

NASA SP-7039 (06)

Section 2

Indexes



(NASA-SP-7039(06)-Sect-2)	NASA PATENT	N75-20150
ABSTRACTS BIBLIOGRAPHY:	A CONTINUING	
BIBLIOGRAPHY. SECTION 2:	INDEXES (NASA)	
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PATENT ABSTRACTS BIBLIOGRAPHY

A CONTINUING BIBLIOGRAPHY

Section 2 • Indexes

JANUARY 1975



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

ACCESSION NUMBER RANGES

<i>Bibliography Number</i>	<i>STAR Accession Numbers</i>
NASA SP-7039(04)	N69-20701—N73-33931
NASA SP-7039(05)	N74-10001—N74-21629
NASA SP-7039(06)	N74-21630—N74-35363

NASA

PATENT
ABSTRACTS
BIBLIOGRAPHY

A CONTINUING BIBLIOGRAPHY

Section 2 • Indexes

Indexes for the annotated references to NASA-owned inventions covered by U.S. patents and applications for patent that were announced in *Scientific and Technical Aerospace Reports (STAR)* between May 1969 and December 1974. This issue supersedes all previous Index Sections.



Scientific and Technical Information Office

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

JANUARY 1975

Washington, D.C.

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NASA PATENT ABSTRACTS BIBLIOGRAPHY: A
CONTINUING BIBLIOGRAPHY. SECTION 2:
INDEXES

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NASA-SP-7039(06)-SECT-2

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NE368373 National Aeronautics and Space
Administration, Washington, D.C.

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Springfield, Virginia 22151, for \$5.00. For copies mailed to addresses outside the
United States, add \$2.50 per copy for handling and postage.

INTRODUCTION

Several thousand inventions result each year from the aeronautical and space research supported by the National Aeronautics and Space Administration. The inventions having important use in government programs or significant commercial potential are usually patented by NASA. These inventions cover practically all fields of technology and include many that have useful and valuable commercial application.

NASA inventions best serve the interests of the United States when their benefits are available to the public. In many instances, the granting of nonexclusive or exclusive licenses for the practice of these inventions may assist in the accomplishment of this objective. This bibliography is published as a service to companies, firms, and individuals seeking new, licensable products for the commercial market.

The *NASA Patent Abstracts Bibliography (NASA PAB)* is a semiannual NASA publication containing comprehensive abstracts and indexes of NASA-owned inventions covered by U.S. patents and applications for patent. The citations included in *NASA PAB* were originally published in NASA's *Scientific and Technical Aerospace Reports (STAR)* and cover *STAR* announcements made since May 1969.

For the convenience of the user, each issue of *NASA PAB* has a separately bound Abstract Section (Section 1) and Index Section (Section 2). Although each Abstract Section covers only the indicated six-month period, the Index Section is cumulative covering all NASA-owned inventions announced in *STAR* since May 1969. Thus a complete set of *NASA PAB* would consist of the Abstract Section of Issue 04 (January 1974), the Abstract Section for all subsequent issues, and the Index Section for the most recent issue.

The 193 citations published in this issue of the Abstract Section cover the period July 1974 through December 1974. The Index Section contains references to the 2757 citations covering the period May 1969 through December 1974.

ABSTRACT SECTION (SECTION 1)

The Abstract Section is divided into 34 subject categories (See Table of Contents for scope note of each category) under which are grouped appropriate NASA inventions. Each entry in the Abstract Section consists of a *STAR* citation accompanied by an abstract and a key illustration taken from the patent or application for patent drawing. Entries are arranged in subject category in order of the ascending NASA Accession Number originally assigned in *STAR* to the invention. The range of NASA Accession Numbers within each issue is printed on the inside front cover.

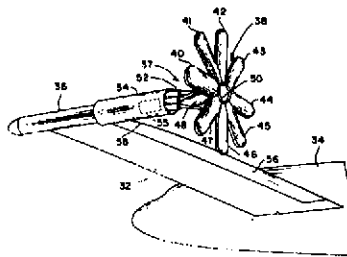
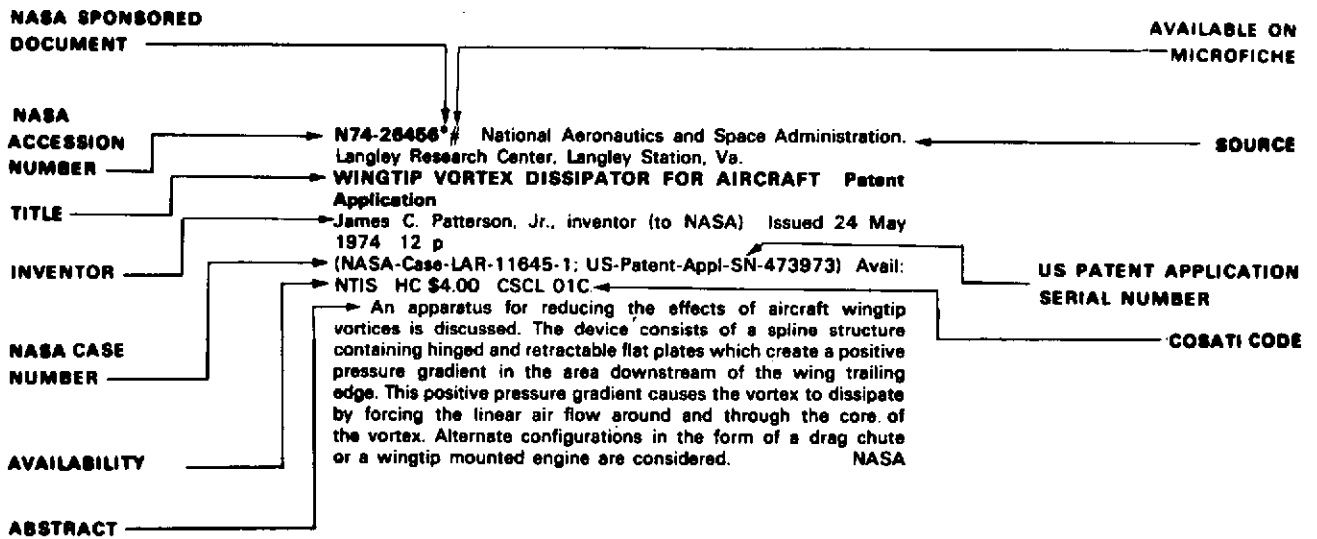
Abstract Citation Data Elements: Each of the abstract citations has several data elements useful for identification and indexing purposes, as follows:

NASA Accession Number
NASA Case Number
Inventor's Name

- Title of Invention
- U.S. Patent Application Serial Number
- U.S. Patent Number (for issued patents only)
- U.S. Patent Office Classification Number(s)
(for issued patents only)

These data elements appear in the citation of the abstract as depicted in the Typical Citation and Abstract reproduced below and are also used in the several indexes.

TYPICAL CITATION AND ABSTRACT FROM *PATENT ABSTRACTS BIBLIOGRAPHY*



KEY ILLUSTRATION

INDEX SECTION (SECTION 2)

The Index Section is divided into five indexes which are cross-indexed and are useful in locating a single invention or groups of inventions.

Each of the five indexes utilizes basic data elements: (1) Subject Category Number, (2) NASA Accession Number, and (3) NASA Case Number, in addition to other specific index terms.

Subject Index: Lists all inventions according to appropriate alphabetized technical term and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Inventor Index: Lists all inventions according to alphabetized names of inventors and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Source Index: Lists all inventions according to alphabetized source of invention (i.e., name of contractor or government installation where invention was made) and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Number Index: Lists inventions in order of ascending (1) NASA Case Number, (2) U.S. Patent Application Serial Number, (3) U.S. Patent Classification Number, and (4) U.S. Patent Number and indicates the related Subject Category Number and the NASA Accession Number.

Accession Number Index: Lists all inventions in order of ascending NASA Accession Number and indicates the related Subject Category Number, the NASA Case Number, the U.S. Patent Application Serial Number, the U.S. Patent Classification Number, and the U.S. Patent Number.

HOW TO USE THIS PUBLICATION TO IDENTIFY NASA INVENTIONS

To identify one or more NASA inventions within a specific technical field or subject, several techniques are possible when using the flexibility incorporated into the *NASA PAB*.

(1) *Using Subject Category:* To identify all NASA inventions in any one of the 34 subject categories in this issue of *NASA PAB*, select the desired Subject Category in the Abstract Section and find the inventions abstracted thereunder. The abstracts are arranged in each Subject Category in order of the ascending Accession Number originally assigned in *STAR* to each invention.

(2) *Using Subject Index:* To identify all NASA inventions listed under a desired technical subject index term, (A) turn to the cumulative Subject Index in the Index Section and find the invention(s) listed under the desired technical subject term. (B) Note the indicated

Accession Number and the Subject Category Number. (C) Using the indicated Accession Number, turn to the inside front cover of the Index Section to determine which issue of the Abstract Section includes the Accession Number desired. (D) To find the abstract of the particular invention in the issue of the Abstract Section selected. (i) use the Subject Category Number to locate the Subject Category and (ii) use the Accession Number to locate the desired invention within the Subject Category listing.

(3) *Using Patent Classification Index:* To identify all inventions covered by issued NASA patents (does not include applications for patent) within a desired Patent Office Classification. (A) turn to the Patent Classification Number in the Number Index of Section 2 and find the associated invention(s) and (B) follow the instructions outlined in (2)(B), and (D) above.

PUBLIC AVAILABILITY OF COPIES OF PATENTS AND PATENT APPLICATIONS

Copies of U.S. patents may be purchased directly from the U.S. Patent Office, Washington, D.C. 20231, for fifty cents a copy.

Copies of pending NASA applications for patent abstracted in *NASA PAB* are sold by the National Technical Information Service, Springfield, Virginia 22151, at the price shown in the citation. Microfiche are sold at the established unit price of \$2.25. When ordering copies of an application for patent from NTIS, the U.S. Patent Application Serial Number listed in the index or shown in the citation for each abstract should be used to identify the desired application for patent.

LICENSES FOR COMMERCIAL USE: INQUIRIES AND APPLICATIONS FOR LICENSE

NASA inventions, abstracted in *NASA PAB*, are available for nonexclusive or exclusive licensing in accordance with the NASA Patent Licensing Regulations. It is significant that all licenses for NASA inventions shall be by express written instruments and that no license will be granted or implied in a NASA invention except as provided in the NASA Patent Licensing Regulations.

Inquiries concerning the NASA Patent Licensing Program or the availability of licenses for the commercial use of NASA-owned inventions covered by U.S. patents or pending applications for patent should be forwarded to the NASA Patent Counsel of the NASA installation having cognizance of the specific invention, or the Assistant General Counsel for Patent Matters, Code GP, National Aeronautics and Space Administration, Washington, D.C. 20546. Inquiries should refer to the NASA Case Number, the Title of the Invention, and the U.S. Patent Number or the U.S. Application Serial Number assigned to the invention as shown in *NASA PAB*.

The NASA Patent Counsel having cognizance of the invention is determined by the first three letters or prefix of the NASA Case Number assigned to the invention. The addresses of NASA Patent Counsels are listed alongside the NASA Case Number prefix letters in the following table. Formal application of license must be submitted on the NASA Form, Application for NASA Patent License, which is available upon request from any NASA Patent Counsel.

**NASA Case
Number Pre-
fix Letters**

ARC-xxxxx
XAR-xxxxx

ERC-xxxxx
XER-xxxxx
HQN-xxxxx
XHQ-xxxxx

GSC-xxxxx
XGS-xxxxx

KSC-xxxxx
XKS-xxxxx

LAR-xxxxx
XLA-xxxxx

LEW-xxxxx
XLE-xxxxx

MSC-xxxxx
XMS-xxxxx

MFS-xxxxx
XMF-xxxxx

NPO-xxxxx
XNP-xxxxx
FRC-xxxxx
XFR-xxxxx
WOO-xxxxx

**Address of Cognizant
NASA Patent Counsel**

Ames Research Center
Mail Code: 200-11A
Moffett Field, California 94035
Telephone: (415)965-5104

NASA Headquarters
Mail Code: GP
Washington, D.C. 20546
Telephone: (202)755-3954

Goddard Space Flight Center
Mail Code: 204
Greenbelt, Maryland 20771
Telephone: (301)982-2351

John F. Kennedy Space Center
Mail Code: AA-PAT
Kennedy Space Center, Florida 32899
Telephone: (305)867-2544

Langley Research Center
Mail Code: 456
Langley Station
Hampton, Virginia 23365
Telephone: (804)827-3725

Lewis Research Center
Mail Code: 500-311
21000 Brookpark Road
Cleveland, Ohio 44135
Telephone: (216)433-6346

Lyndon B. Johnson Space Center
Mail Code: AM
Houston, Texas 77058
Telephone: (713)483-4871

George C. Marshall Space Flight Center
Mail Code: CCO1
Huntsville, Alabama 35812
Telephone: (205)453-0020

NASA Pasadena Office
Mail Code: 180-601
4800 Oak Grove Drive
Pasadena, California 91103
Telephone: (213)354-2700

PATENT LICENSING REGULATIONS

Title 14—AERONAUTICS AND SPACE

Chapter V—National Aeronautics and Space Administration PART 1245—PATENTS

Subpart 2—Patent Licensing Regulations

1. Subpart 2 is revised in its entirety as follows:

Sec.	
1245.200	Scope of subpart.
1245.201	Definitions.
1245.202	Basic considerations.
1245.203	Licenses for practical application of inventions.
1245.204	Other licenses.
1245.205	Publication of NASA inventions available for license.
1245.206	Application for nonexclusive license.
1245.207	Application for exclusive license.
1245.208	Processing applications for license.
1245.209	Royalties and fees.
1245.210	Reports.
1245.211	Revocation of licenses.
1245.212	Appeals.
1245.213	Litigation.
1245.214	Address of communications.

AUTHORITY: The provisions of this Subpart 2 issued under 42 U.S.C. 2457, 2478(b)(3).

§ 1245.200 Scope of subpart.

This Subpart 2 prescribes the terms, conditions, and procedures for licensing inventions covered by U.S. patents and patent applications for which the Administrator of the National Aeronautics and Space Administration holds title on behalf of the United States.

§ 1245.201 Definitions.

For the purpose of this subpart, the following definitions apply:

(a) "Invention" means an invention covered by a U.S. patent or patent application for which the Administrator of NASA holds title on behalf of the United States and which is designated by the Administration as appropriate for the grant of license(s) in accordance with this subpart.

(b) "To practice an invention" means to make or have made, use or have used, sell or have sold, or otherwise dispose of according to law any machine, article of manufacture or composition of matter physically embodying the invention, or to use or have used the process or method comprising the invention.

(c) "Practical application" means the manufacture in the case of a composition of matter or product, the use in the case of a process, or the operation in the case of a machine, under such conditions as to establish that the invention is being utilized and that its benefits are reasonably accessible to the public.

(d) "Special invention" means any invention designated by the NASA Assistant General Counsel for Patent Matters to be subject to short-form licensing procedures. An invention may be designated as a special invention when a determination is made that:

(1) Practical application has occurred and is likely to continue for the life of

the patent and for which an exclusive license is not in force, or

(2) The public interest would be served by the expeditious granting of a nonexclusive license for practice of the invention by the public.

(e) The "Administrator" means the Administrator of the National Aeronautics and Space Administration, or his designee.

(f) "Government" means the Government of the United States of America.

(g) The "Inventions and Contributions Board" means the NASA Inventions and Contributions Board established by the Administrator of NASA within the Administration in accordance with section 305 of the National Aeronautics and Space Act of 1958 as amended (42 U.S.C. 2457).

§ 1245.202 Basic considerations.

(a) Much of the new technology resulting from NASA sponsored research and development in aeronautical and space activities has application in other fields. NASA has special authority and responsibility under the National Aeronautics and Space Act of 1958, as amended (42 U.S.C. 2451), to provide for the widest practical dissemination and utilization of this new technology. In addition, NASA has been given unique requirements to protect the inventions resulting from NASA activities and to promulgate licensing regulations to encourage commercial use of these inventions.

(b) NASA-owned inventions will best serve the interests of the United States when they are brought to practical application in the shortest time possible. Although NASA encourages the nonexclusive licensing of its inventions to promote competition and achieve their widest possible utilization, the commercial development of certain inventions calls for a substantial capital investment which private manufacturers may be unwilling to risk under a nonexclusive license. It is the policy of NASA to seek exclusive licensees when such licenses will provide the necessary incentive to the licensee to achieve early practical application of the invention.

(c) The Administrator, in determining whether to grant an exclusive license, will evaluate all relevant information submitted by applicants and all other persons and will consider the necessity for further technical and market development of the invention, the capabilities of prospective licensees, their proposed plans to undertake the required investment and development, the impact on competitors, and the benefits of the license to the Government and to the public. Preference for exclusive license shall be given to U.S. citizens or companies who intend to manufacture or use, in the case of a process, the invention in the United States of America, its territories and possessions. Consideration may also be given to assisting small businesses and minority business enterprises, as well as economically depressed, low income and labor surplus areas.

(d) All licenses for inventions shall

be by express written instruments. No license shall be granted either expressly or by implication, for a NASA invention except as provided for in §§ 1245.203 and 1245.204 and in any existing or future treaty or agreement between the United States and any foreign government.

(e) Licenses for inventions covered by NASA-owned foreign patents and patent applications shall be granted in accordance with the NASA Foreign Patent Licensing Regulations (§ 1245.4).

§ 1245.203 Licenses for practical application of inventions.

(a) *General.* As an incentive to encourage practical application of inventions, licenses will be granted to responsible applicants according to the circumstances and conditions set forth in this section.

(b) *Nonexclusive licenses.* (1) Each invention will be made available to responsible applicants for nonexclusive, revocable licensing in accordance with § 1245.206, consistent with the provisions of any existing exclusive license.

(2) The duration of the license shall be for a period as specified in the license.

(3) The license shall require the licensee to achieve the practical application of the invention and to then practice the invention for the duration of the license.

(4) The license may be granted for all or less than all fields of use of the invention and throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(5) The license shall extend to the subsidiaries and affiliates of the licensee and shall be nonassignable without approval of the Administrator, NASA, except to the successor of that part of the licensee's business to which the invention pertains.

(c) *Short-form nonexclusive licenses.* A nonexclusive, revocable license for a special invention, as defined in § 1245.201 (d), shall be granted upon written request, to any applicant by the Patent Counsel of the NASA installation having cognizance of the invention.

(d) *Exclusive licenses.* (1) A limited exclusive license may be granted on an invention available for such licensing provided that:

(i) The Administrator has determined that: (a) The invention has not been brought to practical application by a nonexclusive licensee in the fields of use or in the geographical locations covered by the application for the exclusive license, (b) practical application of the invention in the fields of use or geographical locations covered by the application for the exclusive license is not likely to be achieved expeditiously by the further funding of the invention by the Government or under a nonexclusive license requested by any applicant pursuant to these regulations, and (c) the exclusive license will provide the necessary incentive to the licensee to achieve the practical application of the invention; and

(ii) Either a notice pursuant to

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§ 1245.205 listing the invention as available for licensing has been published in the FEDERAL REGISTER for at least 9 months; or a patent covering the invention has been issued for at least 6 months. However, a limited exclusive license may be granted prior to the periods specified above if the Administrator determines that the public interest will best be served by the earlier grant of an exclusive license.

(2) The license may be granted for all or less than all fields of use of the invention, and throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(3) The exclusive period of the license shall be negotiated, but shall be for less than the terminal portion of the patent, and shall be related to the period necessary to provide a reasonable incentive to invest the necessary risk capital.

(4) The license shall require the licensee to practice the invention within a period specified in the license and then to achieve practical application of the invention.

(5) The license shall require the licensee to expend a specified minimum sum of money and/or to take other specified actions, within indicated period(s) after the effective date of the license, in an effort to achieve practical application of the invention.

(6) The license shall be subject to at least an irrevocable royalty-free right of the Government of the United States to practice and have practiced the invention throughout the world by or on behalf of the Government of the United States and on behalf of any foreign government pursuant to any existing or future treaty or agreement with the United States.

(7) The license may reserve to the Administrator, NASA, under the following circumstances, the right to require the granting of a sublicense to responsible applicant(s) on terms that are considered reasonable by the Administrator, taking into consideration the current royalty rates under similar patents and other pertinent facts: (i) To the extent that the invention is required for public use by Government regulation, or (ii) as may be necessary to fulfill health or safety needs, or (iii) for other purposes stipulated in the license.

(8) The license shall be nontransferable except to the successor of that part of the licensee's business to which the invention pertains.

(9) Subject to the approval of the Administrator, the licensee may grant sublicenses under the license. Each sublicense granted by an exclusive licensee shall make reference to and shall provide that the sublicense is subject to the terms of the exclusive license including the rights retained by the Government under the exclusive license. A copy of each sublicense shall be furnished to the Administrator.

(10) The license may be subject to such other reservations as may be in the public interest.

§ 1245.204 Other licenses.

(a) *License to contractor.* There is

hereby granted to the contractor reporting an invention made in the performance of work under a contract of NASA in the manner specified in section 305(a) (1) or (2) of the National Aeronautics and Space Act of 1958 as amended (42 U.S.C. 2457(a) (1) or (2)), a revocable, nonexclusive, royalty-free license for the practice of such invention, together with the right to grant sublicenses of the same scope to the extent the contractor was legally obligated to do so at the time the contract was awarded. Such license and right is nontransferable except to the successor of that part of the contractor's business to which the invention pertains.

(b) *Miscellaneous licenses.* Subject to any outstanding licenses, nothing in this subpart 2 shall preclude the Administrator from granting other licenses for inventions, when he determines that do so would provide for an equitable distribution of rights. The following exemplify circumstances wherein such licenses may be granted:

(1) In consideration of the settlement of an interference;

(2) In consideration of a release of a claim of infringement; or

(3) In exchange for or as part of the consideration for a license under adversely held patent(s).

§ 1245.205 Publication of NASA inventions available for license.

(a) A notice will be periodically published in the FEDERAL REGISTER listing inventions available for licensing. Abstracts of the inventions will also be published in the NASA Scientific and Technical Aerospace Reports (STAR) and other NASA publications.

(b) Copies of pending patent applications for inventions abstracted in STAR may be purchased from the National Technical Information Service, Springfield, Va. 22151.

§ 1245.206 Application for nonexclusive license.

(a) *Submission of application.* An application for nonexclusive license under § 1245.203(b) or a short-form nonexclusive license for special inventions under § 1245.203(c) shall be addressed to the NASA Patent Counsel of the NASA installation having cognizance over the NASA invention for which a license is desired or to the NASA Assistant General Counsel for Patent Matters.

(b) *Contents of an application for nonexclusive license.* An application for nonexclusive license under § 1245.203(b) shall include:

(1) Identification of invention for which license is desired, including the NASA patent case number, patent application serial number of patent number, title and date, if known;

(2) Name and address of the person, company or organization applying for license and whether the applicant is a U.S. citizen or a U.S. corporation;

(3) Name and address of representative of applicant to whom correspondence should be sent;

(4) Nature and type of applicant's business;

(5) Number of employees;

(6) Purpose for which license is desired;

(7) A statement that contains the applicant's best knowledge of the extent to which the invention is being practiced by private industry and the Government;

(8) A description of applicant's capability and plan to undertake the development and marketing required to achieve the practical application of the invention, including the geographical location where the applicant plans to manufacture or use, in the case of a process, the invention; and

(9) A statement indicating the minimum term of years the applicant desires to be licensed.

(c) *Contents of an application for a short-form nonexclusive license.* An application for a short-form nonexclusive license under § 1245.203(c) for a special invention shall include:

(1) Identification of invention for which license is desired, including the NASA patent case number, patent application serial number or patent number, title and date, if known;

(2) Name and address of company or organization applying for license; and

(3) Name and address of representative of applicant to whom correspondence should be sent.

§ 1245.207 Application for exclusive license.

(a) *Submission of application.* An application for exclusive license under § 1245.203(d) may be submitted to NASA at any time. An application for exclusive license shall be addressed to the NASA Assistant General Counsel for Patent Matters.

(b) *Contents of an application for exclusive license.* In addition to the requirements set forth in § 1245.206(b), the application for an exclusive license shall include:

(1) Applicant's status, if any, in any one or more of the following categories:

- (i) Small business firm;
- (ii) Minority business enterprise;
- (iii) Location in a surplus labor area;
- (iv) Location in a low-income urban area; and

(v) Location in an area designed by the Government as economically depressed.

(2) A statement indicating the time, expenditure, and other acts which the applicant considers necessary to achieve practical application of the invention, and the applicant's offer to invest that sum and to perform such acts if the license is granted;

(3) A statement whether the applicant would be willing to accept a license for all or less than all fields of use of the invention throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(4) A statement indicating the amount of royalty fees or other consideration, if any, the applicant would be willing to pay the Government for the exclusive license; and

(5) Any other facts which the applicant believes to show it to be in the interests of the United States of America for the Administrator to grant an exclusive license rather than a nonexclusive li-

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cense and that such an exclusive license should be granted to the applicant.

§ 1245.208 Processing applications for license.

(a) *Initial review.* Applications for nonexclusive and exclusive licenses under §§ 1245.206 and 1245.207 will be reviewed by the Patent Counsel of the NASA installation having cognizance of the invention and the NASA Assistant General Counsel for Patent Matters, to determine the conformity and appropriateness of the application for license and the availability of the specific invention for the license requested. The Assistant General Counsel for Patent Matters will forward all applications for license conforming to §§ 1245.206(b) and 1245.207(b) to the NASA Inventions and Contributions Board when the invention is available for consideration of the requested license. Prior to forwarding applications for exclusive licenses to the Inventions and Contributions Board, notice in writing will be given to each nonexclusive licensee for the specific invention advising of the receipt of the application for the exclusive license and providing each nonexclusive licensee with a 30-day period for submitting either evidence that practical application of the invention has occurred or is about to occur or, an application for an exclusive license for the invention.

(b) *Recommendations of Inventions and Contributions Board.* The Inventions and Contributions Board shall, in accordance with the basic considerations set forth in §§ 1245.202 and 1245.203, evaluate all applications for license forwarded by the Assistant General Counsel for Patent Matters. Based upon the facts presented to the Inventions and Contributions Board in the application and any other facts in its possession, the Inventions and Contributions Board shall recommend to the Administrator: (1) Whether a nonexclusive or exclusive license should be granted, (2) the identity of the licensee, and (3) any special terms or conditions of the license.

(c) *Determination of Administrator and grant of nonexclusive licenses.* The Administrator shall review the recommendations of the Inventions and Contributions Board and shall determine whether to grant the nonexclusive license as recommended by the Board. If the Administrator determines to grant the license, the license will be granted upon the negotiation of the appropriate terms and conditions of the Office of General Counsel.

(d) *Determination of Administrator and grant of exclusive licenses—(1) Notice.* If the Administrator determines that the best interest of the United States will be served by the granting of an exclusive license in accordance with the basic considerations set forth in §§ 1245.202 and 1245.203, a notice shall be published in the FEDERAL REGISTER announcing the intent to grant the exclusive license, the identification of the invention, special terms or conditions of the proposed license, and a statement that NASA will grant the exclusive license unless within 30 days of the publication of such notice the Inventions and Contributions Board receives in writing

any of the following together with supporting documentation:

(i) A statement from any person setting forth reasons why it would not be in the best interest of the United States to grant the proposed exclusive license; or

(ii) An application for a nonexclusive license under such invention, in accordance with § 1245.206(b), in which applicant states that he has already brought or is likely to bring the invention to practical application within a reasonable period.

The Inventions and Contributions Board shall, upon receipt of a written request within the 30 days' notice period, grant an extension of 30 days for the submission of the documents designated above.

(2) *Recommendation of Inventions and Contributions Board.* Upon the expiration of the period required by subparagraph (1) of this paragraph, the Board shall review all written responses to the notice and shall then recommend to the Administrator whether to grant the exclusive license as the Board initially recommended or whether a different form of license, if any, should instead be granted.

(3) *Grant of exclusive licenses.* The Administrator shall review the Board's recommendation and shall determine if the interest of the United States would best be served by the grant of an exclusive license as recommended by the Board. If the Administrator determines to grant the exclusive license, the license will be granted upon the negotiation of the appropriate terms and conditions by the Office of General Counsel.

§ 1245.209 Royalties and fees.

(a) Normally, a nonexclusive license for the practical application of an invention granted to a U.S. citizen or company will not require the payment of royalties; however, NASA may require other consideration.

(b) An exclusive license for an invention may require the payment of royalties, fees or other consideration when the licensing circumstances and the basic considerations in § 1245.202, considered together, indicate that it is in the public interest to do so.

§ 1245.210 Reports.

A license shall require the licensee to submit periodic reports of his efforts to work the invention. The reports shall contain information within his knowledge, or which he may acquire under normal business practice, pertaining to the commercial use that is being made of the invention and such other information which the Administrator may determine pertinent to the licensing program and which is specified in the license.

§ 1245.211 Revocation of licenses.

(a) Any license granted pursuant to § 1245.203 may be revoked, either in part or in its entirety, by the Administrator if in his opinion the licensee at any time shall fail to use adequate efforts to bring to or achieve practical application of the invention in accordance with the terms of the license, or if the licensee at any

time shall default in making any report required by the license, or shall make any false report, or shall commit any breach of any covenant or agreement therein contained, and shall fail to remedy any such default, false report, or breach within 30 days after written notice, or if the patent is deemed unenforceable either by the Attorney General or a final decision of a U.S. court.

(b) Any license granted pursuant to § 1245.204(a) may be revoked, either in part or in its entirety, by the Administrator if in his opinion such revocation is necessary to achieve the earliest practical application of the invention pursuant to an application for exclusive license submitted in accordance with § 1245.207, or the licensee at any time shall breach any covenant or agreement contained in the license, and shall fail to remedy any such breach within 30 days after written notice thereof.

(c) Before revoking any license granted pursuant to this Subpart 2 for any cause, there will be furnished to the licensee a written notice of intention to revoke the license, and the licensee will be allowed 30 days after such notice in which to appeal and request a hearing before the Inventions and Contributions Board on the question of revocation. After a hearing, the Inventions and Contributions Board shall transmit to the Administrator the record of proceedings, its findings of fact, and its recommendation whether the license should be revoked either in part or in its entirety. The Administrator shall review the recommendation of the Board and determine whether to revoke the license in part or in its entirety. Revocation of a license shall include revocation of all sublicenses which have been granted.

§ 1245.212 Appeals.

Any person desiring to file an appeal pursuant to § 1245.211(c) shall address the appeal to Chairman, Inventions and Contributions Board. Any person filing an appeal shall be afforded an opportunity to be heard before the Inventions and Contributions Board, and to offer evidence in support of his appeal. The procedures to be followed in any such matter shall be determined by the Administrator. The Board shall make findings of fact and recommendations with respect to disposition of the appeal. The decision on the appeal shall be made by the Administrator, and such decision shall be final and conclusive, except on questions of law, unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

§ 1245.213 Litigation.

An exclusive licensee shall be granted the right to sue at his own expense any party who infringes the rights set forth in his license and covered by the licensed patent. The licensee may join the Government, upon consent of the Attorney General, as a party complainant in such suit, but without expense to the Government and the licensee shall pay costs and any final judgment or decree that may be rendered against the Govern-

PATENT LICENSING REGULATIONS

ment in such suit. The Government shall also have an absolute right to intervene in any such suit at its own expense. The licensee shall be obligated to promptly furnish to the Government, upon request, copies of all pleadings and other papers filed in any such suit and of evidence adduced in proceedings relating to the licensed patent including, but not limited to, negotiations for settlement and agreements settling claims by a licensee based on the licensed patent, and all other books, documents, papers, and

records pertaining to such suit. If, as a result of any such litigation, the patent shall be declared invalid, the licensee shall have the right to surrender his license and be relieved from any further obligation thereunder.

§ 1245.214 Address of communications.

(a) Communications to the Assistant General Counsel for Patent Matters in accordance with §§ 1245.206 and 1245.207 and requests for information concerning licenses for NASA inventions should be

addressed to the Assistant General Counsel for Patent Matters, Code GP, National Aeronautics and Space Administration, Washington, D.C. 20546.

(b) Communications to the Inventions and Contributions Board in accordance with §§ 1245.208, 1245.211, and 1245.212 should be addressed to Chairman, Inventions and Contributions Board, National Aeronautics and Space Administration, Washington, D.C. 20546.

Effective date. The regulations set forth in this subpart 2 are effective April 1, 1972.

JAMES C. FLETCHER,
Administrator.

NASA FOREIGN PATENT LICENSING REGULATIONS

Selected NASA inventions are also available for licensing in countries other than the United States in accordance with the NASA Foreign Patent Licensing Regulation (14 C.F.R. 1245.4), a copy of which is available from any NASA Patent Counsel.

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Section 1 • Abstracts

Subject Categories

Abstracts in the bibliography are grouped under the following categories:

01 Aerodynamics

Includes aerodynamics of bodies, combinations, internal flow in ducts and turbomachinery; wings, rotors, and control surfaces. For applications see: 02 Aircraft and 32 Space Vehicles. For related information see also: 12 Fluid Mechanics; and 33 Thermodynamics and Combustion.

02 Aircraft

Includes fixed-wing airplanes, helicopters, gliders, balloons, ornithopters, etc.; and specific types of complete aircraft (e.g., ground effect machines, STOL, and VTOL); flight tests; operating problems (e.g., sonic boom); safety and safety devices; economics; and stability and control. For basic research see: 01 Aerodynamics. For related information see also: 31 Space Vehicles; and 32 Structural Mechanics.

03 Auxiliary Systems

Includes fuel cells, energy conversion cells, and solar cells; auxiliary gas turbines; hydraulic, pneumatic and electrical systems; actuators; and inverters. For related information see also: 09 Electronic Equipment; 22 Nuclear Engineering; and 28 Propulsion Systems.

04 Biosciences

Includes aerospace medicine, exobiology, radiation effects on biological systems; physiological and psychological factors. For related information see also: 05 Biotechnology.

05 Biotechnology

Includes life support systems, human engineering, protective clothing and equipment; crew training and evaluation, and piloting. For related information see also: 04 Biosciences.

06 Chemistry

Includes chemical analysis and identification (e.g., spectroscopy). For applications see: 17 Materials, Metallic; 18 Materials, Nonmetallic; and 27 Propellants.

07 Communications

Includes communications equipment and techniques, noise; radio and communications blackout; modulation telemetry; tracking radar and optical observation; and wave propagation. For basic research see: 23 Physics, General; and 21 Navigation.

08 Computers

Includes computer operation and programming; and data processing. For applications, see specific categories. For related information see also: 19 Mathematics.

09 Electronic Equipment

Includes electronic test equipment and maintainability; component parts, e.g., electron tubes, tunnel diodes, transistors, integrated circuitry; microminiaturization. For basic research see: 10 Electronics. For related information see also: 07 Communications and 21 Navigation.

10 Electronics

Includes circuit theory; and feedback and control theory. For applications see: 09 Electronic Equipment. For related information see specific Physics categories.

11 Facilities, Research and Support

Includes airports; lunar and planetary bases including associated vehicles; ground support systems; related logistics; simulators; test facilities (e.g., rocket engine test stands, shock tubes, and wind tunnels); test ranges; and tracking stations.

12 Fluid Mechanics

Includes boundary-layer flow; compressible flow; gas dynamics; hydrodynamics; and turbulence. For related information see also: 01 Aerodynamics; and 33 Thermodynamics and Combustion.

13 Geophysics

Includes aeronomy; upper and lower atmosphere studies; oceanography; cartography; and geodesy. For related information see also: 20 Meteorology; 29 Space Radiation; and 30 Space Sciences.

14 Instrumentation and Photography

Includes design, installation, and testing of instrumentation systems; gyroscopes; measuring instruments and gages; recorders, transducers; aerial photography; and telescopes and cameras.

15 Machine Elements and Processes

Includes bearings, seals, pumps, and other mechanical equipment; lubrication, friction, and wear; manufacturing processes and quality control; reliability; drafting; and materials fabrication, handling, and inspection.

16 Masers

Includes applications of masers and lasers. For basic research see: 26 Physics, Solid-State.

17 Materials, Metallic

Includes cermets; corrosion; physical and mechanical properties of materials; metallurgy; and applications as structural materials. For basic research see: 06 Chemistry. For related information see also: 18 Materials, Nonmetallic; and 32 Structural Mechanics.

18 Materials, Nonmetallic

Includes corrosion; physical and mechanical properties of materials (e.g., plastics); and elastomers, hydraulic fluids, etc. For basic research see: 08 Chemistry. For related information see also: 17 Materials, Metallic; 27 Propellants; and 32 Structural Mechanics.

19 Mathematics

Includes calculation methods and theory; and numerical analysis. For applications see specific categories. For related information see also: 08 Computers.

20 Meteorology

Includes climatology; weather forecasting; and visibility studies. For related information see also: 13 Geophysics; and 30 Space Sciences.

21 Navigation

Includes guidance; autopilots; star and planet tracking; inertial platforms; and air traffic control. For related information see also: 07 Communications.

22 Nuclear Engineering

Includes nuclear reactors and nuclear heat sources used for propulsion and auxiliary power. For basic research see: 24 Physics, Atomic, Molecular, and Nuclear. For related information see also: 03 Auxiliary Systems; and 28 Propulsion Systems.

23 Physics, General

Includes acoustics, Cryogenics, mechanics, and optics. For astrophysics see: 30 Space Sciences. For geophysics and related information see also: 13 Geophysics, 20 Meteorology, and 29 Space Radiation.

24 Physics, Atomic, Molecular, and Nuclear

Includes atomic, molecular and nuclear physics. For applications see: 22 Nuclear Engineering. For related information see also: 29 Space Radiation.

25 Physics, Plasma

Includes magnetohydrodynamics. For applications see: 28 Propulsion Systems.

26 Physics, Solid-State

Includes semiconductor theory; and superconductivity. For applications see: 16 Masers. For related information see also: 10 Electronics.

27 Propellants

Includes fuels; igniters; and oxidizers. For basic re-

search see: 06 Chemistry; and 33 Thermodynamics and Combustion. For related information see also: 28 Propulsion Systems.

28 Propulsion Systems

Includes air breathing, electric, liquid, solid, and magnetohydrodynamic propulsion. For nuclear propulsion see: 22 Nuclear Engineering. For basic research see: 23 Physics, General; and 33 Thermodynamics and Combustion. For applications see: 31 Space Vehicles. For related information see also: 27 Propellants.

29 Space Radiation

Includes cosmic radiation; solar flares; solar radiation; and Van Allen radiation belts. For related information see also: 13 Geophysics, and 24 Physics, Atomic, Molecular, and Nuclear.

30 Space Sciences

Includes astronomy and astrophysics; cosmology; lunar and planetary flight and exploration; and theoretical analysis of orbits and trajectories. For related information see also: 11 Facilities, Research and Support; and 31 Space Vehicles.

31 Space Vehicles

Includes launch vehicles; manned space capsules; clustered and multistage rockets; satellites; sounding rockets and probes; and operating problems. For basic research see: 30 Space Sciences. For related information see also: 28 Propulsion Systems; and 32 Structural Mechanics.

32 Structural Mechanics

Includes structural element design and weight analysis; fatigue; thermal stress; impact phenomena; vibration; flutter; inflatable structures; and structural tests. For related information see also: 17 Materials, Metallic; and 18 Materials, Nonmetallic.

33 Thermodynamics and Combustion

Includes ablation, cooling, heating, heat transfer, thermal balance, and other thermal effects; and combustion theory. For related information see also: 12 Fluid Mechanics; and 27 Propellants.

34 General

Includes information of a broad nature related to industrial applications and technology, and to basic research; defense aspects; information retrieval; management; law and related legal matters; and legislative hearings and documents.

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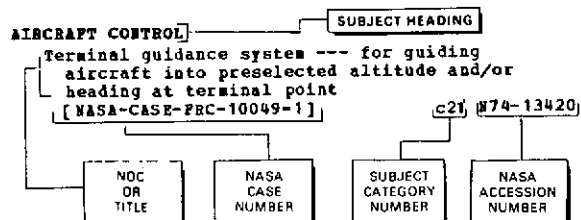
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NASA PATENT ABSTRACTS BIBLIOGRAPHY

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Section 2

Typical Subject Index Listing



The subject heading is the key to the subject content of the document. A brief description of the document, e.g., title, title plus a title extension, or Notation of Content (NOC), is included for each subject entry to indicate the subject heading context; these descriptions are arranged under each subject heading in ascending accession number order. The NASA Case Number serves as the prime access number to the patent documents. The Subject Category Number indicates the category in Section 1 (Abstracts) in which the patent citation and abstract are located. The NASA accession number denotes the number by which the citation is identified within the subject category.

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[NASA-CASE-XGS-00824] c15 N71-16078
Burst diaphragm flow initiator for installation in short duration wind tunnels
[NASA-CASE-MPS-12915] c11 N71-17600
Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07487] c15 N71-23255
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[NASA-CASE-MSC-11817-1] c15 N71-26611
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[NASA-CASE-XLA-10450] c28 N71-21493
- Variable geometry rotor system for direct control over wake vortex
[NASA-CASE-LAR-10557] c02 N72-11018
- Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
- Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XMP-02263] c02 N74-10907
- Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c28 N74-28226
- AERODYNAMIC HEATING**
- Development of thermal insulation system for wing and control surfaces of hypersonic aircraft and reentry vehicles
[NASA-CASE-XLA-00892] c33 N71-17897
- Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-XPR-03802] c33 N71-23085
- Ablative heat shield for protection from aerodynamic heating of reentry spacecraft

- [NASA-CASE-MSC-12143-1] c33 N72-17947
- AERODYNAMIC LOADS**
Directed fluid stream for propeller blade loading control
[NASA-CASE-XAC-00139] c02 N70-34856
- AERODYNAMIC STABILITY**
Aerodynamically stable meteorological balloon using surface roughness effect
[NASA-CASE-XMP-04163] c02 N71-23007
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387
Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-MSC-13281] c31 N72-18859
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c02 N74-34475
- AERONAUTICAL ENGINEERING**
Differential pressure cell insensitive to changes in ambient temperature and extreme overload
[NASA-CASE-XAC-00042] c14 N70-34816
- AEROSOLS**
Liquid aerosol dispenser with explosively driven piston to compress light gas to extremely high pressure
[NASA-CASE-MFS-20829] c12 N72-21310
Remote detection and measurement of clear air turbulence using pulsed laser radar
[NASA-CASE-MFS-21244-1] c20 N73-21523
Particulate and aerosol detector --- based on discharge characteristics of charged capacitor under particle impact
[NASA-CASE-LAR-11434-1] c14 N74-22112
- AEROSPACE ENGINEERING**
Modifying existing solar cells for temperature control
[NASA-CASE-NFO-10109] c03 N71-11049
Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder
[NASA-CASE-XLA-08911] c15 N71-27214
- AEROSPACE ENVIRONMENTS**
High voltage insulators for direct current in acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574
Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772
Preparation of inorganic solid film lubricants with long wear life and stability in aerospace environments
[NASA-CASE-XMP-03988] c15 N71-21403
Momentum-velocity analyzer for measuring minute space particles
[NASA-CASE-XMS-04201] c14 N71-22990
Metal alloy bearing materials for space applications
[NASA-CASE-XLE-05033] c15 N71-23810
Method and apparatus for adjusting thermal conductance in electronic components for space use
[NASA-CASE-XNP-05524] c33 N71-24876
Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NFO-10141] c11 N71-24964
High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
[NASA-CASE-LEW-10155-1] c09 N71-29035
- AEROSPACE MEDICINE**
Piston device for producing known constant positive pressure within lungs by using thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329
- AEROSPACE SYSTEMS**
Polyimides of ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-MFS-22355] c06 N74-29480
- AEROSPACE VEHICLES**
Aerospace configuration with low and high aspect ratio variability for high and low speed flight
[NASA-CASE-XLA-00142] c02 N70-33286
Landing pad assembly for aerospace vehicles
[NASA-CASE-XMP-02853] c31 N70-36654
Aerospace vehicle with variable platform for hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
Development of resilient fastener for attaching skin of aerospace vehicles to permit movement of skin relative to framework
[NASA-CASE-XLA-01027] c31 N71-24035
Chemical spot tests for identification of titanium and titanium alloys used in aerospace vehicles
[NASA-CASE-LAR-10539-1] c17 N73-12547
- AEROSPACEPLANES**
Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XMP-02263] c02 N74-10907
- AFTERBODIES**
Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
- AFTERBURNING**
Exhaust nozzle with afterburning for generating thrust
[NASA-CASE-XLA-00154] c28 N70-33374
- AILERONS**
Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-XAC-10019] c15 N71-23809
- AIR**
Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
- AIR CONDITIONING EQUIPMENT**
Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-XMP-03212] c15 N71-22721
Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c15 N74-27902
- AIR COOLING**
Modification and improvement of turbine blades for maximum cooling efficiency
[NASA-CASE-XLE-00092] c15 N70-33264
- AIR DUCTS**
Cascade plug nozzle
[NASA-CASE-LAR-11674-1] c28 N74-33220
- AIR FILTERS**
Development of filter apparatus for gas separation and characteristics of filter cell support frame for improved operation
[NASA-CASE-MSC-12297] c14 N72-23457
- AIR FLOW**
Wind tunnel air flow modulating device and apparatus for selectively generating wave motion in wind tunnel airstream
[NASA-CASE-XLA-00112] c11 N70-33287
Photographing surface flow patterns on wind tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366
Method for maintaining good performance in gas turbine during air flow distortion
[NASA-CASE-LEW-10286-1] c28 N71-28915
Airflow distribution control in gas turbine engines
[NASA-CASE-LEW-11593-1] c28 N73-25816
Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144
Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c15 N74-27902
- AIR INTAKES**
Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39981

- Adjustable airfoil for reversable cowl flap inlet thrust augmentation
[NASA-CASE-ARC-10754-1] c28 N73-32624
- Shock position sensor for supersonic inlets --- development of system to measure pressure in throat of supersonic inlet and operate bypass valve
[NASA-CASE-LEW-11915-1] c12 N74-25805
- AIR LOCKS**
Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968
- System for removing and repairing spacecraft control thrusters by use of portable air locks
[NASA-CASE-MPS-20325] c28 N71-27095
- Airlock for waste transferal from pressurized enclosure aboard space vehicle to waste receiver at negative pressure
[NASA-CASE-MPS-20922] c31 N72-20840
- Airlock
[NASA-CASE-MPS-20922-1] c15 N74-22136
- Apparatus for inserting and removing specimens from high temperature vacuum furnaces
[NASA-CASE-LAR-10841-1] c15 N74-27900
- AIR POLLUTION**
Analytical photoionization mass spectrometer with argon gas filter between light source and monochrometer
[NASA-CASE-LAR-10180-1] c06 N71-13461
- Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c14 N74-11284
- Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c14 N74-25932
- AIR PURIFICATION**
Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-MPS-12806] c14 N71-17588
- Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-YMP-03212] c15 N71-22721
- AIR SAMPLING**
Pressure probe for sensing ambient static air pressures
[NASA-CASE-XLA-00481] c14 N70-36824
- AIR TRAFFIC CONTROL**
Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
- Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
- System and method for position locating for air traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
- AIRBORNE EQUIPMENT**
Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
- AIRBORNE/SPACEBORNE COMPUTERS**
Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602
- Shared memory for a fault-tolerant computer
[NASA-CASE-NPO-13139-1] c08 N74-17911
- AIRCRAFT**
Combined shoulder harness and lap belt restraint system for use in aircraft or automobiles
[NASA-CASE-ARC-10519-1] c05 N72-31117
- Pilot warning indicator system of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483
- Apparatus for span loading to alleviate wake-vortex hazard behind aircraft
[NASA-CASE-ARC-10801-1] c02 N74-32428
- AIRCRAFT ACCIDENTS**
Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
- AIRCRAFT APPROACH SPACING**
Economical satellite aided vehicle avoidance system for preventing midair collisions
[NASA-CASE-ERC-10419] c21 N72-21631
- AIRCRAFT CONFIGURATIONS**
Variable sweep wing configuration for supersonic aircraft
[NASA-CASE-XLA-00230] c02 N70-33255
- Television simulation for aircraft and space flight
[NASA-CASE-XPR-03107] c09 N71-19449
- Design of dual fuselage aircraft with pivoting wing and horizontal stabilizer to permit yawing of wing in flight for high speed operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
- Aircraft configuration for reducing effects of nose-down pitching moments due to high lift forces, loss of trim lift, and engine-out yawing moments
[NASA-CASE-LAR-11252-1] c02 N73-26007
- Development of aircraft configuration for reduction of jet aircraft noise by exhausting engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
- AIRCRAFT CONTROL**
Development and characteristics of control system for flexible wings
[NASA-CASE-XLA-06958] c02 N71-11038
- Development of attitude control system for vertical takeoff aircraft using reaction nozzles displaced from various axes of aircraft
[NASA-CASE-XAC-08972] c02 N71-20570
- Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-XAC-10019] c15 N71-23809
- Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110
- Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation
[NASA-CASE-XAC-00048] c02 N71-29128
- Development of thrust control system for application to control of aircraft and spacecraft
[NASA-CASE-HSC-13397-1] c21 N72-25595
- Aircraft control system for rotary wing aircraft
[NASA-CASE-ERC-10439] c02 N73-19004
- Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474
- Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
- Aircraft configuration for reducing effects of nose-down pitching moments due to high lift forces, loss of trim lift, and engine-out yawing moments
[NASA-CASE-LAR-11252-1] c02 N73-26007
- Development and characteristics of system for integrated control of engine power and aerodynamic configuration of aircraft during landing approach
[NASA-CASE-ARC-10456-1] c02 N73-30938
- Terminal guidance system --- for guiding aircraft into preselected altitude and/or heading at terminal point
[NASA-CASE-PRC-10049-1] c21 N74-13420
- AIRCRAFT DESIGN**
Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-ILA-04451] c02 N71-12243
- Design of dual fuselage aircraft with pivoting wing and horizontal stabilizer to permit yawing of wing in flight for high speed operation
[NASA-CASE-ARC-10470-1] c02 N73-26005

- Aircraft configuration for reducing effects of nose-down pitching moments due to high lift forces, loss of trim lift, and engine-out yawing moments
[NASA-CASE-LAR-11252-1] c02 N73-26007
- Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XMF-02263] c02 N74-10907
- AIRCRAFT DETECTION**
Surface based altitude measuring system for accurately measuring altitude of airborne vehicle
[NASA-CASE-ERC-10412-1] c09 N73-12211
- AIRCRAFT ENGINES**
Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c02 N74-32418
- AIRCRAFT EQUIPMENT**
Development of radiometric sensor to warn aircraft pilots of region of clear air turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437
- Wingtip vortex dissipator for aircraft
[NASA-CASE-LAR-11645-1] c02 N74-26456
- AIRCRAFT HAZARDS**
Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLA-00388] c28 N70-34788
- AIRCRAFT HYDRAULIC SYSTEMS**
Variable-orifice hydraulic mechanism for aircraft gas turbine engine fuel control
[NASA-CASE-LBW-11187-1] c28 N73-19793
- AIRCRAFT INSTRUMENTS**
Aircraft instrument for indicating malfunctions during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807
- Pressure probe for sensing ambient static air pressures
[NASA-CASE-XLA-00481] c14 N70-36824
- Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157
- Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-XMP-03853] c23 N71-21882
- Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
- Aircraft horizon and vertical indicator
[NASA-CASE-ERC-10392] c21 N73-14692
- AIRCRAFT LANDING**
Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
- Magnetic method for detection of aircraft position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619
- Development and characteristics of system for integrated control of engine power and aerodynamic configuration of aircraft during landing approach
[NASA-CASE-ARC-10456-1] c02 N73-30938
- AIRCRAFT MODELS**
Free flight suspension system for use with aircraft models in wind tunnel tests
[NASA-CASE-XLA-00939] c11 N71-15926
- Variable geometry wind tunnel for testing aircraft models at subsonic speeds
[NASA-CASE-XLA-07430] c11 N72-22246
- AIRCRAFT PERFORMANCE**
Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
- AIRCRAFT PILOTS**
Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c11 N74-30597
- AIRCRAFT SAFETY**
Aircraft instrument for indicating malfunctions during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807
- Development and operating principles of collision warning system for aircraft accident prevention
[NASA-CASE-HQN-10703] c21 N73-13643
- Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c02 N74-30421
- AIRCRAFT STABILITY**
Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XLA-06339] c02 N71-13422
- Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
- AIRCRAFT STRUCTURES**
Fatigue testing device applying random discrete load levels to test specimen and applicable to aircraft structures
[NASA-CASE-XLA-02131] c32 N70-42003
- Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-XPR-03802] c33 N71-23085
- Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c14 N74-13129
- Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c18 N74-16249
- AIRFOIL PROFILES**
Airfoil with cambered trailing edge section for supersonic flight
[NASA-CASE-LAR-10585-1] c01 N73-14981
- AIRFOILS**
Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-00755] c01 N71-13410
- Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-05828] c01 N71-13411
- Single wing supersonic aircraft --- with pivotal attachment of airfoil
[NASA-CASE-ARC-10470-3] c01 N74-30414
- Miniature hydraulic actuator --- for control surfaces on airfoils
[NASA-CASE-LAR-11522-1] c15 N74-34881
- AIRFRAMES**
Design of dual fuselage aircraft with pivoting wing and horizontal stabilizer to permit yawing of wing in flight for high speed operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
- Aircraft configuration for reducing effects of nose-down pitching moments due to high lift forces, loss of trim lift, and engine-out yawing moments
[NASA-CASE-LAR-11252-1] c02 N73-26007
- AIRSPPEED**
Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
- ALCOHOLS**
New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244
- Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MPS-20180] c16 N72-12440
- ALDEHYDES**
Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XMF-08655] c06 N71-11239
- Synthesis of azine polymers for heat shields by azine-aromatic aldehyde reaction
[NASA-CASE-XMF-08656] c06 N71-11242
- Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-XMF-03074] c06 N71-24740
- ALIGNMENT**
Centering device with ultrafine adjustment for use with roundness measuring apparatus
[NASA-CASE-XMF-00480] c14 N70-39898
- Portable device for aligning surfaces of two adjacent wall or sheet sections for joining at point of junction
[NASA-CASE-XMF-01452] c15 N70-41371
- Electro-optical/computer system for aligning large structural members and maintaining

- correct position
[NASA-CASE-XNP-02029] c14 N70-41955
- Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axis coordinate references
[NASA-CASE-XNP-00684] c21 N71-21688
- Description of device for aligning stacked sheets of paper for repetitive cutting
[NASA-CASE-XNS-04178] c15 N71-22798
- Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescopes during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
- Measuring roll alignment of test body with respect to reference body
[NASA-CASE-GSC-10514-1] c14 N72-20379
- Guide accessories for correctly aligning paper in typewriter to correct typographical errors
[NASA-CASE-MPS-15218-1] c15 N73-31438
- Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
- ALKALI METALS**
- Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-YGS-04119] c18 N69-39979
- Analytical test apparatus and method for determining oxygen content in alkali liquid metal
[NASA-CASE-XLE-01997] c06 N71-23527
- Composition and production method of alkali metal silicate paint with ultraviolet reflection properties
[NASA-CASE-XGS-04799] c18 N71-24183
- Design and characteristics of heat activated electric cell with anode made from one or more alkali metals and cathode made from oxidizing material
[NASA-CASE-LEW-11358] c03 N71-26084
- Method for producing alkali metal dispersions of high purity
[NASA-CASE-XNP-08876] c17 N73-28573
- ALKALINE BATTERIES**
- Method for determining state of charge of alkali batteries by using tritium as tracer
[NASA-CASE-XNP-01464] c03 N71-10728
- Alkaline-type coulometer cell for primary charge control in secondary battery recharge circuits
[NASA-CASE-IGS-05434] c03 N71-20491
- ALKYL COMPOUNDS**
- Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of polyfluoroalkylene diol
[NASA-CASE-MPS-10507] c06 N73-30101
- ALLOYS**
- Brazing alloy adapted for brazing corrosion resistant steel to refractory metals, also for brazing refractory metals to other refractory metals
[NASA-CASE-INP-03063] c17 N71-23365
- Metal alloy bearing materials for space applications
[NASA-CASE-XLE-05033] c15 N71-23810
- High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875
- Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123
- Metallic alloy and aluminate coating for metallic base system
[NASA-CASE-LEW-11696-1] c15 N73-10502
- Two-step diffusion welding process of unrecrystallized alloys
[NASA-CASE-LEW-11388-1] c15 N73-32358
- Duplex aluminized coatings
[NASA-CASE-LEW-11696-2] c18 N74-18197
- ALLYL COMPOUNDS**
- Monomer polymerization by plasma discharge as thin film for water purification membrane
[NASA-CASE-ARC-10643-1] c06 N73-29074
- ALPHANUMERIC CHARACTERS**
- Alphanumeric character display device for oscilloscopes
[NASA-CASE-GSC-11582-1] c09 N73-32120
- ALTERNATING CURRENT**
- Characteristics of high power, low distortion, alternating current power amplifier
[NASA-CASE-LAR-10218-1] c09 N70-34559
- Frequency control network for current feedback oscillators converting dc voltage to ac or higher dc voltages
[NASA-CASE-GSC-10041-1] c10 N71-19418
- Blood pressure measuring system for separately recording dc and ac pressure signals of Korotkoff sounds
[NASA-CASE-XNS-06061] c05 N71-23317
- Solid state circuit for switching alternating current input signal as function of direct current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799
- Device for voltage conversion using controlled pulse widths and arrangements to generate ac output voltage
[NASA-CASE-MPS-10068] c10 N71-25139
- Inverters for changing direct current to alternating current
[NASA-CASE-XGS-06226] c10 N71-25950
- Dc to ac to dc converter with transistor driven synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
- Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c10 N74-14956
- ALTITUDE**
- Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
- ALTITUDE CONTROL**
- Ambient atmospheric pressure sensing device for determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925
- ALUMINUM**
- Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-MPS-07369] c15 N71-20443
- Low concentration alkaline solution treatment of aluminum with metal phosphate surface coatings to improve chemical bonding and reduce coating weight
[NASA-CASE-XLA-01995] c18 N71-23047
- Etching aluminum alloys with aqueous solution containing sulfuric acid, hydrofluoric acid, and an alkali metal dichromate for adhesive bonding
[NASA-CASE-INP-02303] c17 N71-23828
- Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142
- Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830
- Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
- Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579
- Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034
- Graded band gap p-n junction gallium arsenide/gallium aluminum arsenide solar cell
[NASA-CASE-LAR-11174-1] c03 N73-26047
- A panel for selectively absorbing solar thermal energy and the method for manufacturing the panel
[NASA-CASE-MPS-22562-1] c03 N74-19700
- ALUMINUM ALLOYS**
- High strength aluminum casting alloy for cryogenic applications in aerospace engineering
[NASA-CASE-XNP-02786] c17 N71-20743
- Etching aluminum alloys with aqueous solution containing sulfuric acid, hydrofluoric acid, and an alkali metal dichromate for adhesive bonding
[NASA-CASE-INP-02303] c17 N71-23828

- Method of fluxless brazing and diffusion bonding of aluminum containing components
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[NASA-CASE-XMP-08652] c06 N71-11243
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[NASA-CASE-XMS-05562-1] c09 N69-39986
Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
[NASA-CASE-XGS-01784] c10 N71-20782
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[NASA-CASE-XGS-01222] c10 N71-20841
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[NASA-CASE-XMS-05307] c09 N69-24330
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[NASA-CASE-ARC-10596-1] c09 N72-27233
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[NASA-CASE-ARC-10596-1] c09 N74-21851
- AMPLIFIERS**
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[NASA-CASE-XGS-02812] c09 N71-19466
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[NASA-CASE-XAC-05422] c04 N71-23185
Comb type traveling wave maser amplifier for improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831
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[NASA-CASE-XPR-07172] c05 N71-27234
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 [NASA-CASE-LEW-10345-1] c10 N71-25899
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[NASA-CASE-XMS-09637-1] c05 N71-24730
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[NASA-CASE-XMS-05304] c05 N71-12336
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Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474
- ASTRONAUTS**
Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171
Manual actuator --- for spacecraft exercising machines
[NASA-CASE-MFS-21481-1] c15 N74-18127
- ASTRONAVIGATION**
Guidance analyzer having suspended spacecraft

- simulating sphere for astronavigation
[NASA-CASE-IMP-09572] c14 N71-15621
- ASTRONOMICAL PHOTOGRAPHY**
Cameras for photographing meteors in selected sky area
[NASA-CASE-LAR-10226-1] c14 N73-19419
- ASTRONOMICAL TELESCOPES**
Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-NSC-10966] c14 N71-19568
Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
Star image motion compensator using telescope for maintaining fixed images
[NASA-CASE-LAR-10523-1] c14 N72-22444
- ATMOSPHERIC COMPOSITION**
Design and development of two types of atmosphere sampling chambers
[NASA-CASE-NPO-11373] c13 N72-25323
Development and operation of apparatus for sampling particulates in gases in upper atmosphere
[NASA-CASE-HQN-10037-1] c14 N73-27376
Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c14 N74-11284
- ATMOSPHERIC ENTRY**
Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
[NASA-CASE-IAC-02058] c02 N71-16087
Development of method for measuring electron density gradients of plasma sheath around space vehicle during atmospheric entry
[NASA-CASE-XLA-06232] c25 N71-20563
Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c14 N74-21015
- ATMOSPHERIC ENTRY SIMULATION**
Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions
[NASA-CASE-XLA-00675] c25 N70-33267
Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436
- ATMOSPHERIC PHYSICS**
Development and characteristics of apparatus for measuring intensity of electric field in atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318
- ATMOSPHERIC RADIATION**
Radiometric measuring system for solar activity and atmospheric attenuation and emission
[NASA-CASE-ERC-10276] c14 N73-26432
- ATMOSPHERIC TURBULENCE**
Passive optical wind and turbulence remote detection system
[NASA-CASE-IMP-14032] c20 N71-16340
- ATOMIZERS**
Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
- ATOMS**
Atomic standard with variable storage volume --- in cylindrical, flexible bellows
[NASA-CASE-GSC-11895-1] c15 N74-33997
- ATTACHMENT**
Silicon carbide backward diode with coated lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150
- ATTENUATORS**
Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-NPO-11418-1] c14 N73-13420
- ATTITUDE (INCLINATION)**
Analog spatial maneuver computer with three output angles for obtaining desired spatial attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172
Spacecraft attitude sensing system design with narrow field of view sensor rotating about spacecraft x-y axis
[NASA-CASE-GSC-10890-1] c21 N73-30640
- ATTITUDE CONTROL**
Visual target luminaires for retrofire attitude control
[NASA-CASE-IHS-12158-1] c31 N69-27499
Unitary three-axis controller for flight vehicles within or outside atmosphere
[NASA-CASE-YFR-00181] c21 N70-33279
Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297
Attitude and propellant flow control system for liquid propellant rocket vehicles
[NASA-CASE-IMP-00185] c21 N70-34539
Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-IMP-00465] c21 N70-35395
Attitude control device for space vehicles
[NASA-CASE-IMP-00294] c21 N70-36938
Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943
Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-IMP-00676] c15 N70-38996
Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
[NASA-CASE-IAC-01404] c05 N70-41581
Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-IHS-02977] c11 N71-10746
Photomultiplier detector of Canopus for spacecraft attitude control
[NASA-CASE-IMP-03914] c21 N71-10771
Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
Development of spacecraft experiment pointing and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132
Development of attitude control system for spacecraft orientation
[NASA-CASE-IGS-04393] c21 N71-14159
System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
Drive mechanism for operating reactance attitude control system for aerospace bodies
[NASA-CASE-IMP-01598] c21 N71-15583
Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
Remote control device operated by movement of finger tips for manual control of spacecraft attitude
[NASA-CASE-IAC-02405] c09 N71-16089
Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880
Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-XGS-01654] c31 N71-24750
Development of voice operated controller for controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160
Attitude sensor
[NASA-CASE-LAR-10586-1] c14 N74-15089
Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NPO-13044-1] c14 N74-15094
- ATTITUDE GYROS**
Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-IMP-00465] c21 N70-35395

- An attitude control system
[NASA-CASE-MFS-22787-1] c21 N74-35096
- ATTITUDE INDICATORS**
Photosensitive light source device for detecting unmanned spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089
Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07487] c15 N71-23255
Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
Aircraft horizon and vertical indicator
[NASA-CASE-ERC-10392] c21 N73-14692
Attitude sensor
[NASA-CASE-LAR-10586-1] c14 N74-15089
- ATTITUDE STABILITY**
Dynamic precession damping of spin-stabilized vehicles by using rate gyroscope and angular accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295
Attitude stabilizer for nonguided missile or vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873
Strapped down gyroscope aligned with sun and star tracker optical axis calibrating roll, yaw and pitch values
[NASA-CASE-ARC-10716-1] c31 N73-32784
- AUDIO EQUIPMENT**
Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
- AUDIO FREQUENCIES**
High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal
[NASA-CASE-NPO-11147] c14 N72-27408
- AUDITORY PERCEPTION**
Auditory display for the blind
[NASA-CASE-HQN-10832-1] c14 N74-21014
- AUDITORY SIGNALS**
Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-HSC-12223-1] c07 N71-26181
Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
- AUDITORY STIMULI**
Auditory display for the blind
[NASA-CASE-HQN-10832-1] c14 N74-21014
- AUSTENITIC STAINLESS STEELS**
Intermetallic chromium containing nickel aluminide for high temperature corrosion protection of stainless steels
[NASA-CASE-LEW-11267-1] c17 N73-32414
- AUTOCORRELATION**
Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503
Circuitry for developing autocorrelation function continuously within signal receiving period
[NASA-CASE-XNP-00746] c07 N71-21476
- AUTOMATIC CONTROL**
Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987
Electro-optical/computer system for aligning large structural members and maintaining correct position
[NASA-CASE-INP-02029] c14 N70-41955
Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
[NASA-CASE-HSC-13112] c03 N71-11057
Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
Computer controlled apparatus for maintaining welding torch angle and velocity during seam tracking
[NASA-CASE-INP-03287] c15 N71-15607
- Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-HSC-10966] c14 N71-19568
Welding torch with automatic speed controller using speed sensing wheel and closed servo system
[NASA-CASE-INP-01730] c15 N71-23050
Microwave waveguide switch with rotor position control
[NASA-CASE-XNP-06507] c09 N71-23548
Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042
Automatic controlled thermal fatigue testing apparatus
[NASA-CASE-XLA-02059] c33 N71-24276
Automatically charging battery of electric storage cells
[NASA-CASE-XNP-04758] c03 N71-24605
Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-INP-05195] c10 N71-24861
Indexing mechanism for cathode array substitution in electron beam tube
[NASA-CASE-NPO-10625] c09 N71-26182
Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244
Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units
[NASA-CASE-INP-09451] c06 N71-26754
Automatic control device for regulating inlet water temperature of liquid cooled spacesuit
[NASA-CASE-HSC-13917-1] c05 N72-15098
Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
Plotter device for automatically drawing equipotential lines on sheet of resistance paper
[NASA-CASE-NPO-11134] c09 N72-21246
Automatic shunting of ion thruster magnetic field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771
Automated system for monitoring oxidative metabolites of aromatic amines
[NASA-CASE-ARC-10469-1] c06 N72-31145
Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] c05 N73-26071
Automatically operable self-leveling load table with plurality of solenoid valves
[NASA-CASE-MFS-22039-1] c14 N73-30428
Speed control system for dc motor equipped with brushless Hall effect device
[NASA-CASE-MFS-20207-1] c09 N73-32107
Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c14 N74-10420
Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c05 N74-22771
- AUTOMATIC CONTROL VALVES**
Ambient atmospheric pressure sensing device for determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925
Describing metal valve pintle with encapsulated elastomeric body
[NASA-CASE-HSC-12116-1] c15 N71-17648
Sectoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNP-09704] c12 N71-18615
Reliability of automatic refilling valving device for cryogenic liquid systems
[NASA-CASE-NPO-11177] c15 N72-17453
- AUTOMATIC FREQUENCY CONTROL**
System for phase locking onto carrier frequency signal located within receiver bandpass
[NASA-CASE-XGS-04994] c09 N69-21543
Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-HSC-12223-1] c07 N71-26181
Automatic frequency control device for providing frequency reference for voltage controlled

- oscillator
[NASA-CASE-KSC-10393] c09 N72-21247
Self-tuning electronic filter for maintaining
constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231
- AUTOMATIC GAIN CONTROL**
Automatic gain control amplifier system
[NASA-CASE-XNS-05307] c09 N69-24330
Automatic measuring and recording of gain and
zero drift characteristics of electronic
amplifier
[NASA-CASE-XNS-05562-1] c09 N69-39986
Self-tuning electronic filter for maintaining
constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231
- AUTOMATIC TEST EQUIPMENT**
Automated visual sensitivity tester for
determining visual field sensitivity and blind
spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c14 N74-10422
- AUTOMOBILES**
Combined shoulder harness and lap belt restraint
system for use in aircraft or automobiles
[NASA-CASE-ARC-10519-1] c05 N72-31117
- AXES (REFERENCE LINES)**
Test fixture for measuring moment of inertia of
irregularly shaped body with multiple axes
[NASA-CASE-IGS-01023] c14 N71-22992
Mechanism for restraining universal joints to
prevent separation while allowing bending,
angulation, and lateral offset in any position
about axis
[NASA-CASE-XNP-02278] c15 N71-28951
- AXES OF ROTATION**
Unitary three-axis controller for flight
vehicles within or outside atmosphere
[NASA-CASE-IFR-00181] c21 N70-33279
Proportional controller for regulating aircraft
or spacecraft motion about three axes
[NASA-CASE-XAC-03392] c03 N70-41954
Electrical and electromechanical trigonometric
computation assembly and space vehicle
guidance system for aligning perpendicular
axes of two sets of three-axes coordinate
references
[NASA-CASE-IMP-00684] c21 N71-21688
Hand controller operable about three
respectively perpendicular axes and capable of
actuating signal generators for attitude
control devices
[NASA-CASE-XMS-07487] c15 N71-23255
Journal bearings
[NASA-CASE-LEW-11076-4] c15 N74-18134
- AXIAL COMPRESSION LOADS**
Development and characteristics of device for
indicating and recording magnitude of force
applied in axial direction
[NASA-CASE-HSC-15626-1] c14 N72-25411
- AXIAL FLOW TURBINES**
Multistage multiple reentry axial flow reaction
turbine with reverse flow reentry ducting
[NASA-CASE-XLE-00170] c15 N70-36412
Multistage, multiple reentry, single rotor,
axial flow turbine
[NASA-CASE-XLE-00085] c28 N70-39895
- AXIAL LOADS**
Ball locking device which releases in response
to small forces when subjected to high axial
loads
[NASA-CASE-XNP-01371] c15 N70-41829
- AZIMUTH**
Tracking mount for laser telescope employed in
tracking large rockets and space vehicles to
give information regarding azimuth and elevation
[NASA-CASE-MPS-14017] c14 N71-26627
Long range laser traversing system
[NASA-CASE-GSC-11262-1] c16 N74-21091
- AZINES**
Synthesis of azine polymers for heat shields by
azine-aromatic aldehyde reaction
[NASA-CASE-XNP-08656] c06 N71-11242
Ultraviolet and thermally stable polymer
compositions --- poly/(diarylsiloxy)/arylazines
[NASA-CASE-ARC-10592-2] c06 N74-11926
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c18 N74-21156
- AZO COMPOUNDS**
Holding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c15 N74-13177
- B**
- BACKGROUND NOISE**
Electronic background suppression field scanning
sensor for detecting point source targets
[NASA-CASE-IGS-05211] c07 N69-39980
- BACKSCATTERING**
Apparatus for measuring backscatter and
transmission characteristics of sample segment
of large spherical passive satellites
[NASA-CASE-IGS-02608] c07 N70-41678
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c14 N74-15091
- BACKUPS**
Flexible backup bar for welding awkwardly shaped
structures
[NASA-CASE-XNP-00722] c15 N70-40204
Reliable electrical element heater using plural
wire system and backup power sources
[NASA-CASE-MFS-21462-1] c09 N74-14935
- BACTERIA**
Decontamination of petroleum products with honey
[NASA-CASE-IMP-03835] c06 N71-23499
Portable tester for monitoring bacterial
contamination by adenosine triphosphate light
reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413
Enzymatic luminescent bioassay method for
determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052
Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c15 N74-13178
Improved method of detecting and counting bacteria
[NASA-CASE-GSC-11917-1] c04 N74-26619
- BACTERIOLOGY**
Detection of bacteria in biological fluids and
foods
[NASA-CASE-GSC-11533-1] c14 N73-13435
- BAFFLES**
Light radiation direction indicator with baffle
of two parallel grids
[NASA-CASE-XNP-03930] c14 N69-24331
Light baffle with oblate hemispheroid surface
and shading flange
[NASA-CASE-NPO-10337] c14 N71-15604
Flexible ring slosh damping baffle for
spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103
Submerged fuel tank baffles to prevent sloshing
in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106
Floating baffle for tank drain
[NASA-CASE-KSC-10639] c15 N73-26472
- BAGS**
Fecal waste disposal container
[NASA-CASE-XMS-06761] c05 N69-23192
- BALANCE**
Thermoprotective device for balances
[NASA-CASE-IAC-00648] c14 N70-40400
Device for monitoring a change in mass in
varying gravimetric environments
[NASA-CASE-MFS-21556-1] c14 N74-26945
- BALANCING**
Automatic balancing device for use on
frictionless supported attitude-controlled
test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
Force balanced throttle valve for fuel control
in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432
Static force balancing system attached to
lifting body
[NASA-CASE-LAR-10348-1] c11 N73-12264
- BALL BEARINGS**
Combination guide and rotary bearing for freely
moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
Method for reducing mass of ball bearings for
long life operation at high speed
[NASA-CASE-LEW-10856-1] c15 N72-22490
Low mass rolling element bearing assembly
[NASA-CASE-LEW-11087-1] c15 N73-30458
Drilled ball bearing with a one piece
anti-tipping cage assembly
[NASA-CASE-LEW-11925-1] c15 N74-18133

- Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c15 N74-21064
- BALLAST (MASS)**
Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26006
- BALLASTS (IMPEDANCES)**
Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318
- BALLISTICS**
Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c18 N74-11366
- BALLOON SOUNDING**
Apparatus for controlling the temperature of balloon-borne equipment
[NASA-CASE-GSC-11620-1] c14 N74-23039
- BALLOONS**
Development and characteristics of hot air balloon deceleration and recovery system
[NASA-CASE-XLA-06824-2] c02 N71-11037
Inflation system for balloon type satellites
[NASA-CASE-XGS-03351] c31 N71-16081
System for controlling torque buildup in suspension of gondola connected to balloon by parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
- BALLS**
Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
[NASA-CASE-XPR-04104] c03 N70-42073
- BANDPASS FILTERS**
Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
Phase locked demodulator with bandwidth switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28859
Signal to noise ratio determination circuit using bandpass limiter
[NASA-CASE-GSC-11239-1] c10 N73-25241
Selective bandpass resonators using bandstop resonator pairs for microwave frequency operation
[NASA-CASE-GSC-10990-1] c09 N73-26195
Dichroic plate
[NASA-CASE-NPO-13506-1] c09 N74-27690
- BANDWIDTH**
Improvements in receiver of narrow bandwidth television system
[NASA-CASE-XMS-06740-1] c07 N71-26579
Self-tuning electronic filter for maintaining constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231
- BARIUM**
Chemical system for releasing barium to create ion clouds in upper atmosphere and interplanetary space
[NASA-CASE-LAR-10670-1] c06 N73-30097
- BARIUM COMPOUNDS**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
- BARIUM FLUORIDES**
Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105
- BARIUM ION CLOUDS**
Rocket having barium release system to create ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c31 N74-27360
- BARIUM TITANATES**
Memory device employing semiconductor and ferroelectric properties of single crystal barium titanate
[NASA-CASE-ERC-10307] c08 N72-21198
- BARRIER LAYERS**
High voltage, high current Schottky barrier solar cell
[NASA-CASE-NPO-13482-1] c03 N74-30448
- BARRIERS**
Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c16 N74-15145
- BASIS (CHEMICAL)**
Low concentration alkaline solution treatment of aluminum with metal phosphate surface coatings to improve chemical bonding and reduce coating weight
[NASA-CASE-XLA-01995] c18 N71-23047
- BATTERY CHARGERS**
Battery charging system with cell to cell voltage balance
[NASA-CASE-XGS-05432] c03 N71-19438
Alkaline-type coulometer cell for primary charge control in secondary battery recharge circuits
[NASA-CASE-XGS-05434] c03 N71-20491
Development and characteristics of battery charging circuits with coulometer for control of available current
[NASA-CASE-GSC-10487-1] c03 N71-24719
- BEYARD-ALPERT IONIZATION GAGES**
Describing hot filament type Bayard-Alpert ionization gage with ion collector buried or removed from grid structure
[NASA-CASE-XLA-07424] c14 N71-18462
- BEADS**
Rotary bead dropper and selector for testing micrometeorite transducers
[NASA-CASE-XGS-03304] c09 N71-22988
- BEAM LEADS**
Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-NPS-21374-1] c10 N74-12951
- BEAM SPLITTERS**
Optical range finder using reflective first surfaces mirror and transmitting beam splitter
[NASA-CASE-MSC-12105-1] c14 N72-21409
Laser system with an antiresonant optical ring --- optical properties and performance of beam splitter with equal transmission and reflection coefficients
[NASA-CASE-HQN-10844-1] c16 N74-20118
- BEAM SWITCHING**
Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677
Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233
Dish antenna having switching beamwidth with truncated concave ellipsoid subreflector
[NASA-CASE-GSC-11760-1] c09 N73-32116
Two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c09 N74-34649
- BEAM WAVEGUIDES**
Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-HQN-10541-2] c15 N71-27135
Optical communication system with gas filled waveguide for laser beam transmission
[NASA-CASE-HQN-10541-4] c16 N71-27183
Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
- BEAMS (RADIATION)**
Method and means for recording and reconstructing holograms without use of reference beam
[NASA-CASE-ERC-10020] c16 N71-26154
Method and system for transmitting and distributing optical frequency radiation
[NASA-CASE-HQN-10541-3] c23 N72-23695
- BEARING (DIRECTION)**
Light radiation direction indicator with baffle of two parallel grids
[NASA-CASE-XNP-03930] c14 N69-24331
Solar radiation direction detector and device for compensating degradation of photocells
[NASA-CASE-XLA-00183] c14 N70-40239
Michelson interferometer with photodetector for optical direction sensing
[NASA-CASE-NPO-10320] c14 N71-17655
Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation
[NASA-CASE-HQN-10780] c14 N71-30265
- BEARINGS**
Metal alloy bearing materials for space applications
[NASA-CASE-XLE-05033] c15 N71-23810
Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537

- Magnetic bearing with diverse magnetic sources coupled to same air gap via different low magnetic reluctance paths for use with permanent magnets
[NASA-CASE-GSC-11079-1] c21 N71-28461
- Measuring device for bearing preload using spring washers
[NASA-CASE-NFS-20434] c11 N72-25288
- Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c15 N74-18132
- BEDS (PROCESS ENGINEERING)**
- Catalyst bed element removing tool
[NASA-CASE-IFR-00811] c15 N70-36901
- BEER LAW**
- Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-BRC-10084-1] c14 N71-27090
- BEES**
- Decontamination of petroleum products with honey
[NASA-CASE-INP-03835] c06 N71-23499
- BELLOWS**
- Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-IAR-01547] c05 N69-21473
- Electrical connection for printed circuits on common board, using bellows principle in rivet
[NASA-CASE-INP-05082] c15 N70-41960
- Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-INP-01855] c15 N71-28937
- An internally supported flexible duct joint --- device for conducting fluids in high pressure systems when flexible joints are required
[NASA-CASE-NFS-19193-1] c15 N74-22145
- Atomic standard with variable storage volume --- in cylindrical, flexible bellows
[NASA-CASE-GSC-11895-1] c15 N74-33997
- BELTS**
- Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c15 N74-32917
- BENDING**
- Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-INP-09422] c07 N71-19436
- Development of systems for automatically and continually suppressing or attenuating bending motion in elastic bodies
[NASA-CASE-IAC-05632] c32 N71-23971
- Elbow forming in jacketed pipes while maintaining separation between core shape and jacket pipes
[NASA-CASE-INP-10475] c15 N71-24679
- Device for bending metal ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408
- BENDING DIAGRAMS**
- Charged particle analyzer with periodically varying voltage applied across electrostatic deflection members
[NASA-CASE-IAC-05506-1] c24 N71-16095
- BENDING FATIGUE**
- Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLB-01300] c15 N70-41993
- Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-INP-02964] c14 N71-17659
- BENDING MOMENTS**
- Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-INP-03198] c30 N70-40353
- BENDING VIBRATION**
- Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
- BENZENE**
- Para-benzoquinone dioxime and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10308-1] c18 N73-26572
- BERYLLIUM ALLOYS**
- Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LEW-10327] c17 N71-33408
- BIMETALS**
- Nonmagnetic thermal motor for magnetometer movement
[NASA-CASE-YAR-03786] c09 N69-21313
- Design and development of linear actuator based on bimetallic spring expansion
[NASA-CASE-NPO-10637] c15 N72-12409
- Application of spiral, bimetallic strip to create circular motion on mechanical shaft by changing strip temperature
[NASA-CASE-NPO-11283] c09 N72-25260
- Development of thermal compensating structure which maintains uniform length with changes in temperature
[NASA-CASE-NFS-20433] c15 N72-28496
- Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c15 N74-15126
- BINARY CODES**
- Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
- Logic circuit for generating multibit binary code word in parallel
[NASA-CASE-INP-04623] c10 N71-26103
- Design and development of encoder/decoder system to generate binary code which is function of outputs of plurality of bistable elements
[NASA-CASE-NPO-10342] c10 N71-33407
- Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NPO-11194] c08 N72-25209
- BINARY DATA**
- Nondestructive interrogating and state changing circuit for binary magnetic storage elements
[NASA-CASE-XGS-00174] c08 N70-34743
- Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602
- Describing circuit for obtaining sum of squares of numbers
[NASA-CASE-XGS-04765] c08 N71-18693
- Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
- Phase modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c07 N73-27107
- Differential phase shift keyed communication system
[NASA-CASE-MSC-14065-1] c07 N74-26654
- BINARY DIGITS**
- Logarithmic converter for compressing 19-digit binary input number to 8-digit output
[NASA-CASE-XLA-00471] c08 N70-34778
- Circuit diagram and operation of full binary adder
[NASA-CASE-XGS-00689] c08 N70-34787
- Binary number sorter for arranging numbers in order of magnitude
[NASA-CASE-NPO-10112] c08 N71-12502
- Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-INP-05415] c08 N71-12505
- Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571
- Characteristics of comparator circuits for comparison of binary numbers in information processing system
[NASA-CASE-INP-04819] c08 N71-23295
- Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176
- Binary concatenated coding system to measure, count, and record numerical information using minimized number of digits
[NASA-CASE-MSC-14082-1] c08 N73-16163
- Family of m-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254
- BINARY FLUIDS**
- Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c14 N74-18101
- BINARY TO DECIMAL CONVERTERS**
- Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
[NASA-CASE-INP-00432] c08 N70-35423

- Design and operation of high speed binary to decimal conversion system
[NASA-CASE-XGS-01230] c08 N71-19544
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- High speed direct binary to binary coded decimal converter for use in PCM telemetry systems
[NASA-CASE-KSC-10326] c08 N72-21197
- BINDERS (MATERIALS)**
Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XMS-00259] c18 N70-36400
- BIOASSAY**
Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
- Bioassay of flavin coenzymes
[NASA-CASE-GSC-10565-1] c06 N72-25149
- Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052
- Servo-controlled intravital microscope system
[NASA-CASE-NPO-13214-1] c14 N74-19093
- BIOFLUORIMETRY**
Ultra-flexible biomedical electrodes and wires
[NASA-CASE-ARC-10268-2] c05 N74-11900
- Ultra-flexible biomedical electrode and wires
[NASA-CASE-ARC-10268-3] c05 N74-11901
- BIOELECTRIC POTENTIAL**
Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
- Manufacturing process for making perspiration resistant-stress resistant biopotential electrode
[NASA-CASE-MS-C-90153-2] c05 N72-25120
- BIOELECTRICITY**
Development and characteristics of electrodes in which poisoning by organic molecules is prevented by ion selective electrolytic deposition of hydrophilic protein colloid
[NASA-CASE-XMS-04213-1] c09 N71-26002
- BIOENGINEERING**
Isolated dc amplifier for bioelectric measurements
[NASA-CASE-ARC-10596-1] c09 N72-27233
- Ultra-flexible biomedical electrodes and wires
[NASA-CASE-ARC-10268-2] c05 N74-11900
- Ultra-flexible biomedical electrode and wires
[NASA-CASE-ARC-10268-3] c05 N74-11901
- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c09 N74-21851
- BIOINSTRUMENTATION**
Temperature compensated solid state differential amplifier with application in bioinstrumentation circuits
[NASA-CASE-XAC-00435] c09 N70-35440
- Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193
- Characteristics of pressed disc electrode for biological measurements
[NASA-CASE-XMS-04212-1] c05 N71-12346
- Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness
[NASA-CASE-MS-C-13282-1] c05 N71-24729
- Development and characteristics of electrodes in which poisoning by organic molecules is prevented by ion selective electrolytic deposition of hydrophilic protein colloid
[NASA-CASE-XMS-04213-1] c09 N71-26002
- Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves
[NASA-CASE-ARC-10597-1] c05 N74-20726
- BIOFLUORESCENCE**
Detection instrument for light emitted from ATP biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
- Describing method for lyophilization of luciferase containing mixtures for use in life detection reactions
[NASA-CASE-XGS-05532] c06 N71-17705
- BIOMEDICAL DATA**
Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
- BIOMETRICS**
Characteristics of pressed disc electrode for biological measurements
[NASA-CASE-XMS-04212-1] c05 N71-12346
- Compressible electrolyte saturated sponge electrode for biomedical applications
[NASA-CASE-MS-C-13648] c05 N72-27103
- Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves
[NASA-CASE-ARC-10597-1] c05 N74-20726
- Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c05 N74-27566
- BIOTELEMETRY**
Communication system for transmitting biomedical information obtained from patient in moving ambulance to hospital for diagnosis
[NASA-CASE-PRC-10031] c05 N70-20717
- Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342
- Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
[NASA-CASE-MS-C-14180-1] c05 N73-22045
- Miniature multichannel biotelemetry system
[NASA-CASE-NPO-13065-1] c05 N74-26625
- BIREFRINGENCE**
Automatic polarimeter capable of measuring transient birefringence changes in electro-optic materials
[NASA-CASE-XNP-08883] c23 N71-16101
- BISTABLE CIRCUITS**
Bistable multivibrator circuits operating at high speed and low power dissipation
[NASA-CASE-XGS-00823] c10 N71-15910
- BIT SYNCHRONIZATION**
Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333
- Bit synchronization system using digital data transition tracking phased locked loop
[NASA-CASE-NPO-10844] c07 N72-20140
- Bit synchronization of PCM communications signal, without separate synchronization channel by digital correlation
[NASA-CASE-NPO-11302-1] c07 N73-13149
- Method and apparatus for a single channel digital communications system --- synchronization of received PCM signal by digital correlation with reference signal
[NASA-CASE-NPO-11302-2] c07 N74-10132
- BITERNARY CODE**
Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917
- BITS**
Logic circuit for generating multibit binary code word in parallel
[NASA-CASE-XNP-04623] c10 N71-26103
- MOD 2 sequential function generator for multibit sequence, with two-bit shift register for each pair of bits
[NASA-CASE-NPO-10636] c08 N72-25210
- BLACK BODY RADIATION**
Development of black-body source calibration furnace
[NASA-CASE-XLB-01399] c33 N71-15625
- Black body cavity radiometer with thermal resistance wire bridge circuit
[NASA-CASE-XNP-08961] c14 N71-24809
- Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475
- Black body radiometer having isothermally surrounded cavity for ultraviolet, visible, and infrared radiation
[NASA-CASE-NPO-10810] c14 N71-27323
- BLADE TIPS**
Modification and improvement of turbine blades for maximum cooling efficiency
[NASA-CASE-XLE-00092] c15 N70-33264

BLADES (CUTTERS)

Piston in bore cutter for severing parachute control lines and sealing cable hole to prevent water leakage into load
[NASA-CASE-IMS-04072] c15 N70-42017

BLAST LOADS

Development of apparatus for detonating explosive devices in order to determine forces generated and detonation propagation rate
[NASA-CASE-LAR-10800-1] c33 N72-27959

BLOOD PRESSURE

Blood pressure measuring system for separately recording dc and ac pressure signals of Korotkoff sounds
[NASA-CASE-IMS-06061] c05 N71-23317
Initial systole and diastolic notch detecting circuitry for monitoring arterial pressure pulse
[NASA-CASE-LEW-11581-1] c05 N73-18139
Apparatus and method for processing Korotkov sounds --- for blood pressure measurement
[NASA-CASE-MSC-13999-1] c05 N74-26626
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c05 N74-27566

BLUFF BODIES

Bluff-shaped annular configuration for supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939

BLUNT BODIES

Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436

BODIES OF REVOLUTION

Conforming polisher for aspheric surfaces of revolution with inflatable tube
[NASA-CASE-XGS-02884] c15 N71-22705
Test fixture for measuring moment of inertia of irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992

BODY FLUIDS

Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c05 N74-22771

BODY KINEMATICS

Space suit with improved waist and torso movement
[NASA-CASE-ARC-10275-1] c05 N72-22092

BODY MEASUREMENT (BIOLOGY)

Elastomer loaded with metal particles for elastic biomedical electrodes
[NASA-CASE-ARC-10268-1] c09 N70-12620
Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals
[NASA-CASE-ARC-10583-1] c05 N73-14093

BODY TEMPERATURE

Thermoregulating with cooling flow pipe network for humans
[NASA-CASE-IMS-10269] c05 N71-24147

BODY VOLUME (BIOLOGY)

Whole body measurement systems --- for weightlessness simulation
[NASA-CASE-MSC-13972-1] c05 N74-10975

BOILERS

Vapor generating boiler system for turbine motor
[NASA-CASE-XLE-00785] c33 N71-16104
Shell-side liquid metal boiler employing tube and shell heat exchanger
[NASA-CASE-NPO-10831] c33 N72-20915

BOLMETERS

High impedance alternating current sensing transformer device between two bolometers for measuring insertion loss of test component
[NASA-CASE-XNP-01193] c10 N71-16057
Thin film capacitive bolometer and capacitance temperature interchange sensor
[NASA-CASE-NPO-10607] c09 N71-27232

BOLTS

Patent data on gas actuated bolt disconnect assembly
[NASA-CASE-XLA-00326] c03 N70-34667
Bolt-latch mechanism for releasing despin weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601
Gage for quality control of sealing surfaces of threaded boss
[NASA-CASE-XMF-04966] c14 N71-17658
Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489
Device for securing together structural members with axially stretched bolt and nut

[NASA-CASE-GSC-11149-1] c15 N73-30457

BONDING

Silver chloride use in technique for fusion bonding of graphite to silver, glass, ceramics, and certain other metals
[NASA-CASE-YGS-00963] c15 N69-39735
High temperature bonding of sapphire to sapphire by eutectic Al2O3 and ZrO2 mixture to form sapphire rubidium maser cell
[NASA-CASE-GSC-11577-1] c15 N73-19467
Improved bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c15 N74-14141
Strain arrestor plate --- bonding rigid thermal insulation tiles to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c18 N74-15213
Bonded joint and method --- for reducing peak shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c15 N74-23064

BONES

Ultrasonic bone densitometer for measuring calcium content of bone structures
[NASA-CASE-MFS-20994-1] c05 N73-30090

BOOMS (EQUIPMENT)

Unfolding boom assembly with knuckle joints for positioning equipment for spacecraft
[NASA-CASE-XGS-00938] c32 N70-41367
Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191
Extendable, self-deploying boom apparatus
[NASA-CASE-GSC-10566-1] c15 N72-18477
Design and characteristics of mechanically extended and telescoping boom on crane assembly
[NASA-CASE-NPO-11118] c03 N72-25021

BOOSTER RECOVERY

Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XMF-00389] c31 N70-34176
Recoverable, reusable single stage booster capable of injecting large payloads into circular earth orbit
[NASA-CASE-XMF-01973] c31 N70-41588

BOOSTER ROCKET ENGINES

Segmented back-up bar for butt welding large tubular structures such as rocket booster bodies or tanks
[NASA-CASE-XMF-00640] c15 N70-39924
Recoverable, reusable single stage booster capable of injecting large payloads into circular earth orbit
[NASA-CASE-XMF-01973] c31 N70-41588

BORING MACHINES

Automatic controlled drive mechanism for portable boring bar
[NASA-CASE-XLA-03661] c15 N71-33518

BORON

Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential of field effect device
[NASA-CASE-GSC-11425-1] c24 N74-20329

BORON CARBIDES

Catalyst for increased growth of boron carbide crystal whiskers
[NASA-CASE-XHQ-03903] c15 N69-21922

BOUNDARY LAYER CONTROL

Double hinged flap for boundary layer control over trailing edges of wings
[NASA-CASE-XLA-01290] c02 N70-42016

BOUNDARY LAYER SEPARATION

Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-MFS-20831] c28 N71-29153

BOUNDARY LAYERS

Flow meter for measuring stagnation pressure in boundary layer around high speed flight vehicle
[NASA-CASE-XFR-02007] c12 N71-24692
Development of thermocouple instrument for measuring temperature of wall heated by flowing fluid without disturbing boundary layer
[NASA-CASE-XLE-05230] c14 N72-27410

BOXES (CONTAINERS)

Sealed storage container for channel carriers with mounted miniature electronic components
[NASA-CASE-MFS-20075] c09 N71-26133

BRAKES (FOR ARRESTING MOTION)

Energy dissipating shock absorbing system for

- land payload recovery or vehicle braking
[NASA-CASE-XLA-00754] c15 N70-34850
- Automatic braking device for rapidly
transferring humans or materials from elevated
location
[NASA-CASE-XKS-07814] c15 N71-27067
- Sprag solenoid brake --- development and
operations of electrically controlled brake
[NASA-CASE-NFS-21846-1] c15 N74-26976
- BRAKING**
- Direct current electromotive system for
regenerative braking of electric motor
[NASA-CASE-XMP-01096] c10 N71-16030
- Linear magnetic braking system with nonuniformly
wrapped primary coil producing constant
braking force on secondary coil
[NASA-CASE-XLE-05079] c15 N71-17652
- Anemometer with braking mechanism to prevent
rotation of wind driven elements
[NASA-CASE-XMF-05224] c14 N71-23726
- BRAZING**
- Anti-wettable materials brazing processes using
titanium and zirconium for surface pretreatment
[NASA-CASE-XMS-03537] c15 N69-21471
- Application techniques for protecting materials
during salt bath brazing
[NASA-CASE-XLE-00046] c15 N70-33311
- Joining aluminum to stainless steel by bonding
aluminum coatings onto titanium coated
stainless steel and brazing aluminum to
aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443
- Brazing alloy adapted for brazing corrosion
resistant steel to refractory metals, also for
brazing refractory metals to other refractory
metals
[NASA-CASE-XNP-03063] c17 N71-23365
- Electric resistance spot welding and brazing for
producing metal bonds with superior mechanical
and structural characteristics
[NASA-CASE-LAR-11072-1] c15 N73-20535
- BREATHING APPARATUS**
- Three-port transfer valve with one port open
continuously suitable for manned space flight
[NASA-CASE-XAC-01158] c15 N71-23051
- BRICKS**
- Development of construction block in form of
container folded from flat sheet and filled
with solid material for architectural purposes
[NASA-CASE-MSC-12233-2] c32 N73-13921
- BRIGHTNESS**
- Modulating and controlling intensity of light
beam from high temperature source by
servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479
- BRIGHTNESS DISCRIMINATION**
- Video signal processing system for sampling
video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742
- Automated visual sensitivity tester for
determining visual field sensitivity and blind
spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072
- BRITTLENESS**
- Rock sampling --- apparatus for controlling
particle size
[NASA-CASE-XNP-10007-1] c15 N74-23068
- Rock sampling --- method for controlling
particle size distribution
[NASA-CASE-XNP-09755] c15 N74-23069
- BROADBAND**
- Broadband chokes and absorbers to reduce
spurious radiation patterns of antenna array
caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
- Flexible monopole antenna with broad bandwidth
and low voltage standing wave ratio
[NASA-CASE-MSC-12101] c09 N71-18720
- Broadband frequency discriminator with resistive
captive inductive networks
[NASA-CASE-NPO-10096] c07 N71-24583
- Broadband microwave waveguide window to
compensate dielectric material filling
[NASA-CASE-XNP-08880] c09 N71-24808
- Comb type traveling wave maser amplifier for
improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831
- Wideband voltage controlled oscillator with high
phase stability
[NASA-CASE-XLA-03893] c10 N71-27271
- Multimode antenna feed system for microwave and
broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013
- BROADBAND AMPLIFIERS**
- Solid state broadband stable power amplifier
[NASA-CASE-XNP-10854] c10 N71-26331
- Broadband distribution amplifier with
complementary pair transistor output stages
[NASA-CASE-NPO-10003] c10 N71-26415
- BUSHES**
- Fabrication of sintered impurity semiconductor
brushes for electrical energy transfer
[NASA-CASE-XMF-01016] c26 N71-17818
- BUCKLING**
- Miniature vibration isolator utilizing elastic
tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
- Test equipment to prevent buckling of small
diameter specimens during compression tests
[NASA-CASE-LAR-10440-1] c14 N73-32323
- BUFFER STORAGE**
- Data handling based on source significance,
storage availability, and data received from
source
[NASA-CASE-XNP-04162-1] c08 N70-34675
- Data acquisition and processing system with
buffer storage and timing device for magnetic
tape recording of PCM data and timing
information
[NASA-CASE-NPO-12107] c08 N71-27255
- Digital to analog converter with parallel
input/output memory device
[NASA-CASE-KSC-10397] c08 N72-25206
- BUILDINGS**
- Apparatus and method of assembling building
blocks by folding pre-cut flat sheets of
material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454
- BULKHEADS**
- Liquid propellant tank design with spheroidal
bulkhead
[NASA-CASE-XMF-01899] c31 N70-41948
- BUOYANCY**
- Inflatable radar reflector unit - lightweight,
highly reflective to electromagnetic
radiation, and adaptable for erection and
deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
- BURNING RATE**
- Pressurized gas injection for burning rate
control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21819
- Development of apparatus for testing burning
rate and flammability of materials
[NASA-CASE-XMS-09690] c33 N72-25913
- BURNOUT**
- Spherical solid propellant rocket engine having
abrupt burnout
[NASA-CASE-XHQ-01897] c28 N70-35381
- BUTT JOINTS**
- Channel-type shell construction for rocket
engines and related configurations
[NASA-CASE-XLE-00144] c28 N70-34860
- Segmented back-up bar for butt welding large
tubular structures such as rocket booster
bodies or tanks
[NASA-CASE-XMF-00640] c15 N70-39924
- BUTTERFLY VALVES**
- Flexible inflatable seal for butterfly valves
[NASA-CASE-XLE-00101] c15 N70-33376
- BYPASSES**
- Low power drain transistor feedback circuit
[NASA-CASE-IGS-04999] c09 N69-24317
- Helical coaxial resonator RF filter
[NASA-CASE-IGS-02816] c07 N69-24323
- Current regulating voltage divider design with
load current shunting
[NASA-CASE-NFS-20935] c09 N71-34212
- Electrical interconnection of unilluminated
solar cells in solar battery array
[NASA-CASE-GSC-10344-1] c03 N72-27053
- C**
- CABLE FORCE RECORDERS**
- Design and characteristics of device for showing
amount of cable payed out from winch and load
imposed

- [NASA-CASE-MSC-12052-1] c15 N71-24599
- CABLES**
- Cable guide and restraint device for reefing tubes in uniform manner
[NASA-CASE-LAR-10129-1] c15 N73-25512
- CABLES (ROPEES)**
- High voltage cable for use in high intensity ionizing radiation fields
[NASA-CASE-INP-00738] c09 N70-38201
- Force separation rigid tethering device using cables
[NASA-CASE-XLA-02332] c32 N71-17609
- Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-INP-07587] c15 N71-18701
- Design and construction of satellite appendage tie-down cord
[NASA-CASE-IGS-02554] c31 N71-21064
- Quick attach mechanism for moving or stationary wires, ropes, or cables
[NASA-CASE-XPR-05421] c15 N71-22994
- Flexible cable that can be made rigid
[NASA-CASE-MSC-13512-1] c15 N72-22485
- Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453
- Reefing system
[NASA-CASE-LAR-10129-2] c15 N74-20063
- CADMIUM SULFIDES**
- High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c14 N74-18088
- CALCIUM**
- Ultrasonic bone densitometer for measuring calcium content of bone structures
[NASA-CASE-MFS-20994-1] c05 N73-30090
- CALCIUM FLUORIDES**
- Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-IHS-00259] c18 N70-36400
- Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105
- CALCIUM PHOSPHATES**
- Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-ERC-10338] c04 N72-33072
- CALIBRATING**
- Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999
- Combination pressure transducer-calibrator assembly for measuring fluid
[NASA-CASE-INP-01660] c14 N71-23036
- Control system for pressure balance device used in calibrating pressure gages
[NASA-CASE-INP-04134] c14 N71-23755
- Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606
- Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914
- Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117
- Calibration of vacuum gauges for measuring total and partial pressures in ultrahigh vacuum region
[NASA-CASE-IGS-07752] c14 N73-30390
- Ergometer calibrator --- for any ergometer utilizing rotating shaft
[NASA-CASE-MFS-21045-1] c14 N74-11288
- System for calibrating pressure transducer
[NASA-CASE-LAR-10910-1] c14 N74-13132
- In situ transfer standard for ultrahigh vacuum gage calibration
[NASA-CASE-LAR-10862-1] c14 N74-15092
- CALORIMETERS**
- Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature
[NASA-CASE-INP-04208] c33 N71-29051
- Heat flow calorimeter --- measures output of Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c14 N74-27859
- CAMERA SHUTTERS**
- Electrically operated rotary shutter for television camera aboard spacecraft
[NASA-CASE-INP-00637] c14 N70-40273
- Magnetically opened diaphragm design with camera shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
- Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427
- Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly --- for use with cameras mounted in satellites
[NASA-CASE-GSC-11560-1] c09 N74-20861
- CAMERAS**
- Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976
- Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-INP-03844-1] c14 N71-26474
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
[NASA-CASE-NPO-10417] c16 N71-33410
- Optical scanner with linear housing and rotating camera
[NASA-CASE-NPO-11002] c14 N72-22441
- Apparatus for on-film optical recording of camera lens aperture and focus setting
[NASA-CASE-MSC-12363-1] c14 N73-26431
- Integration of spectrometer capability with imagery function of facsimile cameras for use on planetary landers
[NASA-CASE-LAR-11207-1] c14 N73-28496
- Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
[NASA-CASE-LAR-10319-1] c14 N73-32322
- Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c14 N74-17153
- Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c14 N74-28932
- A holographic motion picture camera
[NASA-CASE-MFS-22517-1] c14 N74-33943
- CANARD CONFIGURATIONS**
- Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
- CANOPIES**
- Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c18 N74-16249
- CAWS**
- Design and characteristics of device for closing canisters under high vacuum conditions
[NASA-CASE-XLA-01446] c15 N71-21528
- Extrusion can for extruding ceramics under heat and pressure
[NASA-CASE-NPO-10812] c15 N73-13464
- CANTILEVER BEAMS**
- Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045
- CANTILEVER MEMBERS**
- Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
[NASA-CASE-NPO-10883] c31 N72-22874
- CAPACITANCE**
- Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-XKS-03495] c14 N69-39785
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- Thin film capacitive bolometer and capacitance temperature interchange sensor
[NASA-CASE-NPO-10607] c09 N71-27232

- Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
[NASA-CASE-MPS-21629] c14 N72-22442
- Adjustable frequency response microphone
[NASA-CASE-LAR-11170-1] c07 N74-12843
- Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-1] c14 N74-29773
- Capacitance multiplier and filter synthesizing network
[NASA-CASE-NPO-11948-1] c10 N74-32712
- CAPACITANCE SWITCHES**
- Electric discharge apparatus for electrohydraulic explosive forming
[NASA-CASE-IMP-00375] c15 N70-34249
- Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
- Feedback integrating circuit with grounded capacitor for signal processing
[NASA-CASE-XAC-10607] c10 N71-23669
- CAPACITORS**
- Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-XNP-09750] c14 N69-39937
- Energy source with tantalum capacitors in parallel and miniature silver oxide button cells for initiating pyrotechnic devices on spacecraft and rocket vehicles
[NASA-CASE-LAR-10367-1] c03 N70-26817
- Electrical power system for space flight vehicles operating over extended periods
[NASA-CASE-XMP-00517] c03 N70-34157
- Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases
[NASA-CASE-XLE-00143] c14 N70-36618
- Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
[NASA-CASE-XLE-01246] c14 N71-10797
- Capacitor fabrication by solidifying mixture of ferromagnetic metal particles, nonferromagnetic particles, and dielectric material
[NASA-CASE-LEW-10364-1] c09 N71-13522
- Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976
- Circuit for monitoring power supply by ripple current indication
[NASA-CASE-KSC-10162] c09 N72-11225
- Thermodielectric radiometer using polymer film as capacitor
[NASA-CASE-ARC-10138-1] c14 N72-24477
- Material compositions and processes for developing dielectric thick films used in microcircuit capacitors
[NASA-CASE-LAR-10294-1] c26 N72-28762
- Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477
- Insulated electrode for electrocardiographic recording without paste electrolyte
[NASA-CASE-HSC-14339-1] c05 N73-21151
- Integrated microcircuits and complementary four-phase logic system
[NASA-CASE-HSC-14240-1] c10 N73-21240
- CAPILLARY FLOW**
- Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures
[NASA-CASE-XLE-03307] c33 N71-14035
- Lubrication for bearings by capillary action from oil reservoir of porous material
[NASA-CASE-IMP-03972] c15 N71-23048
- Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder
[NASA-CASE-XLA-08911] c15 N71-27214
- CAPILLARY TUBES**
- Tubular flow restrictor for gas flow control in pipeline
[NASA-CASE-NPO-10117] c15 N71-15608
- Development of liquid separating system using capillary device connected to flexible bladder storage chamber
[NASA-CASE-XMS-13052] c14 N71-20427
- Interrupter switching device utilizing electrodes and mercury filled capillary tubes in which current flow vaporizes mercury as circuit breaker
[NASA-CASE-XNP-02251] c12 N71-20896
- CARBAZOLES**
- Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
[NASA-CASE-NPO-10373] c03 N71-18698
- CARBOHYDRATES**
- Decontamination of petroleum products with honey
[NASA-CASE-INP-03835] c06 N71-23499
- CARBON ARCS**
- Water cooled contactors for holding rotating carbon arc anode
[NASA-CASE-XMS-03700] c15 N69-24266
- CARBON COMPOUNDS**
- Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075
- CARBON DIOXIDE**
- Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
- Past response miniature carbon dioxide detector with no moving parts for measuring concentration in any atmosphere
[NASA-CASE-MSC-13332-1] c14 N72-21408
- CARBON DIOXIDE LASERS**
- Repetitively pulsed wavelength selective carbon dioxide laser
[NASA-CASE-ERC-10178] c16 N71-24832
- Performance of ac power supply developed for CO₂ laser system
[NASA-CASE-GSC-11222-1] c16 N73-32391
- CARBON DIOXIDE REMOVAL**
- Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c06 N74-12813
- CARBONATES**
- Chemical and physical properties of synthetic polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate
[NASA-CASE-MPS-10512] c06 N73-30099
- CARBOXYL GROUP**
- Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
[NASA-CASE-NPO-10596] c06 N71-25929
- CARBOXYLIC ACIDS**
- Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
- Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MPS-21040-1] c06 N73-30098
- Ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-MPS-22356-1] c06 N74-29479
- CARCINOGENS**
- Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-IGS-01231] c14 N70-41676
- CARDIOGRAPHY**
- Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
- Reference apparatus for medical ultrasonic transducer
[NASA-CASE-ARC-10753-1] c05 N74-13818
- CARDIOLOGY**
- Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MPS-20418] c14 N73-24473
- CARDIOTACHOMETERS**
- Digital computing cardiometer
[NASA-CASE-MPS-20284-1] c05 N74-12778
- CARDIOVASCULAR SYSTEM**
- Conditioning suit for normal function of astronaut cardiovascular system in gravity environment
[NASA-CASE-XLA-02898] c05 N71-20268

- Ear oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-IAC-05422] c04 N71-23185
- CARRIER FREQUENCIES**
Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-IXF-01160] c07 N71-11298
Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113
Demodulator for carrier transducers
[NASA-CASE-BUC-10107-1] c09 N74-17930
Decision feedback loop for tracking a polyphase modulated carrier
[NASA-CASE-NPO-13103-1] c07 N74-20811
- CARRIER WAVES**
Variable frequency subcarrier oscillator with temperature compensation
[NASA-CASE-IXP-03916] c09 N71-28810
Phase modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c07 N73-27107
- CARRIERS**
Sealed storage container for channel carriers with mounted miniature electronic components
[NASA-CASE-NFS-20075] c09 N71-26133
Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-NFS-21394-1] c12 N74-27744
- CARTESIAN COORDINATES**
Design and development of random function tracer for obtaining coordinates of points on contour maps
[NASA-CASE-XLA-01401] c15 N71-21179
- CASSETTES**
Tape cartridge with high capacity storage of endless-loop magnetic tape
[NASA-CASE-IGS-00769] c14 N70-41647
Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-IGS-01223] c07 N71-10609
Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c06 N74-12813
- CASCADE CONTROL**
Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-IGS-01473] c09 N71-10673
Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245
- CASES (CONTAINERS)**
Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-IGS-00886] c03 N71-11053
Radioactive isotope capsule container design for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEN-11227-1] c33 N71-35153
- CASSEGRAIN ANTENNAS**
Cassegain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
[NASA-CASE-IXP-00683] c09 N70-35425
Design and operation of multi-feed cone Cassegain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-IXP-09832] c30 N71-23723
Dual frequency feed systems for Cassegainian antennas
[NASA-CASE-NPO-13091-1] c09 N73-12214
Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c07 N74-11000
- CASTING**
Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-IXP-07659] c06 N71-22975
- CASTINGS**
Method of making an apertured casting
[NASA-CASE-LEW-11169-1] c15 N74-18131
- CATALYSIS**
Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-INS-00583] c28 N70-38504
- CATALYSTS**
Catalyst for increased growth of boron carbide crystal whiskers
[NASA-CASE-IXQ-03903] c15 N69-21922
Catalyst bed element removing tool
[NASA-CASE-XPR-00811] c15 N70-36901
Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-IXP-00876] c28 N70-41311
Development of device for detecting hydrogen in ambient environments
[NASA-CASE-NFS-11537] c14 N71-20442
Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c06 N74-12813
- CATALYTIC ACTIVITY**
Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579
- CATHETERIZATION**
Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
- CATHODE RAY TUBES**
Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-IXP-01383] c09 N71-10659
Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-IGS-04987] c08 N71-20571
Indexing mechanism for cathode array substitution in electron beam tube
[NASA-CASE-NPO-10625] c09 N71-26182
Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
Digital video system for displaying image and alphanumeric data on cathode ray tube
[NASA-CASE-NPO-11342] c09 N72-25248
Switching circuit for control of cathode ray tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273
Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474
- CATHODES**
Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
Design and characteristics of heat activated electric cell with anode made from one or more alkali metals and cathode made from oxidizing material
[NASA-CASE-LEW-11358] c03 N71-26084
Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783
Storage battery comprising negative plates of a wedge shaped configuration --- for preventing shape change induced malfunctions
[NASA-CASE-NPO-11806-1] c03 N74-19693
- CATIONS**
Water insoluble, cationic permselective membrane
[NASA-CASE-NPO-11091] c18 N72-22567
- CAVITATION FLOW**
Sensitoidal diaphragm cavitating flow control valve
[NASA-CASE-IXP-09704] c12 N71-18615
- CAVITIES**
Black body radiometer having isothermally surrounded cavity for ultraviolet, visible, and infrared radiation
[NASA-CASE-NPO-10810] c14 N71-27323
Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits

- [NASA-CASE-XHP-05999] c15 N71-29032
Soil burrowing mole apparatus
[NASA-CASE-XHP-07169] c15 N73-32362
- CAVITY RESONATORS**
Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
Semiconductor in resonant cavity for improving
signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616
Thermally sensitive tuning probe for nullifying
detuning effects in microwave cavity resonator
of amplifier
[NASA-CASE-XNP-00449] c14 N70-35220
Holder for high frequency crystal resonators
[NASA-CASE-XNP-03637] c15 N71-21311
Superconductive resonant cavity for improved
signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
Infrared tunable dye laser with nonlinear
wavelength mixing crystal in optical cavity
[NASA-CASE-ARC-10463-1] c09 N73-32111
Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQM-10790-1] c16 N74-11313
- CELESTIAL BODIES**
Device for determining relative angular position
of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490
- CELESTIAL NAVIGATION**
Development of star intensity measuring system
which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797
- CELL ANODES**
Heat activated eaf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579
Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034
- CELLS**
Separation cell with permeable membranes for
fluid mixture component separation
[NASA-CASE-XNS-02952] c18 N71-20742
- CELLS (BIOLOGY)**
Improved method of detecting and counting bacteria
[NASA-CASE-GSC-11917-1] c04 N74-26619
- CENTRIFUGES**
Centrifuge mounted motion simulator with
elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
Liquid-gaseous centrifugal separator for
weightlessness environment
[NASA-CASE-XLA-00415] c15 N71-16079
Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c12 N74-29652
Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c12 N74-30608
- CERAMIC BONDING**
Plasma spraying gun for forming diffusion bonded
metal or ceramic coatings on substrates
[NASA-CASE-XLE-01604-2] c15 N71-15610
Method of forming ceramic to metal seals
impervious to gaseous and liquid mercury at
high temperature
[NASA-CASE-INP-01263-2] c15 N71-26312
- CERAMIC COATINGS**
Evaporating crucible of tantalum-tungsten foil,
nickel alumina bonding agent, and ceramic
coating
[NASA-CASE-XLA-03105] c15 N69-27483
Unfired-ceramic, highly reflective composite
insulation for large launch vehicles
[NASA-CASE-XHP-01030] c18 N70-41583
Unfired ceramic insulation for protection from
radiant heating environments
[NASA-CASE-NFS-14253] c33 N71-24858
Cermet for nuclear fuel constructed by pressing
metal coated ceramic particles in die at
temperature to cause bonding of metal
coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
Ceramic coating for silica insulation
[NASA-CASE-HSC-14270-2] c18 N74-30004
Ceramic coating for silica insulation
[NASA-CASE-HSC-14270-1] c18 N74-30005
- CERAMIC NUCLEAR FUELS**
Cermet for nuclear fuel constructed by pressing
metal coated ceramic particles in die at
temperature to cause bonding of metal
coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
- CERAMICS**
Transpiration cooled turbine blade made from
metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
Characteristics of foamed-in-place ceramic
refractory insulating material and method of
fabrication
[NASA-CASE-IGS-02435] c18 N71-22998
Process for fiberizing ceramic materials with
high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
Method for coating through-holes in ceramic
substrates used in fabricating miniaturized
electronic circuits
[NASA-CASE-XHP-05999] c15 N71-29032
Extrusion can for extruding ceramics under heat
and pressure
[NASA-CASE-NPO-10812] c15 N73-13464
Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584
Method of making an apertured casting
[NASA-CASE-LEW-11169-1] c15 N74-18131
- CERNETS**
Freeze casting of metal ceramic and refractory
compound powders into plastic slaps
[NASA-CASE-XLE-00106] c15 N71-16076
Cermet for nuclear fuel constructed by pressing
metal coated ceramic particles in die at
temperature to cause bonding of metal
coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
Development of method for fabricating cernets
and analysis of various compositions to show
electrical and physical properties
[NASA-CASE-NPO-13120-1] c18 N73-23629
- CESIUM**
Heated tungsten filter for removing oxygen
impurities from cesium
[NASA-CASE-XNP-04262-2] c17 N71-26773
Production of iodine isotope by high energy
bombardment of cesium heat pipe causing
spallation reaction
[NASA-CASE-LEW-11390-2] c24 N73-20763
- CESIUM DIODES**
Oxygen-doped tantalum emitter for thermionic
devices such as cesium vapor diodes
[NASA-CASE-NPO-11138] c03 N70-34646
Thermionic cesium diode converter with cavity
emitters
[NASA-CASE-NPO-10412] c09 N71-28421
- CESIUM ENGINES**
Variable thrust ion engine using thermal
decomposition of solid cesium compound to
produce propulsive vapor
[NASA-CASE-XNP-00923] c28 N70-36802
Method for producing porous tungsten plates for
ionizing cesium compounds for propulsion of
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[NASA-CASE-XMF-00369] c09 N70-36494
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[NASA-CASE-NPO-10034] c15 N71-17685
- Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards
[NASA-CASE-MPS-20408] c18 N73-12604
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[NASA-CASE-MPS-21919-1] c10 N73-25243
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[NASA-CASE-NPO-13253-1] c15 N73-31445
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[NASA-CASE-XKS-03381] c09 N71-22796
- Electrical circuit selection device for simulating stage separation of flight vehicle
[NASA-CASE-XKS-04631] c10 N71-23663
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[NASA-CASE-IMP-06936] c15 N71-24695
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[NASA-CASE-MSC-11277] c09 N71-29008
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[NASA-CASE-IMP-04183] c09 N69-24329
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[NASA-CASE-XGS-01110] c07 N69-24334
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[NASA-CASE-IGS-03095] c09 N69-27463
- Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-IMP-09228] c09 N69-27500
- Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
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[NASA-CASE-XGS-02889] c07 N71-11282
- Difference indicating circuit used in conjunction with device measuring gravitational fields
[NASA-CASE-IMP-08274] c10 N71-13537
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[NASA-CASE-IMP-06937] c09 N71-19516
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[NASA-CASE-MPS-06074] c15 N71-20393
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[NASA-CASE-IMP-00746] c07 N71-21476
- Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material
[NASA-CASE-XKS-03381] c09 N71-22796
- Design and development of buck-boost voltage regulator circuit with additive or subtractive alternating current impressed on variable direct current source voltage
[NASA-CASE-GSC-10735-1] c10 N71-26085
- Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
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- Precision surface cutter for screen circuit negatives and other microcircuits
[NASA-CASE-XLA-09843] c15 N72-27485
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[NASA-CASE-NPO-13114-1] c22 N73-13656
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[NASA-CASE-NPO-13426-1] c09 N74-18869
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[NASA-CASE-GSC-11752-1] c33 N74-19583
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[NASA-CASE-XGS-04808] c03 N69-25146
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[NASA-CASE-XAC-08981] c09 N69-39897
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[NASA-CASE-MSC-12135-1] c09 N71-12526
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[NASA-CASE-MSC-12033-1] c09 N71-13531

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[NASA-CASE-IGS-03120] c15 N71-24047
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[NASA-CASE-GSC-10114-1] c10 N71-27366
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[NASA-CASE-GSC-10667-1] c10 N71-33129
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[NASA-CASE-ERC-10075-2] c09 N72-22196
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[NASA-CASE-LBW-10489-1] c15 N72-25447
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[NASA-CASE-XLA-01288] c09 N69-21470
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[NASA-CASE-IGS-00174] c08 N70-34743
- Electronic circuit system for controlling electric motor speed
[NASA-CASE-XMP-01129] c09 N70-38712
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[NASA-CASE-IMP-01058] c09 N71-12540
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[NASA-CASE-XNP-04780] c08 N71-19687
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[NASA-CASE-ILE-02008] c09 N71-21583
- Negation of magnetic fields produced by thin waferlike circuit elements in space vehicles
[NASA-CASE-XGS-03390] c03 N71-23187
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[NASA-CASE-XNP-07477] c09 N71-26092
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[NASA-CASE-XNP-02792] c14 N71-28958
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[NASA-CASE-XNP-00745] c10 N71-28960
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[NASA-CASE-XLA-07788] c09 N71-29139
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[NASA-CASE-GSC-10667-1] c10 N71-33129
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[NASA-CASE-ABC-10348-1] c10 N72-10205
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[NASA-CASE-FRC-10036] c09 N72-22200
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[NASA-CASE-NPO-11388] c03 N72-23048
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[NASA-CASE-NPO-11078] c09 N72-25262
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[NASA-CASE-XLA-09843] c15 N72-27485
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[NASA-CASE-GSC-10786-1] c10 N72-28241
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[NASA-CASE-GSC-11340-1] c10 N72-33230
- Thermochromic compositions for detecting heat levels in electronic circuits and devices
[NASA-CASE-NPO-10764-1] c14 N73-14428
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[NASA-CASE-LBW-11581-1] c05 N73-18139
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[NASA-CASE-MFS-21214-1] c09 N73-30181
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[NASA-CASE-IMP-00462] c14 N70-34298
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[NASA-CASE-LAR-10782-1] c15 N74-14133
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[NASA-CASE-XNP-02140] c09 N71-23097
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[NASA-CASE-XNP-03704] c15 N71-17695
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- Portable device for aligning surfaces of two adjacent wall or sheet sections for joining at point of junction
[NASA-CASE-XNP-01452] c15 N70-41371
- Hydraulic clamping of sheet stock specimens
[NASA-CASE-XLA-05100] c15 N71-17696
- Inertial component clamping assembly design for spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813
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[NASA-CASE-XNP-02341] c15 N71-21531
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[NASA-CASE-XPR-05421] c15 N71-22994
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[NASA-CASE-LAR-11458-1] c14 N74-32882
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[NASA-CASE-XNP-02139] c18 N71-24184
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- Environmentally controlled suit for working in sterile chamber
[NASA-CASE-LAR-10076-1] c05 N73-20137
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- Device for back purging thrust engines
[NASA-CASE-XMS-04826] c28 N71-28849
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[NASA-CASE-MFS-18100] c15 N72-11390
- Fiber separating and cleaning method and apparatus
[NASA-CASE-LAR-11224-1] c15 N74-20072
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[NASA-CASE-LAR-10590-1] c15 N70-26819
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aircraft pilots of region of clear air
turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437

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turbulence using pulsed laser radar
[NASA-CASE-MFS-21244-1] c20 N73-21523

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roll, climbout path and verticle flight path
in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157

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systolic and diastolic blood pressure in humans
[NASA-CASE-MSC-13999-1] c05 N72-25142

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for tooth repair
[NASA-CASE-ERC-10338] c04 N72-33072

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for thyroid measurements
[NASA-CASE-LEW-11390-3] c11 N73-28128

Surgical liquification pump for removing
macerrated tissue from eye
[NASA-CASE-LEW-12051-1] c04 N73-32000

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clocks at remote locations with master clock
using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326

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by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137

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digital logic systems which maintains output
pulses during component failure
[NASA-CASE-MSC-12531-1] c14 N73-22386

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[NASA-CASE-LAR-11458-1] c14 N74-32882

CLOSED CIRCUIT TELEVISION
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optical alignment of spacecraft using
television camera system
[NASA-CASE-MSC-12559-1] c31 N73-26879

CLOSED CYCLES
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to determine distance between moving airborne
vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930

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signal phase-locked to input signal
[NASA-CASE-GSC-11623-1] c10 N73-31202

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Potable water reclamation from human wastes in
zero-G environment
[NASA-CASE-XLA-03213] c05 N71-11207

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atmosphere
[NASA-CASE-LEW-11101-1] c31 N73-32750

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canisters under high vacuum conditions
[NASA-CASE-XLA-01446] c15 N71-21528

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Development and characteristics of apparatus for
measuring intensity of electric field in
atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318

Electric field measuring and display system ---
for cloud formations
[NASA-CASE-KSC-10731-1] c14 N74-27862

COATING
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circuit protection
[NASA-CASE-XNP-01599] c09 N71-20705

High thermal emittance black surface coatings
and process for applying to metal and metal
alloy surfaces used in radiative cooling of
spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875

COATINGS
Bonded solid lubricant coatings of calcium
fluoride and binder for high temperature
stability
[NASA-CASE-IMS-00259] c18 N70-36400

Contrast color coating for meteoroid impact
position locator for space vehicles
[NASA-CASE-LAR-10629-1] c14 N73-32348

COAXIAL CABLES
Design and development of device for cooling
inner conductor of coaxial cable
[NASA-CASE-XNP-09775] c09 N71-20445

Design and development of electric connectors
for rigid and semirigid coaxial cables
[NASA-CASE-XNP-04732] c09 N71-20851

Transducer circuit design with single coaxial
cable for input and output connections
including incorporation into miniaturized
catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597

Collapsible antenna boom and coaxial
transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191

Vibration isolation system, using coaxial
helical compression springs
[NASA-CASE-NPO-11012] c15 N72-11391

Development and characteristics of hermetically
sealed coaxial package for containing
microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469

System for stabilizing cable phase delay
utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c09 N74-17927

Refrigerated coaxial coupling --- for maser
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[NASA-CASE-NPO-13504-1] c09 N74-27689

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Self-energized plasma compressor
[NASA-CASE-MFS-22145-2] c25 N74-35145

COBALT ALLOYS
High strength, corrosion resistant cobalt-based
alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644

High temperature cobalt-base alloy resistant to
corrosion by liquid metals and to sublimation
in vacuum environment
[NASA-CASE-XLE-02991] c17 N71-16025

High temperature ferromagnetic cobalt-base alloy
for electrical power generating equipment
[NASA-CASE-XLE-03629] c17 N71-23248

Cobalt-tungsten alloys with superior strength at
elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415

COCKPIT SIMULATORS
Controlled visibility device for simulating poor
visibility conditions in training pilots in
instrument landing and flight procedures
[NASA-CASE-XPR-04147] c11 N71-10748

CODERS
Design and development of encoder/decoder system
to generate binary code which is function of
outputs of plurality of bistable elements
[NASA-CASE-NPO-10342] c10 N71-33407

Biorthogonal encoder with modular design
[NASA-CASE-NPO-10629] c08 N72-18184

Method and apparatus for decoding compatible
convolutional codes
[NASA-CASE-MSC-14070-1] c07 N74-32598

CODING
Description of error correcting methods for use
with digital data computers and apparatus for
encoding and decoding digital data
[NASA-CASE-XNP-02748] c08 N71-22749

Binary concatenated coding system to measure,
count, and record numerical information using
minimized number of digits
[NASA-CASE-MSC-14082-1] c08 N73-16163

Apparatus and digital technique for coding rate
data
[NASA-CASE-LAR-10128-1] c08 N73-20217

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Bioassay of flavin coenzymes
[NASA-CASE-GSC-10565-1] c06 N72-25149

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Design of folded traveling wave user structure
[NASA-CASE-INP-05219] c16 N71-15550

Development of focused image holography with
extended sources
[NASA-CASE-ERC-10019] c16 N71-15551

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Hybrid holographic system using reference,
transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565

Development of apparatus for amplitude
modulation of diode laser by periodic
discharge of direct current power supply
[NASA-CASE-IMS-04269] c16 N71-22895

Coherent light beam device and method for
measuring gas density in vacuum chambers

- [NASA-CASE-XER-11203] c14 N71-28994
- COHERENT RADIATION**
- Method and apparatus for producing intense, coherent, monochromatic light from low temperature plasma
[NASA-CASE-INP-04167-3] c25 N72-21693
- Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light collector as receiving antenna
[NASA-CASE-LAR-10311-1] c16 N73-16536
- Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c14 N74-11284
- Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c14 N74-20009
- Laser system with an antiresonant optical ring --- optical properties and performance of beam splitter with equal transmission and reflection coefficients
[NASA-CASE-HQM-10844-1] c16 N74-20118
- Optically detonated explosive device
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- COILS**
- Improved structure and method of producing composite of gapped and ungapped cores
[NASA-CASE-NPO-13413-1] c09 N74-33738
- COLD CATHODES**
- Cold cathode discharge tube with pressurized gas cell for meteoroid detection in space
[NASA-CASE-LAR-10483-1] c14 N73-32327
- COLD WORKING**
- Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLE-05641-1] c15 N71-26346
- COLLAPSE**
- Collapsible piston for hypervelocity gun
[NASA-CASE-MS-C-13789-1] c11 N73-32152
- COLLECTION**
- Automatic liquid collection and disposal system
[NASA-CASE-LAR-11071-1] c15 N73-18474
- COLLIMATION**
- Long range laser traversing system
[NASA-CASE-GSC-11262-1] c16 N74-21091
- COLLIMATORS**
- X ray collimating structure for focusing radiation directly onto detector
[NASA-CASE-YBQ-04106] c14 N70-40240
- Focusing optical collimator for high resolution scanning of electromagnetic radiations, neutrons, and other particles
[NASA-CASE-MPS-20932-1] c14 N73-27380
- Collimator for analyzing spatial location of near and distant sources of radiation
[NASA-CASE-MPS-20546-2] c14 N73-30389
- COLLISION AVOIDANCE**
- Cooperative Doppler radar system for avoiding midair collisions
[NASA-CASE-LAR-10403] c21 N71-11766
- Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
- Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
- Economical satellite aided vehicle avoidance system for preventing midair collisions
[NASA-CASE-ERC-10419] c21 N72-21631
- Development and operating principles of collision warning system for aircraft accident prevention
[NASA-CASE-HQM-10703] c21 N73-13643
- Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
[NASA-CASE-LAR-10717-1] c21 N73-30641
- COLLOIDAL GENERATORS**
- Colloidal particle generator for electrostatic engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265
- COLLOIDAL PROPELLANTS**
- Colloidal particle generator for electrostatic engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265
- Low density and low viscosity magnetic propellant for use under zero gravity conditions
[NASA-CASE-XLE-01512] c12 N70-40124
- Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213
- COLOR**
- Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446
- Contrast color coating for meteoroid impact position locator for space vehicles
[NASA-CASE-LAR-10629-1] c14 N73-32348
- COLOR PHOTOGRAPHY**
- Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XMF-01779] c12 N71-20815
- COLOR TELEVISION**
- Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
- Color television system for allowing monochrome television camera to produce color pictures
[NASA-CASE-MS-C-12146-1] c07 N72-17109
- Video tape recorder with scan conversion playback for color television signals
[NASA-CASE-NPO-10166-1] c07 N73-22076
- COLOR VISION**
- Color perception tester for testing color code perceptiveness of individuals
[NASA-CASE-KSC-10278] c05 N72-16015
- COLUMNS (PROCESS ENGINEERING)**
- Micropacked column for rapid chromatographic analysis using low gas flow rates
[NASA-CASE-XNP-04816] c06 N69-39936
- COMBINATORIAL ANALYSIS**
- Apparatus for computing square roots
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- COMBUSTION**
- Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
- COMBUSTION CHAMBERS**
- Rocket chamber leak test fixture using tubular plug
[NASA-CASE-YPR-09479] c14 N69-27503
- Propellant injectors for rocket combustion chambers
[NASA-CASE-XLE-00103] c28 N70-33241
- Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411
- Apparatus for cooling and injecting hypergolic propellants into combustion chamber of small rocket engine
[NASA-CASE-XLE-00303] c15 N70-36535
- Ignition system for monopropellant combustion devices
[NASA-CASE-XNP-00249] c28 N70-38249
- Fabrication method for lightweight regeneratively cooled combustion chamber of channel construction
[NASA-CASE-XLE-00150] c28 N70-41818
- Rocket combustion chamber stability by controlling transverse instability during propellant combustion
[NASA-CASE-XLE-04603] c33 N71-21507
- Regenerative cooling system for rocket combustion chamber using coolant tubes in convergent-divergent nozzle
[NASA-CASE-XLE-04857] c28 N71-23968
- Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
- Coaxial injector for mixing liquid propellants within combustion chambers
[NASA-CASE-NPO-11095] c15 N72-25455
- Airflow distribution control in gas turbine engines
[NASA-CASE-LEW-11593-1] c28 N73-25816
- Swirl can, full-annulus combustion chambers for high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665
- Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c15 N74-32919

- COMBUSTION CONTROL**
 Pressurized gas injection for burning rate control of solid propellants
 [NASA-CASE-XLE-03494] c27 N71-21819
- COMBUSTION EFFICIENCY**
 Fuel injection system for maximum combustion efficiency of rocket engines
 [NASA-CASE-XLE-00111] c28 N70-38199
- COMBUSTION PHYSICS**
 Characteristics of solid propellant rocket engine with controlled rate of thrust buildup operating in vacuum environment
 [NASA-CASE-NPO-11559] c28 N73-24784
- COMBUSTION PRODUCTS**
 Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
 [NASA-CASE-XGS-01971] c15 N71-15922
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 [NASA-CASE-GSC-11095-1] c14 N72-10375
- COMBUSTION STABILITY**
 Rocket combustion chamber stability by controlling transverse instability during propellant combustion
 [NASA-CASE-XLE-04603] c33 N71-21507
- COMMAND MODULES**
 Energy absorbing crew couch strut for Apollo command module
 [NASA-CASE-MSC-12279] c15 N72-17450
- COMMUNICATING**
 Communication between computers using two identical communications links
 [NASA-CASE-NPO-11161] c08 N72-25207
- COMMUNICATION**
 Circuitry for developing autocorrelation function continuously within signal receiving period
 [NASA-CASE-XNP-00746] c07 N71-21476
 Superconductive resonant cavity for improved signal to noise ratio in communication signal
 [NASA-CASE-MSC-12259-2] c07 N72-33146
- COMMUNICATION CABLES**
 Method of making molded electric connector for use with flat conductor cables
 [NASA-CASE-XMP-03498] c15 N71-15986
 Process for making RF shielded cable connector assemblies and resulting structures
 [NASA-CASE-GSC-11215-1] c09 N73-28083
- COMMUNICATION EQUIPMENT**
 Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts
 [NASA-CASE-XNP-01306] c07 N71-20814
 Binary data decoding device for use at receiving end of communication channel
 [NASA-CASE-NPO-10118] c07 N71-24741
 Development of communication system for transmitting differential phase shift keyed signals from input data bits without timing or phase reference signals
 [NASA-CASE-MSC-14065-1] c07 N73-10215
 Characteristics of data-aided carrier tracking loop used for tracking carrier in angle modulated communications system
 [NASA-CASE-NPO-11282] c10 N73-16205
 Doppler compensated communication system for locating supersonic transport position
 [NASA-CASE-GSC-10087-4] c07 N73-20174
 Differential phase shift keyed communication system
 [NASA-CASE-MSC-14065-1] c07 N74-26654
- COMMUNICATION SATELLITES**
 Erectable, inflatable, radio signal reflecting passive communication satellite
 [NASA-CASE-XLA-00210] c30 N70-40309
 Development of antenna system for spin stabilized communication satellite for simultaneous reception and transmission of data
 [NASA-CASE-XGS-02607] c31 N71-23009
 Elimination of tracking occultation problems occurring during continuous monitoring of interplanetary missions by using Earth orbiting communications satellite
 [NASA-CASE-XAC-06029-1] c31 N71-24813
 Satellite radio communication system with remote steerable antenna
 [NASA-CASE-XNP-02389] c07 N71-28900
- COMPUTATION**
 High speed low level voltage commutating switch
 [NASA-CASE-XAC-00060] c09 N70-39915
- COMPUTATORS**
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 [NASA-CASE-IGS-08266] c14 N69-27432
 Commutator for steering precisely controlled bidirectional currents through numerous loads by use of magnetic core shift registers
 [NASA-CASE-NPO-10743] c08 N72-21199
- COMPARATOR CIRCUITS**
 Describing frequency discriminator using digital logic circuits and supplying single binary output signal
 [NASA-CASE-MFS-14322] c08 N71-18692
 Development of pulsed differential comparator circuit
 [NASA-CASE-XLE-03804] c10 N71-19471
- COMPARATORS**
 Photometric flow meter with comparator reference means
 [NASA-CASE-IGS-01331] c14 N71-22996
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 [NASA-CASE-XNP-04819] c08 N71-23295
- COMPENSATORS**
 Star image motion compensator using telescope for maintaining fixed images
 [NASA-CASE-LAR-10523-1] c14 N72-22444
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 High strength reinforced metallic composites for applications over wide temperature range
 [NASA-CASE-XLE-02428] c17 N70-33288
 Method for producing fiber reinforced metallic composites with high strength and elasticity over wide temperature range
 [NASA-CASE-XLE-00231] c17 N70-38198
 Composites reinforced with short metal fibers or whiskers and having high tensile strength
 [NASA-CASE-XLE-00228] c17 N70-38490
 Unfired-ceramic, highly reflective composite insulation for large launch vehicles
 [NASA-CASE-XMP-01030] c18 N70-41583
 Freeze casting of metal ceramic and refractory compound powders into plastic slips
 [NASA-CASE-XLE-00106] c15 N71-16076
 Preparation and characteristics of lightweight refractory insulation
 [NASA-CASE-XMF-05279] c18 N71-16124
 Flexible composite membrane structure impervious to extremely reactive chemicals in rocket propellants
 [NASA-CASE-XMP-08837] c18 N71-16210
 Cryostat for flexure fatigue testing of composite materials
 [NASA-CASE-XMF-02964] c14 N71-17659
 Description of method for producing metallic composites reinforced with ceramic and refractory hard metals that are fibered in place
 [NASA-CASE-XLE-03925] c18 N71-22894
 Electrically coupled individually encapsulated solar cell matrix
 [NASA-CASE-NPO-11190] c03 N71-34044
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 [NASA-CASE-MFS-21077] c18 N71-34502
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 [NASA-CASE-NPO-11036] c15 N72-24522
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 [NASA-CASE-LAR-10416-1] c15 N72-27527
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 [NASA-CASE-MSC-14331-1] c18 N73-27501
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 [NASA-CASE-LEW-11879-1] c18 N74-20152
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 [NASA-CASE-LEW-11582-1] c09 N74-33739

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 Ammonium perchlorate composite propellant with
 organic Cu/II/ chelate catalytic additive
 [NASA-CASE-LAR-10173-1] c27 N71-14090

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 lightweight structures usable in space
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 [NASA-CASE-XLA-00204] c32 N70-36536
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 [NASA-CASE-LAR-10788-1] c31 N73-20880
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 continuous regression rate sensor devices
 [NASA-CASE-LAR-10337-1] c15 N74-14141

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 [NASA-CASE-GSC-11889-1] c14 N74-32887

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 to control valve handling large liquid flows
 [NASA-CASE-IRG-01208] c15 N70-35409

COMPRESSIBLE FLUIDS
 Capacitor for measuring density of compressible
 fluid in liquid, gas, or liquid and gas phases
 [NASA-CASE-XLE-00143] c14 N70-36618
 Apparatus for tensile strength testing of
 specimen by pressurized fluid
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 temperature refrigeration based on gas
 pressure balance
 [NASA-CASE-IXP-08877] c15 N71-23025
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 plastics utilizing a temperature gradient
 across the plastic to cure the article
 [NASA-CASE-LAR-10489-1] c15 N74-18124

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 [NASA-CASE-ARC-10461-1] c33 N74-33379

COMPRESSION TESTS
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 diameter specimens during compression tests
 [NASA-CASE-LAR-10440-1] c14 N73-32323
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 subjecting metal specimen to tensile and
 compressive loads at constant temperature
 [NASA-CASE-LAR-10426-1] c32 N74-19528

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 blades to rotors and discs of jet engines
 [NASA-CASE-LEW-10533-1] c15 N73-28515

COMPRESSORS
 Thermal pump-compressor for converting solar
 energy
 [NASA-CASE-XLA-00377] c33 N71-17610
 Self-energized plasma compressor
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COMPUTATION
 Apparatus for computing square roots
 [NASA-CASE-IGS-04768] c08 N71-19437

COMPUTER COMPONENTS
 Computer circuit performing both counting and
 shifting logic operations also capable of
 miniaturization and integration in basic
 circuits
 [NASA-CASE-IXP-01753] c08 N71-22897

COMPUTER GRAPHICS
 System for digitizing graphic displays
 [NASA-CASE-NPO-10745] c08 N72-22164

COMPUTER PROGRAMMING
 Encoders designed to generate comma free
 biorthogonal Reed-Muller type code comprising
 conversion of 64 6-bit words into 64 32-bit
 data for communication purposes
 [NASA-CASE-NPO-10595] c10 N71-25917

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 Self testing and repairing computer comprising
 control and diagnostic unit and rollback

points for error correction
 [NASA-CASE-NPO-10567] c08 N71-24633
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 reliability of self-repair and fault-tolerant
 systems with respect to selected system and
 mission parameters
 [NASA-CASE-NPO-13086-1] c15 N73-12495
 Development of flight simulator system to show
 position of joystick displacement
 [NASA-CASE-NPO-11497] c08 N73-25206

COMPUTER STORAGE DEVICES
 Magnetic matrix memory system for nondestructive
 reading of information contained in matrix
 [NASA-CASE-IXP-05835] c08 N71-12504
 Binary sequence detector with few memory
 elements and minimized logic circuit complexity
 [NASA-CASE-IXP-05415] c08 N71-12505
 Pulsed magnetic core memory element with
 blocking oscillator feedback for interrogation
 without loss of digital information
 [NASA-CASE-IGS-03303] c08 N71-18595
 Reliable magnetic core circuit apparatus with
 application in selection matrices for digital
 memories
 [NASA-CASE-IXP-01318] c10 N71-23033
 Time division multiplexed telemetry transmitting
 system controlled by programmed memory
 [NASA-CASE-GSC-10131-1] c07 N71-24624
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 circuit matrix and serial memory storage units
 [NASA-CASE-NPO-10150] c08 N71-24650
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 for driving each word location
 [NASA-CASE-IXP-01466] c10 N71-26434
 Redundant memory for enhanced reliability of
 digital data processing system
 [NASA-CASE-GSC-10564] c10 N71-29135
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 ferroelectric properties of single crystal
 barium titanate
 [NASA-CASE-ERC-10307] c08 N72-21198
 Shared memory for a fault-tolerant computer
 [NASA-CASE-NPO-13139-1] c08 N74-17911

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 Adaptive voting computer system
 [NASA-CASE-MSC-13932-1] c08 N74-14920

COMPUTERIZED SIMULATION
 Integrated time shared instrumentation display
 for aerospace vehicle simulators
 [NASA-CASE-XLA-01952] c08 N71-12507

COMPUTERS
 Telemetry data unit to form multibit words for
 use between demodulator and computer
 [NASA-CASE-IXP-09225] c09 N69-24333
 Data compression processor for monitoring analog
 signals by sampling procedure
 [NASA-CASE-NPO-10068] c08 N71-19288
 Communication between computers using two
 identical communications links
 [NASA-CASE-NPO-11161] c08 N72-25207

CONCAVITY
 Concave grating spectrometer for use in near and
 vacuum ultraviolet regions
 [NASA-CASE-IGS-01036] c14 N70-40003

CONCENTRATORS
 Concentrator device for controlling direction of
 solar energy onto energy converters
 [NASA-CASE-XLE-01716] c09 N70-40234

CONDENSATES
 Apparatus for determining volatile condensable
 material present in polymeric products
 [NASA-CASE-IXP-09699] c06 N71-24607
 Development and characteristics of device for
 removing condensate from heat exchangers with
 straight through gas flow
 [NASA-CASE-MSC-14143-1] c33 N73-32823

CONDENSERS (LIQUIFIERS)
 Condenser-separator for dehumidifying air
 utilizing sintered metal surface
 [NASA-CASE-XLA-08645] c15 N69-21465
 Development and characteristics of device for
 removing condensate from heat exchangers with
 straight through gas flow
 [NASA-CASE-MSC-14143-1] c33 N73-32823

CONDUCTING FLUIDS
 Multiducted electromagnetic pump for conductive
 liquids
 [NASA-CASE-NPO-10755] c15 N71-27084

CONDUCTIVE HEAT TRANSFER

Measuring conductive heat flow and thermal conductivity of laminar gas stream in cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156

Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XHS-09571] c05 N71-19439

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Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-INP-07587] c15 N71-18701

Ferrite memory arrays from pre-formed metal conductors
[NASA-CASE-LAR-10994-1] c18 N73-30536

CONES

Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-INP-09701] c14 N71-26475

CONFINEMENT

Observation window for internal gas confining chamber
[NASA-CASE-NPO-10890] c14 N73-12265

CONICAL BODIES

Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859

Conical reflector antenna with feed approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127

Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130

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Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-IXS-03495] c14 N69-39785

Foldable, double cone and parabolic reflector system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580

Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XHS-04292] c15 N71-22722

CONNECTORS

Expanding and contracting connector strip for solar cell array of Nimbus satellite
[NASA-CASE-XGS-01395] c03 N69-21539

Design and development of quick release connector
[NASA-CASE-XLA-01141] c15 N71-13789

Development and characteristics of strainer for flared tube fitting
[NASA-CASE-XLA-05056] c15 N72-11389

Process for making RF shielded cable connector assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083

CONSCIOUSNESS

Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness
[NASA-CASE-MSC-13282-1] c05 N71-24729

CONSTRAINTS

Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694

Cable guide and restraint device for reefing tubes in uniform manner
[NASA-CASE-LAR-10129-1] c15 N73-25512

Development of restraint system for securing personnel to ergometer while exercising under weightless conditions
[NASA-CASE-NFS-21046-1] c14 N73-27377

Reefing system
[NASA-CASE-LAR-10129-2] c15 N74-20063

CONSTRUCTION MATERIALS

Apparatus and method of assembling building blocks by folding pre-cut flat sheets of material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454

Development of construction block in form of container folded from flat sheet and filled with solid material for architectural purposes
[NASA-CASE-MSC-12233-2] c32 N73-13921

CONTACT POTENTIALS

Lightweight, rugged, inexpensive satellite

battery for producing electrical power from ionosphere using electrodes with different contact potentials
[NASA-CASE-IGS-01593] c03 N70-35408

CONTAINERS

Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835

Method for locating leaks in hermetically sealed containers
[NASA-CASE-ERC-10045] c15 N71-24910

Quantitative liquid measurements in container by resonant frequencies
[NASA-CASE-INP-02500] c18 N71-27397

CONTAMINANTS

Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XHS-01905] c12 N71-21089

CONTAMINATION

Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-INP-02039] c15 N71-15871

Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-IGS-01971] c15 N71-15922

Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372

Portable tester for monitoring bacterial contamination by adenosine triphosphate light reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413

CONTINUOUS WAVE RADAR

Phase locked loop with sideband rejecting properties in continuous wave tracking radar
[NASA-CASE-INP-02723] c07 N70-41680

CONTOURS

Describing device for surveying contour of surface using X-Y plotter and traveling transducer
[NASA-CASE-XLA-08646] c14 N71-17586

Processing system for semiperiodic electrical signals to produce real time contoured display
[NASA-CASE-MSC-13407-1] c10 N72-20225

CONTROL

Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
[NASA-CASE-XHS-05890] c09 N71-23191

Control system for pressure balance device used in calibrating pressure gages
[NASA-CASE-INP-04134] c14 N71-23755

Power control system for thermal nuclear reactor
[NASA-CASE-XLE-05799] c22 N72-21644

CONTROL BOARDS

Ionization control system design for monitoring separately located ion gage pressures on vacuum chambers
[NASA-CASE-XLE-00787] c14 N71-21090

CONTROL EQUIPMENT

Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772

Voltage drift compensation circuit for analog-to-digital converter
[NASA-CASE-INP-04780] c08 N71-19687

Development of attitude control system for vertical takeoff aircraft using reaction nozzles displaced from various axes of aircraft
[NASA-CASE-XAC-08972] c02 N71-20570

Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-IAC-10019] c15 N71-23809

Controlled release device for use in launching rockets or missiles
[NASA-CASE-IXS-03338] c15 N71-24043

Circuits for controlling reversible dc motor
[NASA-CASE-INP-07477] c09 N71-26092

Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-INP-01466] c10 N71-26434

Fluid control jet amplifiers
[NASA-CASE-XLE-09341] c12 N71-28741

CONTROL ROCKETS

SUBJECT INDEX

System for control of variable signal generator
[NASA-CASE-NPO-11064] c07 N72-11150

Solid state remote circuit selector switching circuit
[NASA-CASE-LEW-10387] c09 N72-22201

Development of device for simulating charge and discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020

Bridge-type gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241

Control circuit for nuclear thermionic converter power source for spacecraft
[NASA-CASE-NPO-13114-1] c22 N73-13656

Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463

Development and characteristics of variable ratio, mixed-mode, bilateral master-slave control system for space shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c31 N73-30832

Remote manipulator system
[NASA-CASE-MFS-22022-1] c05 N74-10099

Digital controller for a Baum folding machine --- providing automatic counting and machine shutoff
[NASA-CASE-LAR-10688-1] c15 N74-21056

Flow control valve --- for high temperature fluids
[NASA-CASE-NPO-11951-1] c15 N74-21065

CONTROL ROCKETS

Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-IMS-00583] c28 N70-38504

CONTROL RODS

Nuclear reactor control rod assembly with improved driving mechanism
[NASA-CASE-XLE-00298] c22 N70-34501

Manual control mechanism for adjusting control rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740

CONTROL SIMULATION

Kinesthetic control simulator with multiple degree of freedom of movement similar to lunar flying vehicles
[NASA-CASE-LAR-10276-1] c11 N70-26813

CONTROL STABILITY

Design and development of active control system for air cushion vehicle to reduce or eliminate effects of excessive vertical vibratory acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023

CONTROL SURFACES

Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859

Attitude control system for spacecraft based on conversion of incident solar radiation on movable control surfaces into mechanical torques
[NASA-CASE-XNP-02982] c31 N70-41855

CONTROL UNITS (COMPUTERS)

Self testing and repairing computer comprising control and diagnostic unit and rollback points for error correction
[NASA-CASE-NPO-10567] c08 N71-24633

CONTROL VALVES

Electromechanical actuator and its use in rocket thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185

Multiple orifice fluid flow control valve to provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867

Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859

Control valve and coaxial variable injector for controlling bipropellant mixture ratio and flow
[NASA-CASE-XNP-09702] c15 N71-17654

Control valve for switching main stream of fluid from one stable position to another by means of electrohydrodynamic forces
[NASA-CASE-NPO-10416] c12 N71-27332

Force balanced throttle valve for fuel control in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432

Dual stage check valve for cryogenic supply systems used in space flight environmental control system
[NASA-CASE-MSC-13587-1] c15 N73-30459

Airflow control system for supersonic inlets
[NASA-CASE-LEN-11188-1] c02 N74-20646

CONTROLLED ATMOSPHERES

Rectangular electric conductors for conductor cables to withstand spacecraft vibration and controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737

High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12176-1] c09 N71-13518

System for continuous monitoring of exhalations, weighing, and cage cleaning for animal exposed to controlled atmosphere for toxic study
[NASA-CASE-XAC-05333] c11 N71-22875

CONTROLLERS

Unitary three-axis controller for flight vehicles within or outside atmosphere
[NASA-CASE-IFR-00181] c21 N70-33279

Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
[NASA-CASE-IFR-04104] c03 N70-42073

Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-IMS-07487] c15 N71-23255

Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c03 N74-10942

CONVECTIVE FLOW

Design and development of device to prevent geysering during convective circulation of cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486

CONVECTIVE HEAT TRANSFER

Thin film gauge --- for measuring convective heat transfer rates along test surfaces in wind tunnels
[NASA-CASE-NPO-10617-1] c14 N74-22095

CONVERGENCE

Electrical device for developing converging spherical shock waves
[NASA-CASE-MFS-20890] c14 N72-22439

CONVERGENT-DIVERGENT NOZZLES

Gimbaled partially submerged nozzle for solid propellant rocket engines for providing directional control
[NASA-CASE-XMP-01544] c28 N70-34162

Regenerative cooling system for rocket combustion chamber using coolant tubes in convergent-divergent nozzle
[NASA-CASE-XLE-04857] c28 N71-23968

CONVOLUTION INTEGRALS

Learning decoders for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c07 N72-27178

COOLANTS

Simulated fuel assembly-type flow measurement apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669

COOLING

Microwave power receiving antenna solving heat dissipation problems by construction of elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486

Dissipative voltage regulator system for minimizing heat dissipation
[NASA-CASE-GSC-10891-1] c10 N71-26626

Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440

COOLING SYSTEMS

Automatic thermal switch for improving efficiency of cooling gases below 40 K
[NASA-CASE-XNP-03796] c23 N71-15467

Differential thermopile for measuring cooling water temperature rise
[NASA-CASE-XAC-00812] c14 N71-15598

Electric power system with circulatory liquid coolant cooling system
[NASA-CASE-MFS-14114-2] c09 N71-24807

Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654

Development and characteristics of natural circulation radiator for use with nuclear

- power plants installed in lunar space stations
[NASA-CASE-IHQ-03673] c33 N71-29046
- Development and characteristics of cooling
system to maintain temperature of rack mounted
electronic modules
[NASA-CASE-MSC-12389] c33 N71-29052
- Development of method for cooling high
temperature wall members with cooling medium
having high heat absorption capability
[NASA-CASE-HQN-00938] c33 N71-29053
- Apparatus for liquid spray cooling of turbine
blades
[NASA-CASE-XLE-00027] c33 N71-29152
- Radial heat flux transformer for use in heating
and cooling processes
[NASA-CASE-NPO-10828] c33 N72-17948
- Light shield and cooling apparatus --- high
intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c15 N74-23066
- Refrigerated coaxial coupling --- for maser
waveguide
[NASA-CASE-NPO-13504-1] c09 N74-27689
- Rocket chamber and method of making
[NASA-CASE-LEW-11118-2] c28 N74-28232
- COORDINATES**
- Mechanical coordinate converter for use with
spacecraft tracking antennas
[NASA-CASE-XNP-00614] c14 N70-36907
- System for locating lightning strokes by
coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
- COPOLYMERS**
- Method for producing alternating ether-siloxane
copolymers with stable properties when exposed
to elevated temperatures and UV radiation
[NASA-CASE-XMP-02584] c06 N71-20905
- Preparation of dicyanoacetylene and vinylidene
copolymers using organic compounds
[NASA-CASE-XNP-03250] c06 N71-23500
- COPPER**
- Development of method for etching copper
[NASA-CASE-XGS-06306] c17 N71-16044
- Method of plating copper on aluminum to permit
conventional soldering of structural aluminum
bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
- COPPER COMPOUNDS**
- Gallium arsenide solar cell preparation by
surface deposition of cuprous iodide on thin
n-type polycrystalline layers and heating in
iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
- Cooling and radiation protection of ruby lasers
using copper sulfate solution in alcohol
[NASA-CASE-NFS-20180] c16 N72-12440
- COPPER FLUORIDES**
- Method to produce high purity copper fluoride by
heating copper hydroxyfluoride powder and
subjecting to flowing fluorine gas
[NASA-CASE-LEW-10794-1] c06 N72-17093
- CORDAGE**
- Fabrication of root cord restrained fabric suit
sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20096
- COBE STORAGE**
- Memory device employing semiconductor and
ferroelectric properties of single crystal
barium titanate
[NASA-CASE-ERC-10307] c08 N72-21198
- CORES**
- Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c15 N74-15128
- CORRECTION**
- Doppler frequency shift correction device for
multiplex communication with Applications
Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978
- CORRELATION DETECTION**
- Phase detector with time correlation integrator
for frequency multiplexed signals
[NASA-CASE-GSC-11744-1] c09 N73-23291
- COBBELATORS**
- Synchronous detection system for detecting weak
radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
- CORROSION PREVENTION**
- Vapor deposited laminated nitride-silicon
coating for corrosion prevention of
carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075
- Method to prevent stress corrosion cracking in
titanium alloys
[NASA-CASE-NPO-10271] c17 N71-16393
- Method and apparatus for inducing compressive
stresses in pressure vessel to prevent stress
corrosion
[NASA-CASE-XLA-07390] c15 N71-18616
- Development of fluoride coating to prevent
oxidation of beryllium surfaces at elevated
temperatures
[NASA-CASE-LEW-10327] c17 N71-33408
- Prevention of hydrogen embrittlement of high
strength steel --- by additive potassium
hydroxide in hydrazine
[NASA-CASE-NPO-12122-1] c27 N74-20397
- CORROSION RESISTANCE**
- High strength, corrosion resistant cobalt-based
alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644
- Hydrazine monoperfluoro alkanoate solder flux
leaving corrosion resistant coating, for
metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
- High temperature cobalt-base alloy resistant to
corrosion by liquid metals and to sublimation
in vacuum environment
[NASA-CASE-XLE-02991] c17 N71-16025
- Metal soldering with hydrazine monoperfluoro
alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078
- CORRUGATING**
- Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c09 N74-29575
- COSINE SERIES**
- Service life of electromechanical device for
generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248
- Function generators for producing complex
vibration mode patterns used to identify
vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253
- COSMIC DUST**
- Sensor for detecting and measuring energy,
velocity and direction of travel of a cosmic
dust particle
[NASA-CASE-GSC-10503-1] c14 N72-20381
- Cosmic dust analyzer using ion time of flight
techniques to determine constituency of
hypervelocity particles such as micrometeoroids
[NASA-CASE-MSC-13802-1] c30 N72-20805
- System for detecting impact position of cosmic
dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
- Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c14 N74-32883
- COUCHES**
- Shock absorbing couch for body support under
high acceleration or deceleration forces
[NASA-CASE-IMS-01240] c05 N70-35152
- Low onset rate energy absorber in form of strut
assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
- Shock absorbing articulated multiple couch
assembly
[NASA-CASE-MSC-11253] c05 N71-12343
- Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
- COULOMETERS**
- Alkaline-type coulometer cell for primary charge
control in secondary battery recharge circuits
[NASA-CASE-XGS-05434] c03 N71-20491
- Development and characteristics of battery
charging circuits with coulometer for control
of available current
[NASA-CASE-GSC-10487-1] c03 N71-24719
- COUNTERS**
- Circuit for measuring wide range of pulse rates
by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137
- Electronic strain level counter on in-flight
aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910
- COUNTING CIRCUITS**
- Rocket-borne aspect sensor consisting of
radiation sensor, apertured disk, commutator,
and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432

- Design of transistorized ring counter circuit with special steering and triggering circuits [NASA-CASE-XGS-03095] c09 N69-27463
- Counter-divider circuit for accuracy and reliability in binary circuits [NASA-CASE-IMP-00421] c09 N70-34502
- Reversible ring counter using cascaded single silicon controlled rectifier stages [NASA-CASE-XGS-01473] c09 N71-10673
- Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids [NASA-CASE-XLE-01246] c14 N71-10797
- Electronic counter circuit utilizing magnetic core and low power consumption [NASA-CASE-IMP-08836] c09 N71-12515
- Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates [NASA-CASE-XGS-02440] c08 N71-19432
- Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute [NASA-CASE-XMS-02399] c05 N71-22896
- Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits [NASA-CASE-IMP-01753] c08 N71-22897
- Noninterruptable digital counter circuit design with display device for pulse frequency modulation [NASA-CASE-IMP-09759] c08 N71-24891
- Diode-gate bridge circuit means [NASA-CASE-ARC-10364-2(B)] c09 N74-14941
- COUPLING**
- Coupling device for linear shaped charge for space vehicle abort system [NASA-CASE-XLA-00189] c33 N70-36846
- Base support for expandable and contractible coupling between two members [NASA-CASE-NPO-11059] c15 N72-17454
- COUPLING CIRCUITS**
- Interrogator and current driver circuit for combination with transistor flip-flop circuit [NASA-CASE-IGS-03058] c10 N71-19547
- Antenna array at focal plane of reflector with coupling network for beam switching [NASA-CASE-GSC-10220-1] c07 N71-27233
- Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits [NASA-CASE-MSC-13201-1] c07 N71-28429
- High efficiency transformerless amplitude modulator coupled to RF power amplifier [NASA-CASE-GSC-10668-1] c07 N71-28430
- Automatic quadrature control and measuring system --- using optical coupling circuitry [NASA-CASE-MPS-21660-1] c14 N74-21017
- Diode quad transducer and discriminator circuit --- characteristics of electrical measuring apparatus [NASA-CASE-ARC-10364-3] c10 N74-26760
- COUPLINGS**
- Releasable coupling device designed to receive and retain matching ends of electrical connectors [NASA-CASE-XMS-07846-1] c09 N69-21927
- Stage separation using remote control release of joint with explosive insert [NASA-CASE-XLA-02854] c15 N69-27490
- Space vehicle stage coupling and quick release separation mechanism [NASA-CASE-XLA-01441] c15 N70-41679
- Standard coupling design for mass production [NASA-CASE-XMS-02532] c15 N70-41808
- Quick-release coupling for fueling rocket vehicles with cryogenic propellants [NASA-CASE-XKS-01985] c15 N71-10782
- Ratchet mechanism for high speed operation at reduced backlash [NASA-CASE-MPS-12805] c15 N71-17805
- Split nut and bolt separation device [NASA-CASE-ZNP-06914] c15 N71-21489
- Quick disconnect duct coupling device for single-handed operation [NASA-CASE-MPS-20395] c15 N71-24903
- Coupling arrangement for isolating torque loads from axial, radial, and bending loads [NASA-CASE-XLA-04897] c15 N72-22482
- Refrigerated coaxial coupling --- for maser waveguide [NASA-CASE-NPO-13504-1] c09 N74-27689
- COVERINGS**
- Apparatus for ejecting covers of instrument packages using differential pressure principle [NASA-CASE-IMP-04132] c15 N69-27502
- Transparent plastic film for attaching cover glasses to silicon solar cells [NASA-CASE-LEW-11065-1] c03 N72-11064
- CRACKING (FRACTURING)**
- Method to prevent stress corrosion cracking in titanium alloys [NASA-CASE-NPO-10271] c17 N71-16393
- Improved silicide coatings for refractory metals employed in space shuttles and gas turbine engine components [NASA-CASE-LEW-11179-1] c17 N73-22474
- CRASH LANDING**
- Aircraft mounted crash activated transmitter device [NASA-CASE-MPS-16609-3] c09 N74-34647
- CREEP RUPTURE STRENGTH**
- Nickel base alloy with resistance to oxidation at high temperatures and superior stress-rupture properties [NASA-CASE-ILE-02082] c17 N71-16026
- CRITICAL EXPERIMENTS**
- Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions [NASA-CASE-NPO-10070] c15 N71-27372
- CROSSED FIELDS**
- Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions [NASA-CASE-XLA-00675] c25 N70-33267
- Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields [NASA-CASE-ILE-00212] c03 N70-34134
- Crossed field MHD plasma generator-accelerator [NASA-CASE-XLA-03374] c25 N71-15562
- CROSSLINKING**
- New trifunctional alcohol derived from triber acid and novel method of preparation [NASA-CASE-NPO-10714] c06 N69-31244
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby [NASA-CASE-LEW-12053-1] c06 N74-34579
- CRUCIBLES**
- Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating [NASA-CASE-XLA-03105] c15 N69-27483
- CRUDE OIL**
- Decantation of petroleum products with honey [NASA-CASE-ZNP-03835] c06 N71-23499
- CRYOGENIC EQUIPMENT**
- Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly [NASA-CASE-NPO-10309] c15 N69-23190
- Low thermal loss piping arrangement for moving cryogenic media through double chamber structure [NASA-CASE-ZNP-08882] c15 N69-39935
- Method and apparatus for removing plastic insulation from wire using cryogenic equipment [NASA-CASE-MPS-10340] c15 N71-17628
- Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods [NASA-CASE-GSC-10188-1] c23 N71-24725
- Reliability of automatic refilling valving device for cryogenic liquid systems [NASA-CASE-NPO-11177] c15 N72-17453
- Dual stage check valve for cryogenic supply systems used in space flight environmental control system [NASA-CASE-MSC-13587-1] c15 N73-30459
- CRYOGENIC FLUID STORAGE**
- Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions [NASA-CASE-XLE-00345] c15 N70-38020

- Cryogenic storage system for gases onboard spacecraft
[NASA-CASE-XMS-04390] c31 N70-41671
- Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
- Fabrication of filament wound propellant tank for cryogenic storage
[NASA-CASE-XLE-03803-2] c15 N71-17651
- Prefabricated multilayered self-evacuating insulation panels using gas with low vapor pressure at cryogenic temperatures for application to storage of cryogens
[NASA-CASE-XLE-04222] c23 N71-22881
- Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-NFS-14023] c33 N71-25351
- Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMF-05046] c33 N71-28892
- Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c14 N74-15093
- CRYOGENIC FLUIDS**
- Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
- Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
- Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
- Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
- Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
- Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
- High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
- Automatic thermal switch for improving efficiency of cooling gases below 40 K
[NASA-CASE-XNP-03796] c23 N71-15467
- Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15968
- Development of apparatus for measuring thermal conductivity
[NASA-CASE-XGS-01052] c14 N71-15992
- Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
- Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XLE-02823] c09 N71-23443
- Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864
- Design and development of device to prevent geysering during convective circulation of cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486
- Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c15 N74-27904
- CRYOGENIC GYROSCOPES**
- Cryogenic gyroscope housing --- with annular disks for gas spin-up
[NASA-CASE-NFS-21136-1] c23 N74-18323
- CRYOGENIC MAGNETS**
- Improved alternator with windings of superconducting materials acting as permanent magnet
[NASA-CASE-XLE-02824] c03 N69-39890
- Heat operated cryogenic electrical generator --- using liquid helium conversion
[NASA-CASE-NPO-13303-1] c03 N74-19701
- CRYOGENIC ROCKET PROPELLANTS**
- Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
- Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
- Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042
- CRYOGENIC STORAGE**
- Light weight plastic foam thermal insulation for cryogenic storage
[NASA-CASE-XLE-02647] c18 N71-23658
- Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816
- CRYOGENICS**
- High strength aluminum casting alloy for cryogenic applications in aerospace engineering
[NASA-CASE-XMF-02786] c17 N71-20743
- Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
- CRYOLITE**
- Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-YNP-02340] c23 N69-24332
- CRYOSTATS**
- Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-IMP-02964] c14 N71-17659
- Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-IMP-10968] c14 N71-24234
- Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c14 N74-15093
- CRYSTAL FILTERS**
- Infrared tunable dye laser with nonlinear wavelength mixing crystal in optical cavity
[NASA-CASE-ARC-10463-1] c09 N73-32111
- CRYSTAL GROWTH**
- Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-ILA-02057] c26 N70-40015
- Electrodeposition method for producing crystalline material from dense gaseous medium
[NASA-CASE-NPO-10440] c15 N72-21466
- Vapor phase growth of groups III-V compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c26 N74-27261
- Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c09 N74-33740
- CRYSTAL OSCILLATORS**
- Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NPO-10144] c14 N71-17701
- CRYSTAL RECTIFIERS**
- Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
- CRYSTAL STRUCTURE**
- Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c09 N74-33740
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[NASA-CASE-XLA-05906] c31 N71-16221
Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-IMP-06531] c14 N71-17575
Electro-optical detector for determining position of light source
[NASA-CASE-IMP-01059] c23 N71-21821
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[NASA-CASE-ERC-10045] c15 N71-24910
Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334
Hydrogen fire blink detector for high altitude rocket or ground installation
[NASA-CASE-MFS-15063] c14 N72-25412
Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
Optical imaging system for increasing light absorption efficiency of imaging detector
[NASA-CASE-ARC-10194-1] c23 N73-20741
Cold cathode discharge tube with pressurized gas cell for meteoroid detection in space
[NASA-CASE-LAR-10483-1] c14 N73-32327
Leak detector with high vacuum seals
[NASA-CASE-LAR-11237-1] c14 N73-32344
Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c14 N74-20019
Deployable pressurized cell structure for a micrometeoroid detector
[NASA-CASE-LAR-10295-1] c15 N74-21062
Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c14 N74-32888

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Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c33 N74-27425

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[NASA-CASE-IMP-06926] c28 N71-22983

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[NASA-CASE-NPO-11322] c06 N72-25146
Deuterium pass through target --- for neutron generating
[NASA-CASE-LEW-11866-1] c11 N74-32719

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Apparatus for producing high purity I-123 --- for thyroid measurement
[NASA-CASE-LEW-10518-3] c15 N74-10476

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Phototransistor with base collector junction diode for integration into photo sensor arrays
[NASA-CASE-MFS-20407] c09 N73-19235

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[NASA-CASE-IMP-04133] c06 N71-20717
Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-IMP-03074] c06 N71-24740
Synthesis of siloxane containing epoxide and diamine polymers
[NASA-CASE-MFS-13994-2] c06 N72-25148
Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980

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Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446
Simplified technique and device for producing industrial grade synthetic diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457

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Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
Reinforcing beam system for highly flexible diaphragms in valves or pressure switches

[NASA-CASE-IMP-01962] c32 N70-41370
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[NASA-CASE-ILA-02651] c28 N70-41957
Knife structure for controlling rupture of shock tube diaphragms
[NASA-CASE-YAC-00731] c11 N71-15960
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[NASA-CASE-XLA-03660] c15 N71-21060
Design and development of inertia diaphragm pressure transducer
[NASA-CASE-YAC-02981] c14 N71-21072
Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-IMP-05297] c15 N71-23811
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[NASA-CASE-NPO-11433] c18 N71-31140
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[NASA-CASE-MFS-14216] c14 N73-13418

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Automatic system for measuring and monitoring systolic and diastolic blood pressure in humans
[NASA-CASE-MSC-13999-1] c05 N72-25142

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[NASA-CASE-ARC-10370-1] c16 N72-10432

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[NASA-CASE-NPO-13506-1] c09 N74-27690

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[NASA-CASE-MFS-21629] c14 N72-22442
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[NASA-CASE-LEW-11583-1] c15 N74-13199

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[NASA-CASE-XGS-04531] c03 N69-24267
Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-IMP-09750] c14 N69-39937
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[NASA-CASE-IMP-00517] c03 N70-34157
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[NASA-CASE-XMS-04312] c07 N71-22984
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[NASA-CASE-IMP-08880] c09 N71-24808
Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-BQN-10541-2] c15 N71-27135
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[NASA-CASE-ERC-10011] c07 N71-29065
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[NASA-CASE-XER-08476-1] c26 N72-17820
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[NASA-CASE-LAR-10294-1] c26 N72-28762
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[NASA-CASE-MFS-22129-1] c09 N73-26197
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[NASA-CASE-IMP-05297] c15 N71-23811
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- [NASA-CASE-XLE-06773] c15 N71-23817
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- Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction [NASA-CASE-GSC-10366-1] c10 N71-18772
- DIFFERENTIAL INTERFEROMETRY**
- Device for determining acceleration of gravity by interferometric measurement of travel of falling body [NASA-CASE-XMP-05844] c14 N71-17587
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- Relief valve to permit slow and fast bleeding rates at difference pressure levels [NASA-CASE-XMS-05894-1] c15 N69-21924
- Apparatus for ejecting covers of instrument packages using differential pressure principle [NASA-CASE-XMP-04132] c15 N69-27502
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- Metallic film diffusion for boundary lubrication in aerospace engineering [NASA-CASE-XLE-10337] c15 N71-24046
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- Method for diffusion welding dissimilar metals in vacuum chamber [NASA-CASE-GSC-10303] c15 N72-22487
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- Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning [NASA-CASE-LAR-10590-1] c15 N70-26819
- Binary number sorter for arranging numbers in order of magnitude [NASA-CASE-NPO-10112] c08 N71-12502
- Binary sequence detector with few memory elements and minimized logic circuit complexity [NASA-CASE-INP-05415] c08 N71-12505
- Digital computer system for automatic prelaunch checkout of spacecraft [NASA-CASE-YKS-08012-2] c31 N71-15566
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- Redundant memory for enhanced reliability of digital data processing system [NASA-CASE-GSC-10564] c10 N71-29135
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- Digital data handling circuits for pulse amplifiers [NASA-CASE-XNP-01068] c10 N71-28739
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- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories [NASA-CASE-XNP-01318] c10 N71-23033
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- Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
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[NASA-CASE-NPO-11104] c08 N72-22165
- Digital video system for displaying image and alphanumeric data on cathode ray tube
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- Data compression using decreasing slope threshold test and digital techniques
[NASA-CASE-NPO-11630] c08 N72-33172
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[NASA-CASE-GSC-10975-1] c08 N73-13187
- Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229
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[NASA-CASE-XNP-03623] c09 N73-28084
- Anti-multipath digital signal detector
[NASA-CASE-LAR-11379-1] c07 N74-11005
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- Digital transmitter for data bus communications system
[NASA-CASE-MSC-14558-1] c07 N74-17888
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[NASA-CASE-LAR-10688-1] c15 N74-21056
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[NASA-CASE-MFS-14322] c08 N71-18692
- Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-XLA-07732] c08 N71-18751
- Horizon sensor design with digital sampling of spaced radiation-compensated thermopile infrared detectors
[NASA-CASE-XNP-06957] c14 N71-21088
- Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
- Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
- Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-XKS-00348] c09 N73-14215
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[NASA-CASE-MSC-12458-1] c08 N73-32081
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[NASA-CASE-MFS-10509] c06 N73-30103
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[NASA-CASE-NPO-13081-1] c07 N74-22814
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[NASA-CASE-ERC-10214] c09 N72-31235
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[NASA-CASE-XGS-03429] c03 N69-21330
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[NASA-CASE-XMS-04215-1] c09 N69-39987
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[NASA-CASE-NPO-10404] c03 N71-12255
- Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723
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[NASA-CASE-GSC-10366-1] c10 N71-18772
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[NASA-CASE-GSC-10041-1] c10 N71-19418
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[NASA-CASE-LRW-10155-1] c09 N71-29035
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[NASA-CASE-XLE-00212] c03 N70-34134
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[NASA-CASE-XLA-00377] c33 N71-17610
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[NASA-CASE-XNP-00614] c14 N70-36907
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Null-type vacuum microbalance for measuring minute mechanical displacements
[NASA-CASE-XAC-00472] c15 N70-40180

Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999

Gas bearing for model support with capacity for measuring angular displacement of model in bearing
[NASA-CASE-XLA-09346] c15 N71-28740

Method and apparatus for remote measurement of displacement of marks on specimen undergoing tensile test
[NASA-CASE-NPO-10778] c14 N72-11364

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Integrated time shared instrumentation display for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507

Data processing and display system for terminal guidance of X-15 aircraft
[NASA-CASE-XFR-00756] c02 N71-13421

Fluidic-thermochronic display device
[NASA-CASE-ERC-10031] c12 N71-18603

Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571

Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882

Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-YKS-03509] c14 N71-23175

Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-YKS-06167] c08 N71-24890

Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891

Data acquisition system for converting displayed analog signal to digital values
[NASA-CASE-NPO-10344] c10 N71-26544

Plasma-fluidic hybrid display system combining high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519

System for digitizing graphic displays
[NASA-CASE-NPO-10745] c08 N72-22164

Digital video system for displaying image and alphanumeric data on cathode ray tube
[NASA-CASE-NPO-11342] c09 N72-25248

Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
[NASA-CASE-MSC-12372-1] c31 N72-25842

Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-YKS-00348] c09 N73-14215

Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474

Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
[NASA-CASE-MSC-14180-1] c05 N73-22045

Device for displaying and recording angled views of samples to be viewed by microscope
[NASA-CASE-GSC-11690-1] c14 N73-28499

Alphanumeric character display device for oscilloscopes
[NASA-CASE-GSC-11582-1] c09 N73-32120

Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-MSC-13746-1] c10 N73-32143

Recorder/processor apparatus --- for optical data processing
[NASA-CASE-GSC-11553-1] c07 N74-15831

Rotating raster generator
[NASA-CASE-PRC-10071-1] c07 N74-20813

G-load measuring and indicator apparatus --- for aircraft
[NASA-CASE-ARC-10806] c14 N74-27872

Field sequential stereo television
[NASA-CASE-MSC-12616-1] c07 N74-32601

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Dissipative voltage regulator system for minimizing heat dissipation
[NASA-CASE-GSC-10891-1] c10 N71-26626

DISSOLVING

Apparatus for mixing two or more liquids under zero gravity conditions
[NASA-CASE-LAR-10195-1] c15 N73-19458

DISTANCE MEASURING EQUIPMENT

Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NPO-11194] c08 N72-25209

Apparatus for determining distance to lighting strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175

DISTILLATION EQUIPMENT

Utilization of solar radiation by solar still for converting salt and brackish water into potable water
[NASA-CASE-XMS-04533] c15 N71-23086

Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-XNP-08124] c15 N71-27184

System for recovering oxygen and/or water from extraterrestrial soil and iron oxide materials
[NASA-CASE-MSC-12332-1] c15 N72-15476

U shaped heated tube for distillation and purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129

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Broadband distribution amplifier with complementary pair transistor output stages
[NASA-CASE-NPO-10003] c10 N71-26415

DISTRIBUTORS

High voltage distributor
[NASA-CASE-GSC-11849-1] c09 N74-22873

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Motor run-up system --- for preventing power line disturbances when synchronous motor is connected to line
[NASA-CASE-NPO-13374-1] c10 N74-17949

DIVERGENT NOZZLES

Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c02 N74-27490

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A synchronous binary array divider
[NASA-CASE-ERC-10180-1] c08 N74-20836

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Describing device for flagging punched business cards
[NASA-CASE-XLA-02705] c08 N71-15908

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Design and specifications of emergency escape system for spacecraft structures
[NASA-CASE-MSC-12086-1] c05 N71-12345

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Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978

Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-MPS-20386] c21 N71-19212

Doppler compensated communication system for locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174

Laser Doppler velocimeter for simultaneously measuring orthogonal fluid velocity components without flow field perturbation
[NASA-CASE-ARC-10637-1] c14 N73-21390

Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c07 N74-15838

Doppler shift system --- system for measuring velocities of radiating particles
[NASA-CASE-HQN-10740-1] c24 N74-19310

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[NASA-CASE-LAR-10403] c21 N71-11766

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[NASA-CASE-XLA-03645] c14 N71-20430
- DRAG CHUTES**
Deployment system for flexible wing with rigid superstructure
[NASA-CASE-XLA-01220] c02 N70-41863
Lightweight, variable solidity knitted parachute fabric --- for aerodynamic decelerators
[NASA-CASE-LAR-10776-1] c02 N74-10034
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Device for measuring drag forces in flight tests
[NASA-CASE-XLA-00113] c14 N70-33386
Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-00755] c01 N71-13410
Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-05828] c01 N71-13411
Impact energy absorber with decreasing absorption rate
[NASA-CASE-XLA-01530] c14 N71-23092
System for measuring drag forces in a turbulently flowing fluid
[NASA-CASE-ARC-10755-1] c14 N74-14115
- DRAG REDUCTION**
Directed fluid stream for propeller blade loading control
[NASA-CASE-XAC-00139] c02 N70-34856
Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825
- DRIFT (INSTROMENTATION)**
Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-IMS-05562-1] c09 N69-39986
Solar radiation direction detector and device for compensating degradation of photocells
[NASA-CASE-XLA-00183] c14 N70-40239
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Impact bit for cutting, collecting, and storing samples such as lunar rock cuttings
[NASA-CASE-XMP-01412] c15 N70-42034
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Rotary impact-type rock drill for recovering rock cuttings
[NASA-CASE-XMP-07478] c14 N69-21923
Auger-type soil penetrometer for burrowing into soil formations
[NASA-CASE-XMP-05530] c14 N73-32321
- DRIVES**
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[NASA-CASE-LEW-10233] c10 N71-27126
- DROPS (LIQUIDS)**
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[NASA-CASE-NPO-10985] c14 N73-20478
- DRY CELLS**
Energy source with tantalum capacitors in parallel and miniature silver oxide button cells for initiating pyrotechnic devices on spacecraft and rocket vehicles
[NASA-CASE-LAR-10367-1] c03 N70-26817
- DRYING**
Drying chamber for photographic sheet material
[NASA-CASE-GSC-11074-1] c14 N73-28489
- DRYING APPARATUS**
Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
- DUCTS**
Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MFS-20395] c15 N71-24903
An externally supported internally stabilized flexible duct joint
[NASA-CASE-MFS-19194-1] c15 N74-34882
- DUST COLLECTORS**
Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning
[NASA-CASE-LAR-10590-1] c15 N70-26819
Cosmic dust analyzer using ion time of flight techniques to determine constituency of hypervelocity particles such as micrometeoroids
[NASA-CASE-MSC-13802-1] c30 N72-20805
- DYE LASERS**
Development of laser head for simultaneous optical pumping of several dye lasers
[NASA-CASE-LAR-11341-1] c16 N73-25564
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[NASA-CASE-ARC-10463-1] c09 N73-32111
- DYES**
Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMF-02221] c18 N71-27170
- DYNAMIC CHARACTERISTICS**
Dynamic sensor for gas pressure or density measurement
[NASA-CASE-XAC-02877] c14 N70-41681
Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
- DYNAMIC LOADS**
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[NASA-CASE-XLA-01326] c11 N71-21481
Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878
Development and characteristics of device for indicating and recording magnitude of force applied in axial direction
[NASA-CASE-MSC-15626-1] c14 N72-25411
- DYNAMIC MODULUS OF ELASTICITY**
Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993
- DYNAMIC RESPONSE**
Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387
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- DYNAMIC TESTS**
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- BAR**
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Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres
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[NASA-CASE-GSC-10656-1] c09 N72-25249
- Electrode with multiple columnar conductors for limiting field emission current
[NASA-CASE-ERC-10015-2] c10 N72-27246
- Means of vapor deposition using electric current and evaporator filament
[NASA-CASE-LAR-10541-1] c15 N72-32487
- Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c14 N74-22113
- ELECTRIC DISCHARGES**
- Electric discharge apparatus for electrohydraulic explosive forming
[NASA-CASE-XMF-00375] c15 N70-34249
- High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
- Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-XNE-00745] c10 N71-28960
- Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLB-2529-3] c09 N74-20859
- Double discharge metal vapor laser with metal halide as a lasant
[NASA-CASE-NPO-13448-1] c16 N74-34012
- ELECTRIC ENERGY STORAGE**
- Electric current measuring apparatus design including saturable core transformer and energy storage device to avoid magnetizing current errors from transformer output winding
[NASA-CASE-XGS-02439] c14 N71-19431
- ELECTRIC EQUIPMENT**
- Characteristics of high power, low distortion, alternating current power amplifier
[NASA-CASE-LAR-10218-1] c09 N70-34559
- Design and development of electric generator for space power system
[NASA-CASE-XLB-04250] c09 N71-20446
- Development of electrical system for measuring high impedance
[NASA-CASE-XMS-08589-1] c09 N71-20569
- Design, development, and operating principles of power supply with starting circuit which is independent of voltage regulator
[NASA-CASE-XMS-01991] c09 N71-21449
- Development of method for improving signal to noise ratio and accuracy of Wheatstone bridge type radiation measuring instrument
[NASA-CASE-XLA-02810] c14 N71-25901
- Design and development of buck-boost voltage regulator circuit with additive or subtractive alternating current impressed on variable direct current source voltage
[NASA-CASE-GSC-10735-1] c10 N71-26085
- Development and characteristics of electronically resettable fuse with saturable core current sensing transformer having two outside legs and center leg
[NASA-CASE-XGS-11177] c09 N71-27001
- Development and characteristics of voltage regulator for connection in series with alternating current source and load using three leg, two-window transformer
[NASA-CASE-ERC-10113] c09 N71-27053
- Development of electric circuit for production of different pulse width signals
[NASA-CASE-XLA-07788] c09 N71-29139
- Development of solar energy powered heliotrope assembly to orient solar array toward sun
[NASA-CASE-GSC-10945-1] c21 N72-31637
- Development of temperature compensated light source with components and circuitry for maintaining luminous intensity independent of temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214
- Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469
- Overvoltage protection network
[NASA-CASE-ARC-10197-1] c09 N74-17929
- Self-regulating proportionally controlled heating apparatus and technique
[NASA-CASE-GSC-11752-1] c33 N74-19583
- Sprag solenoid brake --- development and operations of electrically controlled brake
[NASA-CASE-MFS-21846-1] c15 N74-26976
- ELECTRIC EQUIPMENT TESTS**
- Fixture for simultaneously supporting several components for electrical testing
[NASA-CASE-XNP-06032] c09 N69-21926
- Electrical testing apparatus for detecting amplitude and width of transient pulse
[NASA-CASE-XMP-06519] c09 N71-12519
- Variable water load for dissipating large amounts of electrical power during high voltage power supply tests
[NASA-CASE-XNP-05381] c09 N71-20842
- ELECTRIC FIELD STRENGTH**
- Low impedance apparatus for measuring electrostatic field intensity near space vehicles
[NASA-CASE-XLE-00820] c14 N71-16014
- Space environment simulation system for measuring spacecraft electric field strength in plasma sheath
[NASA-CASE-XLE-02038] c09 N71-16086
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- Apparatus to determine electric field strength by measuring deflection of electron beam impinging on target
[NASA-CASE-XMP-06617] c09 N71-24843
- ELECTRIC FIELDS**
- Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-00755] c01 N71-13410
- Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-05828] c01 N71-13411
- Instrument for measuring potentials on two dimensional electric field plot
[NASA-CASE-XLA-08493] c10 N71-19421
- Electron beam deflection devices for measuring electric fields
[NASA-CASE-XMF-10289] c14 N71-23699
- Electrodes having array of small surfaces for field ionization
[NASA-CASE-ERC-10013] c09 N71-26678
- Apparatus for determining distance to lightning strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175
- Development and characteristics of apparatus for measuring intensity of electric field in atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318
- Fine particulate capture device
[NASA-CASE-LBW-11581-1] c15 N74-13199
- Electric field measuring and display system --- for cloud formations
[NASA-CASE-KSC-10731-1] c14 N74-27862
- ELECTRIC FILTERS**
- Describing static inverter with single or multiple phase output
[NASA-CASE-XMF-00663] c08 N71-18752
- Apparatus for filtering input signals
[NASA-CASE-NPO-10198] c09 N71-24806
- Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
- Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245
- Development of electric connector and pin assembly with radio frequency absorbing sleeve to reduce radio frequency interference
[NASA-CASE-XLA-02609] c09 N72-25256
- Filter for third order phase locked loops in signal receivers
[NASA-CASE-NPO-11941-1] c10 N73-27171
- ELECTRIC FUSES**
- Development of in-line fuse device for protection of electric circuits from excessive currents and voltages
[NASA-CASE-MSC-12135-1] c09 N71-12526
- Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material

- [NASA-CASE-XKS-03381] c09 N71-22796
- ELECTRIC GENERATORS**
- Regulated dc to dc converter
[NASA-CASE-XGS-03429] c03 N69-21330
- Nuclear electric generator for accelerating charged propellant particles in electrostatic propulsion system
[NASA-CASE-XLE-00818] c22 N70-34248
- Design and development of electric generator for space power system
[NASA-CASE-XLE-04250] c09 N71-20446
- Development and characteristics of single or double pulse generator which produces constant width pulses in nanosecond region
[NASA-CASE-XGS-03427] c10 N71-23029
- Development of slip ring assembly with inner and outer peripheral surfaces used as electrical contacts for brushes
[NASA-CASE-XMP-01049] c15 N71-23049
- Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XMP-14301] c09 N71-23188
- High temperature ferromagnetic cobalt-base alloy for electrical power generating equipment
[NASA-CASE-XLE-03629] c17 N71-23248
- Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315
- Electric power system with circulatory liquid coolant cooling system
[NASA-CASE-MFS-14114-2] c09 N71-24807
- Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-XMP-02966] c10 N71-24863
- Device for voltage conversion using controlled pulse widths and arrangements to generate ac output voltage
[NASA-CASE-MFS-10068] c10 N71-25139
- Multiple varactor for generating high frequencies with high power and high conversion efficiency
[NASA-CASE-XMP-04958-1] c10 N71-26414
- Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MFS-14114] c33 N71-27862
- Power converters for supplying direct current at one voltage from source at another voltage
[NASA-CASE-XER-11046] c09 N72-22203
- Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-ERC-10268] c09 N72-25252
- Dc to ac to dc converter with transistor driven synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
- Device for converting electromagnetic wave energy into electric power
[NASA-CASE-GSC-11394-1] c09 N73-32109
- Brushless electromechanical generator for sine and cosine functions
[NASA-CASE-LAR-11389-1] c09 N73-32121
- Heat operated cryogenic electrical generator --- using liquid helium conversion
[NASA-CASE-NPO-13303-1] c03 N74-19701
- Electric power generation system directly from laser power
[NASA-CASE-NPO-13308-1] c03 N74-19702
- ELECTRIC IGNITION**
- Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent sandrel
[NASA-CASE-XLA-04126] c28 N71-26779
- ELECTRIC MOTORS**
- Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987
- Electronic circuit system for controlling electric motor speed
[NASA-CASE-XMP-01129] c09 N70-38712
- Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677
- Direct current electromotive system for regenerative braking of electric motor
[NASA-CASE-XMP-01096] c10 N71-16030
- Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585
- Reversible current directing circuitry for reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724
- Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
- Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-INP-06936] c15 N71-24695
- Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-XMP-05195] c10 N71-24861
- Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895
- Design and development of electric motor with stationary field and armature windings which operates on direct current
[NASA-CASE-XGS-05290] c09 N71-25999
- Circuits for controlling reversible dc motor
[NASA-CASE-XMP-07477] c09 N71-26092
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MFS-14610] c09 N71-28886
- Optical control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
- Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-XGS-07805] c15 N72-33476
- Speed control system for dc motor equipped with brushless Hall effect device
[NASA-CASE-MFS-20207-1] c09 N73-32107
- Brushless dc motor with wound rotor
[NASA-CASE-NPO-13437-1] c09 N74-27688
- ELECTRIC NETWORKS**
- Electric network for monitoring temperatures, detecting critical temperatures, and indicating critical time duration
[NASA-CASE-XMP-01097] c10 N71-16058
- Development and characteristics of single or double pulse generator which produces constant width pulses in nanosecond region
[NASA-CASE-XGS-03427] c10 N71-23029
- Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
- Broadband frequency discriminator with resistive captive inductive networks
[NASA-CASE-NPO-10096] c07 N71-24583
- ELECTRIC POTENTIAL**
- Battery charging system with cell to cell voltage balance
[NASA-CASE-XGS-05432] c03 N71-19438
- Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-IMP-14301] c09 N71-23188
- Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315
- Device for monitoring voltage by generating signal when voltages drop below predetermined value
[NASA-CASE-KSC-10020] c10 N71-27338
- Transmitter receiver system for measuring millivolt electrical signals with high common mode potential
[NASA-CASE-XLE-03155-2] c09 N72-20205
- Plotter device for automatically drawing equipotential lines on sheet of resistance paper
[NASA-CASE-NPO-11134] c09 N72-21246
- Pulsed excitation voltage circuit for strain gage bridge transducers
[NASA-CASE-PRC-10036] c09 N72-22200
- Power converters for supplying direct current at one voltage from source at another voltage
[NASA-CASE-XER-11046] c09 N72-22203

- Continuously variable, voltage-controlled phase shifter
[NASA-CASE-NPO-11129] c09 N72-33204
- Controllable high voltage source having fast settling time
[NASA-CASE-GSC-11844-1] c09 N74-19853
- ELECTRIC POWER**
- Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNP-02654] c10 N70-42032
- Variable water load for dissipating large amounts of electrical power during high voltage power supply tests
[NASA-CASE-XNP-05381] c09 N71-20842
- ELECTRIC POWER SUPPLIES**
- Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154
- Development of thermal to electric power conversion system using solid state switches of electrical currents to load for Seebeck effect compensation
[NASA-CASE-NPO-11388] c03 N72-23048
- Development of electrical circuit for suppressing oscillations across inductor operating in resonant mode
[NASA-CASE-ERC-10403-1] c10 N73-26228
- Powerplexer for distribution of dc power levels to loads which require different voltages
[NASA-CASE-MSC-12396-1] c03 N73-31988
- Reliable electrical element heater using plural wire system and backup power sources
[NASA-CASE-NFS-21462-1] c09 N74-14935
- ELECTRIC POWER TRANSMISSION**
- Power switch with transfluxor type magnetic core
[NASA-CASE-NPO-10242] c09 N71-24803
- Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- Powerplexer for distribution of dc power levels to loads which require different voltages
[NASA-CASE-MSC-12396-1] c03 N73-31988
- Microwave power transmission system wherein level of transmitted power is controlled by reflections from receiver
[NASA-CASE-NFS-21470-1] c10 N74-19870
- ELECTRIC PROPULSION**
- Electric propulsion engine test chamber
[NASA-CASE-XLE-00252] c11 N70-34844
- ELECTRIC PULSES**
- RC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-XMP-00906] c09 N70-41655
- Design and development of variable pulse width multiplier
[NASA-CASE-XLA-02850] c09 N71-20447
- Piezoelectric transducer for monitoring sound waves of physiological origin
[NASA-CASE-XMS-05365] c14 N71-22993
- Development and characteristics of single or double pulse generator which produces constant width pulses in nanosecond region
[NASA-CASE-XGS-03427] c10 N71-23029
- Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315
- Development and characteristics of electric circuitry for detecting electrical pulses rise time and amplitude
[NASA-CASE-XMP-08804] c09 N71-24717
- Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137
- Precision full wave rectifier circuit for rectifying incoming electrical signals having positive or negative polarity with only positive output signals
[NASA-CASE-ARC-10101-1] c09 N71-33109
- Transmitter receiver system for measuring millivolt electrical signals with high common mode potential
[NASA-CASE-XLE-03155-2] c09 N72-20205
- Orthotic arm joint --- for manipulating objects in response to electrical signals
[NASA-CASE-NFS-21611-1] c05 N74-10100
- ELECTRIC RELAYS**
- Spark gap type protective circuit for fast sensing and removal of overvoltage conditions
[NASA-CASE-YAC-08981] c09 N69-39897
- Time division multiplexer with magnetic latching relays
[NASA-CASE-XNP-00431] c09 N70-38998
- Alarm system design for monitoring one or more relay circuits
[NASA-CASE-XMS-10984-1] c10 N71-19417
- Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
- Relay circuit breaker with magnetic latching to provide conductive and nonconductive paths for current devices
[NASA-CASE-MSC-11277] c09 N71-29008
- Piezoelectric relay --- with pair of bimorphs
[NASA-CASE-GSC-11627-1] c09 N74-19852
- ELECTRIC ROCKET ENGINES**
- Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-INP-04124] c28 N71-21822
- ELECTRIC SWITCHES**
- Thermionic diode switch for use in high temperature region to chop current from dc source
[NASA-CASE-NPO-10404] c03 N71-12255
- Characteristics of hermetically sealed electric switch with flexible operating capability
[NASA-CASE-XNP-09808] c09 N71-12518
- Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
[NASA-CASE-NPO-10037] c09 N71-19610
- System for checking status of several double-throw switches by readout indications
[NASA-CASE-XLA-08799] c10 N71-27272
- Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-XNP-00745] c10 N71-28960
- High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
[NASA-CASE-LEW-10155-1] c09 N71-29035
- Zero power telemetry actuated switch for biomedical equipment
[NASA-CASE-ARC-10105] c09 N72-17153
- Development of differential pressure control system using notion of mechanical diaphragms to operate electric switch
[NASA-CASE-NFS-14216] c14 N73-13418
- ELECTRIC TERMINALS**
- Electrical connector pin with wiping action to assure reliable contact
[NASA-CASE-IMP-04238] c09 N69-39734
- Patent data on terminal insert connector for flat electric cables
[NASA-CASE-XMP-00324] c09 N70-34596
- Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-XMP-02107] c15 N71-10809
- Electrical spot terminal assembly for printed circuit boards
[NASA-CASE-NPO-10034] c15 N71-17685
- Device for resistance soldering electrical leads to solder cups of multiple terminal block
[NASA-CASE-GSC-10913] c15 N72-22491
- Development of electric connector and pin assembly with radio frequency absorbing sleeve to reduce radio frequency interference
[NASA-CASE-XLA-02609] c09 N72-25256
- Device for configuring multiple leads --- method for connecting electric leads to printed circuit board
[NASA-CASE-NFS-22133-1] c15 N74-26977
- ELECTRIC WELDING**
- Development of electric weeding torch with casing on one end to form inert gas shield
[NASA-CASE-XMP-02330] c15 N71-23798
- Electric resistance spot welding and brazing for producing metal bonds with superior mechanical and structural characteristics
[NASA-CASE-LAR-11072-1] c15 N73-20535
- Process for welding compressor and turbine blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28515

- ELECTRIC WIRE**
 Apparatus for forming wire grids for electric strain gages
 [NASA-CASE-XLE-00023] c15 N70-33330
 Control of fusion welding through use of thermocouple wire
 [NASA-CASE-NFS-06074] c15 N71-20393
 Ablation sensor for measuring char layer recession rate using electric wires
 [NASA-CASE-XLA-01794] c33 N71-21586
 Device for resistance soldering electrical leads to solder cups of multiple terminal block
 [NASA-CASE-GSC-10913] c15 N72-22491
 Lead attachment for high temperature operation of electronic devices
 [NASA-CASE-ERC-10224] c09 N72-25261
 Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
 [NASA-CASE-LAR-10168-1] c09 N74-22865
 Device for configuring multiple leads --- method for connecting electric leads to printed circuit board
 [NASA-CASE-NPS-22133-1] c15 N74-26977
 High current electrical lead --- for thermionic converters
 [NASA-CASE-LEW-10950-1] c09 N74-27683
- ELECTRICAL ENGINEERING**
 Counter-divider circuit for accuracy and reliability in binary circuits
 [NASA-CASE-XNF-00421] c09 N70-34502
 Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude
 [NASA-CASE-XAC-02807] c09 N71-23021
- ELECTRICAL FAULTS**
 Overcurrent protecting circuit for push-pull transistor amplifiers
 [NASA-CASE-MSG-12033-1] c09 N71-13531
 Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
 [NASA-CASE-GSC-10114-1] c10 N71-27366
 Test method and equipment for identifying faulty cells or connections in solar cell assemblies
 [NASA-CASE-NPO-10401] c03 N72-20033
 Shared memory for a fault-tolerant computer
 [NASA-CASE-NPO-13139-1] c08 N74-17911
- ELECTRICAL IMPEDANCE**
 High voltage transistor circuit
 [NASA-CASE-XNP-06937] c09 N71-19516
 Development of electrical system for measuring high impedance
 [NASA-CASE-XNS-08589-1] c09 N71-20569
 Signaling summary alarm circuit with semiconductor switch for faulty contact indications
 [NASA-CASE-XLE-03061-1] c10 N71-24798
 Electronic signal-handling circuit with constant input impedance
 [NASA-CASE-ARC-10348-1] c10 N72-10205
- ELECTRICAL INSULATION**
 Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
 [NASA-CASE-XNP-01951] c09 N70-41929
 Method and apparatus for removing plastic insulation from wire using cryogenic equipment
 [NASA-CASE-NFS-10340] c15 N71-17628
 Nonconductive tube as feed system for plasma thruster
 [NASA-CASE-XLE-02902] c25 N71-21694
 Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
 [NASA-CASE-LEW-10210-1] c28 N71-26781
 Development of process for forming insulating layer between two electrical conductor or semiconductor materials
 [NASA-CASE-LEW-10489-1] c15 N72-25447
 Isolated dc amplifier for bioelectric measurements
 [NASA-CASE-ARC-10596-1] c09 N72-27233
 Procedure for making insulating foil for use in multilayer insulating system
 [NASA-CASE-LEW-11484-1] c15 N73-22415
 Development of stored charge device using field effect transistor technology
 [NASA-CASE-NPO-11156-2] c03 N73-30974
- Bio-isolated dc operational amplifier --- for bioelectric measurements
 [NASA-CASE-ARC-10596-1] c09 N74-21851
- ELECTRICAL MEASUREMENT**
 Capacitance measuring device for determining flare accuracy on tapered tubes
 [NASA-CASE-IKS-03495] c14 N69-39785
 Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
 [NASA-CASE-XNP-09768] c09 N71-12516
 Microamperage current measuring circuit, with two subminiature thermionic diodes with filament cathodes
 [NASA-CASE-XNP-00384] c09 N71-13530
 Low impedance apparatus for measuring electrostatic field intensity near space vehicles
 [NASA-CASE-XLE-00820] c14 N71-16014
 Electric current measuring apparatus design including saturable core transformer and energy storage device to avoid magnetizing current errors from transformer output winding
 [NASA-CASE-IGS-02439] c14 N71-19431
 High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
 [NASA-CASE-XLE-02008] c09 N71-21583
 Ablation sensor for measuring char layer recession rate using electric wires
 [NASA-CASE-XLA-01794] c33 N71-21586
 Current measurement by use of Hall effect generator
 [NASA-CASE-XAC-01662] c14 N71-23037
 Connector internal force gage for measuring strength of electrical connection
 [NASA-CASE-XNP-03918] c14 N71-23087
 Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
 [NASA-CASE-XMS-06497] c14 N71-26244
 Lightning current measuring systems
 [NASA-CASE-KSC-10807-1] c14 N74-22113
- ELECTRICAL PROPERTIES**
 Voltage drift compensation circuit for analog-to-digital converter
 [NASA-CASE-XNP-04780] c08 N71-19687
 Development and characteristics of electronically resettable fuse with saturable core current sensing transformer having two outside legs and center leg
 [NASA-CASE-XGS-11177] c09 N71-27001
 Development and characteristics of voltage regulator for connection in series with alternating current source and load using three leg, two-window transformer
 [NASA-CASE-ERC-10113] c09 N71-27053
 Development of system with electrical properties which vary with changes in temperature for use with feedback loop in operational amplifier circuit
 [NASA-CASE-MSG-13276-1] c14 N71-27058
 Electrically coupled individually encapsulated solar cell matrix
 [NASA-CASE-NPO-11190] c03 N71-34044
 Development of performed attachable thermocouple from thermoelectrically different metals
 [NASA-CASE-LEW-11072-2] c14 N72-28443
 Development of stored charge device using field effect transistor technology
 [NASA-CASE-NPO-11156-2] c03 N73-30974
 Storage battery comprising negative plates of a wedge shaped configuration --- for preventing shape change induced malfunctions
 [NASA-CASE-NPO-11806-1] c03 N74-19693
- ELECTRICAL RESISTANCE**
 Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
 [NASA-CASE-KSC-10242] c15 N72-23497
 Radio frequency source resistance measuring instruments of varied design
 [NASA-CASE-NPO-11291-1] c14 N73-30388
- ELECTRICAL RESISTIVITY**
 Describing method for vapor deposition of gallium arsenide films to manganese substrates to provide semiconductor devices with low resistance substrates
 [NASA-CASE-XNP-01328] c26 N71-18064

- Simulating operation of thermopile vacuum gage tube at high and low pressures
[NASA-CASE-XLA-02758] c14 N71-18481
- Electrically conductive fluorocarbon polymers
[NASA-CASE-XLB-06774-2] c06 N72-25150
- Electrical conductivity cell and method for fabricating the same --- using flask with threaded neck
[NASA-CASE-ARC-10810-1] c14 N74-29772
- ELECTRICITY**
- Thermonic converter for converting heat energy directly into electrical energy
[NASA-CASE-XLE-01903] c22 N71-23599
- ELECTRO-OPTICS**
- Electro-optical system with scan-in illuminator and scan-out photosensor for scanning variable transmittance objects
[NASA-CASE-NPO-11106] c14 N70-34697
- Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
[NASA-CASE-XMF-00908] c14 N70-40238
- Automatic polarimeter capable of measuring transient birefringence changes in electro-optic materials
[NASA-CASE-XNP-08883] c23 N71-16101
- Design and development of light sensing device for controlling orientation of object relative to sun or other light source
[NASA-CASE-NPO-11201] c14 N72-27409
- Electro-optical stabilization of calibrated light source
[NASA-CASE-MSC-12293-1] c14 N72-27411
- Electro-optical system for scanning variable transmittance objects
[NASA-CASE-NPO-11106-2] c23 N72-28696
- Electronic optical transfer function analyzer using scanning image dissection system to produce representative output signal
[NASA-CASE-MPS-21672-1] c23 N73-22630
- ELECTROACOUSTIC TRANSDUCERS**
- Transducer for monitoring oxygen flow in respirator
[NASA-CASE-FRC-10012] c14 N72-17329
- Application of acoustic transducers for suspending object at center of chamber under near weightless conditions
[NASA-CASE-NPO-13263-1] c15 N73-31443
- ELECTROACOUSTIC WAVES**
- Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606
- ELECTROCARDIOGRAPHY**
- Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606
- Insulated electrode for electrocardiographic recording without paste electrolyte
[NASA-CASE-MSC-14339-1] c05 N73-21151
- Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MPS-20418] c14 N73-24473
- ELECTROCHEMICAL CELLS**
- Apparatus for measuring polymer membrane expansion in electrochemical cells
[NASA-CASE-XGS-03865] c14 N69-21363
- Preventing pressure buildup in electrochemical cells by reacting palladium oxide with evolved hydrogen
[NASA-CASE-XGS-01419] c03 N70-41864
- Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053
- Epoxy resin sealing device for electrochemical cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
- Sealed electrochemical cell with flexible casing for varying electrolyte level in cell
[NASA-CASE-XGS-01513] c03 N71-23336
- Elimination of two step voltage discharge property of silver zinc batteries by using divalent silver oxide capacity of cell to charge anodes to monovalent silver state
[NASA-CASE-XGS-01674] c03 N71-29129
- Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-XGS-10010] c03 N72-15986
- Porous electrode for use in electrochemical cells
[NASA-CASE-GSC-11368-1] c09 N73-32108
- Battery testing device --- for testing cells of multiple-cell battery
[NASA-CASE-MFS-20761-1] c03 N74-27519
- ELECTROCHEMISTRY**
- Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
- ELECTRODEPOSITION**
- Binding layer of semiconductor particles by electrodeposition
[NASA-CASE-XNP-01959] c26 N71-23043
- Electrodeposition method for producing crystalline material from dense gaseous medium
[NASA-CASE-NPO-10440] c15 N72-21466
- Electrophoretic sample insertion --- device for uniformly distributing samples in flow path
[NASA-CASE-MFS-21395-1] c14 N74-26948
- ELECTRODES**
- Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
- Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
- Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
- Elastomer loaded with metal particles for elastic biomedical electrodes
[NASA-CASE-ARC-10268-1] c09 N70-12620
- Ionization vacuum gage
[NASA-CASE-XNP-00646] c14 N70-35666
- Accel and focus electrode design for ion engine with improved efficiency
[NASA-CASE-XNP-02839] c28 N70-41922
- Including didymium hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608
- Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
- Electromedical garment, applying vectorcardiologic type electrodes to human torsos for data recording during physical activity
[NASA-CASE-XPR-10856] c05 N71-11189
- Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193
- Characteristics of pressed disc electrode for biological measurements
[NASA-CASE-XMS-04212-1] c05 N71-12346
- Electrode connection for n-on-p silicon solar cell
[NASA-CASE-XLE-04787] c03 N71-20492
- Arc electrode of graphite with tantalum ball tip
[NASA-CASE-XLE-04788] c09 N71-22987
- Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
- Automatic recording McLeod gage with three electrodes and solenoid valve connection
[NASA-CASE-XLE-03280] c14 N71-23093
- Dry electrode design with wire sandwiched between two flexible conductive discs for monitoring physiological responses
[NASA-CASE-FRC-10029] c09 N71-24618
- Development and characteristics of electrodes in which poisoning by organic molecules is prevented by ion selective electrolytic deposition of hydrophilic protein colloid
[NASA-CASE-XMS-04213-1] c09 N71-26002
- Adhesive spray process for attaching biomedical skin electrodes
[NASA-CASE-XPR-07658-1] c05 N71-26293
- Electrodes having array of small surfaces for field ionization
[NASA-CASE-ERC-10013] c09 N71-26678

- Manufacturing process for making perspiration resistant-stress resistant biopotential electrode
 [NASA-CASE-MSC-90153-2] c05 N72-25120
- Dry electrode manufacture, using silver powder with cement
 [NASA-CASE-FRC-10029-2] c05 N72-25121
- Compressible electrolyte saturated sponge electrode for biomedical applications
 [NASA-CASE-MSC-13648] c05 N72-27103
- Electrode with multiple columnar conductors for limiting field emission current
 [NASA-CASE-ERC-10015-2] c10 N72-27246
- Coaxial, high density, hypervelocity plasma generator and accelerator using electrodes
 [NASA-CASE-MFS-20589] c25 N72-32688
- Insulated electrode for electrocardiographic recording without paste electrolyte
 [NASA-CASE-MSC-14339-1] c05 N73-21151
- Characteristics of ion rocket engine with combination keeper electrode and electron baffle
 [NASA-CASE-NPO-11880] c28 N73-24783
- Silicon carbide backward diode with coated lead attachment
 [NASA-CASE-ERC-10224-2] c09 N73-27150
- Porous electrode for use in electrochemical cells
 [NASA-CASE-GSC-11368-1] c09 N73-32108
- Ultra-flexible biomedical electrodes and wires
 [NASA-CASE-ARC-10268-2] c05 N74-11900
- Ultra-flexible biomedical electrode and wires
 [NASA-CASE-ARC-10268-3] c05 N74-11901
- High powered arc electrodes --- producing solar simulator radiation
 [NASA-CASE-LEW-11162-1] c09 N74-12913
- Method of making porous conductive supports for electrodes --- by electroforming and stacking nickel foils
 [NASA-CASE-GSC-11367-1] c03 N74-19692
- Trielectrode capacitive pressure transducer
 [NASA-CASE-ARC-10711-1] c14 N74-29773
- ELECTROFORMING**
 Method of electroforming a rocket chamber
 [NASA-CASE-LEW-11118-1] c15 N74-32919
- ELECTROHYDRAULIC FORMING**
 Electric discharge apparatus for electrohydraulic explosive forming
 [NASA-CASE-XMF-00375] c15 N70-34249
- ELECTROHYDRODYNAMICS**
 Control valve for switching main stream of fluid from one stable position to another by means of electrohydrodynamic forces
 [NASA-CASE-NPO-10416] c12 N71-27332
- ELECTROKINETICS**
 Zeta potential flowmeter for measuring very slow to very high flows
 [NASA-CASE-XNP-06509] c14 N71-23226
- ELECTROLYSIS**
 Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator
 [NASA-CASE-XGS-08729] c28 N71-14044
- Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermolectric regeneration mechanism
 [NASA-CASE-ILE-01645] c03 N71-20904
- ELECTROLYTES**
 Apparatus for measuring polymer membrane expansion in electrochemical cells
 [NASA-CASE-XGS-03865] c14 N69-21363
- Electrolytically regenerative hydrogen-oxygen fuel cells
 [NASA-CASE-ILE-04526] c03 N71-11052
- Sealed electrochemical cell with flexible casing for varying electrolyte level in cell
 [NASA-CASE-IGS-01513] c03 N71-23336
- Compressible electrolyte saturated sponge electrode for biomedical applications
 [NASA-CASE-MSC-13648] c05 N72-27103
- ELECTROLYTIC CELLS**
 Heat activated cell with aluminum anode
 [NASA-CASE-LEW-11359-2] c03 N72-20034
- Actuator operated by electrolytic drive gas generator and evacuator
 [NASA-CASE-NPO-11369] c15 N73-13467
- Electrolytic cell design
 [NASA-CASE-LAR-11042-1] c03 N74-29416
- ELECTROMAGNETIC ABSORPTION**
 Optical imaging system for increasing light absorption efficiency of imaging detector
 [NASA-CASE-ARC-10194-1] c23 N73-20741
- ELECTROMAGNETIC FIELDS**
 Tumbling motion system for object demagnetization
 [NASA-CASE-IGS-02437] c15 N69-21472
- Device for high vacuum film deposition with electromagnetic ion steering
 [NASA-CASE-NPO-10331] c09 N71-26701
- Metal detection system with electromagnetic transmitter with single coil and receiver with single coil
 [NASA-CASE-ARC-10265-1] c10 N72-28240
- Low power electromagnetic flowmeter system producing zero output signal for zero flow
 [NASA-CASE-ARC-10362-1] c14 N73-32326
- Electromagnetic flow rate meter --- for liquid metals
 [NASA-CASE-LEW-10981-1] c14 N74-21018
- ELECTROMAGNETIC HAMMERS**
 Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
 [NASA-CASE-XMF-05114] c15 N71-17650
- Portable magnetomotive hammer for metal working
 [NASA-CASE-XMF-03793] c15 N71-24833
- ELECTROMAGNETIC INTERFERENCE**
 Sealed housing for protecting electronic equipment against electromagnetic interference
 [NASA-CASE-MSC-12168-1] c09 N71-18600
- ELECTROMAGNETIC MEASUREMENT**
 Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites
 [NASA-CASE-IGS-02608] c07 N70-41678
- ELECTROMAGNETIC NOISE**
 Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
 [NASA-CASE-LAR-10253-1] c09 N72-25258
- Audio equipment for removing impulse noise from audio signals
 [NASA-CASE-NPO-11631] c10 N73-12244
- ELECTROMAGNETIC PUMPS**
 Multiducted electromagnetic pump for conductive liquids
 [NASA-CASE-NPO-10755] c15 N71-27084
- ELECTROMAGNETIC RADIATION**
 Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
 [NASA-CASE-XMS-00893] c07 N70-40063
- Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits
 [NASA-CASE-XNP-02140] c09 N71-23097
- Left and right hand circular electromagnetic polarization excitation by phase shifter and hybrid networks
 [NASA-CASE-GSC-10021-1] c09 N71-24595
- Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna
 [NASA-CASE-XLA-10772] c07 N71-28980
- Characteristics of microwave antenna with conical reflectors to generate plane wave front
 [NASA-CASE-NPO-11661] c07 N73-14130
- Focusing optical collimator for high resolution scanning of electromagnetic radiations, neutrons, and other particles
 [NASA-CASE-MFS-20932-1] c14 N73-27380
- Method and apparatus for measuring electromagnetic radiation
 [NASA-CASE-LEW-11159-1] c14 N73-28488
- ELECTROMAGNETIC SHIELDING**
 Shielded flat conductor cable fabricated by electroless and electrolytic plating
 [NASA-CASE-MFS-13687] c09 N71-28691
- ELECTROMAGNETIC WAVE FILTERS**
 Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
 [NASA-CASE-NPO-10417] c16 N71-33410
- ELECTROMAGNETIC WAVE TRANSMISSION**
 Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites
 [NASA-CASE-IGS-02608] c07 N70-41678

- ELECTROMAGNETISM**
Electromagnetic braking arrangement for controlling rotor rotation in electric motor [NASA-CASE-IMP-06936] c15 N71-24695
- ELECTROMAGNETS**
Oscillatory electromagnetic mirror drive system for horizon scanners [NASA-CASE-ILA-03724] c14 N69-27461
Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss [NASA-CASE-IMP-01951] c09 N70-41929
Magnetic element position sensing device, using misaligned electromagnets [NASA-CASE-IGS-07514] c23 N71-16099
Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge [NASA-CASE-LAR-10372] c09 N71-18599
Magnetic bearing with diverse magnetic sources coupled to same air gap via different low magnetic reluctance paths for use with permanent magnets [NASA-CASE-GSC-11079-1] c21 N71-28461
- ELECTROMECHANICAL DEVICES**
Electromechanical actuator and its use in rocket thrust control valve [NASA-CASE-IMP-05975] c15 N69-23185
Power controlled bimetallic electromechanical actuator for accurate, timely, and reliable response to remote control signal [NASA-CASE-IMP-09776] c09 N69-39929
Electro-mechanical circuit for converting floating intelligence signal to common electrically grounded intelligence recorder [NASA-CASE-IAC-00086] c09 N70-33182
Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer [NASA-CASE-IGS-03532] c14 N71-17627
Mechanical actuator wherein linear motion changes to rotational motion [NASA-CASE-IGS-04548] c15 N71-24045
Solid state force measuring electromechanical transducers made of piezoresistive materials [NASA-CASE-ERC-10088] c26 N71-25490
Electromechanical control actuator system using double differential screws [NASA-CASE-ERC-10022] c15 N71-26635
Miniature electromechanical junction transducer operating on piezoelectric effect and utilizing epoxy for stress coupling component [NASA-CASE-ERC-10087] c14 N71-27334
Service life of electromechanical device for generating sine/cosine functions [NASA-CASE-LAR-10503-1] c09 N72-21248
Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals [NASA-CASE-NPO-11738-1] c09 N73-30185
Brushless electromechanical generator for sine and cosine functions [NASA-CASE-LAR-11389-1] c09 N73-32121
- ELECTROMETERS**
Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude [NASA-CASE-IAC-02807] c09 N71-23021
- ELECTROMOTIVE FORCES**
Heat activated emf cells with aluminum anode [NASA-CASE-LEW-11359] c03 N71-28579
- ELECTRON BEAM WELDING**
Portable electron beam welding chamber [NASA-CASE-LEW-11531] c15 N71-14932
Development of device to prevent high voltage arcing in electron beam welding [NASA-CASE-IMP-08522] c15 N71-19486
- ELECTRON BEAMS**
Using electron beam switching for brushless motor commutation [NASA-CASE-IGS-01451] c09 N71-10677
Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission [NASA-CASE-ERC-10552] c09 N71-12539
Electron beam deflection devices for measuring electric fields [NASA-CASE-IMP-10289] c14 N71-23699
- Apparatus to determine electric field strength by measuring deflection of electron beam impinging on target [NASA-CASE-IMP-06617] c09 N71-24843
Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam [NASA-CASE-LAR-10728-1] c14 N73-12445
Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube [NASA-CASE-LEW-11617-1] c09 N74-10195
Image tube --- deriving electron beam replica of image [NASA-CASE-GSC-11602-1] c09 N74-21850
- ELECTRON BOMBARDMENT**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster [NASA-CASE-XLE-07087] c06 N69-39889
Device and method for particle bombardment of specimens in electron microscope and measurement of beam intensities [NASA-CASE-IGS-01725] c14 N69-39982
Electric rocket engine with electron bombardment ionization chamber [NASA-CASE-IMP-04124] c28 N71-21822
Electronic cathodes for use in electron bombardment ion thrusters [NASA-CASE-XLE-04501] c09 N71-23190
Production of iodine isotope by high energy bombardment of cesium heat pipe causing spallation reaction [NASA-CASE-LEW-11390-2] c24 N73-20763
Single grid accelerator system for electron bombardment type ion thruster [NASA-CASE-XLE-10453-2] c28 N73-27699
- ELECTRON DISTRIBUTION**
Measurement of plasma temperature and density using radiation absorption [NASA-CASE-ARC-10598-1] c25 N74-30156
- ELECTRON EMISSION**
Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency [NASA-CASE-XLE-01015] c03 N69-39898
- ELECTRON FLUX DENSITY**
Device and method for particle bombardment of specimens in electron microscope and measurement of beam intensities [NASA-CASE-IGS-01725] c14 N69-39982
- ELECTRON IRRADIATION**
Electrostatic ion engines using high velocity electrons to ionize propellant [NASA-CASE-XLE-00376] c28 N70-37245
- ELECTRON MICROSCOPES**
Device and method for particle bombardment of specimens in electron microscope and measurement of beam intensities [NASA-CASE-IGS-01725] c14 N69-39982
Electron microscope and method of making annular objective aperture [NASA-CASE-ARC-10448-1] c14 N72-21421
Electron microscope aperture system [NASA-CASE-ARC-10448-2] c14 N74-12190
Electron microscope aperture system [NASA-CASE-ARC-10448-3] c14 N74-12191
- ELECTRON PLASMA**
Apparatus for producing highly conductive, high temperature electron plasma with homogenous temperature and pressure distribution [NASA-CASE-ILA-00147] c25 N70-34661
- ELECTRON TRANSFER**
Method for treating metal surfaces to prevent secondary electron transmission [NASA-CASE-IMP-09469] c24 N71-25555
- ELECTRON TRANSITIONS**
Laser utilizing infrared rotation transitions of diatomic gas for production of different wavelengths [NASA-CASE-ARC-10370-1] c16 N72-10432
- ELECTRON TUBES**
Direct radiation cooling of linear beam collector tubes [NASA-CASE-IMP-09227] c15 N69-24319
Refractory filament series circuitry for radiant heater [NASA-CASE-XLE-00387] c33 N70-34812

ELECTRON TUNNELING

A doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NPO-13348-1] c14 N74-20022

ELECTRONIC CONTROL

Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460

Electronic circuit system for controlling electric motor speed
[NASA-CASE-XMP-01129] c09 N70-38712

Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction
[NASA-CASE-NPO-10302] c10 N71-26102

Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173

Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185

Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NPO-11016] c08 N72-31226

ELECTRONIC EQUIPMENT

Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460

Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-XMP-06531] c14 N71-17575

Development of stable electronic amplifier adaptable for monolithic and thin film construction
[NASA-CASE-XGS-02812] c09 N71-19466

Development and characteristics of oscillating static inverter
[NASA-CASE-XGS-05289] c09 N71-19470

Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits
[NASA-CASE-XMP-02140] c09 N71-23097

Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098

Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190

Method and apparatus for adjusting thermal conductance in electronic components for space use
[NASA-CASE-INP-05524] c33 N71-24876

Development and characteristics of solid state acoustic variable time delay line using direct current voltage and radio frequency pulses
[NASA-CASE-ERC-10032] c10 N71-25900

Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244

Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215

Device for rapid adjustment and maintenance of temperature in electronic components
[NASA-CASE-INP-02792] c14 N71-28958

Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171

Readily assembled universal environment housing for electronic equipment
[NASA-CASE-KSC-10031] c15 N72-22486

Lead attachment for high temperature operation of electronic devices
[NASA-CASE-ERC-10224] c09 N72-25261

Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457

Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NPO-11371] c08 N73-12177

Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187

Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-XRS-00348] c09 N73-14215

Thermochromic compositions for detecting heat levels in electronic circuits and devices
[NASA-CASE-NPO-10764-1] c14 N73-14428

Development of phase control coupling for use with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206

Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
[NASA-CASE-KSC-10108] c14 N73-25461

Development of equipment and method for electrifying dielectric to determine electrostatic properties
[NASA-CASE-NPS-22129-1] c09 N73-26197

Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910

Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c09 N74-12912

Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c14 N74-32890

ELECTRONIC EQUIPMENT TESTS

Apparatus for automatically testing analog to digital converters for open and short circuits
[NASA-CASE-XLA-06713] c14 N71-28991

Test set for signal conditioner modules
[NASA-CASE-KSC-10750-1] c14 N73-23527

ELECTRONIC FILTERS

Self-tuning electronic filter for maintaining constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231

Capacitance multiplier and filter synthesizing network
[NASA-CASE-NPO-11948-1] c10 N74-32712

ELECTRONIC MODULES

Thermal conductive, electrically insulated cleavable adhesive connection between electronic module and heat sink
[NASA-CASE-XMS-02087] c09 N70-41717

Fabrication methods for matrices of solar cell submodules
[NASA-CASE-INP-05021] c03 N71-11056

Development and characteristics of cooling system to maintain temperature of rack mounted electronic modules
[NASA-CASE-MSC-12389] c33 N71-29052

Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c15 N74-32918

ELECTRONIC PACKAGING

Electrical feedthrough connection for printed circuit boards
[NASA-CASE-INP-01483] c14 N69-27431

Capacitor fabrication by solidifying mixture of ferromagnetic metal particles, nonferromagnetic particles, and dielectric material
[NASA-CASE-LEW-10364-1] c09 N71-13522

Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NPO-10051] c18 N71-24934

Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783

Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-XGS-10010] c03 N72-15986

Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469

Techniques for packaging and mounting printed circuit boards
[NASA-CASE-NPS-21919-1] c10 N73-25203

Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-NPS-21374-1] c10 N74-12951

Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c15 N74-32918

ELECTRONIC RECORDING SYSTEMS

- Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
- ELECTRONIC TRANSDUCERS**
Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-XMF-02433] c14 N71-10616
Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2(B)] c09 N74-14941
- ELECTROPHORESIS**
Electrophoretic sample insertion --- device for uniformly distributing samples in flow path
[NASA-CASE-MFS-21395-1] c14 N74-26948
Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c12 N74-27744
- ELECTROPHOTOMETERS**
Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993
- ELECTROPHYSIOLOGY**
Dry electrode design with wire sandwiched between two flexible conductive discs for monitoring physiological responses
[NASA-CASE-FRC-10029] c09 N71-24618
- ELECTROPLATING**
Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
Shielded flat conductor cable fabricated by electroless and electrolytic plating
[NASA-CASE-MFS-19687] c09 N71-28691
Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
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[NASA-CASE-XLA-02898] c05 N71-20268

Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161

EXPLOSIONS

Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484

EXPLOSIVE DEVICES

Stage separation using remote control release of joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490

Hermetically sealed explosive release mechanism for actuator device
[NASA-CASE-IGS-00824] c15 N71-16078

Development of non-magnetic indexing device for orienting magnetic flux sensing instrument in magnetic field without generation of detrimental magnetic fields
[NASA-CASE-IGS-02422] c15 N71-21529

Development of apparatus for detonating explosive devices in order to determine forces generated and detonation propagation rate
[NASA-CASE-LAR-10800-1] c33 N72-27959

Development and characteristics of squib actuated explosive disconnect for spacecraft

release from launch vehicle
[NASA-CASE-NPO-11330] c33 N73-26958

EXPLOSIVE FORMING

Electric discharge apparatus for electrohydraulic explosive forming
[NASA-CASE-XMP-00375] c15 N70-34249

EXPLOSIVE WELDING

Explosive welding of thin metal scarf joint
[NASA-CASE-LAR-11211-1] c15 N73-14480

Method for eliminating noise and debris of explosive welding techniques by using complete enclosure
[NASA-CASE-LAR-10941-2] c15 N73-32371

Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c15 N74-21057

EXPLOSIVES

Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
[NASA-CASE-MPS-20861-1] c18 N73-32437

Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c33 N74-27425

EXPONENTIAL FUNCTIONS

Digital quasi-exponential function generator
[NASA-CASE-NPO-11130] c08 N72-20176

EXPOSURE

Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
[NASA-CASE-LAR-10319-1] c14 N73-32322

EXPULSION BLADDERS

Expulsion bladder equipped storage tank structure
[NASA-CASE-XMP-00612] c11 N70-38182

Rubber composition for expulsion bladders and diaphragms for use with hydrazine
[NASA-CASE-NPO-11433] c18 N71-31140

EXTENSIONS

Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XMP-07587] c15 N71-18701

EXTENSOMETERS

Transducer frame for use with extensometer to continuously monitor specimen sample
[NASA-CASE-XLA-10322] c15 N72-17452

Conductive elastomeric extensometer
[NASA-CASE-MPS-21049-1] c14 N74-27864

EXTRACTION

Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062

EXTRAVEHICULAR ACTIVITY

Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203

Hand-held maneuvering unit for propulsion and attitude control of astronauts in zero or reduced gravity environment
[NASA-CASE-XMS-05304] c05 N71-12336

Internal and external serpentine devices for performing physical operations around orbital space stations
[NASA-CASE-XMP-05344] c31 N71-16345

Releasable, pin-type fastener, easily operated during EVA
[NASA-CASE-ARC-10140-1] c15 N71-17653

Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
[NASA-CASE-MSC-12243-1] c05 N71-24728

Open loop life support subsystem using breathing bag as reservoir for EVA
[NASA-CASE-MSC-12411-1] c05 N72-20096

Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012

EXTREMELY LOW RADIO FREQUENCIES

VHF/UHF parasitic probe antenna for spacecraft communication
[NASA-CASE-XKS-09340] c07 N71-24614

EXTRUDING

Extrusion can for extruding ceramics under heat and pressure
[NASA-CASE-NPO-10812] c15 N73-13464

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Sight switch using infrared source and sensor mounted beside eye

[NASA-CASE-XMP-03934] c09 N71-22985
 Ultrasonic device for ophthalmic eye surgery
 with safe removal of macerated material
 [NASA-CASE-LEW-11669-1] c05 N73-27062
 Surgical liquification pump for removing
 macerated tissue from eye
 [NASA-CASE-LEW-12051-1] c04 N73-32000

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 Optical vision testing unit for testing eyes and
 visual system of human subject
 [NASA-CASE-MSC-13601-1] c05 N72-11088
 Automated visual sensitivity tester for
 determining visual field sensitivity and blind
 spot size
 [NASA-CASE-ARC-10329-1] c05 N73-26072
 Visual examination apparatus
 [NASA-CASE-ARC-10329-2] c05 N74-19761

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 Wide angle eyepiece with long eye-relief distance
 [NASA-CASE-XMS-06056-1] c23 N71-24857

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 [NASA-CASE-XNP-09752] c14 N69-21541
 Fabrication method for lightweight
 regeneratively cooled combustion chamber of
 channel construction
 [NASA-CASE-XLE-00150] c28 N70-41818
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 [NASA-CASE-XNP-05821] c03 N71-11056
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 ferromagnetic metal particles,
 nonferromagnetic particles, and dielectric
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 [NASA-CASE-LEW-10364-1] c09 N71-13522
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 [NASA-CASE-XNP-03413] c03 N71-26726
 Fabrication of root cord restrained fabric suit
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 [NASA-CASE-MSC-12398] c05 N72-20098
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 [NASA-CASE-PRC-10038] c15 N72-20444
 Development of thin film temperature sensor from
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 [NASA-CASE-NPO-11775] c26 N72-28761

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 [NASA-CASE-MSC-12398] c05 N72-20098

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 Fabry-Perot interferometer retrodirective
 reflector modulator for optical communication
 [NASA-CASE-XGS-04480] c16 N69-27491

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 [NASA-CASE-GSC-10185-1] c07 N72-12081
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 imagery function of facsimile cameras for use
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 [NASA-CASE-LAR-11207-1] c14 N73-28496

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 Space suit with pressure-volume compensator system
 [NASA-CASE-XLA-05332] c05 N71-11194
 Equipotential space suits utilizing mechanical
 aids to minimize astronaut energy at bending
 joints
 [NASA-CASE-LAR-10007-1] c05 N71-11195

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 Fail-safe multiple transformer circuit
 configuration
 [NASA-CASE-NPO-11078] c09 N72-25262
 Latch mechanism
 [NASA-CASE-MSC-12549-1] c15 N74-27903

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 Method and apparatus for detecting flaws in
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 [NASA-CASE-MPS-19218-1] c14 N74-34860

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 [NASA-CASE-LEW-10856-1] c15 N72-22490
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 [NASA-CASE-NPO-33160-1] c14 N74-18090

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 clamshell fairing sections from spinning
 sounding rockets
 [NASA-CASE-GSC-10590-1] c31 N73-14853

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 by interferometric measurement of travel of
 falling body
 [NASA-CASE-XMF-05844] c14 N71-17587

FAR INFRARED RADIATION
 Collimator for analyzing spatial location of
 near and distant sources of radiation
 [NASA-CASE-MPS-20546-2] c14 N73-30389

FAR ULTRAVIOLET RADIATION
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 radiant intensity from far ultraviolet and
 ionized high temperature gases
 [NASA-CASE-INP-09802] c33 N71-15641

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 members, particularly fastening bolts or studs
 [NASA-CASE-XNP-00456] c14 N70-34705
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 [NASA-CASE-XMS-00864] c05 N70-36493
 Nut and bolt fastener permitting all-directional
 movement of skin sections with respect to
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 [NASA-CASE-XLA-01807] c15 N71-10799
 Releasable, pin-type fastener, easily operated
 during EVA
 [NASA-CASE-ARC-10140-1] c15 N71-17653
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 [NASA-CASE-MPS-20586] c15 N71-17686
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 [NASA-CASE-INP-04732] c09 N71-20851
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 [NASA-CASE-INP-02341] c15 N71-21531
 Threadless fastener apparatus comprising
 receiving apertures for plurality of articles,
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 [NASA-CASE-XPR-05302] c15 N71-23254
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 skin of aerospace vehicles to permit movement
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 [NASA-CASE-XLA-01027] c31 N71-24035
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 [NASA-CASE-XMS-10660-1] c15 N71-25975

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 [NASA-CASE-LEW-11152-1] c15 N73-32359

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 [NASA-CASE-XMP-10968] c14 N71-24234
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			c14 N71-10616
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			Process for fiberizing ceramic materials with high fusion temperatures and tensile strength [NASA-CASE-IMP-00597]
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			c08 N71-12500
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			Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration [NASA-CASE-WPO-11333]
			c08 N72-22162
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			Development of stored charge device using field effect transistor technology [NASA-CASE-WPO-11156-2]
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			Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential of field effect device [NASA-CASE-GSC-11425-1]
			c24 N74-20329
			FIELD EMISSION
			Electrode with multiple columnar conductors for limiting field emission current [NASA-CASE-ERC-10015-2]
			c10 N72-27246
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			Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements [NASA-CASE-IMP-02107]
			c15 N71-10809
			Fabrication of filament wound propellant tank for cryogenic storage [NASA-CASE-XLE-03803-2]
			c15 N71-17651
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- [NASA-CASE-LEW-11015] c26 N73-32571
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- Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812
- Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
- FILLERS**
- Filling honeycomb matrix with deaerated paste filler
[NASA-CASE-INS-01108] c15 N69-24322
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- Multislit film cooled pyrolytic graphite rocket nozzle
[NASA-CASE-IMP-04389] c28 N71-20942
- FILMS**
- Apparatus for obtaining isotropic irradiation on film emulsion from parallel radiation source
[NASA-CASE-NFS-20095] c24 N72-11595
- FILTERS**
- Development of filter system for control of outgas contamination in vacuum conditions using absorbent beds of molecular sieve zeolite, silica gel, and charcoal
[NASA-CASE-NFS-14711] c15 N71-26185
- Heated tungsten filter for removing oxygen impurities from cesium
[NASA-CASE-IMP-04262-2] c17 N71-26773
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[NASA-CASE-LAR-10194-1] c12 N74-30608
- FINS**
- Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
- Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c02 N74-30421
- FIRE PREVENTION**
- Hydrogen fire blink detector for high altitude rocket or ground installation
[NASA-CASE-NFS-15063] c14 N72-25412
- Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c18 N74-11366
- Method and apparatus for checking fire detectors
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- Fireproof potassium silicate coating composition, insoluble in water after application
[NASA-CASE-GSC-10072] c18 N71-14014
- Lightweight fire resistant plastic foam for thermal protection of reentry vehicles and aircraft structures
[NASA-CASE-ARC-10180-1] c28 N72-20767
- Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
- Para-benzoquinone dioxide and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572
- Process for developing flame retardant elastomeric composition textiles for use in space suits
[NASA-CASE-HSC-14331-1] c18 N73-27501
- Flexible fire retardant polyisocyanate modified neoprene foam --- for thermal protective devices
[NASA-CASE-ARC-10180-1] c06 N74-12814
- FIRES**
- Device for generating and controlling combustion products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375
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[NASA-CASE-NFS-13130] c10 N72-17173
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[NASA-CASE-XGS-01971] c15 N71-15922
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[NASA-CASE-XLE-00321] c22 N70-34572
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[NASA-CASE-XLA-01141] c15 N71-13789
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[NASA-CASE-NPO-13157-1] c15 N74-32918
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[NASA-CASE-LAR-11465-1] c15 N74-32926
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[NASA-CASE-ARC-10322-1] c14 N74-27875
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[NASA-CASE-NFS-21577-1] c03 N74-29410
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[NASA-CASE-XLA-00302] c15 N71-16077
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[NASA-CASE-ARC-10098-1] c06 N71-24739
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[NASA-CASE-LAR-10170-1] c15 N74-11301
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- Anodizing method for providing metal surfaces with temperature reducing coatings against flames
[NASA-CASE-XLE-00035] c33 N71-29151
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- Flammability test chamber for testing materials in certain predetermined environments
[NASA-CASE-KSC-10126] c11 N71-24985
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[NASA-CASE-XMS-09690] c33 N72-25913
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[NASA-CASE-IMP-00683] c09 N70-35425
- Light baffle with oblate hemispheroid surface and shading flange
[NASA-CASE-NPO-10337] c14 N71-15604
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- Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332
- Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
[NASA-CASE-IMP-00641] c31 N70-36410
- Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110
- Characteristics of system for providing yaw control of vehicles at high supersonic and hypersonic speeds by deflecting flaps mounted on upper wing surface
[NASA-CASE-LAR-11140-1] c02 N73-20008
- Adjustable airfoil for reversible cowl flap inlet thrust augmentation
[NASA-CASE-ARC-10754-1] c28 N73-32624
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[NASA-CASE-XLA-05056] c15 N72-11389
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- Method of making molded electric connector for use with flat conductor cables
[NASA-CASE-IMP-03498] c15 N71-15986
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[NASA-CASE-MFS-13687-2] c09 N72-22198
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 [NASA-CASE-XLE-02624] c12 N69-39988
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 Flexible bellows joint shielding sleeve for propellant transfer pipelines
 [NASA-CASE-INP-01855] c15 N71-28937
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 [NASA-CASE-INP-00722] c15 N70-40204
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 [NASA-CASE-XNP-09808] c09 N71-12518
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 [NASA-CASE-INP-08837] c18 N71-16210
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 [NASA-CASE-XLA-00117] c31 N71-17680
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 [NASA-CASE-LAR-10106-1] c15 N71-27169
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 [NASA-CASE-XNP-08881] c17 N71-28747
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 [NASA-CASE-LAR-10270-1] c32 N72-25877
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 [NASA-CASE-XLA-06095] c01 N69-39981
 Deployment system for flexible wing with rigid superstructure
 [NASA-CASE-XLA-01220] c02 N70-41863
 Development and characteristics of control system for flexible wings
 [NASA-CASE-XLA-06958] c02 N71-11038

FLEXING
 Two degree inverted flexure from single block of material
 [NASA-CASE-ARC-10345-1] c15 N73-12488

FLIGHT
 Flow meter for measuring stagnation pressure in boundary layer around high speed flight vehicle
 [NASA-CASE-XFR-02007] c12 N71-24692

FLIGHT ALTITUDE
 Surface based altitude measuring system for accurately measuring altitude of airborne vehicle
 [NASA-CASE-ERC-10412-1] c09 N73-12211
 Terminal guidance system --- for guiding aircraft into preselected altitude and/or heading at terminal point
 [NASA-CASE-FRC-10049-1] c21 N74-13420

FLIGHT CONTROL
 Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions

[NASA-CASE-XLA-00487] c14 N70-40157
 Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
 [NASA-CASE-XFR-04104] c03 N70-42073
 Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation
 [NASA-CASE-IAC-00048] c02 N71-29128
 Characteristics of system for providing yaw control of vehicles at high supersonic and hypersonic speeds by deflecting flaps mounted on upper wing surface
 [NASA-CASE-LAR-11140-1] c02 N73-20008
 Development of flight simulator system to show position of joystick displacement
 [NASA-CASE-NPO-11497] c08 N73-25206
 Development and characteristics of system for integrated control of engine power and aerodynamic configuration of aircraft during landing approach
 [NASA-CASE-ARC-10456-1] c02 N73-30938
 Solid state controller three axes controller
 [NASA-CASE-MSC-12394-1] c03 N74-10942
 G-load measuring and indicator apparatus --- for aircraft
 [NASA-CASE-ARC-10806] c14 N74-27872

FLIGHT CREWS
 Survival couch for aircraft or spacecraft crews
 [NASA-CASE-XLA-00118] c05 N70-33285

FLIGHT RECORDEERS
 Event recorder with constant speed motor which rotates recording disk
 [NASA-CASE-XLA-01832] c14 N71-21006

FLIGHT SAFETY
 Aerial capsule emergency separation device using jettisonable towers
 [NASA-CASE-XLA-00115] c03 N70-33343
 Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
 [NASA-CASE-LAR-10717-1] c21 N73-30641

FLIGHT SIMULATION
 Lunar landing flight research vehicle
 [NASA-CASE-YFR-00929] c31 N70-34966
 Television simulation for aircraft and space flight
 [NASA-CASE-YFR-03107] c09 N71-19449
 Electrical circuit selection device for simulating stage separation of flight vehicle
 [NASA-CASE-YKS-04631] c10 N71-23663

FLIGHT SIMULATORS
 Kinesthetic control simulator with multiple degree of freedom of movement similar to lunar flying vehicles
 [NASA-CASE-LAR-10276-1] c11 N70-26813
 Centrifuge mounted motion simulator with elevator mechanism
 [NASA-CASE-IAC-00399] c11 N70-34815
 Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
 [NASA-CASE-INP-00708] c14 N70-35394
 Wind tunnel test section for simulating high Reynolds number over transonic speed range
 [NASA-CASE-MFS-20509] c11 N72-17183
 Development of flight simulator system to show position of joystick displacement
 [NASA-CASE-NPO-11497] c08 N73-25206
 Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
 [NASA-CASE-LAR-10550-1] c11 N74-30597
 Vehicle simulator binocular multiplanar visual display system
 [NASA-CASE-ARC-10808-1] c11 N74-32718

FLIGHT TESTS
 Device for measuring drag forces in flight tests
 [NASA-CASE-XLA-00113] c14 N70-33386

FLIGHT VEHICLES
 Construction of leading edges of surfaces for aerial vehicles performing from subsonic to above transonic speeds
 [NASA-CASE-XLA-01486] c01 N71-23497
 Electro-optical attitude sensing device for landing approach of flight vehicle
 [NASA-CASE-XMS-01994-1] c14 N72-17326

- Design and development of active control system for air cushion vehicle to reduce or eliminate effects of excessive vertical vibratory acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023
- FLIP-FLOPS**
Bistable multivibrator circuits operating at high speed and low power dissipation
[NASA-CASE-XGS-00823] c10 N71-15910
Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-XGS-03058] c10 N71-19547
- FLOATING**
Floating baffle for tank drain
[NASA-CASE-KSC-10639] c15 N73-26472
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c05 N74-14845
- FLOATS**
Magnetically centered liquid column float
[NASA-CASE-XAC-00030] c14 N70-34820
- FLOTATION**
Development and characteristics of rescue litter with inflatable flotation device for water rescue application
[NASA-CASE-XMS-04170] c05 N71-22748
- FLOW DEFLECTION**
Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c28 N74-28233
- FLOW DIRECTION INDICATORS**
Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271
Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864
- FLOW DISTRIBUTION**
Multiple orifice fluid flow control valve to provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867
Photographing surface flow patterns on wind tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366
Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XMP-01779] c12 N71-20815
Laser Doppler velocimeter for simultaneously measuring orthogonal fluid velocity components without flow field perturbation
[NASA-CASE-ARC-10637-1] c14 N73-21390
- FLOW MEASUREMENT**
Collapsible flow test device for obstructed passages
[NASA-CASE-XMS-04917] c14 N69-24257
Simulated fuel assembly-type flow measurement apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669
Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365
Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415
System for measuring drag forces in a turbulently flowing fluid
[NASA-CASE-ARC-10755-1] c14 N74-14115
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[NASA-CASE-LEW-12078-1] c14 N74-18101
- FLOW REGULATORS**
Antibacklash circuit for hydraulic drive system
[NASA-CASE-XNP-01020] c03 N71-12260
Tubular flow restrictor for gas flow control in pipeline
[NASA-CASE-NPO-10117] c15 N71-15608
Fluid flow control valve for regulating fluids in molecular quantities
[NASA-CASE-XLE-00703] c15 N71-15967
Control of gas flow from pressurized vessel by thermal expansion of metal plug
[NASA-CASE-NPO-10298] c12 N71-17661
Semitoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNP-09704] c12 N71-18615
Describing device for changing flow rate of fluid in duct in response to change in temperature
[NASA-CASE-MFS-14259] c15 N71-19213
Pneumatic servoamplifier for controlling flow regulation
[NASA-CASE-MSC-12121-1] c15 N71-27147
Gas flow control device, including housing and input port
[NASA-CASE-NPO-11479] c15 N73-13462
- FLOW STABILITY**
Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMF-06926] c28 N71-22983
Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c12 N74-27730
- FLOW VELOCITY**
Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367
Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
Device for adding water to high velocity exhaust jets to reduce velocity, noise, and temperature
[NASA-CASE-XMF-01813] c28 N70-41582
Positive displacement flowmeter for measuring extremely low flows of fluid with self calibrating features
[NASA-CASE-XMF-02822] c14 N70-41994
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[NASA-CASE-XNP-06509] c14 N71-23226
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[NASA-CASE-XLA-03375] c16 N71-24074
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[NASA-CASE-XAC-10770-1] c16 N71-24828
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[NASA-CASE-ERC-10022] c12 N71-26546
Force balanced throttle valve for fuel control in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432
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[NASA-CASE-NPO-10722] c09 N72-20199
Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415
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[NASA-CASE-ARC-10710-1] c11 N73-27175
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[NASA-CASE-MFS-21424-1] c12 N74-27730
- FLOW VISUALIZATION**
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[NASA-CASE-XAC-02970] c14 N69-39896
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[NASA-CASE-XMF-01779] c12 N71-20815
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[NASA-CASE-MSC-12084-1] c12 N71-17569
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FLUID AMPLIFIERS

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 [NASA-CASE-FRC-10022] c12 N71-26546

Mass flow meter containing beta source for measuring nonpolar liquid flow
 [NASA-CASE-NFS-20485] c14 N72-11365

Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time
 [NASA-CASE-HSC-13436-1] c05 N73-32015

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 [NASA-CASE-ARC-10362-1] c14 N73-32326

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 [NASA-CASE-ARC-10755-1] c14 N74-14115

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 [NASA-CASE-LEW-10981-1] c14 N74-21018

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 [NASA-CASE-XLE-03512] c12 N69-21466

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 [NASA-CASE-XMF-04709] c15 N71-15609

Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type
 [NASA-CASE-NFS-10412] c12 N71-17578

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 [NASA-CASE-LEW-10374-1] c28 N73-13773

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 [NASA-CASE-LAR-10868-1] c09 N74-11050

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 [NASA-CASE-LEW-11076-1] c15 N74-21061

FLUID FILTERS

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 [NASA-CASE-XNS-01492] c05 N70-41297

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 [NASA-CASE-XNP-00732] c28 N70-41447

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 [NASA-CASE-XNS-13052] c14 N71-20427

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 [NASA-CASE-LAR-11110-1] c12 N74-29652

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 [NASA-CASE-HRC-10208] c15 N70-10867

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 [NASA-CASE-XLE-00715] c15 N70-34859

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Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction
 [NASA-CASE-HSC-12084-1] c12 N71-17569

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 [NASA-CASE-XNP-09699] c15 N71-18580

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 [NASA-CASE-XGS-01331] c14 N71-22996

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 [NASA-CASE-XNP-01660] c14 N71-23036

Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
 [NASA-CASE-XMS-05890] c09 N71-23191

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 [NASA-CASE-NFS-20485] c14 N72-11365

Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
 [NASA-CASE-NPO-10722] c09 N72-20199

Torsional disconnect device for releasably coupling distal ends of fluid conduits
 [NASA-CASE-NPO-10704] c15 N72-20445

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 [NASA-CASE-NFS-21629] c14 N72-22442

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 [NASA-CASE-LAR-10031] c15 N72-22484

Design and development of device for moving liquid through pipes without use of mechanical pumps
 [NASA-CASE-LAR-10799-1] c12 N73-12295

Design and development of device to prevent geysering during convective circulation of cryogenic fluids
 [NASA-CASE-HSC-10615] c15 N73-12486

Laser Doppler velocimeter for simultaneously measuring orthogonal fluid velocity components without flow field perturbation
 [NASA-CASE-ARC-10637-1] c14 N73-21390

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 [NASA-CASE-NPO-11417] c15 N73-24513

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 [NASA-CASE-ARC-10755-1] c14 N74-14115

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 [NASA-CASE-ARC-10642-1] c14 N74-18099

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 [NASA-CASE-LEW-12078-1] c14 N74-18101

Flow control valve --- for high temperature fluids
 [NASA-CASE-NPO-11951-1] c15 N74-21065

An internally supported flexible duct joint --- device for conducting fluids in high pressure systems when flexible joints are required
 [NASA-CASE-NFS-19193-1] c15 N74-22145

Apparatus for establishing flow of a fluid mass having a known velocity
 [NASA-CASE-NFS-21424-1] c12 N74-27730

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 [NASA-CASE-NFS-19194-1] c15 N74-34882

FLUID INJECTION

Solid propellant ignition with hypergolic fluid

injected to predetermined portions of propellant
[NASA-CASE-XLE-00207] c28 N70-33375

Method for igniting solid propellant rocket
motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634

Constructing fluid spike nozzle to eliminate
heat transfer and high temperature problems
inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647

Method and apparatus for producing fine
particles in cryogenic liquid bath for gelled
rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212

Fluid transferring system design for purging
toxic, corrosive, or noxious fluids and fumes
from materials handling equipment for
cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089

Tertiary flow injection system for thrust
vectoring of propulsive nozzle flow
[NASA-CASE-MPS-20831] c28 N71-29153

Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c05 N74-22771

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loading control
[NASA-CASE-XAC-00139] c02 N70-34856

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[NASA-CASE-XLA-07391] c12 N71-17579

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monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573

Development and characteristics of parallel
plate viscometer for determination of absolute
viscosity of liquids and viscoelastic materials
[NASA-CASE-NPO-11387] c14 N73-14429

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Fluid power transmission and gas bearing system
[NASA-CASE-XMS-01445] c12 N71-16031

Low friction gas bearing system for fluid power
transmission to bearing-supported payload
[NASA-CASE-ERC-10097] c15 N71-28465

FLUID ROTOR GYROSCOPES
Piezoelectric pump for supplying fluid at high
frequencies to gyroscope fluid suspension system
[NASA-CASE-XNP-05429] c26 N71-21824

FLUID SWITCHING ELEMENTS
Two phase fluid pressurization system for
propellant tank
[NASA-CASE-MSC-12390] c27 N71-29155

FLUID TRANSMISSION LINES
Device for suppressing pressure oscillations in
fluid transmission lines
[NASA-CASE-MPS-10354] c12 N70-41976

Device for suppressing pressure oscillations in
fluid transmission line
[NASA-CASE-MPS-10354-2] c12 N72-25306

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Using molds for fabricating individual fluid
circuit components
[NASA-CASE-XLA-07829] c15 N72-16329

Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c14 N74-18101

FLUIDICS
Fluidic-thermochromic display device
[NASA-CASE-ERC-10031] c12 N71-18603

Plasma-fluidic hybrid display system combining
high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519

Continuous gas flow control by fluidic
proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769

Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c09 N74-11050

FLOIDS
Automated fluid chemical analyzer for
microchemical analysis of small quantities of
liquids by use of selected reagents and
analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754

Detection of bacteria in biological fluids and
foods
[NASA-CASE-GSC-11533-1] c14 N73-13435

Fluid polydimethylsiloxane resin with low
outgassing properties in cured state
[NASA-CASE-GSC-11358-1] c06 N73-26100

FLUORESCENCE

Spectrophotofluorometer with 3-dimensional
display to identify fluorescence spectra of
carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676

Sealed fluorescent tube light unit capable of
connection with other units to form string of
work lights
[NASA-CASE-XKS-05932] c09 N71-26787

Fluorescence detector for monitoring atmospheric
pollutants
[NASA-CASE-NPO-13231-1] c14 N74-25932

Chrono-fluorographic drug detector --- device
for detecting and recording fluorescent
properties of materials
[NASA-CASE-ARC-10633-1] c14 N74-26947

FLUORIDES

Self lubricating fluoride-metal composite
materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710

Development of fluoride coating to prevent
oxidation of beryllium surfaces at elevated
temperatures
[NASA-CASE-LEW-10327] c17 N71-33408

Perfluoro polyether acyl fluorides
[NASA-CASE-NPO-10765] c06 N72-20121

FLUORINATION

Fluorinated polyurethanes produced by reacting
hydroxy terminated perfluoro polyether with
diisocyanate
[NASA-CASE-NPO-10767-2] c06 N72-27151

Fluorinated esters of polycarboxylic acid and
lubricating compositions for use at extreme
temperature
[NASA-CASE-MPS-21040-1] c06 N73-30098

FLUORINE

Reaction of polyperfluoropolyenes with fluorine
to produce saturated polymer chain or create
reactive sites on chain
[NASA-CASE-NPO-10862] c06 N72-22107

FLUORO COMPOUNDS

Synthesis of polyfluorobutadiene by
polymerization of perfluorobutadiene with
diisopropyl peroxydicarbonate
[NASA-CASE-NPO-10863] c06 N70-11251

Low pressure perfluorobutadiene polymerization
with peroxide catalysts
[NASA-CASE-NPO-10447] c06 N70-11252

Oxygen difluoride in synthesis of fluoropolymers
[NASA-CASE-NPO-12061-1] c06 N72-21100

Preparation of fluorohydroxy ethers by reacting
fluoroalkylene oxides with alkali salt of
polyfluoroalkylene diol
[NASA-CASE-MPS-10507] c06 N73-30101

Preparation of fluorinated polyethers from
2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MPS-11492] c06 N73-30102

Chemical and elastic properties of fluorinated
polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076

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Electrically conductive fluorocarbon polymers
[NASA-CASE-XLE-06774-2] c06 N72-25150

FLUTTER

Antiflutter check valve for use with high
pressure fluid flow
[NASA-CASE-XNP-01152] c15 N70-41811

Development of aerodynamic control system to
control flutter over large range of
oscillatory frequencies using stability
augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004

FLUX (RATE)

Solid state device for mapping flux and power in
nuclear reactor cores
[NASA-CASE-XLE-00301] c14 N70-36808

Fluxgate magnetometer for measuring magnetic
field along two axes using one sensor
[NASA-CASE-GSC-10441-1] c14 N71-27325

FLUX DENSITY

Particle beam power density detection and
measurement apparatus
[NASA-CASE-XLE-00243] c14 N70-38602

FLUXES

Hydrazine monoperfluoro alkanoate solder flux
leaving corrosion resistant coating, for
metals such as copper
[NASA-CASE-INP-03459-2] c18 N71-15688

- Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078
- FOAMS**
- Fire retardant polyisocyanurate foam with high temperature resistance
[NASA-CASE-ARC-10280-1] c18 N70-34695
- Elastic foam generator for space vehicle instrument payload package flotation in water landing
[NASA-CASE-XLA-00838] c03 N70-36778
- Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367
- Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816
- Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
[NASA-CASE-NPO-10596] c06 N71-25929
- Storage stable, thermally activated foaming compositions for erecting and rigidizing mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
- Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779
- Foam insulation thickness measuring and injection device for spacecraft applications
[NASA-CASE-MPS-20261] c14 N71-27005
- Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-XMP-09902] c15 N72-11387
- Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c06 N74-12812
- Intumescent composition, foamed product prepared therewith and process for making same
[NASA-CASE-ARC-10304-2] c18 N74-27037
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- X ray collimating structure for focusing radiation directly onto detector
[NASA-CASE-XHQ-04106] c14 N70-40240
- Aptured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
- Development and characteristics of Petzval type objective including field shaping lens for focusing light of specified wavelength band on curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
- Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
- Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c09 N74-10195
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c14 N74-10420
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- Foil seal between parts moving relative to each other
[NASA-CASE-XLE-05130] c15 N69-21362
- Procedure for making insulating foil for use in multilayer insulating system
[NASA-CASE-LEW-11484-1] c15 N73-22415
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- Characteristics of device for folding thin flexible sheets into compact configuration
[NASA-CASE-XLA-00137] c15 N70-33180
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[NASA-CASE-IGS-00260] c31 N70-37924
- Collapsible, space erectable loop antenna system for space vehicle
[NASA-CASE-XNP-00437] c07 N70-40202
- Unfolding boom assembly with knuckle joints for positioning equipment for spacecraft
[NASA-CASE-XGS-00938] c32 N70-41367
- Foldable conduit capable of springing back as self erecting structural member
[NASA-CASE-XLE-00620] c32 N70-41579
- Foldable, double cone and parabolic reflector system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580
- Method for deployment of flexible wing glider from space vehicle with minimum impact and loading
[NASA-CASE-XMS-00907] c02 N70-41630
- Development and characteristics of variable sweep wing control system for supersonic aircraft
[NASA-CASE-XLA-03659] c02 N71-11041
- Hydraulic actuator design for space deployment of heat radiators
[NASA-CASE-MSC-11817-1] c15 N71-26611
- Apparatus and method of assembling building blocks by folding pre-cut flat sheets of material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454
- FOOD**
- Detection of bacteria in biological fluids and foods
[NASA-CASE-GSC-11533-1] c14 N73-13435
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- Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals
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- FORCE DISTRIBUTION**
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[NASA-CASE-XNP-04969] c11 N69-27466
- Development of two force component measuring device
[NASA-CASE-XAC-04886-1] c14 N71-20439
- Tensile strength testing device having pulley guides for exerting multiple forces on test specimen
[NASA-CASE-XNP-05634] c15 N71-24834
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[NASA-CASE-MSC-15626-1] c14 N72-25411
- Variable direction force coupler for transmitting force along selectable curve path
[NASA-CASE-MPS-20317] c15 N73-13463
- FORMALDEHYDE**
- Chemical synthesis of formaldehyde based disinfectants without penetrating odor and eye and ear irritation properties
[NASA-CASE-NPO-12115-1] c06 N73-17153
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[NASA-CASE-MPS-10509] c06 N73-30103
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[NASA-CASE-XLE-00023] c15 N70-33330
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[NASA-CASE-IGS-04175] c15 N71-18579
- Portable magnetomotive hammer for metal working
[NASA-CASE-XNP-03793] c15 N71-24833
- Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836
- Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
[NASA-CASE-NPO-11036] c15 N72-24522
- Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c17 N74-10521
- Drilled ball bearing with a one piece anti-tipping cage assembly
[NASA-CASE-LEW-11925-1] c15 N74-18133
- Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c15 N74-22147
- Molding apparatus --- for thermosetting plastic compositions
[NASA-CASE-LAR-10489-2] c15 N74-32920
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- Base support for expansible and contractible coupling between two members
[NASA-CASE-NPO-11059] c15 N72-17454

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Photographic film restoration system using
Fourier transformation lenses and spatial filter
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Continuous Fourier transform method and apparatus
[NASA-CASE-ARC-10466-1] c08 N73-21199

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Purification apparatus for vaporization and
fractional distillation of liquids
[NASA-CASE-MNP-08124] c15 N71-27184

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Apparatus for testing metallic and nonmetallic
beams or rods by bending at high temperatures
in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993

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Shock absorbing articulated multiple couch
assembly
[NASA-CASE-MSC-11253] c05 N71-12343
Pliable frame for sunglasses in emergency
survival kits
[NASA-CASE-IMS-06064] c05 N71-23096
Expandable space frames with high expansion to
collapse ratio
[NASA-CASE-ERC-10365-1] c31 N73-32749

FRAMING CAMERAS

High speed photo-optical time recorder for
indicating time at exposure of each frame of
high speed movie camera film
[NASA-CASE-KSC-10294] c14 N72-18411

FREE FLIGHT TEST APPARATUS

Hydraulic support equipment for full scale
dynamic testing of large rocket vehicle under
free flight conditions
[NASA-CASE-XMF-01772] c11 N70-41677
Hydraulic support apparatus for dynamic testing
of space vehicles under near-free flight
conditions
[NASA-CASE-XMF-03248] c11 N71-10604
Free flight suspension system for use with
aircraft models in wind tunnel tests
[NASA-CASE-ILA-00939] c11 N71-15926

FREEZE DRYING

Rice preparation process consisting of cooking,
two freezing-thawing cycles, and then freeze
drying
[NASA-CASE-MSC-13540-1] c05 N72-33096

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Solar energy power system --- using freon
[NASA-CASE-MFS-21628-1] c29 N74-14496

FREQUENCIES

Controlled oscillator system with a time
dependent output frequency
[NASA-CASE-NPO-11962-1] c09 N74-10194
High efficiency multifrequency feed
[NASA-CASE-GSC-11317-3] c09 N74-20863

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Describing frequency discriminator using digital
logic circuits and supplying single binary
output signal
[NASA-CASE-MFS-14322] c08 N71-18692
Broadband frequency discriminator with resistive
captive inductive networks
[NASA-CASE-NPO-10096] c07 N71-24583
Audio frequency analysis circuit for
determining, displaying, and recording
frequency of sweeping audio frequency signal
[NASA-CASE-NPO-11147] c14 N72-27408
Continuous Fourier transform method and apparatus
[NASA-CASE-ARC-10466-1] c08 N73-21199

FREQUENCY CONTROL

Automatic control of voltage supply to direct
current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987
Variable frequency magnetic coupled
multivibrator with temperature compensated
frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604
Variable frequency magnetic coupled
multivibrator with output signal of constant
amplitude and waveform
[NASA-CASE-XGS-00131] c09 N70-38995
Development of automatic frequency
discriminators and control for phase lock loop
providing frequency preset capabilities
[NASA-CASE-XMF-08665] c10 N71-19467
Linear accelerator frequency control system
[NASA-CASE-XGS-05441] c10 N71-22962

Tuning arrangement for frequency control of
magnetron-type electron discharge device
[NASA-CASE-XNP-09771] c09 N71-24841

Development of acoustical controlled distributed
feedback laser with continuous frequency
spectrum tuning
[NASA-CASE-NPO-13175-1] c16 N73-27431

Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c07 N74-11000

Automatic frequency control for FM transmitter
[NASA-CASE-MFS-21540-1] c07 N74-19790

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Frequency to analog converters with unipolar
field effect transistor for determining
potential charge by pulse duration of input
signal
[NASA-CASE-XNP-07040] c08 N71-12500

Describing static inverter with single or
multiple phase output
[NASA-CASE-XMF-00663] c08 N71-18752

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relaxation oscillator with MOSFET variable
current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882

Development of family of frequency to amplitude
converters for frequency analysis of complex
input signal waveforms
[NASA-CASE-MSC-12395] c09 N72-25257

FREQUENCY DISTRIBUTION

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omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200

Variable frequency subcarrier oscillator with
temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810

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Low phase noise frequency divider for use with
deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229

Technique for extending the frequency range of
digital dividers
[NASA-CASE-LAR-10730-1] c10 N74-10223

Symmetrical odd-modulus frequency divider
[NASA-CASE-NPO-13426-1] c09 N74-18869

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Earth satellite relay station for frequency
multiplexed voice transmission
[NASA-CASE-GSC-10118-1] c07 N71-24621

System for monitoring condition responsive
devices by using frequency division multiplex
technique
[NASA-CASE-KSC-10521] c07 N73-20176

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Measurement system for physical quantity
represented by or converted to variable
frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386

FREQUENCY MODULATION

Accelerometer with FM output signals indicative
of mechanical strain on it
[NASA-CASE-XLA-00492] c14 N70-34799

Circuitry for generating sync signals in FM
communication systems including video
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[NASA-CASE-XNP-10830] c07 N71-11281

Demodulator for simultaneous demodulation of two
modulating ac signal carriers close in frequency
[NASA-CASE-XMF-01160] c07 N71-11298

Optical tracker with pair of FM reticles having
patterns 90 deg out of phase
[NASA-CASE-XGS-05715] c23 N71-16100

Atomic hydrogen maser with bulb temperature
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Device for locating electrically nonlinear
objects and determining distance to object by
FM signal transmission
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Symmetrical odd-modulus frequency divider
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Automatic frequency control for FM transmitter
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[NASA-CASE-LAR-10730-1] c10 N74-10223

Multichannel logarithmic RF level detector
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[NASA-CASE-XLE-01645] c03 N71-20904

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[NASA-CASE-IMS-01625] c15 N71-23022

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Development and characteristics of injection system for use with gas chromatograph [NASA-CASE-ARC-10344-1] c14 N72-21433

Gas chromatographic method for analyzing hydrogen deuterium mixtures [NASA-CASE-NPO-11322] c06 N72-25146

Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds [NASA-CASE-HQN-10756-1] c14 N72-25428

Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography [NASA-CASE-GSC-10903-1] c14 N73-12444

Gas chromatograph injection system [NASA-CASE-ARC-10344-2] c14 N74-20021

GAS COOLED REACTORS

Gaseous core diffusion nuclear reactor for thermal energy generation [NASA-CASE-LBW-10250-1] c22 N71-28759

GAS COOLING

Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly [NASA-CASE-NPO-10309] c15 N69-23190

Gas cooled high temperature thermocouple [NASA-CASE-XLE-09475-1] c33 N71-15568

GAS DENSITY

Dynamic sensor for gas pressure or density measurement [NASA-CASE-XAC-02877] c14 N70-41681

Device for simultaneously determining density, velocity, and temperature of streaming gas [NASA-CASE-XLA-03375] c16 N71-24074

Coherent light beam device and method for measuring gas density in vacuum chambers [NASA-CASE-XER-11203] c14 N71-28994

Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors [NASA-CASE-XLE-04599] c22 N72-20597

Electrodeposition method for producing crystalline material from dense gaseous medium [NASA-CASE-NPO-10440] c15 N72-21466

Wide range dynamic pressure sensor with vibrating diaphragm for measuring density and pressure of gaseous environment [NASA-CASE-ARC-10263-1] c14 N72-22438

Absolute pressure measuring device for measuring gas density level in high vacuum range [NASA-CASE-LAR-10000] c14 N73-30394

GAS DETECTORS

Method and transducer device for detecting presence of hydrogen gas [NASA-CASE-XMP-03873] c06 N69-39733

Development of device for detecting hydrogen in ambient environments [NASA-CASE-MPS-11537] c14 N71-20442

Gas leak detection in evacuated systems using ultraviolet radiation probe [NASA-CASE-ERC-10034] c15 N71-24896

Fast response miniature carbon dioxide detector with no moving parts for measuring concentration in any atmosphere [NASA-CASE-MSC-13332-1] c14 N72-21408

Particulate and aerosol detector --- based on discharge characteristics of charged capacitor under particle impact [NASA-CASE-LAR-11434-1] c14 N74-22112

Fluorescence detector for monitoring atmospheric pollutants [NASA-CASE-NPO-13231-1] c14 N74-25932

A method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector [NASA-CASE-ARC-10631-1] c14 N74-34864

GAS DISCHARGE TUBES

Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels [NASA-CASE-XLA-03103] c25 N71-21693

GAS DISCHARGES

Radio frequency noise generator having microwave slow-wave structure in gas discharge plasma [NASA-CASE-XER-11019] c09 N71-23598

GAS EVOLUTION

Development of filter system for control of outgas contamination in vacuum conditions using absorbent beds of molecular sieve zeolite, silica gel, and charcoal [NASA-CASE-MPS-14711] c15 N71-26185

GAS EXPANSION

Sealed electric storage battery with gas manifold interconnecting each cell [NASA-CASE-INP-03378] c03 N71-11051

Method and apparatus for producing very low temperature refrigeration based on gas pressure balance [NASA-CASE-XMP-08877] c15 N71-23025

Gas-operated actuator with cyclic motion of expansion chamber [NASA-CASE-NPO-11340] c15 N72-33477

GAS FLOW

Tubular flow restrictor for gas flow control in pipeline [NASA-CASE-NPO-10117] c15 N71-15608

Developing high pressure gas purification and filtration system for use in test operations of space vehicles

- [NASA-CASE-MFS-12806] c14 N71-17588
Burst diaphragm flow initiator for installation
in short duration wind tunnels
[NASA-CASE-MFS-12915] c11 N71-17600
Color photointerpretation of interference colors
reflected from thin film oil-coated components
in moving gases for gas flow visualization
[NASA-CASE-XMP-01779] c12 N71-20815
Transducer for monitoring oxygen flow in
respirator
[NASA-CASE-FRC-10012] c14 N72-17329
Design, development, and operation of shock tube
with bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245
Continuous gas flow control by fluidic
proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769
Development of filter apparatus for gas
separation and characteristics of filter cell
support frame for improved operation
[NASA-CASE-MSC-12297] c14 N72-23457
Pressurized inert gas feed for lighting system
[NASA-CASE-RSC-10644] c09 N72-27227
Development of method for controlling vapor
content of gas
[NASA-CASE-NPO-10633] c03 N72-28025
Gas flow control device, including housing and
input port
[NASA-CASE-NPO-11479] c15 N73-13462
Development and characteristics of device for
removing condensate from heat exchangers with
straight through gas flow
[NASA-CASE-MSC-14143-1] c33 N73-32823
Compact hydrogenator
[NASA-CASE-NPO-11682-1] c15 N74-15127
Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c14 N74-18101
Apparatus for establishing flow of a fluid mass
having a known velocity
[NASA-CASE-MFS-21424-1] c12 N74-27730
Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c28 N74-28233
- GAS GENERATORS**
Chlorine generator for purifying water in life
support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
Gas operated quick disconnect coupling for
umbilical connectors
[NASA-CASE-NPO-11202] c15 N72-25450
Actuator operated by electrolytic drive gas
generator and evacuator
[NASA-CASE-NPO-11369] c15 N73-13467
Development and operating principles of gas
generator for deploying recovery parachutes
from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898
- GAS GUNS**
Electric arc device for minimizing electrode
ablation and heating gases to supersonic or
hypersonic wind tunnel temperatures
[NASA-CASE-XAC-00319] c25 N70-41628
- GAS HEATING**
Bimetallic fluid displacement apparatus --- for
stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c15 N74-15126
- GAS INJECTION**
Pressurized gas injection for burning rate
control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21819
Compact hydrogenator
[NASA-CASE-NPO-11682-1] c15 N74-15127
- GAS IONIZATION**
Electrostatic modulator for communicating
through plasma sheath formed around spacecraft
during reentry
[NASA-CASE-XLA-01400] c07 N70-41331
Multichannel photoionization chamber for
measuring absorption, photoionization yield,
and coefficients of gases
[NASA-CASE-ERC-10044-1] c14 N71-27090
- GAS LASERS**
Gas laser frequency stabilized by position of
mirrors in resonant cavity
[NASA-CASE-IGS-03644] c16 N71-18614
Laser utilizing infrared rotation transitions of
diatomic gas for production of different
wavelengths
[NASA-CASE-ARC-10370-1] c16 N72-10432
- Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c16 N74-16187
- GAS LUBRICANTS**
High temperature gas lubricant consisting of two
fluoro-bromo-methanes
[NASA-CASE-XLE-Q0353] c18 N70-39897
- GAS MASERS**
Solid state chemical source for ammonia beam
masers
[NASA-CASE-IGS-01504] c16 N70-41578
Atomic hydrogen maser with bulb temperature
control by output frequency difference signal
for wall shift elimination
[NASA-CASE-HQN-10654-1] c16 N73-13489
- GAS METERS**
Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c04 N74-32518
- GAS MIXTURES**
Gas analyzer for bi-gaseous mixtures suitable
for use in test facilities
[NASA-CASE-ILA-01131] c14 N71-10774
Equipment for measuring partial water vapor
pressure in gas tank
[NASA-CASE-XMS-01618] c14 N71-20741
Separation cell with permeable membranes for
fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742
Gas chromatographic method for analyzing
hydrogen deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146
- GAS PIPES**
Tubular flow restrictor for gas flow control in
pipeline
[NASA-CASE-NPO-10117] c15 N71-15608
- GAS PRESSURE**
Expulsion and measuring device for determining
quantity of liquid in tank under conditions of
weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
Dynamic sensor for gas pressure or density
measurement
[NASA-CASE-XAC-02877] c14 N70-41681
Wide range dynamic pressure sensor with
vibrating diaphragm for measuring density and
pressure of gaseous environment
[NASA-CASE-ARC-10263-1] c14 N72-22438
Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c04 N74-32518
- GAS STREAMS**
Device for simultaneously determining density,
velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
Stagnation pressure probe --- for measuring
pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c14 N74-32878
- GAS TEMPERATURE**
Device for simultaneously determining density,
velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
- GAS TUNGSTEN ARC WELDING**
Refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c15 N74-32925
- GAS TURBINE ENGINES**
Variable-orifice hydraulic mechanism for
aircraft gas turbine engine fuel control
[NASA-CASE-LEW-11187-1] c28 N73-19793
Airflow distribution control in gas turbine
engines
[NASA-CASE-LEW-11593-1] c28 N73-25816
Swirl can, full-annulus combustion chambers for
high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665
- GAS TURBINES**
Method for maintaining good performance in gas
turbine during air flow distortion
[NASA-CASE-LEW-10286-1] c28 N71-28915
Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c28 N74-15453
- GAS VALVES**
High-temperature, high-pressure spherical
segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
Shrink-fit vacuum system gas valve
[NASA-CASE-IGS-00587] c15 N70-35087
Gas valve operated by thermally expanding and
contracting device
[NASA-CASE-XLE-00815] c15 N70-35407
Three-port transfer valve with one port open
continuously suitable for manned space flight

GAS WELDING

SUBJECT INDEX

- [NASA-CASE-XAC-01158] c15 N71-23051
- GAS WELDING**
Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XMP-02039] c15 N71-15871
- GAS-LIQUID INTERACTIONS**
Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c12 N74-29652
- GASEOUS DIFFUSION**
Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759
- GASEOUS FISSION REACTORS**
Nuclear gaseous reactor for heating working fluid to high temperatures
[NASA-CASE-XLE-00321] c22 N70-34572
Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759
- GASEOUS ROCKET PROPELLANTS**
Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMP-06926] c28 N71-22983
- GASES**
Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
High speed scanner for measuring mass of preselected gases at high sampling rate
[NASA-CASE-LAR-10766-1] c14 N72-21432
Observation window for internal gas confining chamber
[NASA-CASE-NPO-10890] c11 N73-12265
Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
- GASKETS**
Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MFS-21364-1] c15 N74-18126
- GATES (CIRCUITS)**
Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123
Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
[NASA-CASE-XGS-02440] c08 N71-19432
Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
- GATES (OPENINGS)**
Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- GEARS**
Precision stepping drive device using cam disk
[NASA-CASE-MFS-14772] c15 N71-17692
Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-IGS-04227] c15 N71-21744
Self lubricating gears and other mechanical parts having surface adapted to frictional contact
[NASA-CASE-MFS-14971] c15 N71-24984
- Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c15 N74-27901
- GELLED ROCKET PROPELLANTS**
Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
- GELS**
Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-IMP-00920] c15 N71-15906
Chemical synthesis of formaldehyde based disinfectants without penetrating odor and eye and ear irritation properties
[NASA-CASE-NPO-12115-1] c06 N73-17153
- GENERATORS**
Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c12 N74-27730
- GIMBALS**
Gimballed partially submerged nozzle for solid propellant rocket engines for providing directional control
[NASA-CASE-XMP-01544] c28 N70-34162
Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-XMP-01669] c21 N71-23289
Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-NSC-10959] c15 N71-26243
Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537
- GLANDS (SEALS)**
Development of mating flat surfaces to inhibit leakage of fluid around shafts
[NASA-CASE-XLE-10326-2] c15 N72-29488
- GLASS**
Fabricating solar cells with dielectric layers to improve glass fusion
[NASA-CASE-XGS-04531] c03 N69-24267
Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988
Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
[NASA-CASE-XLE-08569] c03 N71-23449
Apparatus for applying thin glass slides to solar cells
[NASA-CASE-NPO-10575] c03 N72-25019
Silicon solar cell with plastic film binding to cover glass
[NASA-CASE-LEW-11065-2] c03 N73-26048
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c15 N74-21063
- GLASS COATINGS**
Method of attaching cover glass to silicon solar cell without using adhesive
[NASA-CASE-XLE-08569-2] c03 N71-24681
Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582
Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037
- GLASS ELECTRODES**
Liquid junction for glass electrode or pH meters
[NASA-CASE-NPO-10682] c15 N70-34699
- GLASS FIBERS**
Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053
Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489
Development of procedure for repairing fiberglass structures which retains geometry and strength of original structure

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GROUND SUPPORT EQUIPMENT

[NASA-CASE-LAR-10416-1] c15 N72-27527
 Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards

[NASA-CASE-MFS-20408] c18 N73-12604
 Fiber modified polyurethane foam for ballistic protection

[NASA-CASE-ARC-10714-1] c18 N74-11366
 Technique for bonding --- process for molding silicone elastomer into fiberglass honeycomb panel

[NASA-CASE-LAR-10073-1] c32 N74-23449
 Method of repairing discontinuity in fiberglass structures

[NASA-CASE-LAR-10416-1] c18 N74-30001
 GLIDE PATHS
 Development and characteristics of system for integrated control of engine power and aerodynamic configuration of aircraft during landing approach

[NASA-CASE-ARC-10456-1] c02 N73-30938
 GLOBES
 Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site

[NASA-CASE-LAR-10626-1] c14 N74-21015
 GLOVES
 Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove

[NASA-CASE-XLE-02531] c05 N71-23080
 GLOW DISCHARGES
 Deposition of alloy films --- on irregularly shaped metal object

[NASA-CASE-LEW-11262-1] c18 N74-13270
 GLUCOSE
 Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions

[NASA-CASE-XGS-05533] c04 N69-27487
 GOLD COATINGS
 Lithium drifted silicon radiation detector with gold rectifying contacts

[NASA-CASE-XLE-10529] c14 N69-23191
 GONDOLAS
 System for controlling torque buildup in suspension of gondola connected to balloon by parachute shroud lines

[NASA-CASE-GSC-11077-1] c02 N73-13008
 GRANULAR MATERIALS
 Development of device for separating, collecting, and viewing soil particles

[NASA-CASE-IXP-09770] c15 N71-20440
 GRAPHITE
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[NASA-CASE-XGS-00963] c15 N69-39735
 Diffusion bonded graphite reinforced aluminum composites

[NASA-CASE-MFS-21077] c18 N71-34502
 GRATINGS (SPECTRA)
 Concave grating spectrometer for use in near and vacuum ultraviolet regions

[NASA-CASE-XGS-01036] c14 N70-40003
 GRAVINETERS
 Device for determining acceleration of gravity by interferometric measurement of travel of falling body

[NASA-CASE-IXP-05844] c14 N71-17587
 GRAVITATION
 Design of precision vertical alignment system using laser with gravitationally sensitive cavity

[NASA-CASE-ARC-10444-1] c16 N73-33397
 GRAVITATIONAL CONSTANT
 Gravity device for accurate and rapid indication of relative gravity conditions aboard accelerating carrier

[NASA-CASE-IXP-00424] c11 N70-38196
 GRAVITATIONAL EFFECTS
 Computation method and apparatus for predicting solar flares by correlating planetary ephemeris data with gravitational force effects on sun

[NASA-CASE-ERC-10323-1] c30 N70-22183
 Gravity environment simulation by locomotion and restraint aid for studying manual operation

performance of astronauts at zero gravity

[NASA-CASE-ARC-10153] c05 N71-28619
 Anti-gravity device

[NASA-CASE-MFS-22758-1] c15 N74-22146
 GRAVITATIONAL FIELDS
 Difference indicating circuit used in conjunction with device measuring gravitational fields

[NASA-CASE-IXP-08274] c10 N71-13537
 GRAVITY GRADIENT SATELLITES
 Stabilization system for gravity-oriented satellites using single dauper rod

[NASA-CASE-XAC-01591] c31 N71-17729
 Method of stationkeeping for lenticular gravity gradient satellites

[NASA-CASE-XLA-03132] c31 N71-22969
 GRAVITY GRADIOMETERS
 Gravity device for accurate and rapid indication of relative gravity conditions aboard accelerating carrier

[NASA-CASE-IXP-00424] c11 N70-38196
 Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control

[NASA-CASE-GSC-10555-1] c21 N71-27324
 GRIDS
 Process for fabricating matched pairs of dished screen and accelerator grids for ion thruster accelerator system

[NASA-CASE-LEW-11694-1] c28 N73-22721
 Apparatus for forming dished ion thruster grids

[NASA-CASE-LEW-11694-2] c15 N74-22147
 GRINDING (MATERIAL REMOVAL)
 Laser device for removing material from rotating object for dynamic balancing

[NASA-CASE-MFS-11279] c16 N71-20400
 Grinding mixtures of powdered metals and inert fillers for conversion to halide

[NASA-CASE-LEW-10450-1] c15 N72-25448
 GRINDING MACHINES
 Grinding arrangement for ball nose milling cutters

[NASA-CASE-LAR-10450-1] c15 N74-27905
 GROOVES
 Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess

[NASA-CASE-IXP-10040] c15 N71-22877
 Spiral groove seal --- for hydraulic rotating shaft

[NASA-CASE-LEW-10326-3] c15 N74-10474
 Spiral groove seal --- for rotating shaft

[NASA-CASE-XLE-10326-4] c15 N74-15125
 GROUND EFFECT MACHINES
 Hovering type flying vehicle design and principle mechanisms for manned or unmanned use

[NASA-CASE-MSC-12111-1] c02 N71-11039
 Platform with several ground effect pads and plenum chambers

[NASA-CASE-MFS-14685] c31 N71-15689
 Tubular guideway for high speed ground effect machines

[NASA-CASE-LAR-10256-1] c11 N72-20253
 Design and development of active control system for air cushion vehicle to reduce or eliminate effects of excessive vertical vibratory acceleration

[NASA-CASE-LAR-10531-1] c02 N73-13023
 Open tube guideway for high speed air cushioned vehicles

[NASA-CASE-LAR-10256-1] c11 N74-34672
 GROUND HANDLING
 Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping

[NASA-CASE-IXP-00580] c11 N70-35383
 GROUND STATIONS
 Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station

[NASA-CASE-GSC-10087-1] c02 N71-19287
 Spacecraft transponder and ground station radar system for mapping planetary surfaces

[NASA-CASE-NPO-11001] c07 N72-21118
 GROUND SUPPORT EQUIPMENT
 Equipment for testing of ground station ranging equipment and spacecraft transponders

[NASA-CASE-XMS-05454-1] c07 N71-12391

- Controlled release device for use in launching rockets or missiles
[NASA-CASE-XKS-03338] c15 N71-24043
- GROUND-AIR-GROUND COMMUNICATIONS**
- Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-IGS-04480] c16 N69-27491
- Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930
- Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-ERC-10324] c07 N72-25173
- GUIDANCE (MOTION)**
- Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
- Development of adjustable attitude guide block for setting pins perpendicular to irregular convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
- Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453
- GUIDANCE SENSORS**
- Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-IGS-00359] c14 N70-34158
- Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621
- Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673
- Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
- GUN LAUNCHERS**
- Self-obturator gas-operated launcher for launching projectiles in decontaminated medium
[NASA-CASE-NPO-11013] c11 N72-22247
- GUNN EFFECT**
- Voltage tunable Gunn effect semiconductor for microwave generation
[NASA-CASE-XER-07894] c09 N71-18721
- Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
- Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679
- Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235
- GYRATORS**
- Design of gyrator circuit using operational amplifiers to replace ungrounded inductors
[NASA-CASE-XAC-10608-1] c09 N71-12517
- Gyrator circuit using MOS field effect transistors
[NASA-CASE-MFS-21433] c09 N73-20232
- Integrated circuit power gyrator with Z-matrix design using parallel transistors
[NASA-CASE-MFS-22342-1] c09 N73-24236
- Integrated P-channel MOS gyrator
[NASA-CASE-MFS-22343-1] c09 N74-34638
- GYROSCOPES**
- Externally pressurized air bearing for gyros operating in high temperature, low gravity environments
[NASA-CASE-XMP-00515] c15 N70-34664
- Air bearings for spacecraft gyros
[NASA-CASE-XMP-00339] c15 N70-39896
- Development of spacecraft experiment pointing and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132
- Strapped down gyroscope aligned with sun and star tracker optical axis calibrating roll, yaw and pitch values
[NASA-CASE-ARC-10716-1] c31 N73-32784
- Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NPO-13044-1] c14 N74-15094
- GYROSTABILIZERS**
- Passive dual spin misalignment compensators --- gyrostabilized device
[NASA-CASE-GSC-11479-1] c21 N74-28097
- H**
- HAFNIUM**
- Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584
- HALIDES**
- Grinding mixtures of powdered metals and inert fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448
- HALL EFFECT**
- Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037
- Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904
- Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAR-10620-1] c09 N72-25255
- Development and characteristics of magnetometer with single Bi2Se3 crystal as sensing element
[NASA-CASE-LEW-11632-1] c14 N72-25440
- Hall effect magnetometer for measuring magnetic fields
[NASA-CASE-LEW-11632-2] c14 N73-29437
- Speed control system for dc motor equipped with brushless Hall effect device
[NASA-CASE-MFS-20207-1] c09 N73-32107
- Hall effect magnetometer
[NASA-CASE-LEW-11632-3] c14 N74-33944
- HALL GENERATORS**
- Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037
- HALOGENS**
- Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control
[NASA-CASE-ARC-10098-1] c06 N71-24739
- HAMMERS**
- Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446
- HAND (ANATOMY)**
- Mechanically operated hand which can depress trigger using touch control device
[NASA-CASE-MFS-20413] c15 N72-21463
- HANDLING EQUIPMENT**
- Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-XMP-00580] c11 N70-35383
- Handling tool for printed circuit cards
[NASA-CASE-MFS-20453] c15 N71-29133
- HARDENING**
- Boron radiation hardening for stabilizing gate threshold potential of MOS devices
[NASA-CASE-GSC-11425-2] c09 N73-32114
- HARMONIC GENERATORS**
- Wideband generator for producing sine wave quadrature and second harmonic of input signal
[NASA-CASE-NPO-11133] c10 N72-20223
- HARNESSES**
- Helmet and torso tiedown mechanism for shortening pressure suits upon inflation
[NASA-CASE-XMS-00784] c05 N71-12335
- One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085
- Combined shoulder harness and lap belt restraint system for use in aircraft or automobiles
[NASA-CASE-ARC-10519-1] c05 N72-31117
- Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N74-18805
- HATCHES**
- Design and specifications of emergency escape system for spacecraft structures

- [NASA-CASE-MSC-12086-1] c05 N71-12345
- HEAT FUNCTION**
Development of instantaneous reading tachometer for measuring electrocardiogram signal rate [NASA-CASE-MFS-20418] c14 N73-24473
Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves [NASA-CASE-ARC-10597-1] c05 N74-20726
- HEART RATE**
Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute [NASA-CASE-XMS-02399] c05 N71-22896
Development of instantaneous reading tachometer for measuring electrocardiogram signal rate [NASA-CASE-MFS-20418] c14 N73-24473
Digital computing cardiometer [NASA-CASE-MFS-20284-1] c05 N74-12778
- HEAT**
Thermionic converter for converting heat energy directly into electrical energy [NASA-CASE-XLE-01903] c22 N71-23599
- HEAT EXCHANGERS**
Electrothermal rocket engine using resistance heated heat exchanger [NASA-CASE-XLE-00267] c28 N70-33356
Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops [NASA-CASE-XMS-09571] c05 N71-19439
Dual solid cryogens for spacecraft refrigeration insuring low temperature cooling for extended periods [NASA-CASE-GSC-10188-1] c23 N71-24725
Shell-side liquid metal boiler employing tube and shell heat exchanger [NASA-CASE-NPO-10831] c33 N72-20915
Heat exchanger and decontamination system for multistage refrigeration unit [NASA-CASE-NPO-10634] c23 N72-25619
Development and characteristics of device for removing condensate from heat exchangers with straight through gas flow [NASA-CASE-MSC-14143-1] c33 N73-32823
- HEAT FLUX**
Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements [NASA-CASE-XMS-05909-1] c14 N69-27459
Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin [NASA-CASE-XPR-03802] c33 N71-23085
Radial heat flux transformer for use in heating and cooling processes [NASA-CASE-NPO-10828] c33 N72-17948
- HEAT MEASUREMENT**
Electromagnetic energy detection by thermal sensor with vibrating electrode [NASA-CASE-XAC-10768] c09 N71-18830
Specific wavelength colorimeter --- for measuring given solute concentration in test sample [NASA-CASE-MSC-14081-1] c14 N74-27860
- HEAT PIPES**
Electric power system utilizing thermionic plasma diodes in parallel and heat pipes as cathodes [NASA-CASE-XMF-05843] c03 N71-11055
Microwave power receiving antenna solving heat dissipation problems by construction of elements as heat pipe devices [NASA-CASE-MFS-20333] c09 N71-13486
Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover [NASA-CASE-MFS-20355] c33 N71-25353
Production of iodine isotope by high energy bombardment of cesium heat pipe causing spallation reaction [NASA-CASE-LEW-11390-2] c24 N73-20763
Heat pipe production of high purity radioiodine for thyroid measurements [NASA-CASE-LEW-11390-3] c11 N73-28128
Structural heat pipe for spacecraft wall thermal insulation system [NASA-CASE-GSC-11619-1] c33 N73-32828
- Method of forming a wick for a heat pipe [NASA-CASE-NPO-13391-1] c33 N74-19584
- HEAT PUMPS**
Thermal pump-compressor for converting solar energy [NASA-CASE-ILA-00377] c33 N71-17610
Manually activated heat pump for mechanically converting human operator output into heat energy [NASA-CASE-NPO-10677] c05 N72-11089
Design and development of thermomechanical pump for transmitting warming fluid through fluid circuit to control temperature of spacecraft instrumentation [NASA-CASE-NPO-11417] c15 N73-24513
- HEAT RADIATORS**
Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures [NASA-CASE-XLE-03307] c33 N71-14035
Hydraulic actuator design for space deployment of heat radiators [NASA-CASE-MSC-11817-1] c15 N71-26611
Development of method and equipment for testing heat radiative properties of material under controlled environmental conditions [NASA-CASE-MFS-20096] c14 N71-30026
- HEAT RESISTANT ALLOYS**
Preparation of nickel alloys for jet turbine blades operating at high temperatures [NASA-CASE-XLE-00151] c17 N70-33283
Nickel alloy series for aerospace structures subjected to high temperatures [NASA-CASE-XLE-00283] c17 N70-36616
High temperature cobalt-base alloy resistant to corrosion by liquid metals and to sublimation in vacuum environment [NASA-CASE-XLE-02991] c17 N71-16025
Brazing alloy adapted for brazing corrosion resistant steel to refractory metals, also for brazing refractory metals to other refractory metals [NASA-CASE-XNP-03063] c17 N71-23365
Intermetallic coating for nickel based superalloy [NASA-CASE-LEW-11348-1] c17 N72-25517
Superalloys from prealloyed powders at high temperatures [NASA-CASE-LEW-10805-1] c15 N73-13465
Refractory porcelain enamel passive thermal control coating for high temperature alloys [NASA-CASE-MFS-22324-1] c18 N73-21471
Development of method for fabricating ceramets and analysis of various compositions to show electrical and physical properties [NASA-CASE-NPO-13120-1] c18 N73-23629
Method of making pressure tight seal for super alloy [NASA-CASE-LAR-10170-1] c15 N74-11301
Method of forming articles of manufacture from superalloy powders [NASA-CASE-LEW-10805-2] c15 N74-13179
Coating superalloys [NASA-CASE-LEW-11696-3] c17 N74-27963
- HEAT SHIELDING**
Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements [NASA-CASE-XMS-05909-1] c14 N69-27459
Oven for heat treating heat shields [NASA-CASE-XMS-04318] c15 N69-27871
Compact heat shielding for interplanetary space vehicles [NASA-CASE-XMS-00486] c33 N70-33344
Sandwich panel structure for removing heat from shield between hot and cold areas [NASA-CASE-ILA-00349] c33 N70-37979
Aerodynamic configuration of reentry vehicle heat shield to provide longitudinal and directional stability at hypersonic velocities [NASA-CASE-XMS-04142] c31 N70-41631
Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding [NASA-CASE-XMS-02677] c31 N70-42075
Synthesis of azine polymers for heat shields by azine-aromatic aldehyde reaction [NASA-CASE-XMP-08656] c06 N71-11242
Synthesis of schiff bases for heat shields by acetal anine reactions [NASA-CASE-XMF-08652] c06 N71-11243

- Preparation and characteristics of lightweight refractory insulation
[NASA-CASE-IMP-05279] c18 W71-16124
- Development and characteristics of thermal radiation shielding of refractory metal foil used for induction furnace
[NASA-CASE-XLE-03432] c33 W71-24145
- Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module
[NASA-CASE-HSC-13047-1] c31 W71-25434
- Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-HSC-12109] c18 W71-26285
- Solar cell assembly
[NASA-CASE-LEW-11549-1] c03 W74-33484
- HEAT SINKS**
- Thermal conductive, electrically insulated cleavable adhesive connection between electronic module and heat sink
[NASA-CASE-XMS-02087] c09 W70-41717
- Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature
[NASA-CASE-IMP-04208] c33 W71-29051
- HEAT SOURCES**
- Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-IMP-09701] c14 W71-26475
- Radioactive isotope capsule container design for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c33 W71-35153
- Thermally cascaded thermoelectric generator with radioisotopic heat source
[NASA-CASE-WPO-10753] c03 W72-26031
- HEAT TRANSFER**
- Thermal switch for transferring excess heat from one region to another heat dissipating one
[NASA-CASE-IMP-00463] c33 W70-36847
- Sandwich panel structure for removing heat from shield between hot and cold areas
[NASA-CASE-XLA-00349] c33 W70-37979
- Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 W70-38020
- Method for improving heat transfer characteristics in nucleate boiling process
[NASA-CASE-XMS-04268] c33 W71-16277
- Design and development of device for cooling inner conductor of coaxial cable
[NASA-CASE-IMP-09775] c09 W71-20445
- Heat sensing instrument, using thermocouple junction connected under heavy conducting material
[NASA-CASE-XLA-01551] c14 W71-22989
- Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-WPO-10691] c14 W71-26199
- Development and characteristics of cooling system to maintain temperature of rack mounted electronic modules
[NASA-CASE-HSC-12389] c33 W71-29052
- Development of method and equipment for testing heat radiative properties of material under controlled environmental conditions
[NASA-CASE-NPS-20096] c14 W71-30026
- Manually activated heat pump for mechanically converting human operator output into heat energy
[NASA-CASE-WPO-10677] c05 W72-11084
- High intensity radiant energy pulse source for calibrating heat transfer gages with thermoluminescent shutter activation
[NASA-CASE-ARC-10178-1] c09 W72-17152
- Development of thermocouple instrument for measuring temperature of wall heated by flowing fluid without disturbing boundary layer
[NASA-CASE-XLE-05230] c14 W72-27410
- Design and development of device for moving liquid through pipes without use of mechanical pumps
[NASA-CASE-LAR-10799-1] c12 W73-12295
- Development and characteristics of thermal control system for maintaining constant temperature within spacecraft module with wide variations of component heat transfer
[NASA-CASE-GSC-11018-1] c31 W73-30829
- Thermal flux transfer system for maintaining thrust chamber of operative reaction motor at given temperatures
[NASA-CASE-WPO-12070-1] c28 W73-32606
- Electrostatically controlled heat transfer system for conducting thermal energy
[NASA-CASE-WPO-11942-1] c33 W73-32818
- Heat transfer device
[NASA-CASE-WPO-11120-1] c33 W74-18552
- HEAT TRANSMISSION**
- Radioactive isotope capsule container design for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c33 W71-35153
- Heat flow calorimeter --- measures output of Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c14 W74-27859
- HEAT TREATMENT**
- High speed infrared furnace
[NASA-CASE-XLE-10466] c17 W69-25147
- Oven for heat treating heat shields
[NASA-CASE-XMS-04318] c15 W69-27871
- Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XLA-01091] c15 W71-10672
- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 W71-15468
- White paint production by heating impure aluminum silicate clay having low solar absorptance
[NASA-CASE-IMP-02139] c18 W71-24184
- Method for diffusion welding dissimilar metals in vacuum chamber
[NASA-CASE-GSC-10303] c15 W72-22487
- Development of method for fabricating cermets and analysis of various compositions to show electrical and physical properties
[NASA-CASE-WPO-13120-1] c18 W73-23629
- Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c17 W74-10521
- An improved heat sterilizable patient ventilator
[NASA-CASE-WPO-13313-1] c05 W74-17858
- Diffusion welding --- heat treatment of nickel alloys following single step vacuum welding process
[NASA-CASE-LEW-11388-2] c15 W74-21055
- HEATERS**
- Reliable electrical element heater using plural wire system and backup power sources
[NASA-CASE-EFS-21462-1] c09 W74-14935
- HEATING**
- Development of system for preheating vaporized fuel for use with internal combustion engines
[NASA-CASE-WPO-12072] c28 W72-22772
- Diffusion welding in air --- solid state welding of butt joint by fusion welding, surface cleaning, and heating
[NASA-CASE-LEW-11387-1] c15 W74-18128
- HEATING EQUIPMENT**
- Using heat control unit to preheat circulating fluid
[NASA-CASE-IMP-04237] c33 W71-16278
- Electric arc heater with supersonic nozzle and fixed arc length for use in high temperature wind tunnels
[NASA-CASE-IAC-01677] c09 W71-20816
- Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-WPO-10828] c33 W72-17948
- Self-cycling fluid heater for heating continuous fluid stream to ultrahigh temperatures to facilitate chemical reactions
[NASA-CASE-HSC-15567-1] c33 W73-16918
- HELICAL ANTENNAS**
- Weatherproof helix antenna
[NASA-CASE-XKS-08485] c07 W71-19493
- Collapsible high gain antenna which can be automatically expanded to operating state
[NASA-CASE-EKC-10392] c07 W73-26117
- HELICOPTER ENGINES**
- Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c28 W74-28233

HELICOPTER WAKES
Variable geometry rotor system for direct control over wake vortex
[NASA-CASE-LAR-10557] c02 N72-11018

HELICOPTERS
Ringeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c02 N74-34475

HELIUM
Helium refining by superfluidity
[NASA-CASE-XMP-00733] c06 N70-34946
Apparatus and method capable of receiving large quantity of high pressure helium, removing impurities, and discharging at received pressure
[NASA-CASE-XMP-06888] c15 N71-24044
An improved helium refrigerator
[NASA-CASE-NPO-13435-1] c23 N74-28134

HELIUM-NEON LASERS
Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light collector as receiving antenna
[NASA-CASE-LAR-10311-1] c16 N73-16536

HELMETS
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193
Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-XMS-09652-1] c05 N71-26333

HEMISPHERICAL SHELLS
Light baffle with oblate hemispheroid surface and shading flange
[NASA-CASE-NPO-10337] c14 N71-15604

HERMETIC SEALS
Piston in bore cutter for severing parachute control lines and sealing cable hole to prevent water leakage into load
[NASA-CASE-XMS-04072] c15 N70-42017
Hermetically sealed explosive release mechanism for actuator device
[NASA-CASE-XGS-00824] c15 N71-16078
Sealing apparatus for joining two pieces of frangible materials
[NASA-CASE-XLA-01494] c15 N71-24164
Method for locating leaks in hermetically sealed containers
[NASA-CASE-ERC-10045] c15 N71-24910
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-NSC-10959] c15 N71-26243
Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XMP-01263-2] c15 N71-26312
Pressure seals suitable for use in environmental test chambers
[NASA-CASE-NPO-10796] c15 N71-27068
Hermetic sealing device for ends of tubular bodies during materials testing operations
[NASA-CASE-NPO-10431] c15 N71-29132
Hermetically sealed elbow actuator for use in severe environments
[NASA-CASE-NFS-14710] c09 N72-22195
Portable device for detecting pneumatic pressure leaks in hermetically sealed housings
[NASA-CASE-NFS-21761-1] c14 N73-18444
Heat transfer device
[NASA-CASE-NPO-11120-1] c33 N74-18552

HEXOKINASE
Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions
[NASA-CASE-XGS-05533] c04 N69-27487

HIGH ACCELERATION
Astronaut restraint suit for high acceleration protection
[NASA-CASE-XAC-00405] c05 N70-41819

HIGH ALTITUDE
Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-XAR-01547] c05 N69-21473

HIGH ALTITUDE ENVIRONMENTS
Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779

HIGH ASPECT RATIO
Aerospace configuration with low and high aspect ratio variability for high and low speed flight
[NASA-CASE-XLA-00142] c02 N70-33286
Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858

HIGH CURRENT
High voltage, high current Schottky barrier solar cell
[NASA-CASE-NPO-13482-1] c03 N74-30448

HIGH ENERGY INTERACTIONS
Converging coaxial plasma accelerator for generating dense high velocity plasma bursts
[NASA-CASE-ARC-10109] c25 N71-29181

HIGH FREQUENCIES
Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318
Holder for high frequency crystal resonators
[NASA-CASE-XMP-03637] c15 N71-21311
Multiple varactor for generating high frequencies with high power and high conversion efficiency
[NASA-CASE-XMP-04958-1] c10 N71-26414

HIGH PASS FILTERS
Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573

HIGH POLYMERS
Shock and vibration damping device using temperature sensitive solid amorphous polymers
[NASA-CASE-XAC-11225] c14 N69-27486

HIGH PRESSURE
High-temperature, high-pressure spherical segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
High pressure four-way valve with O ring adapted to pass across inlet port
[NASA-CASE-XMP-00214] c15 N70-36908
Compact high pressure filter for rocket fuel lines
[NASA-CASE-INP-00732] c28 N70-41447
Antiflutter check valve for use with high pressure fluid flow
[NASA-CASE-INP-01152] c15 N70-41811
High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
Structural design of high pressure regulator valve
[NASA-CASE-XMP-00710] c15 N71-10778
Hypersonic test facility for studying ablation in models under high pressure and high temperature
[NASA-CASE-XLA-00378] c11 N71-15925
Development and characteristics of high pressure control valve
[NASA-CASE-NSC-11010] c15 N71-19485
Valve seat with resilient support ring for venting valves subjected to high pressure sealing loads
[NASA-CASE-XKS-02582] c15 N71-21234
Apparatus and method capable of receiving large quantity of high pressure helium, removing impurities, and discharging at received pressure
[NASA-CASE-INP-06888] c15 N71-24044
Liquid aerosol dispenser with explosively driven piston to compress light gas to extremely high pressure
[NASA-CASE-NFS-20829] c12 N72-21310

HIGH RESOLUTION
High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119
Focusing optical collimator for high resolution scanning of electromagnetic radiations, neutrons, and other particles
[NASA-CASE-NFS-20932-1] c14 N73-27380

HIGH SPEED
Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-XAR-01547] c05 N69-21473

- High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
- Impact testing machine for imparting large
impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
- Flow meter for measuring stagnation pressure in
boundary layer around high speed flight vehicle
[NASA-CASE-IFP-02007] c12 N71-24692
- Method for reducing mass of ball bearings for
long life operation at high speed
[NASA-CASE-LEW-10856-1] c15 N72-22490
- Two stage light gas plasma projectile accelerator
[NASA-CASE-NFS-22287-1] c11 N74-18891
- HIGH SPEED CAMERAS**
- Electrically operated rotary shutter for
television camera aboard spacecraft
[NASA-CASE-XNP-00637] c14 N70-40273
- HIGH STRENGTH**
- Method for making fiber composites with high
strength at high temperatures
[NASA-CASE-LEW-10424-2-2] c18 N72-25539
- HIGH STRENGTH ALLOYS**
- High strength, corrosion resistant cobalt-based
alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644
- High strength aluminum casting alloy for
cryogenic applications in aerospace engineering
[NASA-CASE-XMP-02786] c17 N71-20743
- Production of high strength refractory compounds
and microconstituents into refractory metal
matrix
[NASA-CASE-XLE-03940] c18 N71-26153
- High strength nickel based alloys
[NASA-CASE-LEW-10874-1] c17 N72-22535
- Cobalt-tungsten alloys with superior strength at
elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415
- HIGH STRENGTH STEELS**
- Prevention of hydrogen embrittlement of high
strength steel --- by additive potassium
hydroxide in hydrazine
[NASA-CASE-NPO-12122-1] c27 N74-20397
- HIGH TEMPERATURE**
- High temperature source of thermal radiation
[NASA-CASE-XLE-00490] c33 N70-34545
- Therionic diode switch for use in high
temperature region to chop current from dc
source
[NASA-CASE-NPO-10404] c03 N71-12255
- Hypersonic test facility for studying ablation
in models under high pressure and high
temperature
[NASA-CASE-XLA-00378] c11 N71-15925
- Process for fiberizing ceramic materials with
high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
- Induction heating of metallurgical specimens to
high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267
- Method of forming ceramic to metal seals
impervious to gaseous and liquid mercury at
high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312
- Method for making fiber composites with high
strength at high temperatures
[NASA-CASE-LEW-10424-2-2] c18 N72-25539
- Superalloys from prealloyed powders at high
temperatures
[NASA-CASE-LEW-10805-1] c15 N73-13465
- HIGH TEMPERATURE AIR**
- Apparatus and method for generating large mass
flow of high temperature air at hypersonic
speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144
- HIGH TEMPERATURE ENVIRONMENTS**
- High speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147
- Nickel alloy series for aerospace structures
subjected to high temperatures
[NASA-CASE-XLE-00283] c17 N70-36616
- Water cooled gage for strain measurements in
high temperature environments
[NASA-CASE-XNP-09205] c14 N71-17657
- Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c09 N74-29577
- HIGH TEMPERATURE FLUIDS**
- Self-cycling fluid heater for heating continuous
fluid stream to ultrahigh temperatures to
facilitate chemical reactions
[NASA-CASE-MSC-15567-1] c33 N73-16918
- HIGH TEMPERATURE GASES**
- Multiple wavelength radiation measuring
instrument for determining hot body or gas
temperature
[NASA-CASE-XLE-00011] c14 N70-41946
- Ablative resins used for retarding regression in
ablative material
[NASA-CASE-XLE-05913] c33 N71-14032
- Transient heat transfer gage for measuring total
radiant intensity from far ultraviolet and
ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641
- Generation of high temperature, high mass flow,
and high Reynolds number air at hypersonic
speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262
- HIGH TEMPERATURE LUBRICANTS**
- Production of barium fluoride-calcium fluoride
composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105
- Self lubricating fluoride-metal composite
materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
- HIGH TEMPERATURE PLASMAS**
- Apparatus for producing highly conductive, high
temperature electron plasma with homogenous
temperature and pressure distribution
[NASA-CASE-XLA-00147] c25 N70-34661
- HIGH TEMPERATURE PROPELLANTS**
- Development of system for delivering vaporized
mercury to electron bombardment ion engine
[NASA-CASE-NPO-10737] c28 N72-11709
- HIGH TEMPERATURE RESEARCH**
- Fire retardant polyisocyanurate foam with high
temperature resistance
[NASA-CASE-ARC-10280-1] c18 N70-34695
- Gas cooled high temperature thermocouple
[NASA-CASE-XLE-09475-1] c33 N71-15568
- Fatigue testing apparatus with light shield and
infrared reflector for high temperature
evaluation of loaded sheet samples
[NASA-CASE-XLA-01782] c14 N71-26136
- HIGH TEMPERATURE TESTS**
- High-temperature, high-pressure spherical
segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
- Test apparatus for determining mechanical
properties of refractory materials at high
temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368
- Apparatus for testing metallic and nonmetallic
beams or rods by bending at high temperatures
in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993
- HIGH VACUUM**
- Epoxy resin sealing device for electrochemical
cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
- Device for high vacuum film deposition with
electromagnetic ion steering
[NASA-CASE-NPO-10331] c09 N71-26701
- Absolute pressure measuring device for measuring
gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394
- HIGH VACUUM ORBITAL SIMULATOR**
- Space environmental work simulator with portions
of space suit mounted to vacuum chamber wall
[NASA-CASE-XMP-07488] c11 N71-18773
- HIGH VOLTAGES**
- Hollow spherical electrode for shielding
dielectric junction between high voltage
conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
- High voltage cable for use in high intensity
ionizing radiation fields
[NASA-CASE-XNP-00738] c09 N70-38201
- High voltage pulse generator for testing flash
and ignition limits of nonmetallic materials
in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
- High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516
- High voltage divider system for attenuating high
voltages to convenient levels suitable for
introduction to measuring circuits
[NASA-CASE-XLE-02008] c09 N71-21583
- High voltage distributor
[NASA-CASE-GSC-11849-1] c09 N74-22873

- High voltage, high current Schottky barrier solar cell
[NASA-CASE-NPO-13482-1] c03 N74-30448
- HISTOGRAMS**
System for storing histogram data in optimum number of elements
[NASA-CASE-XNP-09785] c08 N69-21928
- HOLDERS**
Water cooled contactors for holding rotating carbon arc anode
[NASA-CASE-XMS-03700] c15 N69-24266
Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
[NASA-CASE-MFS-11132] c15 N71-17649
Holder for high frequency crystal resonators
[NASA-CASE-XNP-03637] c15 N71-21311
Design and construction of mechanical probe for determining if object is properly secured
[NASA-CASE-MFS-20760] c14 N72-33377
- HOLE DISTRIBUTION (MECHANICAL)**
Adjustable hole cutter for forming circular openings
[NASA-CASE-MFS-22649-1] c15 N73-32376
- HOLE MOBILITY**
Hole mobility of deposited semiconductor films in vacuum utilizing thermal gradient
[NASA-CASE-XRS-04614] c15 N69-21460
- HOLOGRAPHY**
Development of focused image holography with extended sources
[NASA-CASE-ERC-10019] c16 N71-15551
Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565
Recording and reconstructing focused image holograms
[NASA-CASE-ERC-10017] c16 N71-15567
Method and means for recording and reconstructing holograms without use of reference beam
[NASA-CASE-ERC-10020] c16 N71-26154
Multiple image storing system for obtaining holographic record on film of high speed projectile
[NASA-CASE-MFS-20596] c14 N72-17324
Thin film analyzer utilizing holographic techniques
[NASA-CASE-MFS-20823-1] c16 N73-30476
Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c16 N73-30478
Method and apparatus for checking the stability of a setup for making reflection type holograms
[NASA-CASE-MFS-21455-1] c16 N74-15146
Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c14 N74-17153
Holography utilizing surface plasmon resonances
[NASA-CASE-MFS-22040-1] c14 N74-26946
Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c14 N74-28932
An optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c13 N74-32780
A holographic motion picture camera
[NASA-CASE-MFS-22517-1] c14 N74-33943
- HOMING DEVICES**
Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-ERC-10324] c07 N72-25173
- HONEYCOMB CORES**
Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713
Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
[NASA-CASE-NPO-11036] c15 N72-24522
Honeycomb core structures of minimum surface tubule sections
[NASA-CASE-ERC-10363] c18 N72-25541
- HONEYCOMB STRUCTURES**
Filling honeycomb matrix with deaerated paste filler
[NASA-CASE-XMS-01108] c15 N69-24322
Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536
Fluid flow control valve for regulating fluids in molecular quantities
[NASA-CASE-XLE-00703] c15 N71-15967
Method and apparatus for fabrication of heat insulating and ablative reentry structure
[NASA-CASE-XMS-02009] c33 N71-20834
Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means
[NASA-CASE-XNF-01402] c18 N71-21651
Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMF-05046] c33 N71-28892
Honeycomb panels of minimal surface, periodic tubule layers
[NASA-CASE-ERC-10364] c18 N72-25540
Development of process for bonding resinous body in cavities of honeycomb structures
[NASA-CASE-MSC-12357] c15 N73-12489
Technique for bonding --- process for holding silicone elastomer into fiberglass honeycomb panel
[NASA-CASE-LAR-10073-1] c32 N74-23449
Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-MFS-21485-1] c15 N74-25968
- HOPPERS**
Design and development of device to prevent clogging in hoppers containing particulate materials
[NASA-CASE-LAR-10961-1] c15 N73-12496
- HORIZON SCANNERS**
Oscillatory electromagnetic mirror drive system for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461
Multi-lobar scan horizon sensor
[NASA-CASE-XGS-00809] c21 N70-35427
Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943
Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
[NASA-CASE-XGS-01784] c10 N71-20782
Horizon sensor design with digital sampling of spaced radiation-compensated thermopile infrared detectors
[NASA-CASE-XNP-06957] c14 N71-21088
Method and equipment for locating earth infrared horizon from space, independent of season and latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475
- HORIZONTAL SPACECRAFT LANDING**
Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37986
- HORIZONTAL TAIL SURFACES**
Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
- HORN ANTENNAS**
Device for improving efficiency of parabolic horn antenna system for linearly polarized signals
[NASA-CASE-XNP-00611] c09 N70-35219
Device for improving efficiency of parabolic reflector horn for linearly or circularly polarized waves
[NASA-CASE-XNP-00540] c09 N70-35382
Characteristics of antenna horn feeds consisting of central horn with overlapping peripheral horns
[NASA-CASE-GSC-10452] c07 N71-12396
Multiple mode horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes
[NASA-CASE-XNP-01057] c07 N71-15907
Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
[NASA-CASE-NPO-11264] c07 N72-25174
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c09 N74-29575
- HOT CATHODES**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster

[NASA-CASE-XLE-07087] c06 N69-39889
HOT PRESSING
 Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability [NASA-CASE-LEW-10219-1] c18 N71-28729

HOT WORKING
 Hot forming of plastic sheets [NASA-CASE-XMS-05516] c15 N71-17803

HOT-WIRE FLOWMETERS
 Hot-wire liquid level detector for cryogenic propellants [NASA-CASE-XLE-00454] c23 N71-17802

HOUSINGS
 Sealed housing for protecting electronic equipment against electromagnetic interference [NASA-CASE-MSC-12168-1] c09 N71-18600
 Open type urine receptacle with tubular housing [NASA-CASE-MSC-12324-1] c05 N72-22093
 Readily assembled universal environment housing for electronic equipment [NASA-CASE-KSC-10031] c15 N72-22486
 Gas flow control device, including housing and input port [NASA-CASE-NPO-11479] c15 N73-13462
 Cryogenic gyroscope housing --- with annular disks for gas spin-up [NASA-CASE-MFS-21136-1] c23 N74-18323
 Heat transfer device [NASA-CASE-NPO-11120-1] c33 N74-18552

HOVERING
 Hovering type flying vehicle design and principle mechanisms for manned or unmanned use [NASA-CASE-MSC-12111-1] c02 N71-11039

HUGONIOT EQUATION OF STATE
 Method for determining density of impacting particles by using Hugoniot curves [NASA-CASE-LAR-11059-1] c30 N73-26838

HULLS (STRUCTURES)
 Efficient operation of improved hydrofoil design [NASA-CASE-XLA-00229] c12 N70-33305

HUMAN BEINGS
 Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions [NASA-CASE-ARC-10100-1] c05 N71-24738
 Automatic braking device for rapidly transferring humans or materials from elevated location [NASA-CASE-IKS-07814] c15 N71-27067

HUMAN BODY
 Apparatus for measuring human body mass in zero or reduced gravity environment [NASA-CASE-XMS-03371] c05 N70-42000
 Electromedical garment, applying vectorcardiologic type electrodes to human torsos for data recording during physical activity [NASA-CASE-XPR-10856] c05 N71-11189
 Thermoregulating with cooling flow pipe network for humans [NASA-CASE-XMS-10269] c05 N71-24147
 Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices [NASA-CASE-MFS-21010-1] c05 N73-30078

HUMAN FACTORS ENGINEERING
 Shock absorbing couch for body support under high acceleration or deceleration forces [NASA-CASE-XMS-01240] c05 N70-35152
 Harness assembly adapted to support man on ground based apparatus which simulates weightlessness [NASA-CASE-MFS-14671] c05 N71-12341
 Multiple circuit switch apparatus requiring minimum hand and eye movement by operator [NASA-CASE-XAC-03777] c10 N71-15909
 Remote control device operated by movement of finger tips for manual control of spacecraft attitude [NASA-CASE-XAC-02405] c09 N71-16089
 Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities [NASA-CASE-MSC-12243-1] c05 N71-24728
 Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness [NASA-CASE-MSC-13282-1] c05 N71-24729
 Recording apparatus [NASA-CASE-LAR-11353-1] c14 N74-20020

HUMAN PERFORMANCE
 Optical vision testing unit for testing eyes and visual system of human subject [NASA-CASE-MSC-13601-1] c05 N72-11088
 Color perception tester for testing color code perceptiveness of individuals [NASA-CASE-KSC-10278] c05 N72-16015

HUMAN REACTIONS
 Reaction tester for testing reaction to light stimuli [NASA-CASE-MSC-13604-1] c05 N73-13114

HUMAN WASTES
 Reduced gravity fecal collector seat and urinal [NASA-CASE-MFS-22102-1] c05 N74-20725

HYBRID COMPUTERS
 Adaptive voting computer system [NASA-CASE-MSC-13932-1] c08 N74-14920

HYBRID PROPELLANTS
 Liner for hybrid solid propellants to bind propellant to rocket motor case [NASA-CASE-XNP-09744] c27 N71-16392

HYDRAULIC CONTROL
 Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type [NASA-CASE-MFS-10412] c12 N71-17578
 Throttle valve for regulating fluid flow volume [NASA-CASE-XNP-09698] c15 N71-18580
 Fluidic-thermochromic display device [NASA-CASE-ERC-10031] c12 N71-18603
 Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures [NASA-CASE-MFS-20830] c15 N71-30028

HYDRAULIC EQUIPMENT
 Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions [NASA-CASE-XMP-01772] c11 N70-41677
 Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions [NASA-CASE-XMP-03248] c11 N71-10604
 Hydraulic drive mechanism for leveling isolation platforms [NASA-CASE-XMS-03252] c15 N71-10658
 Antibacklash circuit for hydraulic drive system [NASA-CASE-XNP-01020] c03 N71-12260
 Hydraulic clamping of sheet stock specimens [NASA-CASE-XLA-05100] c15 N71-17696
 Design and development of double acting shock absorber for spacecraft docking operations [NASA-CASE-XMS-03722] c15 N71-21530
 Hydraulic apparatus for casting and molding of liquid polymers [NASA-CASE-XNP-07659] c06 N71-22975
 System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop [NASA-CASE-ARC-10131-1] c15 N71-27754
 Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation [NASA-CASE-XAC-00048] c02 N71-29128
 Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures [NASA-CASE-MFS-20830] c15 N71-30028
 Design and characteristics of mechanically extended and telescoping boom on crane assembly [NASA-CASE-NPO-11118] c03 N72-25021
 Design and development of device to prevent geysering during convective circulation of cryogenic fluids [NASA-CASE-KSC-10615] c15 N73-12486
 Redundant hydraulic control system for actuators with three main valve combination [NASA-CASE-MFS-20944] c15 N73-13466
 Development and characteristics of combined pressure regulator and shutoff valve with variable pressure response characteristics [NASA-CASE-NPO-13201-1] c15 N73-26474
 Rocket propellant injector with porous faceplate for rocket engine combustion chamber [NASA-CASE-LEW-11071-1] c27 N73-27695

- Design and characteristics of system for regenerating fluid filter to remove trapped particles with application to space shuttle systems
[NASA-CASE-MSC-14273-1] c12 N73-28179
- Ultrasonically bonded valve assembly
[NASA-CASE-NPO-13360-1] c15 N74-20073
- Quick disconnect filter coupling
[NASA-CASE-MFS-22323-1] c15 N74-26988
- HYDRAULIC FLUIDS**
Miniature hydraulic actuator --- for control surfaces on airfoils
[NASA-CASE-LAR-11522-1] c15 N74-34881
- HYDRAZINE NITROFORM**
Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder
[NASA-CASE-NPO-12015] c27 N73-16764
- HYDRAZINES**
Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-00876] c28 N70-41311
- Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
- Rubber composition for expulsion bladders and diaphragms for use with hydrazine
[NASA-CASE-NPO-11433] c18 N71-31140
- Prevention of hydrogen embrittlement of high strength steel --- by additive potassium hydroxide in hydrazine
[NASA-CASE-NPO-12122-1] c27 N74-20397
- HYDROCARBON FUELS**
Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
[NASA-CASE-XLE-00010] c15 N70-33382
- HYDROCARBONS**
Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder
[NASA-CASE-NPO-12015] c27 N73-16764
- HYDRODYNAMICS**
Heat operated cryogenic electrical generator --- using liquid helium conversion
[NASA-CASE-NPO-13303-1] c03 N74-19701
- HYDROFOILS**
Efficient operation of improved hydrofoil design
[NASA-CASE-XLA-00229] c12 N70-33305
- HYDROFORMING**
Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLE-05641-1] c15 N71-26346
- HYDROGEN**
Method and transducer device for detecting presence of hydrogen gas
[NASA-CASE-IMF-03873] c06 N69-39733
- Preventing pressure buildup in electrochemical cells by reacting palladium oxide with evolved hydrogen
[NASA-CASE-XGS-01419] c03 N70-41864
- Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-XNP-06531] c14 N71-17575
- Development of device for detecting hydrogen in ambient environments
[NASA-CASE-MFS-11537] c14 N71-20442
- Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146
- Hydrogen fire blink detector for high altitude rocket or ground installation
[NASA-CASE-MFS-15063] c14 N72-25412
- Separation of dissolved hydrogen from water and coating with palladium black
[NASA-CASE-MSC-13335-1] c06 N72-31140
- Atomic hydrogen maser with bulb temperature control by output frequency difference signal for wall shift elimination
[NASA-CASE-HQR-10654-1] c16 N73-13489
- Method for producing storage bulb for atomic hydrogen maser
[NASA-CASE-NPO-13050-1] c16 N73-18508
- HYDROGEN EMBRITTLEMENT**
Prevention of hydrogen embrittlement of high strength steel --- by additive potassium hydroxide in hydrazine
[NASA-CASE-NPO-12122-1] c27 N74-20397
- HYDROGEN IONS**
Modulated hydrogen ion flame detector
[NASA-CASE-ARC-10322-1] c14 N74-27875
- HYDROGEN OXYGEN FUEL CELLS**
Electrolytically regenerative hydrogen-oxygen fuel cells
[NASA-CASE-XLE-04526] c03 N71-11052
- Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator
[NASA-CASE-XGS-08729] c28 N71-14044
- HYDROGEN PEROXIDE**
Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504
- HYDROGENATION**
Producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-00158] c26 N70-36805
- Compact hydrogenator
[NASA-CASE-NPO-11682-1] c15 N74-15127
- HYDROXIDES**
Method for determining presence and type of OH in MgO
[NASA-CASE-NPO-10774] c06 N72-17095
- HYGROSCOPICITY**
Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NPO-10051] c18 N71-24934
- HYPERBOLIC SYSTEMS**
Development of radio locating system for monitoring geographic movement of surface vehicles in metropolitan area using unsynchronized radio broadcasting stations
[NASA-CASE-NPO-13217-1] c07 N73-26144
- HYPERFINE STRUCTURE**
Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142
- HYPERGOLIC ROCKET PROPELLANTS**
Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
[NASA-CASE-XLE-00207] c28 N70-33375
- Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-XLE-00685] c28 N70-41992
- Method for igniting solid propellant rocket motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634
- HYPERSONIC AIRCRAFT**
Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XNP-02263] c02 N74-10907
- HYPERSONIC FLOW**
Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure
[NASA-CASE-XLA-05378] c11 N71-21475
- HYPERSONIC SPEED**
Leading edge design for hypersonic reentry vehicles
[NASA-CASE-XLA-00165] c31 N70-33242
- Aerospace vehicle with variable planform for hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
- Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
- Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262
- Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144
- HYPERSONIC VEHICLES**
Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin

[NASA-CASE-XLA-01967] c31 N70-42015
HYPERVELOCITY GUNS
 Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube
 [NASA-CASE-IGS-06628] c24 N71-16213
 Implosion driven, light gas, hypervelocity gun
 [NASA-CASE-IAC-05902] c11 N71-18578
 Collapsible piston for hypervelocity gun
 [NASA-CASE-MSC-13789-1] c11 N73-32152
HYPERVELOCITY IMPACT
 Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
 [NASA-CASE-NPO-12127-1] c14 N74-13130
HYPERVELOCITY PROJECTILES
 Impact measuring technique for determining size of hypervelocity projectiles
 [NASA-CASE-LAR-10913] c14 N72-16282
 Multiple image storing system for obtaining holographic record on film of high speed projectile
 [NASA-CASE-MFS-20596] c14 N72-17324
HYPERVELOCITY WIND TUNNELS
 Hypersonic test facility for studying ablation in models under high pressure and high temperature
 [NASA-CASE-XLA-00378] c11 N71-15925
 Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure
 [NASA-CASE-XLA-05378] c11 N71-21475
HYSTEREISIS
 Belleville spring assembly with elastic guides having low hysteresis
 [NASA-CASE-XNP-09452] c15 N69-27504

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IGNITERS
 Characteristics of solid propellant rocket engine with controlled rate of thrust buildup operating in vacuum environment
 [NASA-CASE-NPO-11559] c28 N73-24784
 Remote fire stack igniter --- with solenoid-controlled valve
 [NASA-CASE-MFS-21675-1] c33 N74-33378
IGNITION
 Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
 [NASA-CASE-XLA-00327] c25 N71-29184
IGNITION LIMITS
 High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
 [NASA-CASE-MSC-12178-1] c09 N71-13518
IGNITION SYSTEMS
 Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
 [NASA-CASE-XLE-00207] c28 N70-33375
 Ignition system for monopropellant combustion devices
 [NASA-CASE-XNP-00249] c28 N70-38249
 Igniter capsule for chemical ignition of liquid rocket propellants
 [NASA-CASE-XLE-00323] c28 N70-38505
 Catalyst bed ignition system for hydrazine propellants
 [NASA-CASE-XNP-00876] c28 N70-41311
 Motor run-up system --- for preventing power line disturbances when synchronous motor is connected to line
 [NASA-CASE-NPO-13374-1] c10 N74-17949
IGNITION TEMPERATURE
 Test chamber for determining decomposition and autoignition of materials used in spacecraft under controlled environmental conditions
 [NASA-CASE-KSC-10198] c11 N71-28629
ILLUMINATORS
 Camera adapter design for image magnification including lens and illuminator
 [NASA-CASE-XMF-03844-1] c14 N71-26474
 Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source
 [NASA-CASE-BQN-10781] c23 N71-30292
IMAGE CONTRAST
 Video signal enhancement of signal component representing brightness of scene element in low contrast
 [NASA-CASE-NPO-10343] c07 N71-27341
IMAGE CONVERTERS
 Photoconducting semiconductor system for converting stored optical images into video signals
 [NASA-CASE-NPO-13131-1] c16 N73-31467
 Real time liquid crystal image converter
 [NASA-CASE-LAR-11206-1] c23 N74-30118
IMAGE CORRELATORS
 Multiple pattern holographic information storage and readout system
 [NASA-CASE-ERC-10151] c16 N71-29131
 Automatic focus control for facsimile cameras
 [NASA-CASE-LAR-11213-1] c14 N74-10420
IMAGE DISSECTOR TUBES
 Apparatus for calibrating an image dissector tube
 [NASA-CASE-MFS-22208-1] c14 N74-18100
IMAGE ENHANCEMENT
 Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
 [NASA-CASE-ERC-10552] c09 N71-12539
IMAGE FILTERS
 Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
 [NASA-CASE-XLA-00062] c14 N70-33254
IMAGE TUBES
 Image tube --- deriving electron beam replica of image
 [NASA-CASE-GSC-11602-1] c09 N74-21850
IMAGES
 Camera adapter design for image magnification including lens and illuminator
 [NASA-CASE-XMF-03844-1] c14 N71-26474
 Family of physical correction filters for improving optical quality of image
 [NASA-CASE-BQN-10542-1] c23 N72-21663
 Stereoscopic television system, including projecting pair of binocular images
 [NASA-CASE-ARC-10160-1] c23 N72-27728
IMAGING TECHNIQUES
 Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
 [NASA-CASE-ERC-10001] c23 N71-24868
 Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
 [NASA-CASE-GSC-11133-1] c23 N72-11568
 Phototransistor imaging system with mosaic of phototransistors on semiconductor substrate
 [NASA-CASE-MFS-20809] c23 N73-13660
 Computerized optical system for producing multiple images of a scene simultaneously
 [NASA-CASE-MSC-12404-1] c23 N73-13661
 Optical imaging system for increasing light absorption efficiency of imaging detector
 [NASA-CASE-ARC-10194-1] c23 N73-20741
 Device for displaying and recording angled views of samples to be viewed by microscope
 [NASA-CASE-GSC-11690-1] c14 N73-28499
 Ritchey-Chretien telescope responsive to images located off telescope optical axis
 [NASA-CASE-GSC-11487-1] c14 N73-30393
 Data storage, image tube type
 [NASA-CASE-MSC-14053-1] c08 N74-12888
 Optical instruments
 [NASA-CASE-MSC-14096-1] c14 N74-15095
 Field sequential stereo television
 [NASA-CASE-MSC-12616-1] c07 N74-32601
IMIDES
 Synthesis and chemical properties of imidazopyrrolone/imide copolymers
 [NASA-CASE-XLA-08802] c06 N71-11238
 Molding process for imidazopyrrolone polymers
 [NASA-CASE-LAR-10547-1] c15 N74-13177
IMINES
 Synthesis of polymeric schiff bases by schiff-base exchange reactions
 [NASA-CASE-XMF-08651] c06 N71-11236
 Direct synthesis of polymeric schiff bases from two amines and two aldehydes
 [NASA-CASE-XMF-08655] c06 N71-11239

SUBJECT INDEX

INERTIAL REFERENCE SYSTEMS

- Synthesis of schiff bases for heat shields by acetal amine reactions
[NASA-CASE-XMF-08652] c06 N71-11243
- Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-XMF-03074] c06 N71-24740
- IMMOBILIZATION**
Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMF-06589] c05 N71-23159
- Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
- IMPACT**
Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NPO-10671] c15 N72-20443
- System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
- Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c14 N74-32886
- IMPACT ACCELERATION**
Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and unilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- IMPACT DAMAGE**
Measuring micrometeoroid depth of penetration into various materials
[NASA-CASE-XLA-00941] c14 N71-23240
- IMPACT LOADS**
Piezoelectric transducer for detecting and measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
- Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
- IMPACT RESISTANCE**
Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20032
- IMPACT STRUCTURE**
High impact pressure regulator having minimum number of lightweight movable elements
[NASA-CASE-NPO-10175] c14 N71-18625
- IMPACT TESTING MACHINES**
Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765
- Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
- IMPACT TOLERANCES**
High impact antennas with high radiating efficiency
[NASA-CASE-NPO-10231] c07 N71-26101
- IMPEDANCE MATCHING**
Impedance transformation device for signal mixing
[NASA-CASE-IGS-01110] c07 N69-24334
- Reflectometer for receiver input impedance match measurement
[NASA-CASE-INP-10843] c07 N71-11267
- Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573
- Pattern and impedance matching improvements in transversely polarized triaxial antenna
[NASA-CASE-XGS-02290] c07 N71-28809
- IMPEDANCE MEASUREMENTS**
Development of electrical system for measuring high impedance
[NASA-CASE-XMS-08589-1] c09 N71-20569
- IMPLANTATION**
Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342
- IMPLOSIONS**
Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578
- IMPURITIES**
Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XMF-01016] c26 N71-17818
- INCLINATION**
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c02 N74-34475
- INCOHERENT SCATTERING**
Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c09 N74-20859
- INDICATING INSTRUMENTS**
Controlled caging and uncaging mechanism for remote instrument control
[NASA-CASE-GSC-11063-1] c03 N70-35584
- Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
- Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
- Apparatus for determining quality of bond between high density material and low density material
[NASA-CASE-NFS-13686] c15 N71-18132
- Device for detecting hydrogen fires onboard high altitude rockets
[NASA-CASE-NFS-13130] c10 N72-17173
- INDUCTANCE**
Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154
- Inductance device with vacuum insulation and materials of low gas entrapping capability
[NASA-CASE-LEW-10330-1] c09 N72-27226
- INDUCTION HEATING**
Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267
- INDUCTION MOTORS**
Voltage controlled oscillator circuit for two-phase induction motor control
[NASA-CASE-NFS-21465-1] c10 N73-32145
- A variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-NFS-22088-1] c09 N74-13894
- INDUCTORS**
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
- Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-XNP-01667] c15 N71-17647
- Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364
- INDUSTRIAL PLANTS**
Simplified technique and device for producing industrial grade synthetic diamonds
[NASA-CASE-NFS-20698-2] c15 N73-19457
- INERTIA**
Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
- INERTIAL GUIDANCE**
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-MSC-10959] c15 N71-26243
- INERTIAL PLATFORMS**
Inertial component clamping assembly design for spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813
- Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-INP-01669] c21 N71-23289
- Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NPO-13044-1] c14 N74-15094
- An attitude control system
[NASA-CASE-NFS-22787-1] c21 N74-35096
- INERTIAL REFERENCE SYSTEMS**
Development of attitude control system for spacecraft orientation
[NASA-CASE-IGS-04393] c21 N71-14159
- Large amplitude, linear inertial reference system of vibrating string type for spacecraft reference plane
[NASA-CASE-XAC-03107] c23 N71-16098

INFLATABLE SPACECRAFT

Passive thermal control coating on aluminum foil laminate for inflatable spacecraft surfaces
[NASA-CASE-XLA-01291] c33 N70-36617

Erectable, inflatable, radio signal reflecting passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309

Rotating, multisided mandrel for fabricating gored inflatable spacecraft
[NASA-CASE-XLA-00183] c15 N71-17687

Forming inflatable panels erectable in space for passive communication satellite
[NASA-CASE-XLA-03497] c15 N71-23052

Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851

INFLATABLE STRUCTURES

Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39981

Design of inflatable life raft for aircrafts and boats
[NASA-CASE-XMS-00863] c05 N70-34857

Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493

Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536

Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063

Temperature sensor warning system for pneumatic tires of aircraft and ground vehicles
[NASA-CASE-XLA-01926] c14 N71-15620

Inflation system for balloon type satellites
[NASA-CASE-XGS-03351] c31 N71-16081

Development and characteristics of protective coatings for spacecraft
[NASA-CASE-IMP-02507] c31 N71-17679

Development and characteristics of self supporting space vehicle
[NASA-CASE-XLA-00117] c31 N71-17680

Conforming polisher for aspheric surfaces of revolution with inflatable tube
[NASA-CASE-XGS-02884] c15 N71-22705

Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713

Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-NFS-20068] c07 N71-27191

Space expandable tether device for use as passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936

Inflatable rocket engine nozzle skirt with transpiration cooling
[NASA-CASE-NFS-20619] c28 N72-11708

INFLATING

Modification of one man life raft
[NASA-CASE-LAR-10241-1] c05 N74-14845

INFORMATION RETRIEVAL

Multiple pattern holographic information storage and readout system
[NASA-CASE-ERC-10151] c16 N71-29131

INFRARED DETECTORS

Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-IMP-09750] c14 N69-39937

Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-IMP-03934] c09 N71-22985

Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam
[NASA-CASE-LAR-10728-1] c14 N73-12445

A doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NPO-13348-1] c14 N74-20022

INFRARED INSTRUMENTS

Infrared scanning system for maintaining spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181

INFRARED LASERS

Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c14 N74-11284

INFRARED RADIATION

High speed infrared furnace
[NASA-CASE-ILE-10466] c17 N69-25147

High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c14 N74-18088

INFRARED SCANNERS

Infrared scanning system for maintaining spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181

Method and equipment for locating earth infrared horizon from space, independent of season and latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475

INFRARED SPECTRA

Laser utilizing infrared rotation transitions of diatomic gas for production of different wavelengths
[NASA-CASE-ARC-10370-1] c16 N72-10432

INFRARED SPECTROMETERS

Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699

INFRARED SPECTROSCOPY

Polymer coatings for moisture protection of optical windows in infrared spectroscopy
[NASA-CASE-ARC-10749-1] c23 N73-32542

INFRASONIC FREQUENCIES

Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir
[NASA-CASE-MSC-11847-1] c14 N72-11363

INGESTION (BIOLOGY)

Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals
[NASA-CASE-ARC-10583-1] c05 N73-14093

INITIATORS (EXPLOSIVES)

Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930

Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge
[NASA-CASE-LAR-10372] c09 N71-18599

INJECTION

Foam insulation thickness measuring and injection device for spacecraft applications
[NASA-CASE-NFS-20261] c14 N71-27005

INJECTORS

Propellant injectors for rocket combustion chambers
[NASA-CASE-XLE-00103] c28 N70-33241

Fuel injection system for maximum combustion efficiency of rocket engines
[NASA-CASE-XLR-00111] c28 N70-38199

Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-IMP-00148] c28 N70-38710

Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube
[NASA-CASE-XGS-06628] c24 N71-16213

Control valve and coaxial variable injector for controlling bipropellant mixture ratio and flow
[NASA-CASE-IMP-09702] c15 N71-17654

Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736

Bipropellant injector with pair of concave deflector plates
[NASA-CASE-IMP-09461] c28 N72-23809

Coaxial injector for mixing liquid propellants within combustion chambers
[NASA-CASE-NPO-11095] c15 N72-25455

Improved injector with porous plug for bubbles of gas into feed lines of electrically conductive liquid
[NASA-CASE-NPO-11377] c15 N73-27406

INLET FLOW

High pressure four-way valve with O ring adapted to pass across inlet port

SUBJECT INDEX

INTEGRATED CIRCUITS

- [NASA-CASE-XNP-00214] c15 N70-36908
Method for maintaining good performance in gas turbine during air flow distortion
- [NASA-CASE-LEW-10286-1] c28 N71-28915
Airflow control system for supersonic inlets
- [NASA-CASE-LEW-11188-1] c02 N74-20646
Shock position sensor for supersonic inlets --- development of system to measure pressure in throat of supersonic inlet and operate bypass valve
- [NASA-CASE-LEW-11915-1] c12 N74-25805
Variably positioned guide vanes for aerodynamic choking
- [NASA-CASE-LAR-10642-1] c28 N74-31270
INLET PRESSURE
Fluid jet amplifier with fluid from jet nozzle deflected by inlet pressure
- [NASA-CASE-ILE-03512] c12 N69-21466
Shock position sensor for supersonic inlets --- development of system to measure pressure in throat of supersonic inlet and operate bypass valve
- [NASA-CASE-LEW-11915-1] c12 N74-25805
INOCULATION
Automatic inoculating device for agar trays using cotton swab or loop
- [NASA-CASE-LAR-11074-1] c05 N73-16096
INORGANIC COATINGS
Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents
- [NASA-CASE-GSC-11214-1] c06 N73-13128
INORGANIC COMPOUNDS
Inorganic ion exchange membrane electrolytes for fuel cell use
- [NASA-CASE-XNP-00264] c03 N69-21337
Preparation of inorganic solid film lubricants with long wear life and stability in aerospace environments
- [NASA-CASE-XMP-03988] c15 N71-21403
Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control
- [NASA-CASE-ARC-10098-1] c06 N71-24739
Inorganic thermal control and solar reflector coatings
- [NASA-CASE-NFS-20011] c18 N72-22566
INPUT
Apparatus for filtering input signals
- [NASA-CASE-WFO-10198] c09 N71-24806
Electronic signal-handling circuit with constant input impedance
- [NASA-CASE-ARC-10348-1] c10 N72-10205
RC networks with voltage amplifier, RC input circuit, and positive feedback
- [NASA-CASE-ARC-10020] c10 N72-17172
INSERTION LOSS
High impedance alternating current sensing transformer device between two bolometers for measuring insertion loss of test component
- [NASA-CASE-XNP-01193] c10 N71-16057
INSTRUMENT ERRORS
Solar radiation direction detector and device for compensating degradation of photocells
- [NASA-CASE-ILA-00183] c14 N70-40239
INSTRUMENT FLIGHT RULES
Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
- [NASA-CASE-XPR-04147] c11 N71-10748
INSTRUMENT ORIENTATION
Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers
- [NASA-CASE-XNP-04180] c07 N69-39736
Inertial gimbal alignment system for spacecraft guidance
- [NASA-CASE-XMP-01669] c21 N71-23289
Optical gauging system for monitoring machine tool alignment
- [NASA-CASE-IAC-09489-1] c15 N71-26673
Development of solar energy powered heliotrope assembly to orient solar array toward sun
- [NASA-CASE-GSC-10945-1] c21 N72-31637
INSTRUMENT PACKAGES
Apparatus for ejecting covers of instrument packages using differential pressure principle
- [NASA-CASE-XMP-04132] c15 N69-27502
Removable potting compound for instrument shock protection
- [NASA-CASE-ILA-00482] c15 N70-36409
Plastic foam generator for space vehicle instrument payload package flotation in water landing
- [NASA-CASE-ILA-00838] c03 N70-36778
High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
- [NASA-CASE-ILA-01339] c31 N71-15692
Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
- [NASA-CASE-XNP-09763] c14 N71-20461
INSTRUMENTS
Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
- [NASA-CASE-XMP-09422] c07 N71-19436
Design and development of pressure sensor for measuring differential pressures of few pounds per square inch
- [NASA-CASE-XMP-01974] c14 N71-22752
Development of temperature compensated thrust measuring gage for measuring forces as function of time in environment with varying temperature
- [NASA-CASE-XGS-02319] c14 N71-22965
Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
- [NASA-CASE-ILA-00781] c09 N71-22999
Design, development, and characteristics of pressure and temperature sensor operating immersed in fluid flow
- [NASA-CASE-LEW-10281-1] c14 N72-17327
Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
- [NASA-CASE-MSC-12372-1] c31 N72-25842
INSULATED STRUCTURES
Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
- [NASA-CASE-XMP-08882] c15 N69-39935
INSULATION
Electrode attached to helmets for detecting low level signals from skin of living creatures
- [NASA-CASE-ARC-10043-1] c05 N71-11193
Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication
- [NASA-CASE-XGS-02435] c18 N71-22998
Method of fabricating equal length insulated wire
- [NASA-CASE-PRC-10038] c15 N72-20444
Inductance device with vacuum insulation and materials of low gas entrapping capability
- [NASA-CASE-LEW-10330-1] c09 N72-27226
Insulated electrode for electrocardiographic recording without paste electrolyte
- [NASA-CASE-MSC-14339-1] c05 N73-21151
Silica reusable surface insulation
- [NASA-CASE-ARC-10721-1] c18 N74-14230
Ceramic coating for silica insulation
- [NASA-CASE-MSC-14270-2] c18 N74-30004
Ceramic coating for silica insulation
- [NASA-CASE-MSC-14270-1] c18 N74-30005
INSULATORS
High voltage insulators for direct current in acceleration system of electrostatic thruster
- [NASA-CASE-ILE-01902] c28 N71-10574
INTAKE SYSTEMS
Deflector for preventing objects from entering nacelle inlets of jet aircraft
- [NASA-CASE-ILE-00388] c28 N70-34788
Shock position sensor for supersonic inlets --- development of system to measure pressure in throat of supersonic inlet and operate bypass valve
- [NASA-CASE-LEW-11915-1] c12 N74-25805
INTEGRATED CIRCUITS
Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
- [NASA-CASE-XNP-01753] c08 N71-22897

- Development and characteristics of electric circuitry for detecting electrical pulses rise time and amplitude
[NASA-CASE-INP-08804] c09 N71-24717
- Method and apparatus for testing integrated circuit microtab welds
[NASA-CASE-ARC-10176-1] c15 N72-21464
- Single integrated circuit chip with field effect transistor
[NASA-CASE-GSC-10835-1] c09 N72-33205
- Integrated microcircuits and complementary four-phase logic system
[NASA-CASE-HSC-14240-1] c10 N73-21240
- Integrated circuit power gyrator with Z-matrix design using parallel transistors
[NASA-CASE-MFS-22342-1] c09 N73-24236
- Integrated circuit tangent function generator
[NASA-CASE-HSC-13907-1] c10 N73-26230
- Inverted geometry transistor for use with monolithic integrated circuit
[NASA-CASE-ARC-10330-1] c09 N73-32112
- Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-MFS-21374-1] c10 N74-12951
- Integrated P-channel MOS gyrator
[NASA-CASE-MFS-22343-1] c09 N74-34638
- INTEGRATORS**
- Solid state operational integrator
[NASA-CASE-NPO-10230] c09 N71-12520
- Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-ILA-01219] c10 N71-23084
- Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-ILA-03356] c10 N71-23315
- Feedback integrating circuit with grounded capacitor for signal processing
[NASA-CASE-IAC-10607] c10 N71-23669
- High speed phase detector design indicating phase relationship between two square wave input signals
[NASA-CASE-INP-01306-2] c09 N71-24596
- INTERFEROMETERS**
- Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer
[NASA-CASE-XGS-03532] c14 N71-17627
- Incremental motion drive system applied to interferometer components
[NASA-CASE-INP-08897] c15 N71-17694
- Design and development of optical interferometer with laser light source for application to schlieren systems
[NASA-CASE-ILA-04295] c16 N71-24170
- Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- Two beam interferometer-polarimeter
[NASA-CASE-NPO-11239] c14 N73-12446
- Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463
- INTERMEDIATE FREQUENCY AMPLIFIERS**
- Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c14 N74-20019
- INTERMETALLICS**
- Intermetallic coating for nickel based superalloy
[NASA-CASE-LEW-11348-1] c17 N72-25517
- Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
- Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
[NASA-CASE-MFS-20861-1] c18 N73-32437
- INTERNAL COMBUSTION ENGINES**
- Variable displacement fuel pump for internal combustion engines
[NASA-CASE-HSC-12139-1] c28 N71-14058
- Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-INP-06926] c28 N71-22983
- Development of system for preheating vaporized fuel for use with internal combustion engines
[NASA-CASE-NPO-12072] c28 N72-22772
- INTERPLANETARY DUST**
- Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c14 N74-32886
- INTERPLANETARY FLIGHT**
- Thermoelectric power system --- for outer planet space flight
[NASA-CASE-MFS-22002-1] c03 N74-18726
- INTERPLANETARY SPACE**
- Compact heat shielding for interplanetary space vehicles
[NASA-CASE-XMS-00486] c33 N70-33344
- Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-IAC-05462-2] c10 N72-17171
- INTERPLANETARY SPACECRAFT**
- Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
- INTERPLANETARY TRAJECTORIES**
- Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-INP-00708] c14 N70-35394
- INTRAVEHICULAR ACTIVITY**
- Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012
- INVERTED CONVERTERS (DC TO AC)**
- A variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MFS-22088-1] c09 N74-13894
- Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c14 N74-18090
- INVERTERS**
- Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-ILA-08507] c09 N69-39984
- Inverter oscillator with voltage feedback
[NASA-CASE-NPO-10760] c09 N72-25254
- IODINE**
- Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
[NASA-CASE-NPO-10373] c03 N71-18698
- Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-INP-01960] c09 N71-23027
- IODINE ISOTOPES**
- Apparatus for producing high purity I-123 from Xe-123 by bombarding tellurium target with cyclotron beam
[NASA-CASE-LEW-10518-2] c24 N72-28714
- Production of I-123 for use as radiopharmaceutical for low radiation exposure
[NASA-CASE-LEW-10518-1] c24 N72-33681
- Production of iodine isotope by high energy bombardment of cesium heat pipe causing spallation reaction
[NASA-CASE-LEW-11390-2] c24 N73-20763
- Heat pipe production of high purity radioiodine for thyroid measurements
[NASA-CASE-LEW-11390-3] c11 N73-28128
- Apparatus for producing high purity I-123 --- for thyroid measurement
[NASA-CASE-LEW-10518-3] c15 N74-10476
- ION ACCELERATORS**
- Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582
- ION BEAMS**
- Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
- Dispensing targets for ion beam particle generators
[NASA-CASE-NPO-13112-1] c11 N74-26767
- Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c28 N74-31269
- ION CHARGE**
- Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-INP-04231] c14 N73-32325

- ION CONCENTRATION**
Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LEW-11262-1] c18 N74-13270
- ION CURRENTS**
System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-INP-02592] c24 N71-20518
- ION CYCLOTRON RADIATION**
Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c14 N74-32890
- ION ENGINES**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
High-vacuum condenser tank for testing ion rocket engines
[NASA-CASE-XLE-00168] c11 N70-33278
Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
Metal ion rocket engine design
[NASA-CASE-XLE-00342] c28 N70-37980
Dynamometer measuring microforce thrust produced by ion engine
[NASA-CASE-XLE-00702] c14 N70-40203
Increasing available power per unit area in ion rocket engine by increasing beam density
[NASA-CASE-XLE-00519] c28 N70-41576
Accel and focus electrode design for ion engine with improved efficiency
[NASA-CASE-XNP-02839] c28 N70-41922
Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043
Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661
System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-INP-02592] c24 N71-20518
Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-INP-02923] c28 N71-23081
Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XNP-06942] c28 N71-23293
Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781
Low mass ionizing device for use in electric thrust spacecraft engines
[NASA-CASE-XNP-01954] c28 N71-28850
Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NPO-10737] c28 N72-11709
Process for fabricating matched pairs of dished screen and accelerator grids for ion thruster accelerator system
[NASA-CASE-LEW-11694-1] c28 N73-22721
Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783
Single grid accelerator system for electron bombardment type ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699
- ION EXCHANGE MEMBRANE ELECTROLYTES**
Inorganic ion exchange membrane electrolytes for fuel cell use
[NASA-CASE-XNP-04264] c03 N69-21337
Development and characteristics of ion-exchange membrane and electrode assembly for fuel cells or electrolysis cells
[NASA-CASE-XMS-02063] c03 N71-29044
- ION EXCHANGING**
Fuel system for thermal nuclear reactor which uses inorganic ion exchanger
[NASA-CASE-LEW-11645-2] c22 N73-28660
- ION PROBES**
Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863
- ION PROPULSION**
Variable thrust ion engine using thermal decomposition of solid cesium compound to produce propulsive vapor
[NASA-CASE-XNP-00923] c28 N70-36802
Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
Metal ion rocket engine design
[NASA-CASE-XLE-00342] c28 N70-37980
Method for producing porous tungsten plates for ionizing cesium compounds for propulsion of ion engines
[NASA-CASE-XLE-00455] c28 N70-38197
Accel and focus electrode design for ion engine with improved efficiency
[NASA-CASE-XNP-02839] c28 N70-41922
Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-XNP-04124] c28 N71-21822
Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NPO-10737] c28 N72-11709
Radial magnetic field for ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
Automatic shunting of ion thruster magnetic field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771
Process for fabricating matched pairs of dished screen and accelerator grids for ion thruster accelerator system
[NASA-CASE-LEW-11694-1] c28 N73-22721
Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c15 N74-22147
- ION SOURCES**
Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-INP-03332] c09 N71-10618
Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-INP-04338] c17 N71-23046
Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
Low mass ionizing device for use in electric thrust spacecraft engines
[NASA-CASE-INP-01954] c28 N71-28850
Development and characteristics of apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29464
Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c28 N74-31269
- IONIZATION CHAMBERS**
Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-XNP-03128] c10 N70-41991
Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-XNP-04124] c28 N71-21822
Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-ERC-10044-1] c14 N71-27090
Development and characteristics of apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29464

- IONIZATION GAGES**
 Ionization vacuum gage
 [NASA-CASE-XNP-00646] c14 N70-35666
 Ionization control system design for monitoring
 separately located ion gage pressures on
 vacuum chambers
 [NASA-CASE-XLE-00787] c14 N71-21090
 Development and characteristics of apparatus for
 ionization analysis
 [NASA-CASE-ARC-10017-1] c14 N72-29464
 Ionization gage for measuring ultrahigh vacuum
 levels
 [NASA-CASE-XLA-05087] c14 N73-30391
- IONIZATION POTENTIALS**
 Electrodes having array of small surfaces for
 field ionization
 [NASA-CASE-ERC-10013] c09 N71-26678
- IONIZED GASES**
 Plasma probes having guard ring and primary
 sensor at same potential to prevent stray wall
 current collection in ionized gases
 [NASA-CASE-XLE-00690] c25 N69-39884
 Transient heat transfer gage for measuring total
 radiant intensity from far ultraviolet and
 ionized high temperature gases
 [NASA-CASE-XNP-09802] c33 N71-15641
- IONIZERS**
 Description of electrical equipment and system
 for purification of waste water by producing
 silver ions for bacterial control
 [NASA-CASE-MSC-10960-1] c03 N71-24718
 Process for fabricating matched pairs of dished
 screen and accelerator grids for ion thruster
 accelerator system
 [NASA-CASE-LEW-11694-1] c28 N73-22721
- IONIZING RADIATION**
 High voltage cable for use in high intensity
 ionizing radiation fields
 [NASA-CASE-XNP-00738] c09 N70-38201
 Reinforced polyquinoxaline gasket and method of
 preparing the same --- resistant to ionizing
 radiation and liquid hydrogen temperatures
 [NASA-CASE-MPS-21364-1] c15 N74-18126
- IONOSPHERE**
 Lightweight, rugged, inexpensive satellite
 battery for producing electrical power from
 ionosphere using electrodes with different
 contact potentials
 [NASA-CASE-XGS-01593] c03 N70-35408
- IONS**
 Micrometeoroid analyzer using arrays of
 interconnected capacitors and ion detector
 [NASA-CASE-ARC-10443-1] c14 N73-20477
- IRISES (MECHANICAL APERTURES)**
 Waveguide, thin film window and microwave irises
 [NASA-CASE-LAR-10513-1] c07 N72-25170
 Development of thin film microwave iris
 installed in microwave waveguide transverse to
 flow of energy in waveguide
 [NASA-CASE-LAR-10511-1] c09 N72-29172
- IRON OXIDES**
 System for recovering oxygen and/or water from
 extraterrestrial soil and iron oxide materials
 [NASA-CASE-MSC-12332-1] c15 N72-15476
- IRRADIATION**
 Solar sensor with coarse and fine sensing
 elements for matching preirradiated cells on
 degradation rates
 [NASA-CASE-XLA-01584] c14 N71-23269
 Apparatus for obtaining isotropic irradiation on
 film emulsion for parallel radiation source
 [NASA-CASE-MPS-20095] c24 N72-11595
 Production of pure metals
 [NASA-CASE-LEW-10906-1] c06 N74-30502
- ISOCYANATES**
 Fire retardant polyisocyanurate foam with high
 temperature resistance
 [NASA-CASE-ARC-10280-1] c18 N70-34695
- ISOLATORS**
 Internal labyrinth and shield structure to
 improve electrical isolation of propellant
 feed source from ion thruster
 [NASA-CASE-LEW-10210-1] c28 N71-26781
- ISOPROPYL ALCOHOL**
 Preparation of fluorinated polyethers from
 2-hydro-perhaloisopropyl alcohols
 [NASA-CASE-MPS-11492] c06 N73-30102
- ISOTHERMAL LAYERS**
 Double-wall isothermal cylinder containing heat
 transfer fluid thermal reservoir as spacecraft
 insulation cover
 [NASA-CASE-MPS-20355] c33 N71-25353
- JET AIRCRAFT**
 Deflector for preventing objects from entering
 nacelle inlets of jet aircraft
 [NASA-CASE-XLE-00388] c26 N70-34788
- JET AIRCRAFT NOISE**
 Upper surface, external flow, jet-augmented flap
 configuration for high wing jet aircraft for
 noise reduction
 [NASA-CASE-XLA-00087] c02 N70-33332
 Jet aircraft exhaust nozzle for noise reduction
 [NASA-CASE-LAR-10951-1] c28 N73-19819
 Jet aircraft noise and sonic boom measuring
 device which converts sound pressure into
 electric current
 [NASA-CASE-LAR-11173-1] c14 N73-22387
 Development of aircraft configuration for
 reduction of jet aircraft noise by exhausting
 engine gases over upper surface of wing
 [NASA-CASE-LAR-11087-1] c02 N73-26008
 Method and apparatus for improving operating
 efficiency and reducing low speed noise for
 turbine aircraft engines
 [NASA-CASE-LAR-11310-1] c28 N73-31699
 Noise suppressor --- for turbofan engine by
 incorporating annular acoustically porous
 elements in exhaust and inlet ducts
 [NASA-CASE-LAR-11141-1] c02 N74-32418
 Abating exhaust noises in jet engines
 [NASA-CASE-ARC-10712-1] c28 N74-33218
- JET AMPLIFIERS**
 Fluid jet amplifier with fluid from jet nozzle
 deflected by inlet pressure
 [NASA-CASE-XLE-03512] c12 N69-21466
 Fluid control jet amplifiers
 [NASA-CASE-XLE-09341] c12 N71-28741
- JET BLAST EFFECTS**
 Separation mechanism for use between stages of
 multistage rocket vehicles
 [NASA-CASE-XLA-00188] c15 N71-22874
- JET CONTROL**
 Attitude control device for space vehicles
 [NASA-CASE-XNP-00294] c21 N70-36938
- JET ENGINES**
 Absorptive, nonreflecting barrier mounted
 between closely spaced jet engines on
 supersonic aircraft, for preventing shock wave
 interference
 [NASA-CASE-XLA-02865] c28 N71-15563
 Development of thrust dynamometer for measuring
 performance of jet and rocket engines
 [NASA-CASE-XLE-05260] c14 N71-20429
 Afterburner-equipped jet engine nacelle with
 slotted configuration afterbody
 [NASA-CASE-XLA-10450] c28 N71-21493
 Process for welding compressor and turbine
 blades to rotors and discs of jet engines
 [NASA-CASE-LEW-10533-1] c15 N73-28515
 Variably positioned guide vanes for aerodynamic
 choking
 [NASA-CASE-LAR-10642-1] c28 N74-31270
- JET EXHAUST**
 Development of aircraft configuration for
 reduction of jet aircraft noise by exhausting
 engine gases over upper surface of wing
 [NASA-CASE-LAR-11087-1] c02 N73-26008
 Jet exhaust noise suppressor
 [NASA-CASE-LEW-11286-1] c02 N74-27490
- JET FLAPS**
 Upper surface, external flow, jet-augmented flap
 configuration for high wing jet aircraft for
 noise reduction
 [NASA-CASE-XLA-00087] c02 N70-33332
- JET FLOW**
 Two-phase flow system with discrete, impinging
 two-phase jets
 [NASA-CASE-NPO-11556] c12 N72-25292
- JET MIXING FLOW**
 Fuel injection system for maximum combustion
 efficiency of rocket engines
 [NASA-CASE-XLE-00111] c28 N70-38199
- JET NOZZLES**
 Fluid jet amplifier with fluid from jet nozzle
 deflected by inlet pressure

- [NASA-CASE-XLE-03512] c12 N69-21466
Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c14 N74-15093
Cascade plug nozzle
[NASA-CASE-LAR-11674-1] c28 N74-33220
- JET THROUST**
System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
Drive mechanism for operating reactance attitude control system for aerospace bodies
[NASA-CASE-INP-01598] c21 N71-15583
- JETTISON SYSTEMS**
Describing assembly for opening stabilizing and decelerating flaps of flight capsules used in space research
[NASA-CASE-XMF-03169] c31 N71-15675
System for deploying and ejecting releasable clamshell fairing sections from spinning sounding rockets
[NASA-CASE-GSC-10590-1] c31 N73-14853
- JIGS**
Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c15 N74-32926
- JOINING**
Transparent plastic film for attaching cover glasses to silicon solar cells
[NASA-CASE-LEW-11065-1] c03 N72-11064
- JOINTS (ANATOMY)**
Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
Cord restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623
Orthotic arm joint --- for manipulating objects in response to electrical signals
[NASA-CASE-MFS-21611-1] c05 N74-10100
- JOINTS (JUNCTIONS)**
Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
Elastic universal joint for rocket motor mounting
[NASA-CASE-XNP-00416] c15 N70-36947
Portable device for aligning surfaces of two adjacent wall or sheet sections for joining at point of junction
[NASA-CASE-XMP-01452] c15 N70-41371
Design and development of flexible joint for pressure suits
[NASA-CASE-XMS-09636] c05 N71-12344
Elbow forming in jacketed pipes while maintaining separation between core shape and jacket pipes
[NASA-CASE-XNP-10475] c15 N71-24679
Method and apparatus for precision sizing and joining of large diameter tubes by bulging or constricting overlapping ends
[NASA-CASE-XMF-05114-2] c15 N71-26148
Universal joints for connecting two displaced shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467
Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-INP-01855] c15 N71-28937
Mechanism for restraining universal joints to prevent separation while allowing bending, angulation, and lateral offset in any position about axis
[NASA-CASE-XNP-02278] c15 N71-28951
Explosive welding of thin metal scarf joint
[NASA-CASE-LAR-11211-1] c15 N73-14480
Improved latching device for joining structural components in motionless relationship
[NASA-CASE-MFS-21606-1] c15 N73-22417
Diffusion welding in air --- solid state welding of butt joint by fusion welding, surface cleaning, and heating
[NASA-CASE-LEW-11387-1] c15 N74-18128
- Method of determining bond quality of power transistors attached to bed substrates --- X ray inspection of junction microstructure
[NASA-CASE-MFS-21931-1] c09 N74-21858
Bonded joint and method --- for reducing peak shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c15 N74-23064
Flexible joint for pressurizable garment
[NASA-CASE-MSC-11072] c05 N74-32546
An externally supported internally stabilized flexible duct joint
[NASA-CASE-MFS-19194-1] c15 N74-34882
- JOSEPHSON JUNCTIONS**
A doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NPO-13348-1] c14 N74-20022
- JOULE-THOMSON EFFECT**
Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NPO-10309] c15 N69-23190
- JOURNAL BEARINGS**
Slit regulated gas journal bearing
[NASA-CASE-XNP-00476] c15 N70-38620
Journal air bearing with cylindrical cup designed to ride on shaft
[NASA-CASE-MFS-20423] c15 N72-11388
Journal bearings
[NASA-CASE-LEW-11076-3] c15 N74-10475
Journal bearings
[NASA-CASE-LEW-11076-4] c15 N74-18134
Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c15 N74-21061
Journal Bearings
[NASA-CASE-LEW-11076-2] c15 N74-32921
- JUNCTION DIODES**
Phototransistor with base collector junction diode for integration into photo sensor arrays
[NASA-CASE-MFS-20407] c09 N73-19235
- JUNCTION TRANSISTORS**
Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318
Miniature piezjunction semiconductor transducer with in situ stress coupling
[NASA-CASE-ERC-10087-2] c14 N72-31446
Method of determining bond quality of power transistors attached to bed substrates --- X ray inspection of junction microstructure
[NASA-CASE-MFS-21931-1] c09 N74-21858

K

KINETIC ENERGY

Non-reusable kinetic energy absorber for application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34861

KINETIC FRICTION

Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-INP-08680] c14 N71-22995

KINETICS

Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477

L

LABORATORY EQUIPMENT

Design of mechanical device for stirring several test tubes simultaneously
[NASA-CASE-XAC-06956] c15 N71-21177
Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
Development of variable angle device for positioning test tubes to permit optimum drying of culture media
[NASA-CASE-LAR-10507-1] c11 N72-25284
Development of method for controlling vapor content of gas
[NASA-CASE-NPO-10633] c03 N72-28025
Apparatus for mixing two or more liquids under zero gravity conditions
[NASA-CASE-LAR-10195-1] c15 N73-19458

- Automatic real-time pair-feeding system for animals
[NASA-CASE-ARC-10302-1] c04 N74-15778
- LAMINAR FLOW**
Laminar flow of liquid coolants in rocket engines
[NASA-CASE-NPO-10122] c12 N71-17631
- LAMINATES**
Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-INP-04338] c17 N71-23046
Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards
[NASA-CASE-MFS-20408] c18 N73-12604
Development of composite structures for spacecraft to serve as anti-meteoroid device
[NASA-CASE-LAR-10788-1] c31 N73-20880
Improved bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c15 N74-14141
Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c18 N74-16249
Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MFS-21364-1] c15 N74-18126
Method of laminating structural members
[NASA-CASE-XLA-11028-1] c18 N74-27035
- LANDING AIDS**
Electro-optical attitude sensing device for landing approach of flight vehicle
[NASA-CASE-XMS-01994-1] c14 N72-17326
Magnetic method for detection of aircraft position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619
- LANDING GEAR**
Pivotal shock absorbing assembly for use as load distributing portion in landing gear systems of space vehicles
[NASA-CASE-XMP-03856] c31 N70-34159
Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160
Landing pad assembly for aerospace vehicles
[NASA-CASE-XMP-02853] c31 N70-36654
Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825
Spacecraft shock absorbing system for soft landings
[NASA-CASE-XMP-02108] c31 N70-36845
Shock absorber for landing gear of lunar or planetary landing modules
[NASA-CASE-XMP-01045] c15 N70-40354
Vertically descending flight vehicle landing gear for rough terrain
[NASA-CASE-XMP-01174] c02 N70-41589
- LANDING MODULES**
Shock absorber for landing gear of lunar or planetary landing modules
[NASA-CASE-XMP-01045] c15 N70-40354
- LANDING SIMULATION**
Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786
- LASER DOPPLER VELOCIMETERS**
Combined dual scatter, local oscillator laser Doppler velocimeter
[NASA-CASE-ARC-10642-1] c14 N74-18099
- LASER HEATING**
Electric power generation system directly from laser power
[NASA-CASE-NPO-13308-1] c03 N74-19702
- LASER MATERIALS**
Development of laser head for simultaneous optical pumping of several dye lasers
[NASA-CASE-LAR-11341-1] c16 N73-25564
Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c16 N74-16187
- LASER MODE LOCKING**
Procedure and device for effecting dual mode locking in pulsed Nd-YAG lasers
[NASA-CASE-GSC-11746-1] c16 N73-32398
- LASER MODES**
Xenon flashlamp driver system for optical laser pumping
[NASA-CASE-ERC-10283] c16 N72-25485
Development of acoustical controlled distributed feedback laser with continuous frequency spectrum tuning
[NASA-CASE-NPO-13175-1] c16 N73-27431
- LASER OUTPUTS**
Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31143
Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-MFS-20386] c21 N71-19212
Development of apparatus for amplitude modulation of diode laser by periodic discharge of direct current power supply
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- Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
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- Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
 [NASA-CASE-NFS-11132] c15 N71-17649
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 [NASA-CASE-IMS-03745] c15 N71-21076
- Latching mechanism with pivoting catch and self-contained spring ejector
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 [NASA-CASE-IAC-01404] c05 N70-41581
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 [NASA-CASE-INP-01307] c21 N70-41856
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 [NASA-CASE-XLA-08967] c02 N71-27088
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 [NASA-CASE-IMS-04292] c15 N71-22722
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 [NASA-CASE-XLA-01396] c03 N71-12259
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 [NASA-CASE-XKS-10543] c07 N71-26292
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 [NASA-CASE-IGS-04554] c15 N69-39786
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 [NASA-CASE-XLA-00165] c31 N70-33242
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 [NASA-CASE-XLA-01486] c01 N71-23497
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 [NASA-CASE-XMF-02307] c14 N71-10779
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 [NASA-CASE-LAR-10323-1] c12 N71-17573
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 [NASA-CASE-IAC-07043] c05 N71-23161
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 [NASA-CASE-ERC-10150] c14 N71-28992
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 [NASA-CASE-INP-04111] c14 N71-15622
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 [NASA-CASE-GSC-10700] c23 N71-30027
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- [NASA-CASE-GSC-11133-1] c23 N72-11568
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 [NASA-CASE-XLE-00454] c23 N71-17802
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 activities
 [NASA-CASE-MSC-12243-1] c05 N71-24728
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 [NASA-CASE-XMS-09637-1] c05 N71-24730
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 [NASA-CASE-MSC-12411-1] c05 N72-20096
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 [NASA-CASE-XLA-8914] c15 N73-12492
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 [NASA-CASE-NPO-10337] c14 N71-15604
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- Flexible barrier membrane comprising porous
substrate and incorporating liquid gallium or
indium metal used as sealant barriers for
spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747
- Shell-side liquid metal boiler employing tube
and shell heat exchanger
[NASA-CASE-NPO-10831] c33 N72-20915
- U shaped heated tube for distillation and
purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129
- Electromagnetic flow rate meter --- for liquid
metals
[NASA-CASE-LEW-10981-1] c14 N74-21018
- LIQUID NITROGEN**
- Transferring liquid nitrogen through vacuum
chamber to cryopanel
[NASA-CASE-LAR-10031] c15 N72-22484
- LIQUID OXYGEN**
- Dye penetrant and technique for nondestructive
tests of solid surfaces contacted by liquid
oxygen
[NASA-CASE-XMP-02221] c18 N71-27170
- LIQUID PHASES**
- Method and feed system for separating and
orienting liquid and vapor phases of liquid
propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
- Hydraulic apparatus for casting and molding of
liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975
- Mixed liquid and vapor phase analyzer design
with thermocouples for relative heat transfer
measurement
[NASA-CASE-NPO-10691] c14 N71-26199
- LIQUID PROPELLANT ROCKET ENGINES**
- High thrust annular liquid propellant rocket
engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284
- Attitude and propellant flow control system for
liquid propellant rocket vehicles
[NASA-CASE-XMP-00185] c21 N70-34539
- Injector manifold assembly for bipropellant
rocket engines providing for fuel propellant
to serve as coolant
[NASA-CASE-XMP-00148] c28 N70-38710
- Collapsible auxiliary tank for restarting liquid
propellant rocket motors under zero gravity
[NASA-CASE-XNP-01390] c28 N70-41275
- Rocket propellant injector with porous faceplate
for rocket engine combustion chamber
[NASA-CASE-LEW-11071-1] c27 N73-27695
- Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c28 N74-13502
- A space vehicle
[NASA-CASE-NPS-22734-1] c31 N74-20541
- LIQUID ROCKET PROPELLANTS**
- Propellant injectors for rocket combustion
chambers
[NASA-CASE-XLE-00103] c28 N70-33241
- Liquid rocket systems for propulsion and control
of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910
- Igniter capsule for chemical ignition of liquid
rocket propellants
[NASA-CASE-XLE-00323] c28 N70-38505
- High temperature spark plug for igniting liquid
rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925
- Compact high pressure filter for rocket fuel lines
[NASA-CASE-XNP-00732] c28 N70-41447
- Venting device for liquid propellant storage
tank using magnetic field to separate liquid
and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
- Liquid propellant tank design with semitoroidal
bulkhead
[NASA-CASE-XMP-01899] c31 N70-41948
- Method and feed system for separating and
orienting liquid and vapor phases of liquid
propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
- Control valve and coaxial variable injector for
controlling bipropellant mixture ratio and flow

[NASA-CASE-XNP-09702] c15 N71-17654
 Slush and swirl alleviator for liquid propellant tanks during transport and flight
 [NASA-CASE-XLA-05749] c15 N71-19569
 Filler valve design for supplying liquid propellants at high pressure to space vehicles
 [NASA-CASE-XNP-01747] c15 N71-23024
 Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
 [NASA-CASE-NPO-10185] c10 N71-26339
 Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
 [NASA-CASE-XNP-08881] c17 N71-28747
 Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
 [NASA-CASE-MFS-11204] c14 N71-29134

LIQUID SLOSHING
 Slush damping method for liquid rocket propellant tanks
 [NASA-CASE-XMP-00658] c12 N70-38997
 Flexible ring slush damping baffle for spacecraft fuel tank
 [NASA-CASE-LAR-10317-1] c32 N71-16103
 Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
 [NASA-CASE-XLA-04605] c32 N71-16106
 Hot-wire liquid level detector for cryogenic propellants
 [NASA-CASE-XLE-00454] c23 N71-17802
 Slush and swirl alleviator for liquid propellant tanks during transport and flight
 [NASA-CASE-XLA-05749] c15 N71-19569
 Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slush amplitude, and fuel depth monitoring
 [NASA-CASE-XLA-05541] c12 N71-26387

LIQUID-GAS MIXTURES
 Liquid-gas separator adapted for use in zero gravity environment - drawings
 [NASA-CASE-XMS-01624] c15 N70-40062
 Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions
 [NASA-CASE-XMS-01492] c05 N70-41297
 Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
 [NASA-CASE-XLE-01449] c15 N70-41646
 Liquid-gaseous centrifugal separator for weightlessness environment
 [NASA-CASE-XLA-00415] c15 N71-16079
 Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
 [NASA-CASE-XMP-04042] c15 N71-23023

LIQUID-VAPOR INTERFACES
 Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
 [NASA-CASE-XLE-00586] c15 N71-15968
 Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
 [NASA-CASE-XNP-02862-1] c15 N71-26294
 Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
 [NASA-CASE-MFS-11204] c14 N71-29134

LIQUIDS
 Liquid-gas separator adapted for use in zero gravity environment - drawings
 [NASA-CASE-XMS-01624] c15 N70-40062
 Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
 [NASA-CASE-NPO-10037] c09 N71-19610
 Purification apparatus for vaporization and fractional distillation of liquids
 [NASA-CASE-XNP-08124] c15 N71-27184
 Quantitative liquid measurements in container by resonant frequencies
 [NASA-CASE-XNP-02500] c18 N71-27397

Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir
 [NASA-CASE-MSC-11847-1] c14 N72-11363
 Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface
 [NASA-CASE-LEW-10359] c33 N72-25911
 Pressurized tank for feeding liquid waste into processing equipment
 [NASA-CASE-LAR-10365-1] c05 N72-27102
 Automatic liquid collection and disposal system
 [NASA-CASE-LAR-11071-1] c15 N73-18474
 Apparatus for mixing two or more liquids under zero gravity conditions
 [NASA-CASE-LAR-10195-1] c15 N73-19458
 Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
 [NASA-CASE-ARC-10441-1] c15 N74-15126
 Method and device for detection of surface discontinuities or defects
 [NASA-CASE-MSC-14187-1] c14 N74-32879

LITHIUM COMPOUNDS
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 [NASA-CASE-NPO-10998-1] c06 N73-32029

LOAD DISTRIBUTION (FORCES)
 Force measuring instrument for structural members, particularly fastening bolts or studs
 [NASA-CASE-XMF-00456] c14 N70-34705
 Multiple Belleville spring assembly with even load distribution
 [NASA-CASE-INP-00840] c15 N70-38225

LOAD TESTING MACHINES
 Load cell protection device using spring-loaded breakaway mechanism
 [NASA-CASE-XMS-06782] c32 N71-15974
 Development of device for transferring load from load cell to bypass mechanism
 [NASA-CASE-XMS-06329-1] c15 N71-20441
 Method and apparatus for tensile testing of metal foil
 [NASA-CASE-LAR-10208-1] c14 N74-30894

LOAD TESTS
 Differential pressure cell insensitive to changes in ambient temperature and extreme overload
 [NASA-CASE-IAC-00042] c14 N70-34816

LOADING OPERATIONS
 Air bearings for near frictionless transfer of loads from one body to another
 [NASA-CASE-IMF-01887] c15 N71-10617

LOADS (FORCES)
 Device for handling heavy loads by distributing forces
 [NASA-CASE-XNP-04969] c11 N69-27466
 Two plane balance for simultaneous measurements of multiple forces
 [NASA-CASE-IAC-00073] c14 N70-34813
 Improving load capacity and fatigue life of rolling element systems in rockets and missiles
 [NASA-CASE-XLE-02999] c15 N71-16052
 Development of device for transferring load from load cell to bypass mechanism
 [NASA-CASE-XMS-06329-1] c15 N71-20441
 Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
 [NASA-CASE-XMS-05890] c09 N71-23191
 Solid state force measuring electromechanical transducers made of piezoresistive materials
 [NASA-CASE-ERC-10088] c26 N71-25490
 Turn on current transient limiter for controlling peak current flow in high capacity load
 [NASA-CASE-GSC-10413] c10 N71-26531
 Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
 [NASA-CASE-GSC-10065-1] c10 N71-27136
 Force balanced throttle valve for fuel control in rocket engines
 [NASA-CASE-NPO-10808] c15 N71-27432
 Energy absorption device in high precision gear train for protection against damage to components caused by stop loads
 [NASA-CASE-XNP-01848] c15 N71-28959
 Air bearing for use in exterior environment for moving heavy loads
 [NASA-CASE-WLP-10002] c15 N72-17451

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- Measuring device for bearing preload using spring washers
[NASA-CASE-MFS-20434] c11 N72-25288
- Variable direction force coupler for transmitting force along selectable curve path
[NASA-CASE-MFS-20317] c15 N73-13463
- Turnbuckle device for tensile stress load measurements
[NASA-CASE-MFS-21488-1] c14 N73-23526
- Versatile ergometer with work load control
[NASA-CASE-MFS-21109-1] c05 N73-27941
- Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c14 N74-13129
- G-load measuring and indicator apparatus --- for aircraft
[NASA-CASE-ARC-10806] c14 N74-27872
- LOCATES SYSTEM**
- System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
- Position determination systems --- using orbital antenna scan of celestial body
[NASA-CASE-MSC-12593-1] c09 N74-14942
- Aircraft mounted crash activated transmitter device
[NASA-CASE-MFS-16609-3] c09 N74-34647
- LOCKING**
- Releasable coupling device designed to receive and retain matching ends of electrical connectors
[NASA-CASE-XMS-07846-1] c09 N69-21927
- LOCKS (FASTENERS)**
- Ball locking device which releases in response to small forces when subjected to high axial loads
[NASA-CASE-XMP-01371] c15 N70-41829
- Low friction bearing and lock mechanism for two-axis gibal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537
- Locking device for retaining turbine rotor blades on turbine wheel
[NASA-CASE-XMP-00816] c28 N71-28928
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- Design of quick release locking pin for joining two or more load-carrying structural members
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- LOCOMOTION**
- Jet shoes for space locomotion
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[NASA-CASE-XMS-02977] c11 N71-10746
- Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119
- LOGARITHMS**
- Technique for deriving logarithm of input signal using exponentially varying electric signal inversely
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- LOGIC CIRCUITS**
- Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
- Counter/divider circuit for accuracy and reliability in binary circuits
[NASA-CASE-XMP-00421] c09 N70-34502
- Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
[NASA-CASE-XMP-00432] c08 N70-35423
- Conversion system for increasing resolution of analog to digital converters
[NASA-CASE-XAC-00404] c08 N70-40125
- Data processor having multiple sections activated at different times by selective power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494
- Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XMP-05415] c08 N71-12505
- Bistable multivibrator circuits operating at high speed and low power dissipation
[NASA-CASE-IGS-00823] c10 N71-15910
- Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
- Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-IGS-04766] c08 N71-18602
- Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-XLA-07732] c08 N71-18751
- Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
- Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- Design and development of multistage current steering switch with inductively coupled magnetic cores
[NASA-CASE-INP-08567] c09 N71-26000
- Logic circuit for generating multibit binary code word in parallel
[NASA-CASE-INP-04623] c10 N71-26103
- Adaptive signal generating system and logic circuits for satellite television systems
[NASA-CASE-GSC-11367] c10 N71-26374
- Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
- Logical function and circuit generator
[NASA-CASE-XLA-05099] c09 N73-13209
- Integrated microcircuits and complementary four-phase logic system
[NASA-CASE-MSC-14240-1] c10 N73-21240
- A synchronous binary array divider
[NASA-CASE-ERC-10180-1] c08 N74-20836
- Computer interface system --- using asynchronous clocks
[NASA-CASE-NPO-13428-1] c08 N74-30549
- LONGITUDINAL CONTROL**
- Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
[NASA-CASE-XAC-01404] c05 N70-41581
- LOOP ANTENNAS**
- Collapsible, space erectable loop antenna system for space vehicle
[NASA-CASE-XMP-00437] c07 N70-40202
- Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113
- LOOPS**
- Tape cartridge with high capacity storage of endless-loop magnetic tape
[NASA-CASE-IGS-00769] c14 N70-41647
- Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-IGS-01223] c07 N71-10609
- Filter for third order phase locked loops in signal receivers
[NASA-CASE-NPO-11941-1] c10 N73-27171
- High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ARC-10516-1] c23 N74-21300
- Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
[NASA-CASE-LAR-10168-1] c09 N74-22865
- LOW ASPECT RATIO**
- Aerospace configuration with low and high aspect ratio variability for high and low speed flight
[NASA-CASE-XLA-00142] c02 N70-33286
- Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
- LOW COST**
- Low cost efficient thermionic converter for use in nuclear reactors
[NASA-CASE-NPO-13121-1] c22 N73-12702
- LOW DENSITY MATERIALS**
- Method and photodetector device for locating

- abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993
- Mixing insert for foam dispensing apparatus
[NASA-CASE-MFS-20607-1] c15 N74-26989
- Intumescent composition, foamed product prepared
therewith and process for making same
[NASA-CASE-ARC-10304-2] c18 N74-27037
- LOW FREQUENCIES**
Determining sway of buildings by low frequency
device using pendulum
[NASA-CASE-XMF-00479] c14 N70-34794
- LOW MOLECULAR WEIGHTS**
Process for preparing high molecular weight
polyaryloxysilanes from lower molecular weight
forms
[NASA-CASE-XMF-08674] c06 N71-28807
- LOW NOISE**
Low phase noise frequency divider for use with
deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229
- LOW PRESSURE**
Flowmeters for sensing low fluid flow rate and
pressure for application to respiration rate
studies
[NASA-CASE-PRC-10022] c12 N71-26546
- LOW SPEED**
Variable geometry manned orbital vehicle having
high aerodynamic efficiency over wide speed
range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
- Device utilizing RC rate generators for
continuous slow speed measurement
[NASA-CASE-XMF-02966] c10 N71-24863
- LOW TEMPERATURE ENVIRONMENTS**
Flexible, fragile electrochemical cell and
package for operation in low temperature
environment
[NASA-CASE-XGS-10010] c03 N72-15986
- LOW TEMPERATURE TESTS**
Cryostat for flexure fatigue testing of
composite materials
[NASA-CASE-XMF-02964] c14 N71-17659
- Cryostat for use with horizontal fatigue testing
machines at low temperatures
[NASA-CASE-XMF-10968] c14 N71-24234
- LOW VACUUM**
Vibration damping system operating in low vacuum
environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673
- LOW VOLTAGE**
High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
- Flexible monopole antenna with broad bandwidth
and low voltage standing wave ratio
[NASA-CASE-MS-12101] c09 N71-18720
- Circuit design for failure sensing and
protecting low voltage electric generator and
power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- LUBRICANTS**
Metallic film diffusion into metal or ceramic
surfaces for boundary lubrication in aerospace
environments
[NASA-CASE-ILE-01765] c18 N71-10772
- Metallic film diffusion for boundary lubrication
in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
- Fluorinated esters of polycarboxylic acid and
lubricating compositions for use at extreme
temperature
[NASA-CASE-MFS-21040-1] c06 N73-30098
- Thiophenyl ether disiloxanes and trisiloxanes
useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c15 N74-21058
- Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c15 N74-21061
- LUBRICATING OILS**
Fluid seal formed by flexible disk on rotating
shaft to retain lubricating oils around shaft
[NASA-CASE-XLE-05130-2] c15 N71-19570
- LUBRICATION**
Variable resistance tension and lubrication
device, using oil-saturated leather wiper
[NASA-CASE-KSC-10723-1] c15 N73-23553
- Hollow high strength rolling elements for
antifriction bearings fabricated from
preformed components
[NASA-CASE-LEW-11026-1] c15 N73-33383
- LUBRICATION SYSTEMS**
Development of hybrid bearing lubrication system
with combination of standard type lubrication
and magnetic flux field for earth atmosphere
and space environment operation
[NASA-CASE-XMP-01641] c15 N71-22997
- Lubrication for bearings by capillary action
from oil reservoir of porous material
[NASA-CASE-XMP-03972] c15 N71-23048
- Journal Bearings
[NASA-CASE-LEW-11076-2] c15 N74-32921
- LUMINAIRES**
Visual target luminaires for retrofire attitude
control
[NASA-CASE-XMS-12158-1] c31 N69-27499
- Development of ultraviolet resonance lamp with
improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521
- Lamp modulator for generating visual indication
of presence and magnitude of signal
[NASA-CASE-KSC-10565] c09 N72-25250
- Electrodeless lamp circuit driven by induction
[NASA-CASE-MFS-21214-1] c09 N73-30181
- LUMINOSITY**
Mechanism for measuring nanosecond time
differences between luminous events using
streak camera
[NASA-CASE-ILA-01987] c23 N71-23976
- LUMINOUS INTENSITY**
Filter arrangement for controlling light
intensity in motion picture camera used in
optical pyrometry
[NASA-CASE-XLA-00062] c14 N70-33254
- Development of star intensity measuring system
which minimizes effects of outside interference
[NASA-CASE-XMP-06510] c14 N71-23797
- LUNAR BASES**
Development and characteristics of natural
circulation radiator for use with nuclear
power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046
- LUNAR COMMUNICATION**
Conversion system for transforming slow scan
rate of Apollo TV camera on moon to fast scan
of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
- Three transceiver lunar emergency system to
relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171
- LUNAR COMPOSITION**
Development and characteristics of pentrometer
for measuring physical properties of lunar
surface
[NASA-CASE-ILA-00934] c14 N71-22765
- LUNAR EXPLORATION**
Backpack carrier with retractable legs suitable
for lunar exploration and convertible to
rescue vehicle
[NASA-CASE-LAR-10056] c05 N71-12351
- Development and characteristics of pentrometer
for measuring physical properties of lunar
surface
[NASA-CASE-ILA-00934] c14 N71-22765
- Lightweight propulsion unit for movement of
personnel and equipment across lunar surface
[NASA-CASE-MFS-20130] c28 N71-27585
- Three transceiver lunar emergency system to
relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171
- LUNAR FLYING VEHICLES**
Kinesthetic control simulator with multiple
degree of freedom of movement similar to lunar
flying vehicles
[NASA-CASE-LAR-10276-1] c11 N70-26813
- LUNAR GRAVITATION**
Apparatus for training astronaut crews to
perform on simulated lunar surface under
conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474
- LUNAR GRAVITY SIMULATOR**
Lunar and planetary gravity simulator to test
vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786
- LUNAR LANDING**
Lunar landing flight research vehicle
[NASA-CASE-IFR-00929] c31 N70-34966
- LUNAR LOGISTICS**
Lightweight propulsion unit for movement of
personnel and equipment across lunar surface

[NASA-CASE-MFS-20130] c28 N71-27585

LUNAR ROCKS
Impact bit for cutting, collecting, and storing samples such as lunar rock cuttings [NASA-CASE-XNP-01412] c15 N70-42034

LUNAR SOIL
Development of device for separating, collecting, and viewing soil particles [NASA-CASE-XNP-09770] c15 N71-20440
Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments [NASA-CASE-XNP-09770-3] c11 N71-27036
System for recovering oxygen and/or water from extraterrestrial soil and iron oxide materials [NASA-CASE-MSC-12332-1] c15 N72-15476
Portable penetrometer for analyzing soil characteristics [NASA-CASE-MFS-20774] c14 N73-19420
Method for obtaining oxygen from lunar or similar soil [NASA-CASE-MSC-12408-1] c13 N74-13011

LUNAR SURFACE VEHICLES
Resilient vehicle wheel for lunar surface travel [NASA-CASE-MFS-20400] c31 N71-18611
Resilient wheel design with woven wire tire and abrasive treads for lunar surface vehicles [NASA-CASE-MFS-13929] c15 N71-27091

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Piston device for producing known constant positive pressure within lungs by using thoracic muscles [NASA-CASE-XMS-01615] c05 N70-41329

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MACHINE TOOLS
Rotary impact-type rock drill for recovering rock cuttings [NASA-CASE-XNP-07478] c14 N69-21923
Description of protective device for providing safe operating conditions around work piece in machine or metal working tool [NASA-CASE-XLE-01092] c15 N71-22797
Description of device for aligning stacked sheets of paper for repetitive cutting [NASA-CASE-XMS-04178] c15 N71-22798
Development and characteristics of frusto-conical die nib for extrusion of refractory metals [NASA-CASE-XLE-06773] c15 N71-23817
Design and development of layout tool for machine shop use to locate point in precise reference to straight or bowed reference edge [NASA-CASE-FRC-10005] c15 N71-26145
Optical gauging system for monitoring machine tool alignment [NASA-CASE-XAC-09489-1] c15 N71-26673
Caterpillar micropositioner for positioning machine tools adjacent to workpiece [NASA-CASE-GSC-10780-1] c14 N72-16283
An improved Geneva mechanism --- Including a star-wheel and a driver [NASA-CASE-NPO-13281-1] c15 N74-23071

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Design of mechanical device for stirring several test tubes simultaneously [NASA-CASE-XAC-06956] c15 N71-21177
Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain [NASA-CASE-XLA-02619] c10 N71-26334
Apparatus for forming drive belts [NASA-CASE-NPO-13205-1] c15 N74-32917

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Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications [NASA-CASE-BQN-10541-2] c15 N71-27135
Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates [NASA-CASE-XLA-10470] c15 N72-21489
Drilled ball bearing with a one piece anti-tipping cage assembly [NASA-CASE-LEW-11925-1] c15 N74-18133

MAGNESIUM
Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications [NASA-CASE-LAR-10953-1] c17 N73-27446

MAGNESIUM ALLOYS

Procedure for bonding polytetrafluoroethylene thermal protective sleeves to magnesium alloy conical shell components with different thermal coefficients [NASA-CASE-XLA-01262] c15 N71-21404
Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications [NASA-CASE-LAR-10953-1] c17 N73-27446

MAGNESIUM OXIDES
Method for determining presence and type of OH in MgO [NASA-CASE-NPO-10774] c06 N72-17095

MAGNET COILS
Improved alternator with windings of superconducting materials acting as permanent magnet [NASA-CASE-XLE-02824] c03 N69-39890
Relay circuit breaker with magnetic latching to provide conductive and nonconductive paths for current devices [NASA-CASE-MSC-11277] c09 N71-29008

MAGNETIC CHARGE DENSITY
Ion engine with magnetic circuit for optimal discharge [NASA-CASE-XLE-01124] c28 N71-14043

MAGNETIC CIRCUITS
Ion engine with magnetic circuit for optimal discharge [NASA-CASE-XLE-01124] c28 N71-14043

MAGNETIC COILS
Time division multiplexer with magnetic latching relays [NASA-CASE-XNP-00431] c09 N70-38998
Linear magnetic braking system with nonuniformly wrapped primary coil producing constant braking force on secondary coil [NASA-CASE-XLE-05079] c15 N71-17652
Electroexplosive safe-arm initiator using electric driven electromagnets coils and magnets to align charge [NASA-CASE-LAR-10372] c09 N71-18599

MAGNETIC CONTROL
Magnetically opened diaphragm design with camera shutter and expansion tube applications [NASA-CASE-XLA-03660] c15 N71-21060
Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment [NASA-CASE-XLA-00327] c25 N71-29184

MAGNETIC CORES
Variable frequency magnetic coupled multivibrator with temperature compensated frequency control circuit [NASA-CASE-XGS-00458] c09 N70-38604
Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform [NASA-CASE-XGS-00131] c09 N70-38995
Electronic counter circuit utilizing magnetic core and low power consumption [NASA-CASE-XNP-08836] c09 N71-12515
Pulsed magnetic core memory element with blocking oscillator feedback for interrogation without loss of digital information [NASA-CASE-XGS-03303] c08 N71-18595
Describing magnetic core current switching device for steering bipolar current pulses to memory units [NASA-CASE-NPO-10201] c08 N71-18694
Reliable magnetic core circuit apparatus with application in selection matrices for digital memories [NASA-CASE-XNP-01318] c10 N71-23033
Magnetic current regulator for saturable core transformer [NASA-CASE-ERC-10075] c09 N71-24800
Power switch with transfluxor type magnetic core [NASA-CASE-NPO-10242] c09 N71-24803
Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment [NASA-CASE-ERC-10125] c09 N71-24893
Temperature sensitive magnetometer with pulsating thermally cycled magnetic core [NASA-CASE-XAC-03740] c14 N71-26135
Digital magnetic core memory with sensing amplifier circuits [NASA-CASE-XNP-01012] c08 N71-28925

- Saturable magnetic core and signal detection for indicating impending saturation
[NASA-CASE-ERC-10089] c23 N72-17747
- Commutator for steering precisely controlled bidirectional currents through numerous loads by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199
- Banded transformer cores
[NASA-CASE-NPO-11966-1] c09 N74-17928
- Improved structure and method of producing composite of gapped and ungapped cores
[NASA-CASE-NPO-13413-1] c09 N74-33738
- MAGNETIC DIPOLES**
Torquemeter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725
- MAGNETIC DISKS**
Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning
[NASA-CASE-LAR-10590-1] c15 N70-26819
- MAGNETIC EFFECTS**
Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c15 N74-18132
- MAGNETIC FIELDS**
Magnetically diffused radial electric arc heater
[NASA-CASE-XLA-00330] c33 N70-34540
Method and apparatus for communicating through ionized layer of gases surrounding spacecraft during reentry into planetary atmospheres
[NASA-CASE-XLA-01127] c07 N70-41372
Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043
Development of wide range linear fluxgate magnetometer
[NASA-CASE-XGS-01587] c14 N71-15962
Magnetic element position sensing device, using misaligned electromagnets
[NASA-CASE-XGS-07514] c23 N71-16099
Development of non-magnetic indexing device for orienting magnetic flux sensing instrument in magnetic field without generation of detrimental magnetic fields
[NASA-CASE-XGS-02422] c15 N71-21529
Negation of magnetic fields produced by thin waferlike circuit elements in space vehicles
[NASA-CASE-XGS-03390] c03 N71-23187
Torquemeter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725
Fluxgate magnetometer for measuring magnetic field along two axes using one sensor
[NASA-CASE-GSC-01441-1] c14 N71-27325
Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
Magnetic method for detection of aircraft position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619
Radial magnetic field for ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
Automatic shunting of ion thruster magnetic field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771
Apparatus for determining distance to lighting strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175
Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
Hall effect magnetometer for measuring magnetic fields
[NASA-CASE-LEW-11632-2] c14 N73-29437
Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c09 N74-10195
- MAGNETIC FLUX**
Excitation and detection circuitry for flux responsive magnetic head
[NASA-CASE-XNP-04183] c09 N69-24329
Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-IGS-01881] c09 N70-40123
Development of hybrid bearing lubrication system with combination of standard type lubrication and magnetic flux field for earth atmosphere and space environment operation
[NASA-CASE-XNP-01641] c15 N71-22997
Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800
Magnetic flux pump for changing intensity of magnetic fields
[NASA-CASE-XNP-01187] c15 N73-28516
Method for increasing intensity of magnetic field by transferring flux
[NASA-CASE-XNP-01188] c15 N73-32361
- MAGNETIC FORMING**
Portable magnetomotive hammer for metal working
[NASA-CASE-XMP-03793] c15 N71-24833
Method and apparatus for portable high precision magnetomotive bulging, constricting, and joining of large diameter metal tubes
[NASA-CASE-XMP-05114-3] c15 N71-24865
- MAGNETIC INDUCTION**
Continuous operation, single phased, induction plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946
Automatic power supply circuit design for driving inductive loads and minimizing power consumption including solenoid example
[NASA-CASE-NPO-10716] c09 N71-24892
Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364
Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235
High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ARC-10516-1] c23 N74-21300
Brushless dc motor with wound rotor
[NASA-CASE-NPO-13437-1] c09 N74-27688
- MAGNETIC LENSES**
Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-XNP-04231] c14 N73-32325
- MAGNETIC MATERIALS**
Low density and low viscosity magnetic propellant for use under zero gravity conditions
[NASA-CASE-XLE-01512] c12 N70-40124
- MAGNETIC MEASUREMENT**
Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
Development of wide range linear fluxgate magnetometer
[NASA-CASE-XGS-01587] c14 N71-15962
Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
- MAGNETIC POLES**
Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNP-07481] c25 N69-21929
- MAGNETIC PUMPING**
Magnetic flux pump for changing intensity of magnetic fields
[NASA-CASE-XNP-01187] c15 N73-28516
Method for increasing intensity of magnetic field by transferring flux
[NASA-CASE-XNP-01188] c15 N73-32361
Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c15 N74-27904
- MAGNETIC RECORDING**
Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710
Magnetic recording head composed of ferrite core coated with thin film of aluminum-iron-silicon alloy

- [NASA-CASE-GSC-10097-1] c08 N71-27210
- MAGNETIC SIGNALS**
Plural recorder system which limits signal recording to signals of sufficient interest [NASA-CASE-XNS-06949] c09 N69-21467
- MAGNETIC STORAGE**
Nondestructive interrogating and state changing circuit for binary magnetic storage elements [NASA-CASE-XGS-00174] c08 N70-34743
Magnetic matrix memory system for nondestructive reading of information contained in matrix [NASA-CASE-XMP-05835] c08 N71-12504
Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage [NASA-CASE-XGS-04224] c10 N71-26418
Redundant memory for enhanced reliability of digital data processing system [NASA-CASE-GSC-10564] c10 N71-29135
Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage [NASA-CASE-NPO-11481] c21 N73-13644
- MAGNETIC SWITCHING**
Power switch with transfluxor type magnetic core [NASA-CASE-NPO-10242] c09 N71-24803
Design and development of multistage current steering switch with inductively coupled magnetic cores [NASA-CASE-XMP-08567] c09 N71-26000
- MAGNETIC TAPES**
Tape cartridge with high capacity storage of endless-loop magnetic tape [NASA-CASE-XGS-00769] c14 N70-41647
Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder [NASA-CASE-XGS-01223] c07 N71-10609
Development of low friction magnetic recording tape [NASA-CASE-XGS-00373] c23 N71-15978
System for recording and reproducing PCM data from data stored on magnetic tape [NASA-CASE-XGS-01021] c08 N71-21042
Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces [NASA-CASE-XMP-08680] c14 N71-22995
Technique for recovery of voice data from heat damaged magnetic tape [NASA-CASE-MSC-14219-1] c07 N74-27612
- MAGNETIZATION**
Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems [NASA-CASE-XMP-06942] c28 N71-23293
Method of manufacturing composite superconductors [NASA-CASE-LEW-11502-1] c09 N74-33739
- MAGNETO-OPTICS**
Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control [NASA-CASE-NPO-11317-2] c16 N74-13205
- MAGNETOHYDRODYNAMIC FLOW**
Improving performance of magnetoplasma dynamic arc rocket engine [NASA-CASE-LEW-11180-1] c25 N73-25760
- MAGNETOHYDRODYNAMIC GENERATORS**
Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields [NASA-CASE-XMP-07481] c25 N69-21929
Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs [NASA-CASE-XLE-02083] c03 N69-39983
Thermoelectric power conversion by liquid metal flowing through magnetic field [NASA-CASE-XMP-00644] c03 N70-36803
Crossed field MHD plasma generator-accelerator [NASA-CASE-XLA-03374] c25 N71-15562
- MAGNETOMETERS**
Nonmagnetic thermal motor for magnetometer movement [NASA-CASE-XAR-03786] c09 N69-21313
Cryogenic flux-gated magnetometer using superconductors [NASA-CASE-XAC-02407] c14 N69-27423
- Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification [NASA-CASE-XGS-01881] c09 N70-40123
Development of wide range linear fluxgate magnetometer [NASA-CASE-XGS-01587] c14 N71-15962
Design and development of optically pumped resonance magnetometer for determining vectoral components in spatial coordinate system [NASA-CASE-XGS-04879] c14 N71-20428
Temperature sensitive magnetometer with pulsating thermally cycled magnetic core [NASA-CASE-XAC-03740] c14 N71-26135
Fluxgate magnetometer for measuring magnetic field along two axes using one sensor [NASA-CASE-GSC-10441-1] c14 N71-27325
Development and characteristics of magnetometer with single Bi2Se3 crystal as sensing element [NASA-CASE-LEW-11632-1] c14 N72-25440
Hall effect magnetometer for measuring magnetic fields [NASA-CASE-LEW-11632-2] c14 N73-29437
Hall effect magnetometer [NASA-CASE-LEW-11632-3] c14 N74-33944
- MAGNETRONS**
Tuning arrangement for frequency control of magnetron-type electron discharge device [NASA-CASE-XMP-09771] c09 N71-24841
- MAGNETS**
Magnetic bearing with diverse magnetic sources coupled to same air gap via different low magnetic reluctance paths for use with permanent magnets [NASA-CASE-GSC-11079-1] c21 N71-28461
- MAGNIFICATION**
Camera adapter design for image magnification including lens and illuminator [NASA-CASE-XMP-03844-1] c14 N71-26474
Passive type, magnifying scratch gage, force transducer [NASA-CASE-LAR-10496-1] c14 N72-22437
- MAGNITUDE**
Torquemeter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field [NASA-CASE-XGS-01013] c14 N71-23725
- MAINTENANCE**
Self testing and repairing computer comprising control and diagnostic unit and rollback points for error correction [NASA-CASE-NPO-10567] c08 N71-24633
Development of procedure for repairing fiberglass structures which retains geometry and strength of original structure [NASA-CASE-LAR-10416-1] c15 N72-27527
Development of process for bonding resinous body in cavities of honeycomb structures [NASA-CASE-MSC-12357] c15 N73-12489
Method of repairing discontinuity in fiberglass structures [NASA-CASE-LAR-10416-1] c18 N74-30001
- MAJFUNCTIONS**
Aircraft instrument for indicating malfunctions during takeoff [NASA-CASE-ILA-00100] c14 N70-36807
- MANDRELS**
Mandrel for shaping solid propellant rocket fuel into engine casing [NASA-CASE-ILA-00304] c27 N70-34783
Rotating, multisided mandrel for fabricating gored inflatable spacecraft [NASA-CASE-ILA-04143] c15 N71-17687
Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel [NASA-CASE-XLA-04126] c28 N71-26779
- MANIFOLDS**
Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant [NASA-CASE-XMP-00148] c28 N70-38710
- MANIPULATORS**
Manipulator for remote handling in zero gravity environment [NASA-CASE-MFS-14405] c15 N72-28495

- Development and characteristics of variable ratio, mixed-mode, bilateral master-slave control system for space shuttle reate manipulator system
[NASA-CASE-MSC-14245-1] c31 N73-30832
- Remote manipulator system
[NASA-CASE-MFS-22022-1] c05 N74-10099
- Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c15 N74-16139
- MANNED ORBITAL LABORATORIES**
- Artificial gravity system for simulating self-locomotion capability of astronauts in rotating environments
[NASA-CASE-XLA-03127] c11 N71-10776
- MANNED ORBITAL RESEARCH LABORATORIES**
- Manned space station collapsible for launching and self-erectable in orbit
[NASA-CASE-XLA-00678] c31 N70-34296
- Radial module manned space station with artificial gravity environment
[NASA-CASE-IMS-01906] c31 N70-41373
- MANNED SPACE FLIGHT**
- Three-port transfer valve with one port open continuously suitable for manned space flight
[NASA-CASE-XAC-01158] c15 N71-23051
- Device for removing air from water for use in life support systems in manned space flight
[NASA-CASE-XLA-8914] c15 N73-12492
- MANNED SPACECRAFT**
- Manned space capsule configuration for orbital flight and atmospheric reentry
[NASA-CASE-XLA-00149] c31 N70-37938
- Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37986
- Parachute system for lowering manned spacecraft from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009
- Design and configuration of manned space capsule
[NASA-CASE-XLA-01332] c31 N71-15664
- Development of method for producing artificial gravity in manned spacecraft
[NASA-CASE-IMP-02595] c31 N71-21881
- Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
- Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
- Spacecraft with artificial gravity and earthlike atmosphere
[NASA-CASE-LEW-11101-1] c31 N73-32750
- MANOMETERS**
- Magnetically centered liquid column float
[NASA-CASE-XAC-00030] c14 N70-34820
- Absolute pressure measuring device for measuring gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394
- MANUAL CONTROL**
- Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
- Manual control mechanism for adjusting control rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
- Manually activated heat pump for mechanically converting human operator output into heat energy
[NASA-CASE-NPO-10677] c05 N72-11084
- Development of flight simulator system to show position of joystick displacement
[NASA-CASE-NPO-11497] c08 N73-25206
- Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c03 N74-10942
- MANUFACTURING**
- Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
- Standard coupling design for mass production
[NASA-CASE-IMS-02532] c15 N70-41808
- Method for making screen with unlimited fineness of mesh and screen thickness
[NASA-CASE-XLE-00953] c15 N71-15966
- Describing apparatus for manufacturing operations in low and zero gravity environments of orbital space flight
[NASA-CASE-MFS-20410] c15 N71-19214
- Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
- Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779
- Shielded flat conductor cable fabricated by electroless and electrolytic plating
[NASA-CASE-MFS-13687] c09 N71-28691
- Production method for manufacturing porous tungsten bodies from tungsten powder particles
[NASA-CASE-IMP-04339] c17 N71-29137
- Improved bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c15 N74-14141
- Method of making porous conductive supports for electrodes --- by electroforming and stacking nickel foils
[NASA-CASE-GSC-11367-1] c03 N74-19692
- Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c15 N74-32917
- MAPPING**
- Solid state device for mapping flux and power in nuclear reactor cores
[NASA-CASE-XLE-00301] c14 N70-36808
- Design and development of random function tracer for obtaining coordinates of points on contour maps
[NASA-CASE-XLA-01401] c15 N71-21179
- Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118
- MAPS**
- Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c14 N74-21015
- An optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c13 N74-32780
- MASERS**
- Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-IGS-10518] c16 N71-28554
- Traveling wave maser for operation in 7 to 20 GHz frequency range
[NASA-CASE-NPO-11437] c16 N72-28521
- Method for producing storage bulb for atomic hydrogen maser
[NASA-CASE-NPO-13050-1] c16 N73-18508
- High temperature bonding of sapphire to sapphire by eutectic Al₂O₃ and ZrO₂ mixture to form sapphire rubidium maser cell
[NASA-CASE-GSC-11577-1] c15 N73-19467
- MASKING**
- Reusable masking boot for chemical machining operations
[NASA-CASE-IMP-02092] c15 N70-42033
- Composition and process for improving definition of resin masks used in chemical etching
[NASA-CASE-IGS-04993] c14 N71-17574
- MASS**
- Apparatus for measuring human body mass in zero or reduced gravity environment
[NASA-CASE-IMS-03371] c05 N70-42000
- Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
- MASS BALANCE**
- Two plane balance for simultaneous measurements of multiple forces
[NASA-CASE-XAC-00073] c14 N70-34813
- Control system for pressure balance device used in calibrating pressure gages
[NASA-CASE-IMP-04134] c14 N71-23755
- MASS DISTRIBUTION**
- Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
- MASS FLOW**
- Rocket engine injector orifice to accommodate changes in density, velocity, and pressure,

- thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
- Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365
- Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262
- MASS SPECTROMETERS**
Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator
[NASA-CASE-LAR-10180-1] c06 N71-13461
- Design and characteristics of time of flight mass spectrometer to measure or analyze gases at low pressures and time of flight of single gas molecule
[NASA-CASE-INP-01056] c14 N71-23041
- Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863
- Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
- High speed scanner for measuring mass of preselected gases at high sampling rate
[NASA-CASE-LAR-10766-1] c14 N72-21432
- Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography
[NASA-CASE-GSC-10903-1] c14 N73-12444
- Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-YNP-04231] c14 N73-32325
- Fast scan control for deflection type mass spectrometers
[NASA-CASE-LAR-11428-1] c14 N74-34857
- MASS SPECTROSCOPY**
Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c14 N74-32887
- MATERIAL ABSORPTION**
Describing sorption vacuum trap having housing with group of reentrant wall portions projecting into internal gas-pervious container filled with gas and vapor sorbent material
[NASA-CASE-XER-09519] c14 N71-18483
- MATERIALS HANDLING**
Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
- Catalyst bed element removing tool
[NASA-CASE-XPR-00811] c15 N70-36901
- Air bearings for near frictionless transfer of loads from one body to another
[NASA-CASE-YMP-01887] c15 N71-10617
- Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
- Method and apparatus for removing plastic insulation from wire using cryogenic equipment
[NASA-CASE-MFS-10340] c15 N71-17628
- Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089
- Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-XMF-09902] c15 N72-11387
- Design and characteristics of mechanically extended and telescoping boom on crane assembly
[NASA-CASE-NPO-11118] c03 N72-25021
- Design and development of device to prevent clogging in hoppers containing particulate materials
[NASA-CASE-LAR-10961-1] c15 N73-12496
- Development of ultrasonic radiation equipment for removing material from host surface and vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514
- Development and characteristics of system for skin packaging articles using thermoplastic film heating and vacuum operated equipment
[NASA-CASE-MFS-20855] c15 N73-27405
- Apparatus for inserting and removing specimens from high temperature vacuum furnaces
[NASA-CASE-LAR-10841-1] c15 N74-27900
- MATERIALS RECOVERY**
System for recovering oxygen and/or water from extraterrestrial soil and iron oxide materials
[NASA-CASE-MSC-12332-1] c15 N72-15476
- MATERIALS SCIENCE**
Flammability test chamber for testing materials in certain predetermined environments
[NASA-CASE-KSC-10126] c11 N71-24985
- Device for measuring thermoelectric properties of materials under high pressure
[NASA-CASE-NPO-11749] c14 N73-28486
- MATERIALS TESTS**
Development of equipment for measuring thermal shock resistance of thin discs of material
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- Automated ball rebound resilience test equipment for determining viscoelastic properties of polymers
[NASA-CASE-XLA-08254] c14 N71-26161
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[NASA-CASE-NPO-10431] c15 N71-29132
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- Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-XMF-05835] c08 N71-12504
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[NASA-CASE-NPO-10821] c03 N71-19545
- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
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[NASA-CASE-NPO-10150] c08 N71-24650
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[NASA-CASE-XKS-03495] c14 N69-39785
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[NASA-CASE-NPO-10051] c18 N71-24934
- MOLDING MATERIALS**
Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XLA-01091] c15 N71-10672
- Method of making molded electric connector for use with flat conductor cables
[NASA-CASE-IMP-03498] c15 N71-15986
- Hydraulic apparatus for casting and molding of liquid polyamers
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- Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLE-05641-1] c15 N71-26346
- Molding process for imidazopyrrolone polyamers
[NASA-CASE-LAR-10547-1] c15 N74-13177
- Evacuated displacement compression molding
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- MOLDS**
Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836
- Using molds for fabricating individual fluid circuit components
[NASA-CASE-XLA-07829] c15 N72-16329
- Vacuum displacement compression molding of tubular bodies from thermosetting plastics
[NASA-CASE-LAR-10782-2] c15 N73-31444
- Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c15 N74-14133
- Method of making an apertured casting
[NASA-CASE-LEW-11169-1] c15 N74-18131
- Molding apparatus --- for thermosetting plastic compositions
[NASA-CASE-LAR-10489-2] c15 N74-32920
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Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XLE-01533] c11 N71-10777
- Sputtering holes with ion beaalets
[NASA-CASE-LEW-11646-1] c28 N74-31269
- MOLECULAR GASES**
Compact hydrogenator
[NASA-CASE-NPO-11682-1] c15 N74-15127
- MOLECULAR PUMPS**
Omnidirectional anisotropic molecular trap, used with vacuum pump to simulate space environments for testing spacecraft components
[NASA-CASE-IGS-00783] c30 N71-17788
- Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294
- MOLECULAR ROTATION**
Laser utilizing infrared rotation transitions of diatomic gas for production of different wavelengths
[NASA-CASE-ARC-10370-1] c16 N72-10432
- MOLECULAR SPECTROSCOPY**
Microwave double resonance spectroscopy absorption cell for gas analysis
[NASA-CASE-LAR-10305] c14 N71-26137
- MOLECULES**
Atomic standard with variable storage volume --- in cylindrical, flexible bellows
[NASA-CASE-GSC-11895-1] c15 N74-33997
- MOLTEN SALT ELECTROLYTES**
Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermoelectric regeneration mechanism
[NASA-CASE-XLE-01645] c03 N71-20904
- MOLYBDENUM CARBIDES**
Flame or plasma spraying for molybdenum coating of carbon or graphite surfaces to prevent oxidative corrosion
[NASA-CASE-XLA-00302] c15 N71-16077
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Method for producing refractory molybdenum disilicides
[NASA-CASE-XMS-00370] c17 N71-20941
- MOMENTS OF INERTIA**
Test fixture for measuring moment of inertia of irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992
- MOMENTUM**
Utilization of momentum devices for forming attitude control and damping system for spacecraft
[NASA-CASE-XLA-02551] c21 N71-21708
- Momentum-velocity analyzer for measuring minute space particles
[NASA-CASE-XMS-04201] c14 N71-22990
- MONITORS**
Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
- Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems

[NASA-CASE-XNP-02791] c07 N71-23026
 Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
 [NASA-CASE-XKS-03509] c14 N71-23175
 Peak polarity selector for monitoring waveforms
 [NASA-CASE-FRC-10010] c10 N71-24862
 Circuit for monitoring power supply by ripple current indication
 [NASA-CASE-KSC-10162] c09 N72-11225
 Development of droplet monitoring probe for use in analysis of droplet propagation in mixed-phase fluid stream
 [NASA-CASE-NPO-10985] c14 N73-20478
 Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
 [NASA-CASE-MSC-14180-1] c05 N73-22045
 Monitoring and recording lightning strokes in predetermined area
 [NASA-CASE-KSC-10728-1] c14 N73-32319
 Method and apparatus for optically monitoring the angular position of a rotating mirror
 [NASA-CASE-GSC-11353-1] c23 N74-21304

MONOCHROMATIC RADIATION
 Method and apparatus for producing intense, coherent, monochromatic light from low temperature plasma
 [NASA-CASE-XNP-04167-3] c25 N72-21693
 Apparatus for producing monochromatic light from continuous plasma source
 [NASA-CASE-XNP-04167-2] c25 N72-24753

MONOCHROMATORS
 Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator
 [NASA-CASE-LAR-10180-1] c06 N71-13461
 Color television system for allowing monochrome television camera to produce color pictures
 [NASA-CASE-MSC-12146-1] c07 N72-17109

MONOMERS
 Monomer polymerization by plasma discharge as thin film for water purification membrane
 [NASA-CASE-ARC-10643-1] c06 N73-29074
 Fabrication of polyphenylquinoxaline composite articles by means of in situ polymerization of monomers
 [NASA-CASE-LEW-11879-1] c18 N74-20152

MONOPOLE ANTENNAS
 Monopole antenna system for maximum omnidirectional efficiency for use on satellites
 [NASA-CASE-XLA-00414] c07 N70-38200
 Flexible monopole antenna with broad bandwidth and low voltage standing wave ratio
 [NASA-CASE-MSC-12101] c09 N71-18720

MONOPROPELLANTS
 Ignition system for monopropellant combustion devices
 [NASA-CASE-XNP-00249] c28 N70-38249
 Catalyst bed ignition system for hydrazine propellants
 [NASA-CASE-XNP-00876] c28 N70-41311

MONOPULSE ANTENNAS
 Electronic and mechanical scanning control system for monopulse tracking antenna
 [NASA-CASE-XGS-05582] c07 N69-27460
 Development and characteristics of low-noise multimode monopulse antenna feed system for use with microwave communication equipment
 [NASA-CASE-XNP-01735] c07 N71-22750
 Monopulse scanning network for scanning volumetric antenna pattern
 [NASA-CASE-GSC-10299-1] c09 N71-24804

MONOPULSE RADAR
 Polarization diversity monopulse tracking receiver design without radio frequency switches
 [NASA-CASE-XGS-03501] c09 N71-20864
 Monopulse tracking system with antenna array of three radiators for deriving azimuth and elevation indications
 [NASA-CASE-XGS-01155] c10 N71-21483

MONOSTABLE MULTIVIBRATORS
 Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
 [NASA-CASE-GSC-11139] c09 N71-27016

Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
 [NASA-CASE-MSC-13492-1] c10 N71-28860

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 Mossbauer spectrometer radiation detector
 [NASA-CASE-LAR-11155-1] c14 N74-15091

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 Quick attach mechanism for moving or stationary wires, ropes, or cables
 [NASA-CASE-XFR-05421] c15 N71-22994

MOTION PICTURES
 Real time moving scene holographic camera system
 [NASA-CASE-MFS-21087-1] c14 N74-17153
 A holographic motion picture camera
 [NASA-CASE-MFS-22517-1] c14 N74-33943

MOTION STABILITY
 Hydraulic drive mechanism for leveling isolation platforms
 [NASA-CASE-IMS-03252] c15 N71-10658

MOTORS
 Nonmagnetic thermal motor for magnetometer movement
 [NASA-CASE-XAR-03786] c09 N69-21313
 System for maintaining motor at predetermined speed using digital pulses
 [NASA-CASE-IMP-06892] c09 N71-24805

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 Mounting fixture for supporting thermobulb in pipeline
 [NASA-CASE-NPO-10158] c33 N71-16356
 Mounting apparatus for temperature control system
 [NASA-CASE-NPO-10138] c33 N71-16357
 Inertial component clamping assembly design for spacecraft guidance and control system mounting
 [NASA-CASE-XMS-02184] c15 N71-20813
 Techniques for packaging and mounting printed circuit boards
 [NASA-CASE-MFS-21919-1] c10 N73-25243
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 [NASA-CASE-LEW-11076-3] c15 N74-10475

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 Automatic vehicle location system
 [NASA-CASE-NPO-11850-1] c09 N74-12912

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 Tape guidance system for multichannel digital recording system
 [NASA-CASE-XNP-09453] c08 N71-19420
 Plural channel data transmission system with quadrature modulation and complementary demodulation
 [NASA-CASE-XAC-06302] c08 N71-19763
 Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
 [NASA-CASE-MSC-14180-1] c05 N73-22045
 Improved phase lock loop for receiver in multichannel telemetry system with suppressed carrier
 [NASA-CASE-NPO-11593-1] c07 N73-28012
 Miniature multichannel biotelemetry system
 [NASA-CASE-NPO-13065-1] c05 N74-26625
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 [NASA-CASE-NPO-13385-1] c08 N74-32646

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 Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
 [NASA-CASE-IMS-01625] c15 N71-23022
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 [NASA-CASE-MFS-14023] c33 N71-25351
 Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
 [NASA-CASE-IMP-03968] c14 N71-27186
 Procedure for making insulating foil for use in multilayer insulating system
 [NASA-CASE-LEW-11484-1] c15 N73-22415

MULTIPLE BEAM INTERVAL SCANNERS
 Tracking antenna system with array for synchronous satellite or ground based radar
 [NASA-CASE-GSC-10553-1] c07 N71-19854
 Variable beamwidth antenna --- with multiple beam, variable feed system
 [NASA-CASE-GSC-11862-1] c09 N74-32674

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 [NASA-CASE-IMS-03613] c31 N71-16346

- Multiple in-line docking capability having intermeshing docking turrets for rotating space stations
[NASA-CASE-MFS-20855-1] c31 N72-25853
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[NASA-CASE-XGS-02749] c07 N69-39978
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[NASA-CASE-XNP-01306] c07 N71-20814
Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
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[NASA-CASE-NPO-10769] c08 N72-11171
Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration
[NASA-CASE-NPO-11333] c08 N72-22162
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[NASA-CASE-GSC-11744-1] c09 N73-23291
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[NASA-CASE-GSC-11388-1] c07 N73-24187
Television multiplexing system, using single crystal controlled clock for signal synchronization
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[NASA-CASE-XBR-09213] c07 N71-12390
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[NASA-CASE-XLA-02850] c09 N71-20447
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[NASA-CASE-MSC-12404-1] c23 N73-13661
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[NASA-CASE-XNP-00234] c28 N70-38645
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[NASA-CASE-XMP-01543] c31 N71-17730
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[NASA-CASE-XLA-00188] c15 N71-22874
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[NASA-CASE-XLA-04804] c31 N71-23008
Frangible connecting link suitable for rocket stage separation
[NASA-CASE-MSC-11849-1] c15 N72-22488
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[NASA-CASE-XGS-00381] c09 N70-34819
Variable frequency magnetic coupled multivibrator with temperature compensated frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604
Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
[NASA-CASE-IGS-00131] c09 N70-38995
- Improved semiconductor multivibrator circuit which approaches 100 percent efficiency
[NASA-CASE-XAC-00942] c10 N71-16042
Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723
One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468
- MUSCULOSKELETAL SYSTEM**
Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions
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- N**
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Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788
Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
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Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
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Collimator for analyzing spatial location of near and distant sources of radiation
[NASA-CASE-MFS-20546-2] c14 N73-30389
- NEGATIVE FEEDBACK**
Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015
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Left and right hand circular electromagnetic polarization excitation by phase shifter and hybrid networks
[NASA-CASE-GSC-10021-1] c09 N71-24595
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[NASA-CASE-XNP-01306-2] c09 N71-24596
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Deuterium pass through target --- for neutron generating
[NASA-CASE-LEW-11866-1] c11 N74-32719
- NEUTRONS**
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Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142
Selective nickel deposition on irradiation sensitive compounds
[NASA-CASE-LEW-10965-1] c15 N72-25452
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Preparation of nickel alloys for jet turbine blades operating at high temperatures
[NASA-CASE-XLE-00151] c17 N70-33283
Nickel alloy series for aerospace structures subjected to high temperatures
[NASA-CASE-XLE-00283] c17 N70-36616
Nickel base alloy with resistance to oxidation at high temperatures and superior stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026
High strength nickel based alloys
[NASA-CASE-LEW-10874-1] c17 N72-22535
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[NASA-CASE-LEW-11388-2] c15 N74-21055
- NICKEL CADMIUM BATTERIES**
Heat flow calorimeter --- measures output of Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c14 N74-27859
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[NASA-CASE-LEW-11267-1] c17 N73-32414

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[NASA-CASE-XGS-03505] c03 N71-10608

NICKEL PLATE
Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830

NIObIUM
Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808

NITRILES
Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579

NITROAMINES
Nitroaniline sulfate, intumescent paints
[NASA-CASE-ARC-10099-1] c18 N71-15469
Mercaptan terminated polymer containing sulfonic acid salts of nitrosubstituted aromatic amines for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147

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Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094

NITROGUANIDINE
Solid propellant stabilizer containing nitroguanidine
[NASA-CASE-NPO-12000] c27 N72-25699

NOBLE METALS
Development and characteristics of device for applying multiple layers of noble metal to glass substrate for protection of optical surfaces
[NASA-CASE-LAR-10362-1] c15 N72-27486

NOISE GENERATORS
Pseudo-noise test set for communication system evaluation
[NASA-CASE-MPS-22671-1] c14 N74-13146

NOISE METERS
Jet aircraft noise and sonic boom measuring device which converts sound pressure into electric current
[NASA-CASE-LAR-11173-1] c14 N73-22387

NOISE REDUCTION
Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332
Cassegrain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
[NASA-CASE-INP-00683] c09 N70-35425
Device for adding water to high velocity exhaust jets to reduce velocity, noise, and temperature
[NASA-CASE-XMF-01813] c28 N70-41582
Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964
Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001
Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
Jet aircraft exhaust nozzle for noise reduction
[NASA-CASE-LAR-10951-1] c28 N73-19819
Development of aircraft configuration for reduction of jet aircraft noise by exhausting engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
Method and apparatus for improving operating efficiency and reducing low speed noise for turbine aircraft engines
[NASA-CASE-LAR-11310-1] c28 N73-31699
Method for eliminating noise and debris of explosive welding techniques by using complete enclosure
[NASA-CASE-LAR-10941-2] c15 N73-32371
Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c28 N74-15453
Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c15 N74-21057
Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c02 N74-27490
Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c28 N74-28226
Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c28 N74-31270
Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c02 N74-32418
Abating exhaust noises in jet engines
[NASA-CASE-ARC-10712-1] c28 N74-33218
Cascade plug nozzle
[NASA-CASE-LAR-11674-1] c28 N74-33220

NOISE TEMPERATURE
Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774

NOISE THRESHOLD
Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MSC-12165-1] c07 N71-33696

NONDESTRUCTIVE TESTS
Nondestructive radiographic tests of resistance welds
[NASA-CASE-XNP-02588] c15 N71-18613
Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NPO-10141] c11 N71-24964
Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MPS-20240] c14 N71-26788
Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMF-02221] c18 N71-27170
Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MPS-20044] c14 N71-28993
Radiographic system for nondestructive testing
[NASA-CASE-MPS-21704-1] c16 N73-30478

NON-EQUILIBRIUM PLASMAS
Plasma probes having guard ring and primary sensor at same potential to prevent stray wall current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884

NONFLAMMABLE MATERIALS
Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
Process for developing flame retardant elastomeric composition textiles for use in space suits
[NASA-CASE-MSC-14331-1] c18 N73-27501

NONLINEAR FEEDBACK
Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NPO-11921-1] c07 N74-30523
Nonlinear nonsingular feedback shift registers
[NASA-CASE-NPO-13451-1] c08 N74-32648

NONLINEAR SYSTEMS
Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-XMF-00701] c09 N70-40272

NOSE CONES

Describing continuous analog to digital converter with parallel digital output and nonlinear feedback
[NASA-CASE-XAC-04031] c08 N71-18594

Split range transducer
[NASA-CASE-XLA-11189] c10 N72-20222

NOSE CONES

Automatically deploying nozzle exit cone extension
[NASA-CASE-XLE-01640] c31 N71-15637

Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984

NOSE WHEELS

Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160

NOTCH TESTS

Vee-notching device --- with adjustable carriage
[NASA-CASE-MPS-20730-1] c14 N74-13131

NOZZLE DESIGN

High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284

Penshaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711

Telescoping-spike supersonic nozzle for turbojet or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899

Automatically deploying nozzle exit cone extension
[NASA-CASE-XLE-01640] c31 N71-15637

Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines
[NASA-CASE-IMP-00968] c28 N71-15660

Development of collapsible nozzle extension for rocket engines
[NASA-CASE-MPS-11497] c28 N71-16224

Design and development of gas turbine combustion unit with nozzle guide vanes for introducing diluent air into combustion gases
[NASA-CASE-XLE-103477-1] c28 N71-20330

Prestressed rocket nozzle with ceramic inner rings and refractory metal outer rings
[NASA-CASE-XNP-02888] c18 N71-21068

Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NPO-11758-1] c15 N74-23065

NOZZLE FLOW

System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582

Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647

Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339

Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-MPS-20831] c28 N71-29153

Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c28 N74-28233

NOZZLE INSERTS

Flexible rocket motor nozzle closure device to aid ignition and protect rocket chamber from foreign objects
[NASA-CASE-XLA-02651] c28 N70-41967

NUCLEAR AUXILIARY POWER UNITS

Control circuit for nuclear thermionic converter power source for spacecraft
[NASA-CASE-NPO-13114-1] c22 N73-13656

NUCLEAR ELECTRIC POWER GENERATION

Nuclear electric generator for accelerating charged propellant particles in electrostatic propulsion system
[NASA-CASE-XLE-00818] c22 N70-34248

NUCLEAR EXPLOSION EFFECT

Development of method for protecting large and oddly shaped areas from radiant and convective heat
[NASA-CASE-IMP-01310] c33 N71-28852

SUBJECT INDEX

NUCLEAR FUEL BURNUP

Low cost efficient thermionic converter for use in nuclear reactors
[NASA-CASE-NPO-13121-1] c22 N73-12702

NUCLEAR FUEL ELEMENTS

Tungsten-coated tungsten-uranium dioxide nuclear fuel plates
[NASA-CASE-XLE-00209] c22 N73-32528

NUCLEAR FUELS

Two step process for cladding nuclear fuels with tungsten
[NASA-CASE-XNP-03704] c15 N71-17695

NUCLEAR FUSION

Converging coaxial plasma accelerator for generating dense high velocity plasma bursts
[NASA-CASE-ARC-10109] c25 N71-29181

NUCLEAR MAGNETIC RESONANCE

Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266

NUCLEAR POWER PLANTS

Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046

NUCLEAR REACTOR CONTROL

Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597

NUCLEAR REACTORS

Low cost efficient thermionic converter for use in nuclear reactors
[NASA-CASE-NPO-13121-1] c22 N73-12702

NUCLEAR ROCKET ENGINES

Nuclear gaseous reactor for heating working fluid to high temperatures
[NASA-CASE-XLE-00321] c22 N70-34572

NUCLEATE BOILING

Method for improving heat transfer characteristics in nucleate boiling process
[NASA-CASE-XMS-04268] c33 N71-16277

NULL ZONES

Manual control mechanism for adjusting control rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740

NUMERICAL CONTROL

Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215

NUMERICAL INTEGRATION

Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437

Binary concatenated coding system to measure, count, and record numerical information using minimized number of digits
[NASA-CASE-MSC-14082-1] c08 N73-16163

ROTATION

Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XMP-00442] c31 N71-10747

Nutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513

NUTS (FASTENERS)

Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922

Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489

Device for securing together structural members with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457

O RING SEALS

High pressure four-way valve with O ring adapted to pass across inlet port
[NASA-CASE-IMP-00214] c15 N70-36908

OHMMETERS

Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
[NASA-CASE-RSC-10242] c15 N72-23497

OILS

Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-IMP-01779] c12 N71-20815
Cross linked polymer system for oil or fat absorption properties
[NASA-CASE-NPO-11609-1] c06 N72-22114

OMNIDIRECTIONAL ANTENNAS

Microwave omnidirectional antenna for use on spacecraft
[NASA-CASE-XLA-03114] c09 N71-22888
Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247

ONBOARD EQUIPMENT

Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285
Cryogenic storage system for gases onboard spacecraft
[NASA-CASE-IMS-04390] c31 N70-41871
Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-IMP-02433] c14 N71-10616
Design and construction of satellite appendage tie-down cord
[NASA-CASE-XGS-02554] c31 N71-21064
Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
Closed loop servosystem for variable speed tape recorders onboard spacecraft
[NASA-CASE-NPO-10700] c07 N71-33613
Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
Monostable multivibrator for conserving power in spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221
Delayed simultaneous appendage release mechanism for use on spacecraft equipped with despin mechanisms and releasable components
[NASA-CASE-GSC-10814-1] c03 N73-20039
Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910

OPHTHALMOLOGY

Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] c05 N73-27062
Multiparameter vision tester
[NASA-CASE-MSC-13601-2] c05 N74-32549

OPTICAL COMMUNICATION

Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-XGS-04480] c16 N69-27491
Specifications and drawings for semipassive optical communication system
[NASA-CASE-XLA-01090] c07 N71-12389
Optical communication system with gas filled waveguide for laser beam transmission
[NASA-CASE-HQN-10541-4] c16 N71-27183
Development and characteristics of optical communications system based on modulation of light beams
[NASA-CASE-XLA-01090] c16 N71-28963
High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119
Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c07 N74-22827

OPTICAL COUPLING

Automatic quadrature control and measuring system --- using optical coupling circuitry
[NASA-CASE-MFS-21660-1] c14 N74-21017

OPTICAL DATA PROCESSING

Optical data processing system using paraboloidal reflecting surfaces
[NASA-CASE-GSC-11296-1] c23 N73-30666
Recorder/processor apparatus --- for optical data processing
[NASA-CASE-GSC-11553-1] c07 N74-15831

OPTICAL EMISSION SPECTROSCOPY

Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041

OPTICAL EQUIPMENT

Detection instrument for light emitted from ATP biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
Optical characteristics measuring apparatus
[NASA-CASE-IMP-08840] c23 N71-16365
Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
Design and development of optical interferometer with laser light source for application to schlieren systems
[NASA-CASE-XLA-04295] c16 N71-24170
Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674
Development and characteristics of Petzval type objective including field shaping lens for focusing light of specified wavelength band on curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
Optical vision testing unit for testing eyes and visual system of human subject
[NASA-CASE-MSC-13601-1] c05 N72-11088
Slotted fine-adjustment support for optical devices
[NASA-CASE-MFS-20249] c15 N72-11386
Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037
Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
Development and characteristics of device for applying multiple layers of noble metal to glass substrate for protection of optical surfaces
[NASA-CASE-LAR-10362-1] c15 N72-27486
Borescope with adjustable hinged telescoping optical system
[NASA-CASE-MFS-15162] c14 N72-32452
Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427
Development of strain gage ambiguity sensor for measuring alignment of optical mirror segments
[NASA-CASE-MFS-20506-1] c14 N73-17563
Method for producing reticles for use in outer space
[NASA-CASE-GSC-11188-2] c21 N73-19630
Method and equipment for locating earth infrared horizon from space, independent of season and latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475
Optical imaging system for increasing light absorption efficiency of imaging detector
[NASA-CASE-ARC-10194-1] c23 N73-20741
Development of optical system for detecting defective components in rotating machinery with emphasis on bearing assemblies
[NASA-CASE-KSC-10752-1] c15 N73-27407
Attitude sensor
[NASA-CASE-LAR-10586-1] c14 N74-15089
Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c14 N74-20008
Laser system with an antiresonant optical ring --- optical properties and performance of beam splitter with equal transmission and reflection coefficients
[NASA-CASE-HQN-10844-1] c16 N74-20118
Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c23 N74-21304
Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c14 N74-23040
Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c07 N74-30532

OPTICAL FILTERS

Lens assembly for solar furnace or solar simulator
[NASA-CASE-XNP-04111] c14 N71-15622
Noise elimination in coherent imaging system by
axial rotation of optical lens for spectral
distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
Family of physical correction filters for
improving optical quality of image
[NASA-CASE-HQN-10542-1] c23 N72-21663

OPTICAL HETERODYNING

Computerized optical system for producing
multiple images of a scene simultaneously
[NASA-CASE-HSC-12404-1] c23 N73-13661

OPTICAL MEASUREMENT

Passive optical wind and turbulence remote
detection system
[NASA-CASE-XHF-14032] c20 N71-16340
Ellipsoidal mirror reflector for measuring
reflectance
[NASA-CASE-XGS-05291] c23 N71-16341
Single reflector interference spectrometer and
drive system therefor
[NASA-CASE-NPO-11932-1] c14 N74-23040

OPTICAL MEASURING INSTRUMENTS

Design and development of optically pumped
resonance magnetometer for determining
vectoral components in spatial coordinate system
[NASA-CASE-XGS-04879] c14 N71-20428

Optical gauging system for monitoring machine
tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673

Optical system for selecting particular
wavelength light beams from multiple
wavelength light source
[NASA-CASE-ERC-10248] c14 N72-17323

Optical sensing of supersonic flows by
correlating deflections in laser beams through
flow
[NASA-CASE-NFS-20642] c14 N72-21407

Multiparameter vision tester
[NASA-CASE-HSC-13601-2] c05 N74-32549

OPTICAL PATHS

Optical instruments
[NASA-CASE-HSC-14096-1] c14 N74-15095

OPTICAL PROPERTIES

Remote-reading torque meter for use where high
horsepowers are transmitted at high rotative
speeds
[NASA-CASE-XLE-00503] c14 N70-34818

Quasi-optical microwave circuit with dielectric
body for use with oversize waveguides
[NASA-CASE-ERC-10011] c07 N71-29065

Development of light sensing system for
controlled orientation of object relative to
sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414

Design and development of light sensing device
for controlling orientation of object relative
to sun or other light source
[NASA-CASE-NPO-11201] c14 N72-27409

Device and method for determining X ray
reflection efficiency, scattering properties,
and surface finish of optical surfaces
[NASA-CASE-NFS-20243] c23 N73-13662

Ultraviolet and thermally stable polymer
compositions --- poly/(diarylsiloxy)/arylazines
[NASA-CASE-ARC-10592-2] c06 N74-11926

Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c14 N74-20008

Optically actuated two position mechanical mover
[NASA-CASE-NPO-13105-1] c15 N74-21060

OPTICAL PUMPING

Xenon flashlamp driver system for optical laser
pumping
[NASA-CASE-ERC-10283] c16 N72-25485

Development of laser head for simultaneous
optical pumping of several dye lasers
[NASA-CASE-LAR-11341-1] c16 N73-25564

OPTICAL PYROMETERS

Filter arrangement for controlling light
intensity in motion picture camera used in
optical pyrometry
[NASA-CASE-XLA-00062] c14 N70-33254

OPTICAL RADAR

Acquisition and tracking system for optical radar
[NASA-CASE-NFS-20125] c16 N72-13437

OPTICAL RANGE FINDERS

Electro-optical attitude sensing device for

landing approach of flight vehicle
[NASA-CASE-XNS-01994-1] c14 N72-17326

Optical range finder using reflective first
surfaces mirror and transmitting beam splitter
[NASA-CASE-HSC-12105-1] c14 N72-21409

OPTICAL REFLECTION

Hybrid holographic system using reference,
transmitted, and reflected beams simultaneously
[NASA-CASE-NFS-20074] c16 N71-15565

Optical device containing rotatable prism and
reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674

Illumination system design for use as sunlight
simulator in space environment simulators with
multiple light sources reflected to single
virtual source
[NASA-CASE-HQN-10781] c23 N71-30292

Composition of diffuse reflective coating
containing sodium chloride in combination with
diol solvent and organic wetting and drying
agents
[NASA-CASE-GSC-11214-1] c06 N73-13128

Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c18 N74-10542

OPTICAL RESONANCE

Design and development of optically pumped
resonance magnetometer for determining
vectoral components in spatial coordinate system
[NASA-CASE-XGS-04879] c14 N71-20428

OPTICAL SCANNERS

Optical scanner mounted on rotating support
structure with method of compensating for
image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485

Optical apparatus for visual detection of
roundness and regularity of cone surfaces
[NASA-CASE-XHF-00462] c14 N70-34298

Electro-optical system with scan-in illuminator
and scan-out photosensor for scanning variable
transmittance objects
[NASA-CASE-NPO-11106] c14 N70-34697

Multi-lobar scan horizon sensor
[NASA-CASE-XGS-00809] c21 N70-35427

Optical scanner with linear housing and rotating
camera
[NASA-CASE-NPO-11002] c14 N72-22441

Focusing optical collimator for high resolution
scanning of electromagnetic radiations,
neutrons, and other particles
[NASA-CASE-NFS-20932-1] c14 N73-27380

Spacecraft attitude sensing system design with
narrow field of view sensor rotating about
spacecraft x-y axis
[NASA-CASE-GSC-10890-1] c21 N73-30640

Manually and automatically operable video
switching system
[NASA-CASE-KSC-10782-1] c07 N73-32063

Optical instruments
[NASA-CASE-HSC-14096-1] c14 N74-15095

OPTICAL TRACKING

Sun tracker with rotatable plane-parallel plate
and two photocells
[NASA-CASE-XGS-01159] c21 N71-10678

Optical tracker with pair of PM reticles having
patterns 90 deg out of phase
[NASA-CASE-XGS-05715] c23 N71-16100

Tracking mount for laser telescope employed in
tracking large rockets and space vehicles to
give information regarding azimuth and elevation
[NASA-CASE-NFS-14017] c14 N71-26627

OPTIMIZATION

Power point tracker for maintaining optimal
output voltage of power source
[NASA-CASE-GSC-10376-1] c14 N71-27407

ORBITAL ASSEMBLY

Space vehicle system
[NASA-CASE-HSC-12561-1] c31 N74-33303

ORBITAL MECHANICS

Design and development of space shuttle system
for delivering payload to earth orbit or
celestial orbit
[NASA-CASE-HSC-12391] c30 N73-12884

ORBITAL SPACE STATIONS

Radial module manned space station with
artificial gravity environment
[NASA-CASE-XNS-01906] c31 N70-41373

Internal and external serpentine devices for
performing physical operations around orbital
space stations

- [NASA-CASE-IMP-05344] c31 N71-16345
Describing apparatus for manufacturing operations in low and zero gravity environments of orbital space flight [NASA-CASE-NPS-20410] c15 N71-19214
- ORBITS**
Position determination systems --- using orbital antenna scan of celestial body [NASA-CASE-MSC-12593-1] c09 N74-14942
- ORGANIC CHEMISTRY**
Process for interfacial polymerization of pyromellitic dianhydride and tetraamino benzene [NASA-CASE-XLA-03104] c06 N71-11235
- ORGANIC COMPOUNDS**
Synthesis of high purity dianilinosilanes [NASA-CASE-IMP-06409] c06 N71-23230
Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds [NASA-CASE-IMP-03250] c06 N71-23500
Infusible polymer production from reaction of polyfunctional epoxy resins with polyfunctional aziridine compounds [NASA-CASE-NPO-10701] c06 N71-28620
Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents [NASA-CASE-GSC-11214-1] c06 N73-13128
Organic amine and nitroaromatic mixed compound for heat change detection in microelectronic components [NASA-CASE-NPO-10764-2] c10 N73-20259
Analysis of volatile organic compounds --- quantitative and qualitative analysis of trace amounts in gas samples [NASA-CASE-MSC-14428-1] c06 N74-19776
- ORGANOMETALLIC COMPOUNDS**
Ammonium perchlorate composite propellant with organic Cu/IL/ chelate catalytic additive [NASA-CASE-LAR-10173-1] c27 N71-14090
Organometallic compounds of niobium and tantalum useful for film deposition [NASA-CASE-IMP-04023] c06 N71-28808
- ORGANOMETALLIC POLYMERS**
Chemical synthesis of thermally stable organometallic polymers with divalent metal ion and tetraphenylphosphonitrilic units [NASA-CASE-HQN-10364] c06 N71-27363
Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids [NASA-CASE-NPS-22411-1] c15 N74-21058
- ORIFICE FLOW**
Relief valve to permit slow and fast bleeding rates at difference pressure levels [NASA-CASE-INS-05894-1] c15 N69-21924
- ORIFICES**
Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber [NASA-CASE-XLE-03157] c28 N71-24736
- ORTHOGONAL MULTIPLEXING THEORY**
Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes [NASA-CASE-NPO-10595] c10 N71-25917
- ORTHOGONALITY**
Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments [NASA-CASE-IAC-04885] c14 N71-23790
- ORTHOTROPIC CYLINDERS**
Method for shaping regeneratively cooled rocket motor casing having minimum thickness at each channel cross section [NASA-CASE-XLE-00409] c28 N71-15658
Regeneratively cooled rocket motor casing with tapered channels to insure minimum thicknesses at each channel cross section for necessary strength requirements [NASA-CASE-XLE-05689] c28 N71-15659
- OSCILLATION DAMPERS**
Design and operation of viscous pendulum damper [NASA-CASE-XLA-02079] c12 N71-16894
Stabilization system for gravity-oriented satellites using single damper rod [NASA-CASE-IAC-01591] c31 N71-17729
- Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers [NASA-CASE-LAR-10193-1] c15 N71-27146
Damper system for alleviating air flow shock loads on wind tunnel models [NASA-CASE-XLA-09480] c11 N71-33612
- OSCILLATIONS**
Device for suppressing pressure oscillations in fluid transmission line [NASA-CASE-NPS-10354-2] c12 N72-25306
Development of electrical circuit for suppressing oscillations across inductor operating in resonant mode [NASA-CASE-ERC-10403-1] c10 N73-26228
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Oscillatory electromagnetic mirror drive system for horizon scanners [NASA-CASE-XLA-03724] c14 N69-27461
Frequency control network for current feedback oscillators converting dc voltage to ac or higher dc voltages [NASA-CASE-GSC-10041-1] c10 N71-19418
Development and characteristics of oscillating static inverter [NASA-CASE-XGS-05289] c09 N71-19470
Voltage controlled oscillators and pulse amplitude modulation for signal ratio system [NASA-CASE-IMP-04367] c09 N71-23545
Development and characteristics of fluid oscillator analog to digital converter with variable frequency controlled by signal passing through conditioning circuit [NASA-CASE-LHW-10345-1] c10 N71-25899
Wideband voltage controlled oscillator with high phase stability [NASA-CASE-XLA-03893] c10 N71-27271
Variable frequency subcarrier oscillator with temperature compensation [NASA-CASE-IMP-03916] c09 N71-28810
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Alphanumeric character display device for oscilloscopes [NASA-CASE-GSC-11582-1] c09 N73-32120
Controlled oscillator system with a time dependent output frequency [NASA-CASE-NPO-11962-1] c09 N74-10194
Ultra-stable oscillator with complementary transistors [NASA-CASE-GSC-11513-1] c09 N74-20862
LC-oscillator with automatic stabilized amplitude via bias current control --- power supply circuit for transducers [NASA-CASE-NPS-21698-1] c09 N74-26732
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- OSCILLOSCOPES**
Sign wave generation simulator for variable amplitude, frequency, damping, and phase pulses for oscilloscope display [NASA-CASE-NPO-10251] c10 N71-27365
Scan oscilloscope for mapping surface sensitivity of photomultiplier tube [NASA-CASE-LAR-10320-1] c09 N72-23172
Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera [NASA-CASE-LAR-10319-1] c14 N73-32322
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Monomer polymerization by plasma discharge as thin film for water purification membrane [NASA-CASE-ARC-10643-1] c06 N73-29074
- OUTER PLANETS EXPLORERS**
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- OUTGASSING**
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OUTPUT
 Nonlinear nonsingular feedback shift registers
 [NASA-CASE-NPO-13451-1] c08 N74-32648

Ovens
 Oven for heat treating heat shields
 [NASA-CASE-XMS-04318] c15 N69-27871

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 Spark gap type protective circuit for fast
 sensing and removal of overvoltage conditions
 [NASA-CASE-XAC-08981] c09 N69-39897
 Sensing circuit for instantaneous reaction to
 power overloads
 [NASA-CASE-GSC-10667-1] c10 N71-33129
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 [NASA-CASE-ARC-10197-1] c09 N74-17929

OXIDATION
 Silicide coating process and composition for
 protection of refractory metals from oxidation
 [NASA-CASE-XLE-10910] c18 N71-29040
 Automated system for monitoring oxidative
 metabolites of aromatic amines
 [NASA-CASE-ARC-10469-1] c06 N72-31145

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 Nickel base alloy with resistance to oxidation
 at high temperatures and superior
 stress-rupture properties
 [NASA-CASE-XLE-02082] c17 N71-16026
 Duplex aluminized coatings
 [NASA-CASE-LEW-11696-2] c18 N74-18197
 Coating superalloys
 [NASA-CASE-LEW-11696-3] c17 N74-27963

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 of aluminum containing components
 [NASA-CASE-MSC-14435-1] c15 N74-20071

OXIDES
 Utilization of lithium p-lithiophenoxide to
 prepare star polymers
 [NASA-CASE-NPO-10998-1] c06 N73-32029

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 fuel cells
 [NASA-CASE-XLE-04526] c03 N71-11052
 Fuel and oxidizer injection head for thrust
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 [NASA-CASE-XAC-05422] c04 N71-23185

OXYGEN
 Analytical test apparatus and method for
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 [NASA-CASE-XNP-04262-2] c17 N71-26773
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 similar soil
 [NASA-CASE-MSC-12408-1] c13 N74-13011
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 high oxygen environments
 [NASA-CASE-MPS-20486-2] c18 N74-17283

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 aerospace environments
 [NASA-CASE-YFR-08403] c05 N71-11202

OXYGEN FLUORIDES
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 [NASA-CASE-NPO-12061-1] c06 N72-21100

OXYGEN METABOLISM
 Metabolic analyzer --- for measuring metabolic
 rate and breathing dynamics of human beings
 [NASA-CASE-MPS-21415-1] c05 N74-20728

P

P-N JUNCTIONS
 Lithium drifted silicon radiation detector with
 gold rectifying contacts
 [NASA-CASE-XLE-10529] c14 N69-23191
 Semiconductor p-n junction on needle apex to
 provide stress and strain sensor

[NASA-CASE-XLA-04980] c09 N69-27422
 Improving radiation resistance of silicon
 semiconductor junctions by doping with lithium
 [NASA-CASE-XGS-07801] c09 N71-12513
 Silicon radiation detecting probe design for in
 vivo biomedical use
 [NASA-CASE-XMS-01177] c05 N71-19440
 Electrode connection for n-on-p silicon solar cell
 [NASA-CASE-XLE-04787] c03 N71-20492
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 forming n-type and p-type junctions of zinc
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 [NASA-CASE-ERC-10339-1] c18 N73-30532

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[NASA-CASE-NPO-10765] c06 N72-20121

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[NASA-CASE-NPO-10862] c06 N72-22107

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[NASA-CASE-XMP-00701] c09 N70-40272
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[NASA-CASE-XNP-02723] c07 N70-41680
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[NASA-CASE-NPO-11941-1] c10 N73-27171
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[NASA-CASE-NPO-11593-1] c07 N73-28012
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ion and tetraphenylphosphonitrilic units
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electric signals
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PHOTOELECTRIC MATERIALS
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[NASA-CASE-NPO-11432-2] c14 N74-15090

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- PLUGS**
Rocket chamber leak test fixture using tubular plug
[NASA-CASE-XFR-09479] c14 N69-27503
Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
Control of gas flow from pressurized vessel by thermal expansion of metal plug
[NASA-CASE-NPO-10298] c12 N71-17661
Beated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766
- PNEUMATIC CONTROL**
Pneumatic system for cyclic control of fluid flow in pneumatic device
[NASA-CASE-IHS-04843] c03 N69-21469
Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
Actuator using compressed gas as driving force to control valve handling large liquid flows
[NASA-CASE-XHQ-01208] c15 N70-35409
Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-IHS-10660-1] c15 N71-25975
Pneumatic foot pedal operated fluidic exercising device
[NASA-CASE-MSC-11561-1] c05 N73-32014
- PNEUMATIC EQUIPMENT**
Development and characteristics of high pressure control valve
[NASA-CASE-MSC-11010] c15 N71-19485
Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045
Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-IHS-01905] c12 N71-21089
Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
[NASA-CASE-INP-06515] c14 N71-23227
Pneumatic servoamplifier for controlling flow regulation
[NASA-CASE-MSC-12121-1] c15 N71-27147
Portable device for detecting pneumatic pressure leaks in hermetically sealed housings
[NASA-CASE-MFS-21761-1] c14 N73-18444
Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26006
Ultrasonically bonded valve assembly
[NASA-CASE-NPO-13360-1] c15 N74-20073
Airlock
[NASA-CASE-MPS-20922-1] c15 N74-22136
- POINT SOURCES**
Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980
X ray collimating structure for focusing radiation directly onto detector
[NASA-CASE-XHQ-04106] c14 N70-40240
- POINTING CONTROL SYSTEMS**
Development of reflector system for application to line-of-sight pointing and tracking telescopes
[NASA-CASE-NPO-10468] c23 N71-33229
- POLAR ORBITS**
Spin phase synchronization of cartwheel satellite in polar orbit
[NASA-CASE-IGS-05579] c31 N71-15676
- POLARIMETERS**
Automatic polarimeter capable of measuring transient birefringence changes in electro-optic materials
[NASA-CASE-INP-08883] c23 N71-16101
Two beam interferometer-polarimeter
[NASA-CASE-NPO-11239] c14 N73-12446
- POLARITY**
Converting output of positive dc voltage source

- to negative dc voltage across load with common reference point
[NASA-CASE-IMP-08217] c03 N71-23239
- Peak polarity selector for monitoring waveforms
[NASA-CASE-FRC-10010] c16 N71-24862
- Precision full wave rectifier circuit for rectifying incoming electrical signals having positive or negative polarity with only positive output signals
[NASA-CASE-ARC-10101-1] c09 N71-33109
- POLARIZATION (WAVES)**
Automatic nulling system for interference signal at multichannel receiver by polarization adjustment
[NASA-CASE-NPO-13140-1] c07 N73-27106
- POLARIZED ELECTROMAGNETIC RADIATION**
Device for improving efficiency of parabolic horn antenna system for linearly polarized signals
[NASA-CASE-IMP-00611] c09 N70-35219
- Device for improving efficiency of parabolic reflector horn for linearly or circularly polarized waves
[NASA-CASE-IMP-00540] c09 N70-35382
- POLARIZED LIGHT**
Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c07 N74-22827
- POLISHING**
Conforming polisher for aspheric surfaces of revolution with inflatable tube
[NASA-CASE-XGS-02884] c15 N71-22705
- POLLUTION MONITORING**
Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c14 N74-25932
- POLYBUTADIENE**
Synthesis of polyfluorobutadiene by polymerization of perfluorobutadiene with diisopropyl peroxydicarbonate
[NASA-CASE-NPO-10863] c06 N70-11251
- Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NPO-10447] c06 N70-11252
- POLYCARBONATES**
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
- POLYESTERS**
Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
[NASA-CASE-NPO-10596] c06 N71-25929
- Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c15 N74-32917
- POLYETHER RESINS**
Preparation of stable polyurethane polymer by reacting polymer with diisocyanate
[NASA-CASE-MFS-10506] c06 N73-30100
- Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of polyfluoroalkylene diol
[NASA-CASE-MFS-10507] c06 N73-30101
- Preparation of fluorinated polyethers from 2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MFS-11492] c06 N73-30102
- POLYIMIDES**
Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
- Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c06 N74-12812
- Aromatic polyimide preparation --- with low softening temperatures
[NASA-CASE-LAR-11372-1] c06 N74-19772
- Reinforced structural plastics
[NASA-CASE-LEW-10199-1] c18 N74-23125
- Polyimides of ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-MFS-22355] c06 N74-29480
- POLYISOBUTYLENE**
Chemical process for production of polyisobutylene compounds and application as solid rocket propellant binder
[NASA-CASE-NPO-10893] c27 N73-22710
- POLYMER CHEMISTRY**
New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244
- Synthesis of siloxane containing epoxy polymers with low dielectric properties
[NASA-CASE-MFS-13994-1] c06 N71-11240
- Apparatus for determining volatile condensable material present in polymeric products
[NASA-CASE-IMP-09699] c06 N71-24607
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579
- POLYMERIC FILMS**
Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
[NASA-CASE-IMP-09763] c14 N71-20461
- Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-IMP-07659] c06 N71-22975
- Transparent plastic film for attaching cover glasses to silicon solar cells
[NASA-CASE-LEW-11065-1] c03 N72-11064
- Thermodielectric radionometer using polymer film as capacitor
[NASA-CASE-ARC-10138-1] c14 N72-24477
- Silicon solar cell with plastic film binding to cover glass
[NASA-CASE-LEW-11065-2] c03 N73-26048
- Development and characteristics of system for skin packaging articles using thermoplastic film heating and vacuum operated equipment
[NASA-CASE-MFS-20855] c15 N73-27405
- POLYMERIZATION**
Synthesis of polyfluorobutadiene by polymerization of perfluorobutadiene with diisopropyl peroxydicarbonate
[NASA-CASE-NPO-10863] c06 N70-11251
- Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NPO-10447] c06 N70-11252
- Process for interfacial polymerization of pyromellitic dianhydride and tetraamino benzene
[NASA-CASE-XLA-03104] c06 N71-11235
- Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
- Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-IMP-08655] c06 N71-11239
- Synthesis of azine polymers for heat shields by azine-aromatic aldehyde reaction
[NASA-CASE-IMP-08656] c06 N71-11242
- Synthesis of schiff bases for heat shields by acetal amine reactions
[NASA-CASE-IMP-08652] c06 N71-11243
- Preparation of elastomeric diamine silazane polymers
[NASA-CASE-IMP-04133] c06 N71-20717
- Reaction of polyperfluoropolyenes with fluorine to produce saturated polymer chain or create reactive sites on chain
[NASA-CASE-NPO-10862] c06 N72-22107
- Cross linked polymer system for oil or fat absorption properties
[NASA-CASE-NPO-11609-1] c06 N72-22114
- Silphenylenesiloxane polymer with in-chain perfluoroalkyl groups
[NASA-CASE-MFS-20979] c06 N72-25151
- Polymerization of perfluorobutadiene
[NASA-CASE-NPO-10863-2] c06 N72-25152
- Monomer polymerization by plasma discharge as thin film for water purification membrane
[NASA-CASE-ARC-10643-1] c06 N73-29074
- Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of polyfluoroalkylene diol
[NASA-CASE-MFS-10507] c06 N73-30101
- Preparation of fluorinated polyethers from 2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MFS-11492] c06 N73-30102
- Fabrication of polyphenylquinoxaline composite articles by means of in situ polymerization of monomers
[NASA-CASE-LEW-11879-1] c18 N74-20152
- POLYMERS**
Preparation of ordered polyarylenesiloxane/polymers

- [NASA-CASE-XMP-10753] c06 N71-11237
Synthesis of aromatic diamines and dialdehyde
polymers using Schiff base
[NASA-CASE-XMP-03074] c06 N71-24740
Automated ball rebound resilience test equipment
for determining viscoelastic properties of
polymers
[NASA-CASE-XLA-08254] c14 N71-26161
Infusible polymer production from reaction of
polyfunctional epoxy resins with
polyfunctional aziridine compounds
[NASA-CASE-NPO-10701] c06 N71-28620
Development of solid state polymer coating for
obtaining thermal balance in spacecraft
components
[NASA-CASE-XLA-01745] c33 N71-28903
Mercaptan terminated polymer containing sulfonic
acid salts of nitrosubstituted aromatic amines
for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
Solid propellant containing hydrazinium
nitroformate oxidizer and polymeric
hydrocarbon binder
[NASA-CASE-NPO-12015] c27 N73-16764
Chemical process for production of
polyisobutylene compounds and application as
solid rocket propellant binder
[NASA-CASE-NPO-10893] c27 N73-22710
Utilization of lithium p-lithiophenoxide to
prepare star polymers
[NASA-CASE-NPO-10998-1] c06 N73-32029
Ultraviolet and thermally stable polymer
compositions --- poly(diarylsiloxyl)arylazines
[NASA-CASE-ARC-10592-2] c06 N74-11926
Method of fluxless brazing and diffusion bonding
of aluminum containing components
[NASA-CASE-MSC-14435-1] c15 N74-20071
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c18 N74-21156
- POLYTETRAFLUOROETHYLENE**
Procedure for bonding polytetrafluoroethylene
thermal protective sleeves to magnesium alloy
conical shell components with different
thermal coefficients
[NASA-CASE-XLA-01262] c15 N71-21404
- POLYURETHANE FOAM**
Self-erectable space structures of flexible foam
for application in planetary orbits
[NASA-CASE-XLA-00686] c31 N70-34135
Modification of polyurethanes with alkyl halide
resins, inorganic salts, and encapsulated
volatile and reactive halogen for fuel fire
control
[NASA-CASE-ARC-10098-1] c06 N71-24739
Lightweight fire resistant plastic foam for
thermal protection of reentry vehicles and
aircraft structures
[NASA-CASE-ARC-10180-1] c28 N72-20767
Fiber modified polyurethane foam for ballistic
protection
[NASA-CASE-ARC-10714-1] c18 N74-11366
Flexible fire retardant polyisocyanate modified
neoprene foam --- for thermal protective devices
[NASA-CASE-ARC-10180-1] c06 N74-12814
Mixing insert for foam dispensing apparatus
[NASA-CASE-MFS-20607-1] c15 N74-26989
- POLYURETHANE RESINS**
Chemical synthesis of hydroxy terminated
perfluoro ethers as intermediates for highly
fluorinated polyurethane resins
[NASA-CASE-NPO-10768] c06 N71-27254
Formation of polyurethane resins from hydroxy
terminated perfluoro ethers
[NASA-CASE-NPO-10768-2] c06 N72-27144
Fluorinated polyurethanes produced by reacting
hydroxy terminated perfluoro polyether with
diisocyanate
[NASA-CASE-NPO-10767-2] c06 N72-27151
Chemical and physical properties of synthetic
polyurethane polymer prepared by reacting
hydroxy carbonate with organic diisocyanate
[NASA-CASE-MFS-10512] c06 N73-30099
Preparation of stable polyurethane polymer by
reacting polymer with diisocyanate
[NASA-CASE-MFS-10506] c06 N73-30100
Preparation of polyurethane polymer by reacting
hydroxy polyformal with organic diisocyanate
[NASA-CASE-MFS-10509] c06 N73-30103
- Chemical and elastic properties of fluorinated
polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076
- POROUS MATERIALS**
Production of refractory bodies with controlled
porosity by pressing and heating mixtures of
refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
Multilayer porous refractory metal ionizer
design with thick, porous, large-grain
substrates and thin, porous micron-grain
substrates
[NASA-CASE-XMP-04338] c17 N71-23046
Lubrication for bearings by capillary action
from oil reservoir of porous material
[NASA-CASE-XMP-03972] c15 N71-23048
Method and photodetector device for locating
abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993
Production method for manufacturing porous
tungsten bodies from tungsten powder particles
[NASA-CASE-XMP-04339] c17 N71-29137
Compressible electrolyte saturated sponge
electrode for biomedical applications
[NASA-CASE-MSC-13648] c05 N72-27103
Porous electrode for use in electrochemical cells
[NASA-CASE-GSC-11368-1] c09 N73-32108
Method of making porous conductive supports for
electrodes --- by electroforming and stacking
nickel foils
[NASA-CASE-GSC-11367-1] c03 N74-19692
- POROUS PLATES**
Method for producing porous tungsten plates for
ionizing cesium compounds for propulsion of
ion engines
[NASA-CASE-XLE-00455] c28 N70-38197
- PORTABLE EQUIPMENT**
Portable electron beam welding chamber
[NASA-CASE-LEW-11531] c15 N71-14932
Portable apparatus producing high velocity
annular air column surrounding low velocity,
filtered, superclean air central core for
industrial clean room environmental control
[NASA-CASE-XMP-03212] c15 N71-22721
Portable cutting machine for piping weld
preparation
[NASA-CASE-YKS-07953] c15 N71-26134
Method and apparatus for precision sizing and
joining of large diameter tubes by bulging or
constricting overlapping ends
[NASA-CASE-XMP-05114-2] c15 N71-26148
Portable cryogenic cooling system design
including turbine pump, cooling chamber, and
atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
Automatic controlled drive mechanism for
portable boring bar
[NASA-CASE-XLA-03661] c15 N71-33518
One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085
Portable tester for monitoring bacterial
contamination by adenosine triphosphate light
reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413
Portable device for detecting pneumatic pressure
leaks in hermetically sealed housings
[NASA-CASE-MFS-21761-1] c14 N73-18444
Portable penetrometer for analyzing soil
characteristics
[NASA-CASE-MFS-20774] c14 N73-19420
Tool exchange capabilities of portable wrench
characterized by telescopic sleeve
[NASA-CASE-MFS-22283-1] c15 N73-30462
Hand-held, lightweight, portable photomicroscope
[NASA-CASE-ARC-10468-1] c14 N73-33361
- PORTS (OPENINGS)**
Sealing evacuation port and evacuating vacuum
container such as space jackets
[NASA-CASE-XMP-03290] c15 N71-23256
- POSITION (LOCATION)**
Position locating system for remote aircraft
using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
Development of telemetry system for position
location and data acquisition
[NASA-CASE-GSC-10083-1] c30 N71-16090
Automatic braking device for rapidly
transferring humans or materials from elevated
location

- [NASA-CASE-XKS-07814] c15 N71-27067
System and method for position locating for air traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-ERC-10324] c07 N72-25173
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Development of radio locating system for monitoring geographic movement of surface vehicles in metropolitan area using unsynchronized radio broadcasting stations
[NASA-CASE-NPO-13217-1] c07 N73-26144
Collimator for analyzing spatial location of near and distant sources of radiation
[NASA-CASE-MPS-20546-2] c14 N73-30389
Measuring probe position recorder
[NASA-CASE-LAR-10806-1] c14 N74-32877
Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c14 N74-32886
- POSITION INDICATORS**
Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432
Characteristics and performance of electrical system to determine angular rotation
[NASA-CASE-XMP-00447] c14 N70-33179
Magnetic element position sensing device, using misaligned electromagnets
[NASA-CASE-XGS-07514] c23 N71-16099
Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585
Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
[NASA-CASE-XGS-03230] c14 N71-23401
Doppler compensated communication system for locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174
- POSITIONING**
Centering device with ultrafine adjustment for use with roundness measuring apparatus
[NASA-CASE-INT-00480] c14 N70-39898
Portable device for aligning surfaces of two adjacent wall or sheet sections for joining at point of junction
[NASA-CASE-XMP-01452] c15 N70-41371
Electro-optical/computer system for aligning large structural members and maintaining correct position
[NASA-CASE-XMP-02029] c14 N70-41955
Manual control mechanism for adjusting control rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
Rotating raster generator
[NASA-CASE-FRC-10071-1] c07 N74-20813
- POSITIONING DEVICES (MACHINERY)**
Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-IMP-07808] c15 N71-23812
Caterpillar micropositioner for positioning machine tools adjacent to workpiece
[NASA-CASE-GSC-10780-1] c14 N72-16283
Positioning mechanism for converting translatory motion into rotary motion
[NASA-CASE-NPO-10679] c15 N72-21462
Design and development of test stand system for supporting test items in vacuum chamber
[NASA-CASE-MPS-21362] c11 N73-20267
Reference apparatus for medical ultrasonic transducer
[NASA-CASE-ARC-10753-1] c05 N74-13818
Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c23 N74-21304
- POSITIVE FEEDBACK**
Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-IGS-02751] c09 N71-23015
- POTABLE WATER**
Potable water reclamation from human wastes in zero-G environment
[NASA-CASE-XLA-03213] c05 N71-11207
Utilization of solar radiation by solar still for converting salt and brackish water into potable water
[NASA-CASE-INS-04533] c15 N71-23086
Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
Potable water dispenser
[NASA-CASE-MPS-21115-1] c05 N74-12779
Metering gun for dispensing precisely measured charges of fluid
[NASA-CASE-MPS-21163-1] c05 N74-17853
- POTASSIUM SILICATES**
Fireproof potassium silicate coating composition, insoluble in water after application
[NASA-CASE-GSC-10072] c18 N71-14014
- POTENTIOMETERS (INSTRUMENTS)**
Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
[NASA-CASE-IFR-04104] c03 N70-42073
Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-XAC-10019] c15 N71-23809
Mechanical function generators with potentiometer as sensing element
[NASA-CASE-XAC-00001] c15 N71-28952
- POTTING COMPOUNDS**
Removable potting compound for instrument shock protection
[NASA-CASE-XLA-00482] c15 N70-36409
Flexible, repairable, pottable composition for encapsulating electric connectors
[NASA-CASE-XGS-05180] c18 N71-25881
Thermally conductive polymer for potting electrical components
[NASA-CASE-GSC-11304-1] c06 N72-21105
- POWDER METALLURGY**
Freeze casting of metal ceramic and refractory compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076
Production method for manufacturing porous tungsten bodies from tungsten powder particles
[NASA-CASE-XNP-04339] c17 N71-29137
Dry electrode manufacture, using silver powder with cement
[NASA-CASE-FRC-10029-2] c05 N72-25121
Grinding mixtures of powdered metals and inert fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448
Superalloys from prealloyed powders at high temperatures
[NASA-CASE-LEW-10805-1] c15 N73-13465
Development of method for fabricating cernets and analysis of various compositions to show electrical and physical properties
[NASA-CASE-NPO-13120-1] c18 N73-23629
Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c17 N74-10521
Method of forming articles of manufacture from superalloy powders
[NASA-CASE-LEW-10805-2] c15 N74-13179
- POWER AMPLIFIERS**
Characteristics of high power, low distortion, alternating current power amplifier
[NASA-CASE-LAR-10218-1] c09 N70-34559
Power supply with automatic power factor conversion system
[NASA-CASE-XMS-02159] c10 N71-22961
Solid state broadband stable power amplifier
[NASA-CASE-IMP-10854] c10 N71-26331
High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
Isolated output system for a class D switching-mode amplifier
[NASA-CASE-MPS-21616-1] c09 N74-21859
- POWER EFFICIENCY**
Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317
Excitation and detection circuitry for flux responsive magnetic head
[NASA-CASE-IMP-04183] c09 N69-24329
Increasing available power per unit area in ion rocket engine by increasing beam density
[NASA-CASE-ILE-00519] c28 N70-41576
Absorbing gas reactivity control system for minimizing power distribution and perturbation

- in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597
- POWER GAIN**
Serrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies [NASA-CASE-XGS-01022] c07 N71-16088
Switching circuit for control of cathode ray tube beam with fast rise time for output signal [NASA-CASE-KSC-10647-1] c10 N72-31273
- POWER LIMITERS**
Monostable multivibrator for conserving power in spacecraft systems [NASA-CASE-GSC-10082-1] c10 N72-20221
- POWER LINES**
Patent data on terminal insert connector for flat electric cables [NASA-CASE-XMP-00324] c09 N70-34596
Motor run-up system --- for preventing power line disturbances when synchronous motor is connected to line [NASA-CASE-NPO-13374-1] c10 N74-17949
- POWER SEEBIES**
Describing circuit for obtaining sum of squares of numbers [NASA-CASE-XGS-04765] c08 N71-18693
- POWER SPECTRA**
Method and apparatus for high resolution power spectrum analysis [NASA-CASE-NPO-10748] c08 N72-20177
- POWER SUPPLIES**
Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions [NASA-CASE-XGS-08259] c14 N71-23698
Current dependent variable inductance for input filter chokes of ac or dc power supplies [NASA-CASE-ERC-10139] c09 N72-17154
Performance of ac power supply developed for CO2 laser system [NASA-CASE-GSC-11222-1] c16 N73-32391
- POWER SUPPLY CIRCUITS**
Regulated dc to dc converter [NASA-CASE-XGS-03429] c03 N69-21330
Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation [NASA-CASE-XMP-02713] c10 N69-39888
Increasing power conversion efficiency of electronic amplifiers by power supply switching [NASA-CASE-XMS-00945] c09 N71-10798
Electric power system utilizing thermionic plasma diodes in parallel and heat pipes as cathodes [NASA-CASE-XMP-05843] c03 N71-11055
Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator [NASA-CASE-MSC-13112] c03 N71-11057
- Data processor having multiple sections activated at different times by selective power coupling to sections [NASA-CASE-XGS-04767] c08 N71-12494
- Microwave power receiving antenna solving heat dissipation problems by construction of elements as heat pipe devices [NASA-CASE-MPS-20333] c09 N71-13486
- Design, development, and operating principles of power supply with starting circuit which is independent of voltage regulator [NASA-CASE-XMS-01991] c09 N71-21449
- Power supply with automatic power factor conversion system [NASA-CASE-XMS-02159] c10 N71-22961
- Electric circuit for reversing direction of current flow [NASA-CASE-XMP-00952] c10 N71-23271
- Power supply with overload protection for series stage transistor [NASA-CASE-XMS-00913] c10 N71-23543
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 Bipolar phase detector and corrector for split phase PCM data signals
 [NASA-CASE-XGS-01590] c07 N71-12392
 System for recording and reproducing PCM data from data stored on magnetic tape
 [NASA-CASE-XGS-01021] c08 N71-21042
 Frequency shift keying apparatus for use with pulse code modulation data transmission system
 [NASA-CASE-XGS-01537] c07 N71-23405
 Data reduction and transmission system for TV PCM data
 [NASA-CASE-NPO-11243] c07 N72-20154
 Pulse code modulated data from frequency multiplex communications by digital phase shift or carrier
 [NASA-CASE-NPO-11338] c08 N72-25208
 Bit synchronization of PCM communications signal, without separate synchronization channel by digital correlation
 [NASA-CASE-NPO-11302-1] c07 N73-13149
 Method and apparatus for a single channel digital communications system --- synchronization of received PCM signal by digital correlation with reference signal
 [NASA-CASE-NPO-11302-2] c07 N74-10132
 Multifunction audio digitizer --- producing direct delta and pulse code modulation
 [NASA-CASE-MSC-13855-1] c07 N74-17885
 Digital transmitter for data bus communications system
 [NASA-CASE-MSC-14558-1] c07 N74-17888
 Pulse code modulated signal synchronizer
 [NASA-CASE-MSC-12462-1] c07 N74-20809
 Pulse code modulated signal synchronizer
 [NASA-CASE-MSC-12494-1] c07 N74-20810

PULSE COMMUNICATION
 Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
 [NASA-CASE-XNP-00911] c08 N70-41961

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 Frequency to analog converters with unipolar field effect transistor for determining potential charge by pulse duration of input signal
 [NASA-CASE-XNP-07040] c08 N71-12500
 Electrical testing apparatus for detecting amplitude and width of transient pulse
 [NASA-CASE-XMF-06519] c09 N71-12519
 Design and development of variable pulse width multiplier
 [NASA-CASE-XLA-02850] c09 N71-20447
 Device for voltage conversion using controlled pulse widths and arrangements to generate ac output voltage
 [NASA-CASE-MPS-10068] c10 N71-25139
 One shot multivibrator circuit for producing long duration output pulses
 [NASA-CASE-ARC-10137-1] c09 N71-28468
 Pulse stretcher for narrow pulses
 [NASA-CASE-HSC-14130-1] c10 N74-32711

PULSE DURATION MODULATION
 Pulse duration modulation multiplier system
 [NASA-CASE-XER-09213] c07 N71-12390
 Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
 [NASA-CASE-XLA-01219] c10 N71-23084
 Electric motor control system with pulse width modulation for providing automatic null seeking servo
 [NASA-CASE-XMP-05195] c10 N71-24861
 Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and

- magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MSC-13492-1] c10 N71-28860
- Load current sensor for series pulse width modulated power supply
[NASA-CASE-GSC-10656-1] c09 N72-25249
- Peak holding circuit for extremely narrow pulses
[NASA-CASE-MSC-14129-1] c10 N73-26231
- PULSE FREQUENCY MODULATION**
Electric current measuring apparatus design including saturable core transformer and energy storage device to avoid magnetizing current errors from transformer output winding
[NASA-CASE-XGS-02439] c14 N71-19431
- Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
- Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-INP-09759] c08 N71-24891
- Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MSC-12165-1] c07 N71-33696
- PULSE FREQUENCY MODULATION TELEMETRY**
Communication system for transmitting biomedical information obtained from patient in moving ambulance to hospital for diagnosis
[NASA-CASE-FRC-10031] c05 N70-20717
- PULSE GENERATORS**
High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
- Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-XGS-03058] c10 N71-19547
- Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
- Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
[NASA-CASE-GSC-11139] c09 N71-27016
- Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-INP-00745] c10 N71-28960
- Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LEW-10433-1] c09 N72-22197
- Circuitry for generating random square wave pulses using white noise source
[NASA-CASE-MSC-14131-1] c09 N73-26199
- Method and apparatus for nondestructive testing --- using high frequency arc discharges
[NASA-CASE-MFS-21233-1] c23 N74-15395
- PULSE RATE**
Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-INP-06234] c10 N71-27137
- PULSE WIDTH AMPLITUDE CONVERTERS**
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Repetitively pulsed wavelength selective carbon dioxide laser
[NASA-CASE-ERC-10178] c16 N71-24832
- Remote detection and measurement of clear air turbulence using pulsed laser radar
[NASA-CASE-MFS-21244-1] c20 N73-21523
- Procedure and device for effecting dual mode locking in pulsed Nd-YAG lasers
[NASA-CASE-GSC-11746-1] c16 N73-32398
- PULSED RADIATION**
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[NASA-CASE-NPO-10758] c14 N73-14427
- PULSES**
High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119
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[NASA-CASE-INP-08881] c17 N71-28747
- Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c15 N74-10474
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[NASA-CASE-INP-05429] c26 N71-21824
- Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-INP-04042] c15 N71-23023
- Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-INP-04731] c15 N71-24042
- Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures
[NASA-CASE-MFS-20830] c15 N71-30028
- Pumping and metering dual piston system and monitor for reaction chamber constituents
[NASA-CASE-GSC-10218-1] c15 N72-21465
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[NASA-CASE-LEW-11672-1] c15 N74-27904
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[NASA-CASE-ILA-02705] c08 N71-15908
- Handling tool for printed circuit cards
[NASA-CASE-MFS-20453] c15 N71-29133
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[NASA-CASE-XMS-01905] c12 N71-21089
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[NASA-CASE-XMS-04826] c28 N71-28849
- PURIFICATION**
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[NASA-CASE-INP-06888] c15 N71-24044
- Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-INP-08124] c15 N71-27184
- PURITY**
Synthesis of high purity dianilinosilanes
[NASA-CASE-INP-06409] c06 N71-23230
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Multislit film cooled pyrolytic graphite rocket nozzle
[NASA-CASE-INP-04389] c28 N71-20942
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[NASA-CASE-ILA-01781] c14 N69-39975
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Q SWITCHED LASERS

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[NASA-CASE-NPO-11743-1] c33 N74-27425
Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c16 N74-34010

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Design of active RC network capable of operating
at high Q values with reduced sensitivity to
gain amplification and number of passive
components
[NASA-CASE-ARC-10042-2] c10 N72-11256

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Automatic quadrature control and measuring system
--- using optical coupling circuitry
[NASA-CASE-MFS-21660-1] c14 N74-21017

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Ultraviolet chromatographic detector for
quantitative and qualitative analysis of
compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428
Analysis of volatile organic compounds ---
quantitative and qualitative analysis of trace
amounts in gas samples
[NASA-CASE-MSC-14428-1] c06 N74-19776

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[NASA-CASE-NPO-10691] c14 N71-26199
Quantitative liquid measurements in container by
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[NASA-CASE-MNP-02500] c18 N71-27397
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quantitative and qualitative analysis of
compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428
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Analysis of volatile organic compounds ---
quantitative and qualitative analysis of trace
amounts in gas samples
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Ultraviolet filter of thorium fluoride and
cryolite on quartz base
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quartz lamp elements protectively positioned
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Spacecraft transponder and ground station radar
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Radar signal receiver arrangement for extending
range and increasing signal to noise ratio
[NASA-CASE-MNP-00748] c07 N70-36911

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Polarization diversity monopulse tracking
receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864

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Radar signal receiver arrangement for extending
range and increasing signal to noise ratio
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radiation, and adaptable for erection and
deployment with minimum effort and time
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synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
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receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
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[NASA-CASE-XGS-01155] c10 N71-21483
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[NASA-CASE-XLA-06199] c15 N71-24875

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quartz lamp elements protectively positioned
to withstand severe environmental stress
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[NASA-CASE-XLE-00490] c33 N70-34545
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the radiant energy wavelength bands from
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[NASA-CASE-XGS-05534] c23 N71-16355
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[NASA-CASE-MFS-20180] c16 N72-12440
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[NASA-CASE-LBW-10814-1] c28 N70-35422
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[NASA-CASE-XLA-07424] c14 N71-18482
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[NASA-CASE-INP-03934] c09 N71-22985
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Radio receiver with array of independently steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775
Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-IGS-00740] c07 N71-23098

RADIO RELAY SYSTEMS
Satellite radio communication system with remote steerable antenna
[NASA-CASE-INP-02389] c07 N71-28900

RADIO SIGNALS
Erectable, inflatable, radio signal reflecting passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-INP-09832] c30 N71-23723

RADIO STARS
System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-IGS-02610] c14 N71-23174

RADIO TELEMETRY
Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001

RADIO TRANSMITTERS
Development of radio locating system for monitoring geographic movement of surface vehicles in metropolitan area using unsynchronized radio broadcasting stations
[NASA-CASE-NPO-13217-1] c07 N73-26144

RADIO WAVES
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701

RADIOACTIVE ISOTOPES
Radioactive isotope capsule container design for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c33 N71-35153
Thermally cascaded thermoelectric generator with radioisotopic heat source
[NASA-CASE-NPO-10753] c03 N72-26031

RADIOBIOLOGY
Production of I-123 for use as radiopharmaceutical for low radiation exposure
[NASA-CASE-LEW-10518-1] c24 N72-33681

RADIOGRAPHY
Nondestructive radiographic tests of resistance welds
[NASA-CASE-INP-02588] c15 N71-18613

RADIOMETERS
Miniaturized radiometer for detecting low level thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-INP-09701] c14 N71-26475
Black body radiometer having isothermally surrounded cavity for ultraviolet, visible, and infrared radiation
[NASA-CASE-NPO-10810] c14 N71-27323

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RECEIVERS

Thermodielectric radiometer using polymer film as capacitor
[NASA-CASE-ARC-10138-1] c14 N72-24477

Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409

Development of radiometric sensor to warn aircraft pilots of region of clear air turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437

Radiometric measuring system for solar activity and atmospheric attenuation and emission
[NASA-CASE-ERC-10276] c14 N73-26432

Steady state thermal radiometers
[NASA-CASE-MFS-21108-1] c14 N74-27861

RADIOTELEPHONES

Communication system for transmitting biomedical information obtained from patient in moving ambulance to hospital for diagnosis
[NASA-CASE-PRC-10031] c05 N70-20717

RAIN

Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334

RANJET ENGINES

Telescoping-spike supersonic nozzle for turbojet or ranjet engines
[NASA-CASE-XLE-00005] c28 N70-39899

RANDOM LOADS

Fatigue testing device applying random discrete load levels to test specimen and applicable to aircraft structures
[NASA-CASE-XLA-02131] c32 N70-42003

RANDOM NOISE

Circuits for amplitude limiting of random noise inputs
[NASA-CASE-NPO-10169] c10 N71-24844

Digital servo control of random sound test excitation --- in reverberant acoustic chamber
[NASA-CASE-NPO-11623-1] c23 N74-31148

RANDOM PROCESSES

Circuitry for generating random square wave pulses using white noise source
[NASA-CASE-MSC-14131-1] c09 N73-26199

RANGE FINDERS

Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-INP-01501] c21 N70-41930

RANGEPINDING

Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391

Spacecraft ranging system
[NASA-CASE-NPO-10066] c09 N71-18598

Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NPO-11194] c08 N72-25209

Loop transponder for regenerating code of nu-type ranging system
[NASA-CASE-NPO-11707] c07 N73-25161

Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c14 N74-21015

RARE EARTH COMPOUNDS

Including didymin hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608

RARE GASES

Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c16 N74-16187

RAREEPIED GASES

Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XLA-00327] c25 N71-29184

RATES (PER TIME)

Apparatus and digital technique for coding rate data
[NASA-CASE-LAR-10128-1] c08 N73-20217

RC CIRCUITS

RC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-INP-00906] c09 N70-41655

Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-INP-02966] c10 N71-24863

Digital data handling circuits for pulse amplifiers
[NASA-CASE-INP-01068] c10 N71-28739

Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256

Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171

RC networks with voltage amplifier, RC input circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172

Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245

Temperature control system comprised of wheatstone bridge with RC circuit
[NASA-CASE-NPO-11304] c14 N73-26430

Diode quad transducer and discriminator circuit --- characteristics of electrical measuring apparatus
[NASA-CASE-ARC-10364-3] c10 N74-26760

REACTION CONTROL

Development of voice operated controller for controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160

REACTION WHEELS

Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082

Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324

REACTIVITY

Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597

REACTOR CORES

Simulated fuel assembly-type flow measurement apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669

Solid state device for mapping flux and power in nuclear reactor cores
[NASA-CASE-XLE-00301] c14 N70-36808

Reactor heated in-core diodes for energy conversion
[NASA-CASE-NPO-10542] c09 N72-27228

REACTOR TECHNOLOGY

Nuclear reactor control rod assembly with improved driving mechanism
[NASA-CASE-XLE-00298] c22 N70-34501

READOUT

Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864

System for checking status of several double-throw switches by readout indications
[NASA-CASE-XLA-08799] c10 N71-27272

REAL TIME OPERATION

Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time
[NASA-CASE-MSC-13436-1] c05 N73-32015

Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c14 N74-17153

Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c14 N74-28932

Real time liquid crystal image converter
[NASA-CASE-LAR-11206-1] c23 N74-30118

RECEIVERS

Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616

Improved phase lock loop for receiver in multichannel telemetry system with suppressed carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012

Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113

Coherent receiver employing nonlinear coherence detection for carrier tracking

RECONSTRUCTION

[NASA-CASE-NPO-11921-1] c07 N74-30523
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 Method and means for recording and reconstructing holograms without use of reference beam
 [NASA-CASE-ERC-10020] c16 N71-26154
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 Weighing and recording device for obtaining precise automatic record of small changes in force
 [NASA-CASE-ILA-02605] c14 N71-10773
 Blood pressure measuring system for separately recording dc and ac pressure signals of Korotkoff sounds
 [NASA-CASE-IMS-06061] c05 N71-23317
 Helical recorder for multiple channel recording
 [NASA-CASE-GSC-10614-1] c09 N72-11224
 Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
 [NASA-CASE-NPO-11317-2] c16 N74-13205
 Holography utilizing surface plasmon resonances
 [NASA-CASE-NFS-22040-1] c14 N74-26946
 Measuring probe position recorder
 [NASA-CASE-LAR-10806-1] c14 N74-32877
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 Ejectable underwater sound source recovery assembly
 [NASA-CASE-LAR-10595-1] c15 N74-16135
RECOVERABLE LAUNCH VEHICLES
 Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
 [NASA-CASE-NMP-00389] c31 N70-34176
RECOVERABLE SPACECRAFT
 Describing assembly for opening stabilizing and decelerating flaps of flight capsules used in space research
 [NASA-CASE-NMP-03169] c31 N71-15675
RECOVERY PARACHUTES
 Parachute system for lowering manned spacecraft from post-reentry to ocean landing
 [NASA-CASE-ILA-00195] c02 N70-38009
 Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry
 [NASA-CASE-LAR-10549-1] c31 N73-13898
RECTANGULAR PANELS
 Rectangular solar cell stacked panels to generate electrical power aboard spacecraft
 [NASA-CASE-NPO-11771] c03 N73-20040
RECTIFIERS
 Lithium drifted silicon radiation detector with gold rectifying contacts
 [NASA-CASE-XLE-10529] c14 N69-23191
 Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation
 [NASA-CASE-NMP-02713] c10 N69-39888
 Precision full wave rectifier circuit for rectifying incoming electrical signals having positive or negative polarity with only positive output signals
 [NASA-CASE-ARC-10101-1] c09 N71-33109
 Voltage amplitude-responsive trigger circuit with silicon controlled rectifier
 [NASA-CASE-GSC-10221-1] c09 N72-23171
 Dc to ac to dc converter with transistor driven synchronous rectifiers
 [NASA-CASE-GSC-11126-1] c09 N72-25253
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 Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
 [NASA-CASE-XLE-02624] c12 N69-39988
 Apparatus for measuring human body mass in zero or reduced gravity environment
 [NASA-CASE-IMS-03371] c05 N70-42000
 Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
 [NASA-CASE-ILA-01787] c11 N71-16028
 Development of restraint system for securing personnel to ergometer while exercising under weightless conditions
 [NASA-CASE-NFS-21046-1] c14 N73-27377
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 Producing metal powders of controlled particle size by reducing oxide using reactive metal vapor in vacuum

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[NASA-CASE-XLE-06461] c17 N72-22530
REDUNDANT COMPONENTS
 Redundant memory for enhanced reliability of digital data processing system
 [NASA-CASE-GSC-10564] c10 N71-29135
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 Electrostatic modulator for communicating through plasma sheath formed around spacecraft during reentry
 [NASA-CASE-ILA-01400] c07 N70-41331
 Method and apparatus for communicating through ionized layer of gases surrounding spacecraft during reentry into planetary atmospheres
 [NASA-CASE-ILA-01127] c07 N70-41372
 Reentry communication by injection of water droplets into plasma layer surrounding space vehicle
 [NASA-CASE-ILA-01552] c07 N71-11284
REENTRY SHIELDING
 Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
 [NASA-CASE-IMS-02677] c31 N70-42075
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 [NASA-CASE-IMS-02009] c33 N71-20834
 Radioactive isotope capsule container design for atmospheric reentry protection and heat transmission to spacecraft
 [NASA-CASE-LHW-11227-1] c33 N71-35153
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 [NASA-CASE-MSC-12143-1] c33 N72-17947
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 [NASA-CASE-IMS-04142] c31 N70-41631
REENTRY VEHICLES
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 [NASA-CASE-XLA-00165] c31 N70-33242
 Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
 [NASA-CASE-ILA-00241] c31 N70-37986
 Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
 [NASA-CASE-ILA-03273] c14 N71-18699
 Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres
 [NASA-CASE-ILA-01791] c14 N71-22991
 Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere
 [NASA-CASE-ILA-04901] c31 N71-24315
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 [NASA-CASE-LAR-10574-1] c11 N73-13257
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 [NASA-CASE-LAR-10549-1] c31 N73-13898
 Ceramic coating for silica insulation
 [NASA-CASE-RSC-14270-2] c18 N74-30004
REFERENCE SYSTEMS
 Automatic frequency control device for providing frequency reference for voltage controlled oscillator
 [NASA-CASE-RSC-10393] c09 N72-21247
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 Helium refining by superfluidity
 [NASA-CASE-NMP-00733] c06 N70-34946
REFLECTANCE
 Optical characteristics measuring apparatus
 [NASA-CASE-NMP-08840] c23 N71-16365
 Device for determining acceleration of gravity by interferometric measurement of travel of falling body
 [NASA-CASE-IMP-05844] c14 N71-17587
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 [NASA-CASE-ERC-10001] c23 N71-24868
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- A method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector [NASA-CASE-ARC-10631-1] c14 N74-34864
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- Ellipsoidal mirror reflector for measuring reflectance [NASA-CASE-IGS-05291] c23 N71-16341
- REFLECTORS**
- Method of compactly packaging centrifugally expandable lightweight flexible reflector satellite [NASA-CASE-XLA-00138] c31 N70-37981
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- Conical reflector antenna with feed approximating line source [NASA-CASE-NPO-10303] c07 N72-22127
- Target acquisition antenna feed with reflector system [NASA-CASE-GSC-10064-1] c10 N72-22235
- Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds [NASA-CASE-NPO-11264] c07 N72-25174
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- REFRACTORY MATERIALS**
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- Semiconductor device manufacture using refractory dielectrics as diffusant masks and interconnection insulating materials [NASA-CASE-IBR-08476-1] c26 N72-17820
- Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit [NASA-CASE-MPS-20710] c11 N72-23215
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby [NASA-CASE-LEW-12053-1] c06 N74-34579
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- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders [NASA-CASE-LEW-10393-1] c17 N71-15468
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- Brazing alloy adapted for brazing corrosion resistant steel to refractory metals, also for brazing refractory metals to other refractory metals [NASA-CASE-XNP-03063] c17 N71-23365
- Development and characteristics of thermal radiation shielding of refractory metal foil used for induction furnace [NASA-CASE-XLE-03432] c33 N71-24145
- Production of high strength refractory compounds and microconstituents into refractory metal matrix [NASA-CASE-XLE-03940] c18 N71-26153
- Silicide coating process and composition for protection of refractory metals from oxidation [NASA-CASE-XLE-10910] c18 N71-29040
- Development of procedure for improved distribution of refractory compounds and micro-constituents in refractory metal matrix [NASA-CASE-XLE-03940-2] c17 N72-28536
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- Reinforcing beam system for highly flexible diaphragms in valves or pressure switches [NASA-CASE-INP-01962] c32 N70-41370

- Fabrication of light weight panel structure using pairs of elongate hollow ribs of semicircular configuration
[NASA-CASE-LAB-11052-1] c32 N73-13929
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[NASA-CASE-XLE-02428] c17 N70-33288
- Method for producing fiber reinforced metallic composites with high strength and elasticity over wide temperature range
[NASA-CASE-XLE-00231] c17 N70-38198
- Description of method for producing metallic composites reinforced with ceramic and refractory hard metals that are fibered in place
[NASA-CASE-XLE-03925] c18 N71-22894
- Production and application of sprayable fiber reinforced ablation material
[NASA-CASE-XLA-04251] c18 N71-26100
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[NASA-CASE-GSC-10022-1] c10 N71-25882
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[NASA-CASE-GSC-10118-1] c07 N71-24621
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[NASA-CASE-XLA-00679] c15 N70-38601
- Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
- Design and development of release mechanism for spacecraft components, releasable despin weights, and extensible gravity booms
[NASA-CASE-XGS-08718] c15 N71-24600
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[NASA-CASE-XMS-10660-1] c15 N71-25975
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[NASA-CASE-GSC-10814-1] c03 N73-20039
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[NASA-CASE-NPO-13086-1] c15 N73-12495
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[NASA-CASE-XLE-02999] c15 N71-16052
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[NASA-CASE-XMP-04966] c14 N71-17658
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[NASA-CASE-MPO-11177] c15 N72-17453
- Reliability of electrical connectors after heat sterilization
[NASA-CASE-MPO-10694] c09 N72-20200
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[NASA-CASE-MFS-21462-1] c09 N74-14935
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[NASA-CASE-XMS-05894-1] c15 N69-21924
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[NASA-CASE-XLE-00586] c15 N71-15968
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[NASA-CASE-MFS-20944] c15 N73-13466
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[NASA-CASE-XLA-03724] c14 N69-27461
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[NASA-CASE-XLA-02854] c15 N69-27490
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[NASA-CASE-XMP-09776] c09 N69-39929
- Controlled caging and uncaging mechanism for remote instrument control
[NASA-CASE-GSC-11063-1] c03 N70-35584
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[NASA-CASE-XLE-00397] c15 N70-36492
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[NASA-CASE-XLA-00711] c03 N71-12258
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[NASA-CASE-XLA-01396] c03 N71-12259
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[NASA-CASE-XAC-02405] c09 N71-16089
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[NASA-CASE-XMP-02389] c07 N71-28900
- Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
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[NASA-CASE-MFS-22022-1] c05 N74-10099
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[NASA-CASE-MFS-14405] c15 N72-28495
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[NASA-CASE-XNP-05415] c08 N71-12505
- SERVICE LIFE**
- Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248
- SERVOAMPLIFIERS**
- Pneumatic servoamplifier for controlling flow regulation
[NASA-CASE-MSC-12121-1] c15 N71-27147
- SERVOCONTROL**
- Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
- Proportional controller for regulating aircraft or spacecraft motion about three axes
[NASA-CASE-IAC-03392] c03 N70-41954
- Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479
- Servocontrol system for measuring local stresses at geometric discontinuity in stressed material
[NASA-CASE-XLA-08530] c32 N71-25360
- System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop
[NASA-CASE-ARC-10131-1] c15 N71-27754
- Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c15 N74-16139
- Servo-controlled intravitral microscope system
[NASA-CASE-NPO-13214-1] c14 N74-19093
- Digital servo controller --- for rotating antenna shaft
[NASA-CASE-KSC-10769-1] c09 N74-29556
- Digital servo control of random sound test excitation --- in reverberant acoustic chamber
[NASA-CASE-NPO-11623-1] c23 N74-31148

SERVOMECHANISMS

Servo system for retroreflector of Michelson interferometer
[NASA-CASE-NPO-10300] c14 N71-17662

Mechanical function generators with potentiometer as sensing element
[NASA-CASE-XAC-00001] c15 N71-28952

Closed loop servosystem for variable speed tape recorders onboard spacecraft
[NASA-CASE-NPO-10700] c07 N71-33613

Characteristics of lightweight actuator for imparting linear motion using elongated output shaft
[NASA-CASE-NPO-11222] c15 N72-25456

Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels
[NASA-CASE-NPO-10680] c31 N73-14855

SERVOMOTORS

Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MPS-13046] c07 N71-19433

Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-XMF-05195] c10 N71-24861

Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427

Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels
[NASA-CASE-NPO-10680] c31 N73-14855

Phase-locked servo system --- for synchronizing rotation of two or more rotating systems
[NASA-CASE-MPS-22073-1] c09 N74-11058

SEWAGE

Raw water sewage treatment
[NASA-CASE-NPO-13224-1] c05 N73-31011

Raw liquid waste treatment system and process
[NASA-CASE-NPO-13573-1] c05 N74-32552

SHAFTS (MACHINE ELEMENTS)

Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505

Elastic universal joint for rocket motor mounting
[NASA-CASE-INP-00416] c15 N70-36947

Air brake device for absorbing and measuring power from rotating shafts
[NASA-CASE-XLE-00720] c14 N70-40201

Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
[NASA-CASE-IPR-04104] c03 N70-42073

Ratchet mechanism for high speed operation at reduced backlash
[NASA-CASE-MPS-12805] c15 N71-17805

Universal joints for connecting two displaced shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467

Development of mating flat surfaces to inhibit leakage of fluid around shafts
[NASA-CASE-XLE-10326-2] c15 N72-29488

Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359

Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c15 N74-10474

Journal bearings
[NASA-CASE-LEW-11076-4] c15 N74-18134

SHAPED CHARGES

Coupling device for linear shaped charge for space vehicle abort system
[NASA-CASE-XLA-00189] c33 N70-36846

Development of remotely controlled shaped charge for lateral displacement of rocket stages after separation
[NASA-CASE-ILA-04804] c31 N71-23008

SHAPERS

Mandrel for shaping solid propellant rocket fuel into engine casing
[NASA-CASE-XLA-00304] c27 N70-34783

Hand tool for forming dimples and nipples on end portion of tubes
[NASA-CASE-XMS-06876] c15 N71-21536

Dielectric apparatus for heating, fusing, and hardening of organic matrix to form plastic material into shaped product
[NASA-CASE-LAR-10121-1] c15 N71-26721

SHARKS

Conditioning tanned sharkskin for use as abrasive resistant clothing
[NASA-CASE-XMS-09691-1] c18 N71-15545

SHEAR CREEP

Measuring shear-creep compliance of solid and liquid materials used in spacecraft components
[NASA-CASE-XLE-01481] c14 N71-10781

SHEAR FLOW

Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type
[NASA-CASE-MFS-10412] c12 N71-17578

SHEAR PROPERTIES

Describing instrument capable of measuring true shear viscosity of liquids and viscoelastic materials
[NASA-CASE-XNP-09462] c14 N71-17584

SHEAR STRESS

Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-ILA-09122] c15 N69-27505

Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410

Bonded joint and method --- for reducing peak shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c15 N74-23064

SHELLS (STRUCTURAL FORMS)

Channel-type shell construction for rocket engines and related configurations
[NASA-CASE-XLE-00144] c28 N70-34860

SHIELDING

Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-INP-01855] c15 N71-28937

Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
[NASA-CASE-MPS-13687-2] c09 N72-22198

SHIFT REGISTERS

Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
[NASA-CASE-XNP-00432] c08 N70-35423

Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503

Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-INP-01753] c08 N71-22897

Commutator for steering precisely controlled bidirectional currents through numerous loads by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199

Multistage feedback shift register with states decomposable into cycles of equal length
[NASA-CASE-NPO-11082] c08 N72-22167

MOD 2 sequential function generator for multibit sequence, with two-bit shift register for each pair of bits
[NASA-CASE-NPO-10636] c08 N72-25210

Linear shift register with feedback logic for generating pseudonoise linear recurring binary sequences
[NASA-CASE-NPO-11406] c08 N73-12175

Family of n-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254

Nonrecursive counting digital filter containing shift register
[NASA-CASE-NPO-11821-1] c08 N73-26175

Event sequence detector with several input and shift register responsive to clock pulses
[NASA-CASE-NPO-11703-1] c10 N73-32144

Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c07 N74-32598

Nonlinear nonsingular feedback shift registers
[NASA-CASE-NPO-13451-1] c08 N74-32648

SHOCK ABSORBERS

Pivotal shock absorbing assembly for use as load distributing portion in landing gear systems of space vehicles
[NASA-CASE-XMF-03856] c31 N70-34159

Energy dissipating shock absorbing system for land payload recovery or vehicle braking
 [NASA-CASE-XLA-00754] c15 N70-34850

Shock absorbing couch for body support under high acceleration or deceleration forces
 [NASA-CASE-XMS-01240] c05 N70-35152

Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
 [NASA-CASE-MS-C-12279-1] c15 N70-35679

Landing pad assembly for aerospace vehicles
 [NASA-CASE-XMF-02853] c31 N70-36654

Spacecraft shock absorbing system for soft landings
 [NASA-CASE-XMF-02108] c31 N70-36845

Shock absorber for landing gear of lunar or planetary landing modules
 [NASA-CASE-XMF-01045] c15 N70-40354

Shock absorbing articulated multiple couch assembly
 [NASA-CASE-MS-C-11253] c05 N71-12343

Design and development of double acting shock absorber for spacecraft docking operations
 [NASA-CASE-XMS-03722] c15 N71-21530

Impact energy absorber with decreasing absorption rate
 [NASA-CASE-XLA-01530] c14 N71-23092

Energy absorbing crew couch strut for Apollo command module
 [NASA-CASE-MS-C-12279] c15 N72-17450

Shock absorber for use as protective barrier in impact energy absorbing system
 [NASA-CASE-NPO-10671] c15 N72-20443

Viscoelastic shock absorbing mount for electrical circuit board
 [NASA-CASE-NPO-13253-1] c15 N73-31445

SHOCK LOADS
 Damper system for alleviating air flow shock loads on wind tunnel models
 [NASA-CASE-XLA-09480] c11 N71-33612

SHOCK RESISTANCE
 Removable potting compound for instrument shock protection
 [NASA-CASE-XLA-00482] c15 N70-36409

Thermal shock resistant hafnia ceramic materials
 [NASA-CASE-IAR-10894-1] c18 N73-14584

SHOCK TUBES
 Knife structure for controlling rupture of shock tube diaphragms
 [NASA-CASE-XAC-00731] c11 N71-15960

Design, development, and operation of shock tube with bypass piston tunnel
 [NASA-CASE-NPO-12109] c11 N72-22245

SHOCK WAVE INTERACTION
 Absorptive, nonreflecting barrier mounted between closely spaced jet engines on supersonic aircraft, for preventing shock wave interference
 [NASA-CASE-XLA-02865] c28 N71-15563

SHOCK WAVE LUMINESCENCE
 Method and apparatus for measuring shock layer radiation distribution about high velocity objects
 [NASA-CASE-IAC-02970] c14 N69-39896

SHOCK WAVE PROFILES
 Method and apparatus for measuring shock layer radiation distribution about high velocity objects
 [NASA-CASE-IAC-02970] c14 N69-39896

SHOCK WAVES
 Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves
 [NASA-CASE-XLE-04946] c17 N71-24911

Electrical device for developing converging spherical shock waves
 [NASA-CASE-MFS-20890] c14 N72-22439

Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
 [NASA-CASE-MFS-20861-1] c18 N73-32437

Shock position sensor for supersonic inlets --- development of system to measure pressure in throat of supersonic inlet and operate bypass valve
 [NASA-CASE-LEW-11915-1] c12 N74-25805

SHOES
 Jet shoes for space locomotion
 [NASA-CASE-XLA-08491] c05 N69-21380

SHORT CIRCUITS
 Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction
 [NASA-CASE-YGS-04808] c03 N69-25146

Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
 [NASA-CASE-XLE-01015] c03 N69-39898

Apparatus for automatically testing analog to digital converters for open and short circuits
 [NASA-CASE-XLA-06713] c14 N71-28991

SHORT TAKEOFF AIRCRAFT
 Turbofans under wings to provide lift and thrust for STOL aircraft
 [NASA-CASE-LEW-11224-1] c02 N72-10033

SHEROIDS
 Shrouded composite propulsion system configuration
 [NASA-CASE-XLA-01043] c28 N71-10780

SHUTTERS
 High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
 [NASA-CASE-ARC-10516-1] c23 N74-21300

SIDEBANDS
 Phase locked loop with sideband rejecting properties in continuous wave tracking radar
 [NASA-CASE-XNP-02723] c07 N70-41680

SIDLOBE REDUCTION
 Multiple node horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes
 [NASA-CASE-XNP-01057] c07 N71-15907

SIEVES
 Processes for making metal sheets or plaques with parallel pores of uniform size
 [NASA-CASE-GSC-10984-1] c15 N71-34427

SIGNAL ANALYSIS
 Design and development of signal detection and tracking apparatus
 [NASA-CASE-XGS-03502] c10 N71-20852

Phase detector with time correlation integrator for frequency multiplexed signals
 [NASA-CASE-GSC-11744-1] c09 N73-23291

Method and apparatus for a single channel digital communications system --- synchronization of received PCM signal by digital correlation with reference signal
 [NASA-CASE-NPO-11302-2] c07 N74-10132

Differential phase shift keyed signal resolver
 [NASA-CASE-MS-C-14066-1] c10 N74-27705

SIGNAL ANALYZERS
 Monitoring system for signal amplitude ranges over predetermined time interval
 [NASA-CASE-XMS-04061-1] c09 N69-39885

Feedback controller for sampling error signals within single control formulation time interval
 [NASA-CASE-GSC-10554-1] c08 N71-29033

Development of family of frequency to amplitude converters for frequency analysis of complex input signal waveforms
 [NASA-CASE-MS-C-12395] c09 N72-25257

Device for performing statistical time-series analysis of complex electrical signal waveforms
 [NASA-CASE-MS-C-12428-1] c10 N73-25240

Pulse stretcher for narrow pulses
 [NASA-CASE-MS-C-14130-1] c10 N74-32711

SIGNAL DETECTION
 Position locating system for remote aircraft using voice communication and digital signals
 [NASA-CASE-GSC-10087-2] c21 N71-13958

Saturable magnetic core and signal detection for indicating impending saturation
 [NASA-CASE-ERC-10089] c23 N72-17747

SIGNAL DETECTORS
 Roughness detector for recording surface pattern of irregularities
 [NASA-CASE-XLA-00203] c14 N70-34161

Electrical testing apparatus for detecting amplitude and width of transient pulse
 [NASA-CASE-XMF-06519] c09 N71-12519

System for monitoring presence of neutrals in streams of ions - ion engine control
 [NASA-CASE-XNP-02592] c24 N71-20518

Development of apparatus for generating output signal commensurate with information contained in input signal
 [NASA-CASE-ERC-10041] c08 N71-29138

SIGNAL ENCODING
 Adaptive compression signal processor for PCM communication systems

- [NASA-CASE-XLA-03076] c07 N71-11266
- SIGNAL GENERATORS**
- Plural recorder system which limits signal recording to signals of sufficient interest [NASA-CASE-XMS-06949] c09 N69-21467
- Alternating current signal generator providing plurality of amplitude modulated output signals [NASA-CASE-XNP-05612] c09 N69-21468
- Circuitry for generating sync signals in FM communication systems including video information [NASA-CASE-XNP-10830] c07 N71-11281
- Apparatus for generating microwave signals at progressively related phase angles for driving antenna array [NASA-CASE-ERC-10046] c10 N71-18722
- System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops [NASA-CASE-XGS-02610] c14 N71-23174
- Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices [NASA-CASE-XMS-07487] c15 N71-23255
- Voltage controlled oscillators and pulse amplitude modulation for signal ratio system [NASA-CASE-XMF-04367] c09 N71-23545
- Sampling circuit for signal processing in multiplex transmission by Fourier analysis [NASA-CASE-NPO-10388] c07 N71-24622
- Signaling summary alarm circuit with semiconductor switch for faulty contact indications [NASA-CASE-XLE-03061-1] c10 N71-24798
- Adaptive signal generating system and logic circuits for satellite television systems [NASA-CASE-GSC-11367] c10 N71-26374
- Device for monitoring voltage by generating signal when voltages drop below predetermined value [NASA-CASE-KSC-10020] c10 N71-27338
- System for control of variable signal generator [NASA-CASE-NPO-11064] c07 N72-11150
- Digital function generator for generating any arbitrary single valued function [NASA-CASE-NPO-11104] c08 N72-22165
- Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals [NASA-CASE-LAR-10620-1] c09 N72-25255
- Multiterminal Gunn-type semiconductor microwave generator for producing stable signals [NASA-CASE-XER-07895] c26 N72-25679
- Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal [NASA-CASE-NPO-11147] c14 N72-27408
- System for generating timing and control signals during repetitive fixed length serial data transmission [NASA-CASE-NPO-13125-1] c09 N73-18225
- Test set for signal conditioner modules [NASA-CASE-KSC-10750-1] c14 N73-23527
- An NDIR gas analyzer based on absorption modulation ratios for known and unknown samples [NASA-CASE-ARC-10802-1] c14 N74-28933
- Digital servo control of random sound test excitation --- in reverberant acoustic chamber [NASA-CASE-NPO-11623-1] c23 N74-31148
- SIGNAL MEASUREMENT**
- Transmitter receiver system for measuring millivolt electrical signals with high common mode potential [NASA-CASE-XLE-03155-2] c09 N72-20205
- SIGNAL MIXING**
- Impedance transformation device for signal mixing [NASA-CASE-IGS-01110] c07 N69-24334
- SIGNAL PROCESSING**
- Adaptive compression signal processor for PCM communication systems [NASA-CASE-XLA-03076] c07 N71-11266
- Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan rate of commercial TV [NASA-CASE-XMS-07168] c07 N71-11300
- Difference indicating circuit used in conjunction with device measuring gravitational fields [NASA-CASE-INP-08274] c10 N71-13537
- Circuitry for developing autocorrelation function continuously within signal receiving period [NASA-CASE-XNP-00746] c07 N71-21476
- System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops [NASA-CASE-IGS-02610] c14 N71-23174
- Feedback integrating circuit with grounded capacitor for signal processing [NASA-CASE-YAC-10607] c10 N71-23669
- Sampling circuit for signal processing in multiplex transmission by Fourier analysis [NASA-CASE-NPO-10388] c07 N71-24622
- Video signal processing system for sampling video brightness levels [NASA-CASE-NPO-10140] c07 N71-24742
- Monopulse scanning network for scanning volumetric antenna pattern [NASA-CASE-GSC-10299-1] c09 N71-24804
- Apparatus for filtering input signals [NASA-CASE-NPO-10198] c09 N71-24806
- Video sync processor with phase locked system [NASA-CASE-KSC-10002] c10 N71-25865
- Transient video signal tape recorder with expanded playback [NASA-CASE-ARC-10003-1] c09 N71-25866
- Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction [NASA-CASE-NPO-10302] c10 N71-26142
- Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects [NASA-CASE-XNP-09830] c14 N71-26266
- Development of apparatus for generating output signal commensurate with information contained in input signal [NASA-CASE-ERC-10041] c08 N71-29138
- Development of electric circuit for production of different pulse width signals [NASA-CASE-XLA-07788] c09 N71-29139
- Phase shifting circuit for selecting phase of input signal [NASA-CASE-ARC-10269-1] c10 N72-16172
- Processing system for semiperiodic electrical signals to produce real time contoured display [NASA-CASE-MSC-13407-1] c10 N72-20225
- Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios [NASA-CASE-ERC-10112] c07 N72-21119
- Technique for deriving logarithm of input signal using exponentially varying electric signal inversely [NASA-CASE-ERC-10267] c09 N72-23173
- Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station [NASA-CASE-NPO-11358] c07 N72-25172
- Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor [NASA-CASE-GSC-10975-1] c08 N73-13187
- Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication [NASA-CASE-NPO-11572] c07 N73-16121
- Measurement system for physical quantity represented by or converted to variable frequency signal [NASA-CASE-MPS-20658-1] c14 N73-30386
- Digital to analog converter for sampled signal reconstruction [NASA-CASE-MSC-12458-1] c06 N73-32081
- Anti-multipath digital signal detector [NASA-CASE-LAR-11379-1] c07 N74-11005
- Fluid pressure amplifier and system [NASA-CASE-LAR-10868-1] c09 N74-11050
- Isolated output system for a class D switching-mode amplifier [NASA-CASE-MPS-21616-1] c09 N74-21859
- Low level signal limiter [NASA-CASE-XLE-04791] c14 N74-22096
- Miniature multichannel biotelemeter system [NASA-CASE-NPO-13065-1] c05 N74-26625

- Apparatus and method for processing Korotkov sounds --- for blood pressure measurement
[NASA-CASE-MSC-13999-1] c05 N74-26626
- Pulse stretcher for narrow pulses
[NASA-CASE-MSC-14130-1] c10 N74-32711
- SIGNAL RECEPTION**
- Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-INP-00748] c07 N70-36911
- Reflectometer for receiver input impedance match measurement
[NASA-CASE-INP-10843] c07 N71-11267
- Diversity receiving system with diversity phase lock
[NASA-CASE-XGS-01222] c10 N71-20841
- Design and development of signal detection and tracking apparatus
[NASA-CASE-XGS-03502] c10 N71-20852
- Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098
- Binary data decoding device for use at receiving end of communication channel
[NASA-CASE-NPO-10118] c07 N71-24741
- Development of electronic circuit for combining input signals on two separate antennas to form two processed signals
[NASA-CASE-MSC-12205-1] c07 N71-27056
- Input signal measurement using liquid crystalline elements
[NASA-CASE-ERC-10275] c26 N72-25680
- Filter for third order phase locked loops in signal receivers
[NASA-CASE-NPO-11941-1] c10 N73-27171
- Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals
[NASA-CASE-NPO-11738-1] c09 N73-30185
- SIGNAL REFLECTION**
- Reflectometer for receiver input impedance match measurement
[NASA-CASE-INP-10843] c07 N71-11267
- SIGNAL STABILIZATION**
- Linear accelerator frequency control system
[NASA-CASE-XGS-05441] c10 N71-22962
- Development of apparatus for generating output signal commensurate with information contained in input signal
[NASA-CASE-ERC-10041] c08 N71-29138
- Automatic nulling system for interference signal at multichannel receiver by polarization adjustment
[NASA-CASE-NPO-13140-1] c07 N73-27106
- SIGNAL TO NOISE RATIOS**
- Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616
- Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-INP-00748] c07 N70-36911
- Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-INP-00701] c09 N70-40272
- Automatic estimation of signal to noise ratio and other parameters in signal communication systems
[NASA-CASE-INP-05254] c07 N71-20791
- Voltage controlled oscillators and pulse amplitude modulation for signal ratio system
[NASA-CASE-INP-04367] c09 N71-23545
- Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119
- Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
[NASA-CASE-LAR-10253-1] c09 N72-25258
- Superconductive resonant cavity for improved signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
- Signal to noise ratio determination circuit using bandpass limiter
[NASA-CASE-GSC-11239-1] c10 N73-25241
- Gated compressor, distortionless signal limiter
[NASA-CASE-NPO-11820-1] c07 N74-19788
- SIGNAL TRANSMISSION**
- Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-39974
- Electro-mechanical circuit for converting floating intelligence signal to common electrically grounded intelligence recorder
[NASA-CASE-XAC-00086] c09 N70-33182
- Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-INP-01160] c07 N71-11298
- Bipolar phase detector and corrector for split phase PCB data signals
[NASA-CASE-XGS-01590] c07 N71-12392
- Automatic estimation of signal to noise ratio and other parameters in signal communication systems
[NASA-CASE-INP-05254] c07 N71-20791
- Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts
[NASA-CASE-INP-01306] c07 N71-20814
- Adaptive notch filter, using modulation techniques for reversed phase noise signal
[NASA-CASE-INP-01892] c10 N71-22986
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
- Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
[NASA-CASE-KSC-10108] c14 N73-25461
- Phase modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c07 N73-27107
- Television multiplexing system, using single crystal controlled clock for signal synchronization
[NASA-CASE-KSC-10654-1] c07 N73-30115
- Controlled oscillator system with a time dependent output frequency
[NASA-CASE-NPO-11962-1] c09 N74-10194
- Digital transmitter for data bus communications system
[NASA-CASE-MSC-14558-1] c07 N74-17888
- Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12462-1] c07 N74-20809
- Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12494-1] c07 N74-20810
- Aircraft mounted crash activated transmitter device
[NASA-CASE-MFS-16609-3] c09 N74-34647
- SIGNALS**
- Electronic signal-handling circuit with constant input impedance
[NASA-CASE-ARC-10348-1] c10 N72-10205
- Photoconducting semiconductor system for converting stored optical images into video signals
[NASA-CASE-NPO-13131-1] c16 N73-31467
- SILANES**
- Preparation of elastomeric diamine silazane polymers
[NASA-CASE-INP-04133] c06 N71-20717
- Synthesis of high purity dianilinosilanes
[NASA-CASE-INP-06409] c06 N71-23230
- Process for preparing high molecular weight polyaryloxysilanes from lower molecular weight forms
[NASA-CASE-INP-08674] c06 N71-28807
- SILICATES**
- Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979
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[NASA-CASE-XNP-00234] c28 N70-38645
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[NASA-CASE-XNP-09228] c09 N69-27500
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[NASA-CASE-XAC-00435] c09 N70-35440
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[NASA-CASE-XLE-00301] c14 N70-36608
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[NASA-CASE-LAR-10595-1] c15 N74-16135
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[NASA-CASE-XLE-01182] c27 N71-15635
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[NASA-CASE-XLE-02038] c09 N71-16086
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[NASA-CASE-IMP-08840] c23 N71-16365
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[NASA-CASE-XGS-00783] c30 N71-17788
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[NASA-CASE-HQN-10781] c23 N71-30292
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[NASA-CASE-XLA-01220] c02 N70-41863
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[NASA-CASE-NPO-10188] c03 N71-20273
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[NASA-CASE-XLA-01731] c32 N71-21045
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[NASA-CASE-MSC-11817-1] c15 N71-26611
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[NASA-CASE-XAC-02058] c02 N71-16087

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[NASA-CASE-MSC-12391] c30 N73-12884

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[NASA-CASE-MSC-12433] c31 N73-14854

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Multiple in-line docking capability having intermeshing docking turrets for rotating space stations
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[NASA-CASE-IMP-07488] c11 N71-18773

Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439

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Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161

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[NASA-CASE-MSC-12109] c18 N71-26285

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[NASA-CASE-MSC-13917-1] c05 N72-15098

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[NASA-CASE-MFS-20332] c05 N72-20097

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[NASA-CASE-IXS-09346] c09 N71-13521

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[NASA-CASE-GSC-10949-1] c07 N71-28965

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Multiple in-line docking capability having intermeshing docking turrets for rotating space stations [NASA-CASE-MPS-20855-1] c31 N72-25853
High energy absorption docking system design for docking large spacecraft [NASA-CASE-MPS-20863] c31 N73-26876
Development of spacecraft docking system for optical alignment of spacecraft using television camera system [NASA-CASE-MSC-12559-1] c31 N73-26879
Latch mechanism [NASA-CASE-MSC-12549-1] c15 N74-27903
- SPACECRAFT ELECTRONIC EQUIPMENT**
Equipment for testing of ground station ranging equipment and spacecraft transponders [NASA-CASE-XMS-05454-1] c07 N71-12391
Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry [NASA-CASE-XMF-01667] c15 N71-17647
Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield [NASA-CASE-XMS-04312] c07 N71-22984
- SPACECRAFT ENVIRONMENTS**
Portable environmental control and life support system for astronaut in and out of spacecraft [NASA-CASE-XMS-09632-1] c05 N71-11203
Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions [NASA-CASE-MPS-11132] c15 N71-17649
Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods [NASA-CASE-GSC-10188-1] c23 N71-24725
Dual stage check valve for cryogenic supply systems used in space flight environmental control system [NASA-CASE-MSC-13587-1] c15 N73-30459
Metering gun for dispensing precisely measured charges of fluid [NASA-CASE-MPS-21163-1] c05 N74-17853
- SPACECRAFT GUIDANCE**
Automatic ejection valve for attitude control and midcourse guidance of space vehicles [NASA-CASE-XMP-00676] c15 N70-38996
Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references [NASA-CASE-XMP-00684] c21 N71-21688
Design and characteristics of device for sensing solar radiation and providing spacecraft attitude control to maintain direction with respect to incident radiation [NASA-CASE-XMP-05535] c14 N71-23040
Inertial gimbal alignment system for spacecraft guidance [NASA-CASE-XMP-01669] c21 N71-23289
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system [NASA-CASE-MSC-10959] c15 N71-26243
- SPACECRAFT INSTRUMENTS**
Mechanical coordinate converter for use with spacecraft tracking antennas [NASA-CASE-XMP-00614] c14 N70-36907
Air bearings for spacecraft gyros [NASA-CASE-XMP-00339] c15 N70-39896
Unfolding boom assembly with knuckle joints for positioning equipment for spacecraft [NASA-CASE-XGS-00938] c32 N70-41367
Pressurized cell micrometeoroid detector [NASA-CASE-XLA-00936] c14 N71-14996
Guidance analyzer having suspended spacecraft simulating sphere for astronavigation [NASA-CASE-XMP-09572] c14 N71-15621
Inertial component clamping assembly design for spacecraft guidance and control system mounting [NASA-CASE-XMS-02184] c15 N71-20813
Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles [NASA-CASE-XMP-03853] c23 N71-21882
Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft [NASA-CASE-XLA-01907] c14 N71-23268
Spacecraft transponder and ground station radar system for mapping planetary surfaces [NASA-CASE-NPO-11001] c07 N72-21118
Method and apparatus for providing active attitude control for spacecraft by converting any attitude motion of vehicle into simple rotational motion [NASA-CASE-HQN-10439] c21 N72-21624
Design and development of thermomechanical pump for transmitting warming fluid through fluid circuit to control temperature of spacecraft instrumentation [NASA-CASE-NPO-11417] c15 N73-24513
Deployable pressurized cell structure for a micrometeoroid detector [NASA-CASE-LAR-10295-1] c15 N74-21062
- SPACECRAFT LANDING**
Non-reusable kinetic energy absorber for application in soft landing of space vehicles [NASA-CASE-XLE-00810] c15 N70-34861
Plastic foam generator for space vehicle instrument payload package flotation in water landing [NASA-CASE-XLA-00838] c03 N70-36778
Device for use in descending spacecraft as altitude sensor for actuating deceleration retrorockets [NASA-CASE-XMS-03792] c14 N70-41812
- SPACECRAFT LAUNCHING**
Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft [NASA-CASE-GSC-10306-1] c15 N71-24694
Development and characteristics of squib actuated explosive disconnect for spacecraft release from launch vehicle [NASA-CASE-NPO-11330] c33 N73-26958
- SPACECRAFT MODELS**
Space environment simulation system for measuring spacecraft electric field strength in plasma sheath [NASA-CASE-XLE-02038] c09 N71-16086
- SPACECRAFT MODULES**
Radial module manned space station with artificial gravity environment [NASA-CASE-XMS-01906] c31 N70-41373
Multi-mission space vehicle module stage design [NASA-CASE-XMF-01543] c31 N71-17730
Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module [NASA-CASE-MSC-13047-1] c31 N71-25434
Development and characteristics of thermal control system for maintaining constant temperature within spacecraft module with wide variations of component heat transfer [NASA-CASE-GSC-11018-1] c31 N73-30829

SPACECRAFT POSITION INDICATORS

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SPACECRAFT POSITION INDICATORS

Device for determining relative angular position of spacecraft and radiating celestial body
 [NASA-CASE-GSC-11444-1] c14 W73-28490
 Spacecraft attitude sensing system design with narrow field of view sensor rotating about spacecraft x-y axis
 [NASA-CASE-GSC-10890-1] c21 W73-30640

SPACECRAFT POWER SUPPLIES

Spacecraft battery seals
 [NASA-CASE-IGS-03864] c15 W69-24320
 Electrical power system for space flight vehicles operating over extended periods
 [NASA-CASE-IMP-00517] c03 W70-34157
 Lightweight, rugged, inexpensive satellite battery for producing electrical power from ionosphere using electrodes with different contact potentials
 [NASA-CASE-IGS-01593] c03 W70-35408
 Design and development of electric generator for space power system
 [NASA-CASE-XLE-04250] c09 W71-20446
 Monostable multivibrator for conserving power in spacecraft systems
 [NASA-CASE-GSC-10082-1] c10 W72-20221
 Control circuit for nuclear thermionic converter power source for spacecraft
 [NASA-CASE-NPO-13114-1] c22 W73-13656
 Rectangular solar cell stacked panels to generate electrical power aboard spacecraft
 [NASA-CASE-NPO-11771] c03 W73-20040
 Thermoelectric power system --- for outer planet space flight
 [NASA-CASE-MFS-22002-1] c03 W74-18726

SPACECRAFT PROPULSION

Colloidal particle generator for electrostatic engine for propelling space vehicles
 [NASA-CASE-XLE-00817] c28 W70-33265
 Spacecraft trajectory correction propulsion system
 [NASA-CASE-IMP-01104] c28 W70-39931
 Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
 [NASA-CASE-IMP-06942] c28 W71-23293
 Development of voice operated controller for controlling reaction jets of spacecraft
 [NASA-CASE-XLA-04063] c31 W71-33160

SPACECRAFT RECOVERY

Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
 [NASA-CASE-IMP-00641] c31 W70-36410
 Method for deployment of flexible wing glider from space vehicle with minimum impact and loading
 [NASA-CASE-XMS-00907] c02 W70-41630

SPACECRAFT REENTRY

Manned space capsule configuration for orbital flight and atmospheric reentry
 [NASA-CASE-XLA-00149] c31 W70-37938
 Event recorder with constant speed motor which rotates recording disk
 [NASA-CASE-XLA-01832] c14 W71-21006

SPACECRAFT SHIELDING

Development and characteristics of protective coatings for spacecraft
 [NASA-CASE-IMP-02507] c31 W71-17679
 Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover
 [NASA-CASE-MFS-20355] c33 W71-25353
 Binder stabilized zinc oxide pigmented coating for spacecraft thermal control
 [NASA-CASE-IMP-07770-2] c18 W71-26772

SPACECRAFT STABILITY

Satellite stabilization reaction wheel scanner
 [NASA-CASE-IGS-02629] c14 W71-21082
 Development and characteristics of annular momentum control device for two axis stabilization of spacecraft
 [NASA-CASE-LAR-11051-1] c21 W73-28646
 Attitude sensor
 [NASA-CASE-LAR-10586-1] c14 W74-15089
 An improved system for imposing directional stability on a rocket-propelled vehicle
 [NASA-CASE-MFS-21311-1] c31 W74-30311

SPACECRAFT STRUCTURES

Collapsible, space erectable loop antenna system for space vehicle

[NASA-CASE-IMP-00437] c07 W70-40202
 Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
 [NASA-CASE-IMP-00908] c14 W70-40238
 Development of spacecraft radiator cover
 [NASA-CASE-MSC-12049] c31 W71-16080
 Design and construction of satellite appendage tie-down cord
 [NASA-CASE-IGS-02554] c31 W71-21064
 Development and characteristics of thermal sensitive panel for controlling ratio of solar absorptivity to surface emissivity for space vehicle temperature control
 [NASA-CASE-XLA-07728] c33 W71-22890
 Space expandable tether device for use as passageway between two docked spacecraft
 [NASA-CASE-XMS-10993] c15 W71-28936
 Delayed simultaneous appendage release mechanism for use on spacecraft equipped with despinn mechanisms and releasable components
 [NASA-CASE-GSC-10814-1] c03 W73-20039
 Development of composite structures for spacecraft to serve as anti-meteoroid device
 [NASA-CASE-LAR-10788-1] c31 W73-20880
 Structural heat pipe for spacecraft wall thermal insulation system
 [NASA-CASE-GSC-11619-1] c33 W73-32828
 Space vehicle system
 [NASA-CASE-MSC-12561-1] c31 W74-33303

SPACECRAFT TELEVISION

Electrically operated rotary shutter for television camera aboard spacecraft
 [NASA-CASE-IMP-00637] c14 W70-40273
 Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
 [NASA-CASE-XMS-07168] c07 W71-11300

SPACECRAFT TRACKING

Spacecraft ranging system
 [NASA-CASE-NPO-10066] c09 W71-18598
 Elimination of tracking occultation problems occurring during continuous monitoring of interplanetary missions by using Earth orbiting communications satellite
 [NASA-CASE-IAC-06029-1] c31 W71-24813
 Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
 [NASA-CASE-MFS-14017] c14 W71-26627
 Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
 [NASA-CASE-LAR-10626-1] c14 W74-21015

SPACECREWS

Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
 [NASA-CASE-XMS-06162] c31 W71-28851

SPALLATION

Production of iodine isotope by high energy bombardment of cesium heat pipe causing spallation reaction
 [NASA-CASE-LEW-11390-2] c24 W73-20763

SPARK GAPS

Spark gap type protective circuit for fast sensing and removal of overvoltage conditions
 [NASA-CASE-IAC-08981] c09 W69-39897
 Mechanism for measuring nanosecond time differences between luminous events using streak camera
 [NASA-CASE-XLA-01987] c23 W71-23976

SPARK IGNITION

High temperature spark plug for igniting liquid rocket propellants
 [NASA-CASE-XLE-00660] c28 W70-39925

SPARK PLUGS

High temperature spark plug for igniting liquid rocket propellants
 [NASA-CASE-XLE-00660] c28 W70-39925

SPATIAL DISTRIBUTION

Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
 [NASA-CASE-NPO-10185] c10 W71-26339

SPATIAL FILTERING

Photographic film restoration system using Fourier transformation lenses and spatial filter

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SPOT WELDS

- [NASA-CASE-HSC-12448-1] c14 N72-20394
Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c16 N74-34010
- SPECTRAL REFLECTANCE**
Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c14 N74-23040
- SPECTROMETERS**
Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XMP-04161] c14 N71-15599
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XMP-09830] c14 N71-26266
Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-XMP-05231] c14 N73-28491
Integration of spectrometer capability with imagery function of facsimile cameras for use on planetary landers
[NASA-CASE-LAR-11207-1] c14 N73-28496
Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect
[NASA-CASE-MPS-21441-1] c14 N73-30392
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c14 N74-15091
Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c14 N74-23040
Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c14 N74-32890
- SPECTROPHOTOMETERS**
Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-IGS-01231] c14 N70-41676
- SPECTROSCOPIC ANALYSIS**
Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for spectroscopic analysis
[NASA-CASE-IGS-08269] c23 N71-26206
- SPECTRUM ANALYSIS**
Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XMP-04161] c14 N71-15599
Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XMP-02039] c15 N71-15871
Method and apparatus for high resolution power spectrum analysis
[NASA-CASE-NPO-10748] c08 N72-20177
- SPEED CONTROL**
System for maintaining motor at predetermined speed using digital pulses
[NASA-CASE-XMP-06892] c09 N71-24805
Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
Low speed phaselock speed control system --- for brushless dc motor
[NASA-CASE-GSC-11127-1] c09 N74-10202
Two speed drive system --- mechanical device for changing speed on rotating vehicle wheel
[NASA-CASE-MFS-20645-1] c15 N74-23070
- SPEED REGULATORS**
Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MFS-14610] c09 N71-28886
- SPHERES**
Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XMP-09572] c14 N71-15621
Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117
Anti-gravity device
[NASA-CASE-MFS-22758-1] c15 N74-22146
- SPHERICAL SHELLS**
Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
Development of mechanical device for measuring distance of point within sphere from surface
of sphere
[NASA-CASE-XLA-06683] c14 N72-28436
- SPHERICAL TANKS**
Gauge for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-IHS-06236] c14 N71-21007
- SPHERICAL WAVES**
Electrical device for developing converging spherical shock waves
[NASA-CASE-MFS-20890] c14 N72-22439
- SPIKE NOZZLES**
Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-IGS-01143] c31 N71-15647
- SPIN DYNAMICS**
Mutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513
- SPIN REDUCTION**
Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-IGS-02401] c14 N69-27485
Bolt-latch mechanism for releasing despinn weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601
Stretch Yo-Yo mechanism for reducing initial spin rate of space vehicle
[NASA-CASE-IGS-00619] c30 N70-40016
Stage separation system for spinning vehicles and payloads
[NASA-CASE-XLA-02132] c31 N71-10582
Flexible turntable antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XMP-00442] c31 N71-10747
- SPIN STABILIZATION**
Dynamic precession damping of spin-stabilized vehicles by using rate gyroscope and angular accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295
Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943
Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-IGS-03431] c21 N71-15642
Spin phase synchronization of cartwheel satellite in polar orbit
[NASA-CASE-IGS-05579] c31 N71-15676
High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
Passive dual spin misalignment compensators --- gyro-stabilized device
[NASA-CASE-GSC-11479-1] c21 N74-28097
Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c02 N74-30421
- SPIRAL WRAPPING**
Adjustable spiral wire winding device
[NASA-CASE-XMS-02383] c15 N71-15918
- SPIRALS (CONCENTRATORS)**
Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c15 N74-10474
- SPIROMETERS**
Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-IAR-01547] c05 N69-21473
- SPLINTS**
Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMP-06589] c05 N71-23159
- SPORES**
Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c15 N74-13178
- SPOT WELDS**
Controlled arc spot welding method
[NASA-CASE-XMP-00392] c15 N70-34814
Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MFS-13046] c07 N71-19433

- Electric resistance spot welding and brazing for producing metal bonds with superior mechanical and structural characteristics
[NASA-CASE-LAR-11072-1] c15 N73-20535
- SPRAYED COATINGS**
Plasma spraying gun for forming diffusion bonded metal or ceramic coatings on substrates
[NASA-CASE-XLE-01604-2] c15 N71-15610
Production and application of sprayable fiber reinforced ablation material
[NASA-CASE-XLA-04251] c18 N71-26100
Metal plating process employing spraying of metallic powder/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360
- SPRAYERS**
External device for liquid spray cooling of gas turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372
Adhesive spray process for attaching biomedical skin electrodes
[NASA-CASE-XPR-07658-1] c05 N71-26293
Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLE-00027] c33 N71-29152
- SPRAYING**
Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825
- SPREADING**
Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-XMP-02107] c15 N71-10809
- SPEWINGS (ELASTIC)**
Belleville spring assembly with elastic guides having low hysteresis
[NASA-CASE-XNP-09452] c15 N69-27504
Multiple Belleville spring assembly with even load distribution
[NASA-CASE-XNP-00890] c15 N70-38225
Switching mechanism with energy stored in coil spring
[NASA-CASE-XGS-00473] c03 N70-38713
Load cell protection device using spring-loaded breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974
Vibration isolation system, using coaxial helical compression springs
[NASA-CASE-NPO-11012] c15 N72-11391
- SPUTTERING**
Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-ZRC-10120] c26 N69-33482
Development of procedure for producing thin transparent films of zinc oxide on transparent refractory substrate
[NASA-CASE-FRC-10019] c15 N73-12487
Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
A multitarget sequential sputtering apparatus --- supported with rotatable anode
[NASA-CASE-NPO-13345-1] c15 N74-25971
Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c28 N74-31269
- SQUARE WAVES**
High speed phase detector design indicating phase relationship between two square wave input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596
Circuitry for generating random square wave pulses using white noise source
[NASA-CASE-MSC-14131-1] c09 N73-26199
- SQUARES (MATHEMATICS)**
Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437
- SQUIDS**
Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- STABILITY DERIVATIVES**
Aircraft configuration for reducing effects of nose-down pitching moments due to high lift forces, loss of trim lift, and engine-out yawing moments
[NASA-CASE-LAR-11252-1] c02 N73-26007
- STABILITY TESTS**
Method and apparatus for checking the stability of a setup for making reflection type holograms
[NASA-CASE-MFS-21455-1] c16 N74-15146
- STABILIZATION**
Electro-optical stabilization of calibrated light source
[NASA-CASE-MSC-12293-1] c14 N72-27411
System for controlling torque buildup in suspension of gondola connected to balloon by parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
Boron radiation hardening for stabilizing gate threshold potential of MOS devices
[NASA-CASE-GSC-11425-2] c09 N73-32114
Journal bearings
[NASA-CASE-LEW-11076-4] c15 N74-18134
- STABILIZED PLATFORMS**
Hydraulic drive mechanism for leveling isolation platforms
[NASA-CASE-XMS-03252] c15 N71-10658
- STABILIZERS**
Design and development of satellite despin device
[NASA-CASE-XMP-08523] c31 N71-20396
- STABILIZERS (AGENTS)**
Solid propellant stabilizer containing nitroguanidine
[NASA-CASE-NPO-12000] c27 N72-25699
- STABILIZERS (FLUID DYNAMICS)**
Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
[NASA-CASE-XMP-00641] c31 N70-36410
Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XLA-06339] c02 N71-13422
Attitude stabilizer for nonguided missile or vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873
Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26006
An externally supported internally stabilized flexible duct joint
[NASA-CASE-MFS-19194-1] c15 N74-34882
- STABLE OSCILLATIONS**
Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986
- STACKS**
Remote fire stack igniter --- with solenoid-controlled valve
[NASA-CASE-MFS-21675-1] c33 N74-33378
- STAGE SEPARATION**
Stage separation using remote control release of joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490
Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
Space vehicle stage coupling and quick release separation mechanism
[NASA-CASE-XLA-01441] c15 N70-41679
Stage separation system for spinning vehicles and payloads
[NASA-CASE-XLA-02132] c31 N71-10582
Payload/spent rocket engine case separation system
[NASA-CASE-XLA-05369] c31 N71-15687
Separation mechanism for use between stages of multistage rocket vehicles
[NASA-CASE-XLA-00188] c15 N71-22874
Development of remotely controlled shaped charge for lateral displacement of rocket stages after separation
[NASA-CASE-XLA-04804] c31 N71-23008
Electrical circuit selection device for simulating stage separation of flight vehicle
[NASA-CASE-XKS-04631] c10 N71-23663
Frangible connecting link suitable for rocket stage separation
[NASA-CASE-MSC-11849-1] c15 N72-22488
- STAGNATION PRESSURE**
Flow meter for measuring stagnation pressure in boundary layer around high speed flight vehicle

- [NASA-CASE-XPR-02007] c12 N71-24692
Stagnation pressure probe --- for measuring
pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c14 N74-32878
- STAGNATION TEMPERATURE**
Measuring conductive heat flow and thermal
conductivity of laminar gas stream in
cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156
- STAINLESS STEELS**
Joining aluminum to stainless steel by bonding
aluminum coatings onto titanium coated
stainless steel and brazing aluminum to
aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443
Ultrasonic scanning system for in-place
inspection of brazed tube joints
[NASA-CASE-MFS-20767-1] c15 N74-15130
Method of forming a wick for a heat pipe
[NASA-CASE-NPO-13391-1] c33 N74-19584
- STAR TRACKERS**
Star sensor system for roll attitude control of
spacecraft
[NASA-CASE-XNP-01307] c21 N70-41856
Sun tracker with rotatable plane-parallel plate
and two photocells
[NASA-CASE-XGS-01159] c21 N71-10678
Photomultiplier detector of Canopus for
spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771
Attitude detection system using stellar
references for three-axis control and spin
stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
Relay controlled voltage switching unit for
scanning circuitry of star tracker
[NASA-CASE-NPO-11253] c09 N72-17157
Method for producing reticles for use in outer
space
[NASA-CASE-GSC-11188-2] c21 N73-19630
Production method of star tracking reticles for
transmitting in visible and near ultraviolet
regions
[NASA-CASE-GSC-11188-1] c14 N73-32320
Strapped down gyroscope aligned with sun and
star tracker optical axis calibrating roll,
yaw and pitch values
[NASA-CASE-ARC-10716-1] c31 N73-32784
Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c14 N74-20008
Star scanner --- with a reticle with a pair of
slits having differing separation
[NASA-CASE-GSC-11569-1] c14 N74-30886
- STARK EFFECT**
Resonant waveguide Stark cell --- using
microwave spectrometers
[NASA-CASE-LAR-11352-1] c09 N74-19854
- STARTERS**
Starting circuit design for initiating and
maintaining arcs in vapor lamps
[NASA-CASE-XNP-01058] c09 N71-12540
- STATIC FRICTION**
Kinetic and static friction force measurement
between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995
- STATIC INVERTERS**
Describing static inverter with single or
multiple phase output
[NASA-CASE-XNP-00663] c08 N71-18752
Development and characteristics of oscillating
static inverter
[NASA-CASE-XGS-05289] c09 N71-19470
- STATIC LOADS**
Measuring shear-creep compliance of solid and
liquid materials used in spacecraft components
[NASA-CASE-XLE-01481] c14 N71-10781
Apparatus for measuring load on cable under
static or dynamic conditions comprising
pulleys pivoting structure against restraint
of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878
- STATIC PRESSURE**
Pressure probe for sensing ambient static air
pressures
[NASA-CASE-XLA-00481] c14 N70-36824
Ambient atmospheric pressure sensing device for
determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925
- STATIONKEEPING**
Method of stationkeeping for lenticular gravity
gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22969
- STATISTICAL CORRELATION**
Optical sensing of supersonic flows by
correlating deflections in laser beams through
flow
[NASA-CASE-MFS-20642] c14 N72-21407
- STEADY STATE**
Steady state thermal radionometers
[NASA-CASE-MFS-21108-1] c14 N74-27861
- STEAM TURBINES**
Vapor generating boiler system for turbine motor
[NASA-CASE-XLE-00785] c33 N71-16104
- STEELS**
Zinc dust formulation for abrasion resistant
steel coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581
- STEERABLE ANTENNAS**
Apparatus for generating microwave signals at
progressively related phase angles for driving
antenna array
[NASA-CASE-ERC-10046] c10 N71-18722
Satellite radio communication system with remote
steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
Amplitude steered array
[NASA-CASE-GSC-11446-1] c09 N74-20860
- STEERING**
Steerable solid propellant rocket motor adapted
to effect payload orientation as multistage
rocket stage or reduce velocity as retrorocket
[NASA-CASE-XNP-00234] c28 N70-38645
- STELLAR LUMINOSITY**
Development of star intensity measuring system
which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797
- STELLAR SPECTRA**
Development of star intensity measuring system
which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797
- STEREOPHOTOGRAPHY**
Stereo photomicrography system with stereo
microscope for viewing specimen at various
magnifications
[NASA-CASE-LAR-10176-1] c14 N72-20380
Field sequential stereo television
[NASA-CASE-MSC-12616-1] c07 N74-32601
- STEREOSCOPIIC VISION**
Stereoscopic television system, including
projecting pair of binocular images
[NASA-CASE-ARC-10160-1] c23 N72-27728
- STERILIZATION**
Using ethylene oxide in preparation of
sterilized solid rocket propellants and
encapsulating materials
[NASA-CASE-XNP-01749] c27 N70-41897
Ethylene oxide sterilization and encapsulating
process for sterile preservation of
instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461
Environmentally controlled suit for working in
sterile chamber
[NASA-CASE-LAR-10076-1] c05 N73-20137
Protein sterilization of firefly luciferase
without denaturation
[NASA-CASE-GSC-10225-1] c06 N73-27086
An improved heat sterilizable patient ventilator
[NASA-CASE-NPO-13313-1] c05 N74-17858
- STERILIZATION EFFECTS**
Reliability of electrical connectors after heat
sterilization
[NASA-CASE-NPO-10694] c09 N72-20200
- STIMULATED EMISSION**
Repetitively pulsed wavelength selective carbon
dioxide laser
[NASA-CASE-ERC-10178] c16 N71-24832
- STIRRING**
Design of mechanical device for stirring several
test tubes simultaneously
[NASA-CASE-IAC-06956] c15 N71-21177
- STORAGE**
Design and development of fluid sample collector
[NASA-CASE-XMS-06767-1] c14 N71-20435
- STORAGE BATTERIES**
Leak resistant bonded elastomeric seal for
secondary electrochemical cells
[NASA-CASE-XGS-02631] c03 N71-23006

- Automatically charging battery of electric storage cells
[NASA-CASE-XNP-04758] c03 N71-24605
- Elimination of two step voltage discharge property of silver zinc batteries by using divalent silver oxide capacity of cell to charge anodes to monovalent silver state
[NASA-CASE-XGS-01674] c03 N71-29129
- Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20032
- STORAGE STABILITY**
Storage stable, thermally activated foaming compositions for erecting and rigidizing mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
- STORAGE TANKS**
Expulsion bladder equipped storage tank structure
[NASA-CASE-XNP-00612] c11 N70-38182
- Development of apparatus and method for testing leakage of large tanks
[NASA-CASE-XNP-02392] c32 N71-24285
- STRAIN GAGE ACCELEROMETERS**
Accelerometer with FM output signals indicative of mechanical strain on it
[NASA-CASE-XLA-00492] c14 N70-34799
- Strain gage accelerometer for angular acceleration measurement
[NASA-CASE-IAS-05936] c14 N70-41682
- STRAIN GAGE BALANCES**
Self-balancing strain gage transducer with bridge circuit
[NASA-CASE-MFS-12827] c14 N71-17656
- STRAIN GAGES**
Semiconductor p-n junction on needle apex to provide stress and strain sensor
[NASA-CASE-XLA-04980] c09 N69-27422
- Apparatus for forming wire grids for electric strain gages
[NASA-CASE-XLE-00023] c15 N70-33330
- Force measuring instrument for structural members, particularly fastening bolts or studs
[NASA-CASE-XMF-00456] c14 N70-34705
- Difference indicating circuit used in conjunction with device measuring gravitational fields
[NASA-CASE-XNP-08274] c10 N71-13537
- Water cooled gage for strain measurements in high temperature environments
[NASA-CASE-XNP-09205] c14 N71-17657
- Development of apparatus for measuring successive increments of strain on elastomers
[NASA-CASE-XMF-04680] c15 N71-19489
- Strain gage measurement of elongation due to thermally and mechanically induced stresses
[NASA-CASE-XGS-04478] c14 N71-24233
- Method for temperature compensating semiconductor gages by exposure to high energy radiation
[NASA-CASE-XLA-04555-1] c14 N71-25892
- Pulsed excitation voltage circuit for strain gage bridge transducers
[NASA-CASE-FRC-10036] c09 N72-22200
- Method for making semiconductor p-n junction stress and strain sensor
[NASA-CASE-XLA-04980-2] c14 N72-28438
- Development of strain gage ambiguity sensor for measuring alignment of optical mirror segments
[NASA-CASE-MFS-20506-1] c14 N73-17563
- Turnbuckle device for tensile stress load measurements
[NASA-CASE-MFS-21488-1] c14 N73-23526
- Development of strain gage mounting assembly for amplifying measurable deformation applied to strain gage
[NASA-CASE-NPO-13170-1] c14 N73-28495
- Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c14 N74-26945
- STRAIN RATE**
Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating
[NASA-CASE-LAR-10765-1] c32 N73-20740
- STRAPDOWN INERTIAL GUIDANCE**
Strapped down gyroscope aligned with sun and star tracker optical axis calibrating roll, yaw and pitch values
[NASA-CASE-ARC-10716-1] c31 N73-32784
- STRAPS**
A meter for use in detecting tension in straps having predetermined elastic characteristics
[NASA-CASE-MFS-22189-1] c14 N74-10421
- STRESS ANALYSIS**
Development of system for measuring damping characteristics of structure or system subjected to random forces or influences
[NASA-CASE-ARC-10754-1] c14 N72-22440
- Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating
[NASA-CASE-LAR-10765-1] c32 N73-20740
- STRESS CONCENTRATION**
Self-supporting strain transducer --- for measuring stress concentration points
[NASA-CASE-LAR-11263-1] c14 N74-25931
- STRESS CORROSION**
Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NPO-10271] c17 N71-16393
- Method and apparatus for inducing compressive stresses in pressure vessel to prevent stress corrosion
[NASA-CASE-XLA-07390] c15 N71-18616
- STRESS MEASUREMENT**
Semiconductor p-n junction on needle apex to provide stress and strain sensor
[NASA-CASE-XLA-04980] c09 N69-27422
- Force measuring instrument for structural members, particularly fastening bolts or studs
[NASA-CASE-XMF-00456] c14 N70-34705
- Self-balancing strain gage transducer with bridge circuit
[NASA-CASE-MFS-12827] c14 N71-17656
- Servocontrol system for measuring local stresses at geometric discontinuity in stressed material
[NASA-CASE-XLA-08530] c32 N71-25360
- Turnbuckle device for tensile stress load measurements
[NASA-CASE-MFS-21488-1] c14 N73-23526
- Development of strain gage mounting assembly for amplifying measurable deformation applied to strain gage
[NASA-CASE-NPO-13170-1] c14 N73-28495
- STRESS RELIEVING**
Nut and bolt fastener permitting all-directional movement of skin sections with respect to supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
- STRESSES**
Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698
- Strain gage measurement of elongation due to thermally and mechanically induced stresses
[NASA-CASE-XGS-04478] c14 N71-24233
- Strain arrestor plate --- bonding rigid thermal insulation tiles to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c18 N74-15213
- STRETCHERS**
Development and characteristics of rescue litter with inflatable flotation device for water rescue application
[NASA-CASE-XMS-04170] c05 N71-22748
- Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMF-06589] c05 N71-23159
- STRETCHING**
Device for securing together structural members with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457
- STRINGS**
Cord restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623
- STRUCTURAL DESIGN**
Design of inflatable life raft for aircrafts and boats
[NASA-CASE-XHS-00863] c05 N70-34857
- Structural design of high pressure regulator valve
[NASA-CASE-XNP-00710] c15 N71-10778

- Graphic illustration of lifting body design
[NASA-CASE-FRC-10063] c01 N71-12217
- Design of ring wing vehicle of high
drag-to-weight ratio to withstand reentry
stress into low density atmosphere
[NASA-CASE-XLA-04901] c31 N71-24315
- Airfoil with cambered trailing edge section for
supersonic flight
[NASA-CASE-LAR-10585-1] c01 N73-14981
- STRUCTURAL MEMBERS**
- Broadband chokes and absorbers to reduce
spurious radiation patterns of antenna array
caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
- Electro-optical/computer system for aligning
large structural members and maintaining
correct position
[NASA-CASE-XNP-02029] c14 N70-41955
- Nut and bolt fastener permitting all-directional
movement of skin sections with respect to
supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
- Universal joints for connecting two displaced
shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467
- Fabrication of light weight panel structure
using pairs of elongate hollow ribs of
semicircular configuration
[NASA-CASE-LAR-11052-1] c32 N73-13929
- Device for securing together structural members
with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457
- Strain arrestor plate --- bonding rigid thermal
insulation tiles to metallic plates or
structural parts
[NASA-CASE-MSC-14182-1] c18 N74-15213
- Method of laminating structural members
[NASA-CASE-XLA-11028-1] c18 N74-27035
- STRUCTURAL STABILITY**
- Improved latching device for joining structural
components in motionless relationship
[NASA-CASE-MPS-21606-1] c15 N73-22417
- STRUCTURAL VIBRATION**
- Rectangular electric conductors for conductor
cables to withstand spacecraft vibration and
controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737
- Determining sway of buildings by low frequency
device using pendulum
[NASA-CASE-XNP-00479] c14 N70-34794
- Transducer for measuring deflections from
vibrating structures
[NASA-CASE-XLA-03135] c32 N71-16428
- STRUCTURES**
- Deformation measuring apparatus with feedback
control for arbitrarily shaped structures
[NASA-CASE-LAR-10098] c32 N71-26681
- STRUTS**
- Low onset rate energy absorber in form of strut
assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
- Collapsible support for antenna reflector
applied to installation of spacecraft antennas
[NASA-CASE-NPO-11751] c07 N73-24176
- STUDS (STRUCTURAL MEMBERS)**
- Design of quick release locking pin for joining
two or more load-carrying structural members
[NASA-CASE-MFS-18495] c15 N72-11385
- Tool for mounting and removing studs with
adhesive coated head portion
[NASA-CASE-MFS-20299] c15 N72-11392
- Insert facing tool --- manually operated cutting
tool for forming studs in honeycomb material
[NASA-CASE-MFS-21485-1] c15 N74-25968
- SUBMINIATURIZATION**
- Microamperere current measuring circuit, with
two subminiature thermionic diodes with
filament cathodes
[NASA-CASE-XNP-00384] c09 N71-13530
- SUBREFLECTORS**
- Dish antenna having switching beamwidth with
truncated concave ellipsoid subreflector
[NASA-CASE-GSC-11760-1] c09 N73-32116
- SUBSONIC SPEED**
- Aerospace vehicle with variable planform for
hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
- Construction of leading edges of surfaces for
aerial vehicles performing from subsonic to
above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
- SUBSONIC WIND TUNNELS**
- Variable geometry wind tunnel for testing
aircraft models at subsonic speeds
[NASA-CASE-XLA-07430] c11 N72-22246
- SUBSTRATES**
- Means and methods of depositing thin films on
substrates
[NASA-CASE-XNP-00595] c15 N70-34967
- Fabrication of solar cell banks for attaching
solar cells to base members or substrates
[NASA-CASE-XNP-00826] c03 N71-20895
- Method and apparatus for fabricating solar cell
panels
[NASA-CASE-XNP-03413] c03 N71-26726
- SUBSTRUCTURES**
- Supporting structure for simultaneous exposure
of pellets to X rays
[NASA-CASE-XNP-06031] c15 N71-15606
- SULFATES**
- Nitroaniline sulfate, intumescent paints
[NASA-CASE-ARC-10099-1] c18 N71-15469
- SULFORES**
- Electrolytic cell design
[NASA-CASE-LAR-11042-1] c03 N74-29416
- SULFUR COMPOUNDS**
- Mercaptan terminated polymer containing sulfonic
acid salts of nitrosubstituted aromatic amines
for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
- SUM RULES**
- Describing circuit for obtaining sum of squares
of numbers
[NASA-CASE-XGS-04765] c08 N71-18693
- SUNGLASSES**
- Pliable frame for sunglasses in emergency
survival kits
[NASA-CASE-XMS-06064] c05 N71-23096
- SUNLIGHT**
- Illumination system design for use as sunlight
simulator in space environment simulators with
multiple light sources reflected to single
virtual source
[NASA-CASE-HQN-10781] c23 N71-30292
- SUPERCONDUCTING MAGNETS**
- Cryogenic flux-gated magnetometer using
superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
- Improved alternator with windings of
superconducting materials acting as permanent
magnet
[NASA-CASE-XLE-02824] c03 N69-39890
- Segmented superconducting magnet producing
staggered magnetic field and suitable for
broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
- Operating properties of superconducting magnet
in vacuum environment
[NASA-CASE-XNP-06503] c23 N71-29049
- SUPERCONDUCTIVITY**
- Superconducting alternator design with cryogenic
fluid for cooling windings below critical
temperature
[NASA-CASE-XLE-02823] c09 N71-23443
- Superconductive resonant cavity for improved
signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
- Superconducting magnetic field trapping device
for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
- A doped Josephson tunneling junction for use in
a sensitive IR detector
[NASA-CASE-NPO-13348-1] c14 N74-20022
- SUPERCONDUCTORS**
- Superconductive accelerometer employing variable
force principle to determine acceleration of
bodies
[NASA-CASE-XMP-01099] c14 N71-15969
- Controlled diffusion reaction process for
masking substrate of twisted multifilaent
superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
- Twisted wire or tube superconductor for filament
windings
[NASA-CASE-LEW-11015] c26 N73-32571
- Method of manufacturing composite superconductors
[NASA-CASE-LEW-11582-1] c09 N74-33739

SUPERFLUIDITY

Helium refining by superfluidity
[NASA-CASE-XNP-00733] c06 N70-34946

SUPERSONIC AIRCRAFT
Variable sweep wing configuration for supersonic aircraft
[NASA-CASE-XLA-00230] c02 N70-33255
Supersonic aircraft variable sweep wing planform for varying aspect ratio
[NASA-CASE-XLA-00350] c02 N70-38011
Development and characteristics of variable sweep wing control system for supersonic aircraft
[NASA-CASE-XLA-03659] c02 N71-11041
Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
Absorptive, nonreflecting barrier mounted between closely spaced jet engines on supersonic aircraft, for preventing shock wave interference
[NASA-CASE-XLA-02865] c28 N71-15563
Single wing supersonic aircraft --- with pivotal attachment of airfoil
[NASA-CASE-ARC-10470-3] c01 N74-30414

SUPERSONIC AIRFOILS
Airfoil with cambered trailing edge section for supersonic flight
[NASA-CASE-LAR-10585-1] c01 N73-14981

SUPERSONIC COMBUSTION
Supersonic-combustion rocket
[NASA-CASE-LEN-11058-1] c28 N74-13502

SUPERSONIC DRAG
Bluff-shaped annular configuration for supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939

SUPERSONIC FLIGHT
Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088

SUPERSONIC FLOW
Optical sensing of supersonic flows by correlating deflections in laser beams through flow
[NASA-CASE-MFS-20642] c14 N72-21407
Stagnation pressure probe --- for measuring pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c14 N74-32878

SUPERSONIC INLETS
Airflow control system for supersonic inlets
[NASA-CASE-LEN-11188-1] c02 N74-20646

SUPERSONIC NOZZLES
Penshaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711
Telescoping-spike supersonic nozzle for turbojet or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
Electric arc heater with supersonic nozzle and fixed arc length for use in high temperature wind tunnels
[NASA-CASE-XAC-01677] c09 N71-20816

SUPERSONIC SPEEDS
Continuous operation, single phased, induction plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946

SUPERSONIC TRANSPORTS
Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
System and method for position locating for air traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
Doppler compensated communication system for locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174

SUPPORT SYSTEMS
Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight

conditions
[NASA-CASE-XNF-03248] c11 N71-10604
Supporting structure for simultaneous exposure of pellets to X rays
[NASA-CASE-XNP-06031] c15 N71-15606
Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481
Adjustable support device with jacket screw for altering distance between base and supported member
[NASA-CASE-NPO-10721] c15 N72-27484

SUPPORTS
Support techniques for restraint of slender bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540
Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-IGS-02401] c14 N69-27485
Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XNF-07587] c15 N71-18701
Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-XNF-07808] c15 N71-23812
Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
Gas bearing for model support with capacity for measuring angular displacement of model in bearing
[NASA-CASE-XLA-09346] c15 N71-28740
Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123
Slotted fine-adjustment support for optical devices
[NASA-CASE-MFS-20249] c15 N72-11386
Base support for expandable and contractible coupling between two members
[NASA-CASE-NPO-11059] c15 N72-17454
Optical mirror support system
[NASA-CASE-XER-07896-2] c23 N72-22673
Fixture for supporting articles during vibration tests comprising integral annular unit
[NASA-CASE-MFS-20523] c14 N72-27412
Design and development of test stand system for supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267
Collapsible support for antenna reflector applied to installation of spacecraft antennas
[NASA-CASE-NPO-11751] c07 N73-24176
Viscoelastic shock absorbing mount for electrical circuit board
[NASA-CASE-NPO-13253-1] c15 N73-31445
Method of making porous conductive supports for electrodes --- by electroforming and stacking nickel foils
[NASA-CASE-GSC-11367-1] c03 N74-19692
Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c32 N74-27397

SUPPRESSORS
Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980

SURFACE DEFECTS
Surface defect detection by reflected microwave radiation pattern
[NASA-CASE-ARC-10009-1] c15 N71-17822
Method and device for detection of surface discontinuities or defects
[NASA-CASE-MSC-14187-1] c14 N74-32879

SURFACE DIFFUSION
Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772

SURFACE FINISHING
Development of procedure for producing thin transparent films of zinc oxide on transparent

- refractory substrate
[NASA-CASE-PRC-10019] c15 N73-12487
- Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
[NASA-CASE-MPS-20243] c23 N73-13662
- SURFACE IONIZATION**
- Electrodes having array of small surfaces for field ionization
[NASA-CASE-ERC-10013] c09 N71-26678
- Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
- SURFACE LAYERS**
- Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-IGS-02011] c15 N71-20739
- Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
[NASA-CASE-ERC-10073-1] c06 N74-19769
- SURFACE PROPERTIES**
- Anti-wettable materials brazing processes using titanium and zirconium for surface pretreatment
[NASA-CASE-XMS-03537] c15 N69-21471
- Automatic swabbing apparatus for sampling of microbiological surfaces
[NASA-CASE-LAR-11069-1] c04 N73-16061
- Ablation article and surface for analyzing flow transition on ablative surface
[NASA-CASE-LAR-10439-1] c33 N73-27796
- Dual measurement ablation sensor
[NASA-CASE-LAR-10105-1] c33 N74-15652
- Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c14 N74-20009
- SURFACE REACTIONS**
- Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446
- SURFACE ROUGHNESS**
- Roughness detector for recording surface pattern of irregularities
[NASA-CASE-XLA-00203] c14 N70-34161
- Optical apparatus for visual detection of roundness and regularity of cone surfaces
[NASA-CASE-XMP-00462] c14 N70-34298
- Describing device for surveying contour of surface using X-Y plotter and traveling transducer
[NASA-CASE-XLA-08646] c14 N71-17586
- SURFACE ROUGHNESS EFFECTS**
- Aerodynamically stable meteorological balloon using surface roughness effect
[NASA-CASE-XMP-04163] c02 N71-23007
- SURFACE VEHICLES**
- Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
- Development of radio locating system for monitoring geographic movement of surface vehicles in metropolitan area using unsynchronized radio broadcasting stations
[NASA-CASE-NPO-13217-1] c07 N73-26144
- Self-propelled vehicle with wheel, track laying, and walking capability for exploratory expolaration
[NASA-CASE-NPO-11366] c11 N73-26238
- Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c16 N74-15145
- Recording apparatus
[NASA-CASE-LAR-11353-1] c14 N74-20020
- SURFACE WAVES**
- Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna
[NASA-CASE-XLA-10772] c07 N71-28980
- SURFACES**
- Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XMP-00389] c31 N70-34176
- Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995
- Three-axis adjustable loading structure
[NASA-CASE-PRC-10051-1] c14 N74-13129
- SURGERY**
- Surgical liquification pump for removing macerated tissue from eye
[NASA-CASE-LEW-12051-1] c04 N73-32000
- SURGES**
- Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984
- Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
- SURGICAL INSTRUMENTS**
- Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] c05 N73-27062
- Surgical liquification pump for removing macerated tissue from eye
[NASA-CASE-LEW-12051-1] c04 N73-32000
- SURVIVAL EQUIPMENT**
- Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285
- Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
- Pliable frame for sunglasses in emergency survival kits
[NASA-CASE-XMS-06064] c05 N71-23096
- SUSPENDING (HANGING)**
- Parallel motion suspension device for measuring instruments
[NASA-CASE-XNP-01567] c15 N70-41310
- Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
- Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- SWEAT COOLING**
- Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
- Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
- Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c15 N74-32919
- SWEEP CIRCUITS**
- Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926
- SWEEP EFFECT**
- Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- SWELLING**
- Para-benzoquinone dioxide and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572
- SWEPT WINGS**
- Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
- SWIRLING**
- Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-ILA-05749] c15 N71-19569
- Swirl can, full-annulus combustion chambers for high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665
- SWITCHES**
- Switching mechanism with energy stored in coil spring
[NASA-CASE-XGS-00473] c03 N70-38713
- Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
- Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202
- SWITCHING CIRCUITS**
- Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500
- Power control switching circuit using low voltage semiconductor controlled rectifiers

- for high voltage isolation
[NASA-CASE-INP-02713] c10 N69-39888
- Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
- Electrical power system for space flight vehicles operating over extended periods
[NASA-CASE-INP-00517] c03 N70-34157
- High speed low level voltage commutating switch
[NASA-CASE-IAC-00060] c09 N70-39915
- Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-INP-02654] c10 N70-42032
- Using electron beam switching for brushless motor commutation
[NASA-CASE-IGS-01451] c09 N71-10677
- Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-IHS-00945] c09 N71-10798
- Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- Describing magnetic core current switching device for steering bipolar current pulses to memory units
[NASA-CASE-NPO-10201] c08 N71-18694
- Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-INP-09450] c10 N71-18723
- Reversible current directing circuitry for reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724
- Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-XLA-07732] c08 N71-18751
- Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-IGS-03501] c09 N71-20864
- Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-XR-03934] c09 N71-22985
- Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-IGS-02751] c09 N71-23015
- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-INP-01318] c10 N71-23033
- Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-IHS-04919] c09 N71-23270
- Electric circuit for reversing direction of current flow
[NASA-CASE-INP-00952] c10 N71-23271
- Switching series regulator with gating control network
[NASA-CASE-IHS-09352] c09 N71-23316
- Microwave waveguide switch with rotor position control
[NASA-CASE-INP-06507] c09 N71-23548
- Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
- Solid state circuit for switching alternating current input signal as function of direct current gating transistor
[NASA-CASE-INP-06505] c10 N71-24799
- Inverters for changing direct current to alternating current
[NASA-CASE-IGS-06226] c10 N71-25950
- Design and development of multistage current steering switch with inductively coupled magnetic cores
[NASA-CASE-INP-08567] c09 N71-26000
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-IGS-04224] c10 N71-26418
- Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
- Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774
- Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126
- Phase locked demodulator with bandwidth switching amplifier circuit
[NASA-CASE-INP-01107] c10 N71-28859
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-HSC-13492-1] c10 N71-28860
- Digital magnetic core memory with sensing amplifier circuits
[NASA-CASE-INP-01012] c08 N71-28925
- Current regulating voltage divider design with load current shunting
[NASA-CASE-HPS-20935] c09 N71-34212
- Relay controlled voltage switching unit for scanning circuitry of star tracker
[NASA-CASE-NPO-11253] c09 N72-17157
- Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
[NASA-CASE-GSC-10669-1] c03 N72-20031
- Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
[NASA-CASE-NPO-10722] c09 N72-20199
- Switching type voltage regulator with relatively simple circuit arrangement
[NASA-CASE-LEW-11005-1] c09 N72-21243
- Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration
[NASA-CASE-NPO-11333] c08 N72-22162
- Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LEW-10433-1] c09 N72-22197
- Solid state remote circuit selector switching circuit
[NASA-CASE-LEW-10387] c09 N72-22201
- Pressure operated electrical switch responsive to pressure decrease after pressure increase
[NASA-CASE-LAR-10137-1] c09 N72-22204
- Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
- Switching circuit for control of cathode ray tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273
- Electronic video editor for switching video input signals to common output channel
[NASA-CASE-KSC-10003] c10 N73-13235
- Solid state switch for variable circuit switching
[NASA-CASE-NPO-10817-1] c08 N73-30135
- Manually and automatically operable video switching system
[NASA-CASE-HSC-10782-1] c07 N73-32063
- Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-HSC-13746-1] c10 N73-32143
- Isolated output system for a class D switching-mode amplifier
[NASA-CASE-HPS-21616-1] c09 N74-21859
- High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c07 N74-22814
- SWITCHING THEORY**
- Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-IAC-03777] c10 N71-15909
- SWIVELS**
- Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-INP-07808] c15 N71-23812
- SYNCHRONISM**
- Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-IGS-05918] c07 N69-39974
- Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-INP-10830] c07 N71-11281
- Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-INP-08875] c10 N71-23099

- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-IGS-03632] c09 N71-23311
- Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326
- System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577
- SYNCHRONIZED OSCILLATORS**
- Development of phase demodulation system with two phase locked loops
[NASA-CASE-XNF-00777] c10 N71-19469
- Phase locked phase modulation system with voltage controlled oscillator for final phase linearity
[NASA-CASE-XNF-05382] c10 N71-23544
- Automatic frequency control device for providing frequency reference for voltage controlled oscillator
[NASA-CASE-KSC-10393] c09 N72-21247
- SYNCHRONIZERS**
- Development and characteristics of burst synchronization detection system
[NASA-CASE-IES-05605-1] c10 N71-19468
- Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
- Design and development of asynchronous servo loop control system
[NASA-CASE-XNF-03794] c10 N71-20448
- Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
- Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
- System for generating timing and control signals during repetitive fixed length serial data transmission
[NASA-CASE-NPO-13125-1] c09 N73-18225
- Pulse code modulated signal synchronizer
[NASA-CASE-NSC-12462-1] c07 N74-20809
- Pulse code modulated signal synchronizer
[NASA-CASE-NSC-12494-1] c07 N74-20810
- SYNCHRONOUS MOTORS**
- Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10085-1] c10 N71-27136
- Motor run-up system --- for preventing power line disturbances when synchronous motor is connected to line
[NASA-CASE-NPO-13374-1] c10 N74-17949
- SYNCHRONOUS SATELLITES**
- Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
- Serrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
[NASA-CASE-IGS-01022] c07 N71-16088
- Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
- Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
- Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
- Development of device for simulating charge and discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020
- SYNTHESIS**
- Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-XNF-08651] c06 N71-11236
- Preparation of ordered poly(arylenesiloxane)/polymers
[NASA-CASE-XNF-10753] c06 N71-11237
- Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
- Chemical synthesis of formaldehyde based disinfectants without penetrating odor and eye and ear irritation properties
[NASA-CASE-NPO-12115-1] c06 N73-17153
- Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
- SYNTHESIZERS**
- Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-IGS-02317] c09 N71-23525
- SYNTHETIC FIBERS**
- Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
- Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-ESC-12109] c18 N71-26285
- Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNF-08881] c17 N71-28747
- SYNTHETIC RESINS**
- Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-XNF-06508] c18 N69-39895
- SYSTEM FAILURES**
- Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-IGS-08259] c14 N71-23698
- Fault-tolerant clock apparatus for use in digital logic systems which maintains output pulses during component failure
[NASA-CASE-HSC-12531-1] c14 N73-22386
- SYSTEMS ANALYSIS**
- Analog to digital converter analyzing system
[NASA-CASE-NPO-10560] c08 N72-22166
- Pseudo-noise test set for communication system evaluation
[NASA-CASE-HFS-22671-1] c14 N74-13146
- SYSTEMS ENGINEERING**
- Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNF-07481] c25 N69-21929
- Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-NSC-12111-1] c02 N71-11039
- Solar battery with interconnecting means for plural cells
[NASA-CASE-XNF-06506] c03 N71-11050
- Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
- Design and operation of multi-feed cone Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
- Method and apparatus for measuring potentials in plasmas
[NASA-CASE-XLE-00821] c25 N71-15650
- Design and operation of viscous pendulum damper
[NASA-CASE-XLA-02079] c12 N71-16894
- Alarm system design for monitoring one or more relay circuits
[NASA-CASE-XMS-10984-1] c10 N71-19417
- Wide range analog data compression system
[NASA-CASE-IGS-02612] c08 N71-19435
- Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439
- Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
- Design and operation of high speed binary to decimal conversion system
[NASA-CASE-IGS-01230] c08 N71-19544
- Sputter proof evaporant source design for use in vacuum deposition of solid thin films on substrates
[NASA-CASE-XNF-06065] c15 N71-20395

- Method and apparatus for fabrication of heat insulating and ablative reentry structure
[NASA-CASE-XNS-02009] c33 N71-20834
- Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
- Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045
- Magnetically opened diaphragm design with camera shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
- Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-XMF-03212] c15 N71-22721
- Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
- Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XMP-01083] c15 N71-22723
- Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968
- Method of stationkeeping for lenticular gravity gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22969
- Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XMP-01747] c15 N71-23024
- Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XMP-08877] c15 N71-23025
- Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XMP-02791] c07 N71-23026
- Multisample test chamber for exposing materials to X rays, temperature change, and gaseous conditions and determination of material effects
[NASA-CASE-XNS-02930] c11 N71-23042
- Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084
- Sealed electrochemical cell with flexible casing for varying electrolyte level in cell
[NASA-CASE-XGS-01513] c03 N71-23336
- Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
[NASA-CASE-XGS-03230] c14 N71-23401
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
- Method of attaching cover glass to silicon solar cell without using adhesive
[NASA-CASE-XLE-08569-2] c03 N71-24681
- Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-XGS-01654] c31 N71-24750
- Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NPO-10649] c07 N71-24840
- Tuning arrangement for frequency control of magnetron-type electron discharge device
[NASA-CASE-XMP-09771] c09 N71-24841
- Broadband modified turnstile antenna for use in space tracking and communications
[NASA-CASE-MSC-12209] c09 N71-24842
- Apparatus to determine electric field strength by measuring deflection of electron beam impinging on target
[NASA-CASE-XMP-06617] c09 N71-24843
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891
- Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MFS-20395] c15 N71-24903
- Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904
- Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975
- Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-XKS-05932] c09 N71-26787
- Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MFS-20240] c14 N71-26788
- Method and apparatus for remote measurement of displacement of marks on specimen undergoing tensile test
[NASA-CASE-NPO-10778] c14 N72-11364
- Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
[NASA-CASE-GSC-10669-1] c03 N72-20031
- Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20032
- Method and apparatus for providing active attitude control for spacecraft by converting any attitude motion of vehicle into simple rotational motion
[NASA-CASE-HQN-10439] c21 N72-21624
- Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
- Development of thrust control system for application to control of aircraft and spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595
- Combined shoulder harness and lap belt restraint system for use in aircraft or automobiles
[NASA-CASE-ARC-10519-1] c05 N72-31117
- Development of computer program for estimating reliability of self-repair and fault-tolerant systems with respect to selected system and mission parameters
[NASA-CASE-NPO-13086-1] c15 N73-12495
- Design and development of active control system for air cushion vehicle to reduce or eliminate effects of excessive vertical vibratory acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023
- Measurement system for physical quantity represented by or converted to variable frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386
- Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c16 N73-30478
- Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
- System for calibrating pressure transducer
[NASA-CASE-LAR-10910-1] c14 N74-13132
- Three mirror glancing incidence system for X-ray telescope
[NASA-CASE-MFS-21372-1] c14 N74-27866
- Photographic film restoration system
[NASA-CASE-MSC-12448-2] c14 N74-32884
- SYSTEMS STABILITY**
- Development and characteristics of annular momentum control device for two axis stabilization of spacecraft
[NASA-CASE-LAR-11051-1] c21 N73-28646
- SYSTEMIC PRESSURE**
- Automatic system for measuring and monitoring systolic and diastolic blood pressure in humans
[NASA-CASE-MSC-13999-1] c05 N72-25142

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- TACHOMETERS**
 Digital cardiometer incorporating circuit for measuring heart rate of subject over predetermined portion of one minute also converting rate to beats per minute
 [NASA-CASE-XMS-02399] c05 N71-22896
 Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
 [NASA-CASE-MFS-20385] c09 N71-24904
 Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
 [NASA-CASE-MFS-20418] c14 N73-24473
- TAKEOFF**
 Aircraft instrument for indicating malfunctions during takeoff
 [NASA-CASE-XLA-00100] c14 N70-36807
 Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
 [NASA-CASE-XLA-00467] c14 N70-40157
- TARGETS**
 Integrated circuit tangnet function generator
 [NASA-CASE-MSC-13907-1] c10 N73-26230
- TANK GEOMETRY**
 Liquid propellant tank design with semitoroidal bulkhead
 [NASA-CASE-XNP-01899] c31 N70-41948
- TANKS (CONTAINERS)**
 Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
 [NASA-CASE-MSC-12280] c27 N71-16348
 Development of apparatus and method for testing leakage of large tanks
 [NASA-CASE-XMF-02392] c32 N71-24285
 Design and development of device to prevent clogging in hoppers containing particulate materials
 [NASA-CASE-LAR-10961-1] c15 N73-12496
 Floating baffle for tank drain
 [NASA-CASE-KSC-10639] c15 N73-26472
- TANTALUM**
 Oxygen-doped tantalum emitter for thermionic devices such as cesium vapor diodes
 [NASA-CASE-NPO-11138] c03 N70-34646
 Arc electrode of graphite with tantalum ball tip
 [NASA-CASE-XLE-04788] c09 N71-22987
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[NASA-CASE-XLE-05689] c28 N71-15659
- Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
- Fuel and oxidizer injection head for thrust chamber of reaction engine
[NASA-CASE-NPO-10046] c28 N72-17843
- Continuous gas flow control by fluidic proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769
- Radial magnetic field for ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
- Thermal flux transfer system for maintaining thrust chamber of operative reaction motor at given temperatures
[NASA-CASE-NPO-12070-1] c28 N73-32606
- THRUST CONTROL**
Electromechanical actuator and its use in rocket thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185
- Solid propellant rocket vehicle thrust control method and apparatus
[NASA-CASE-XNP-00217] c28 N70-38181
- Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
- Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMF-06926] c28 N71-22983
- Low mass ionizing device for use in electric thrust spacecraft engines
[NASA-CASE-XNP-01954] c28 N71-28850
- Heated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766
- THRUST MEASUREMENT**
Dynamometer measuring microforce thrust produced by ion engine
[NASA-CASE-XLE-00702] c14 N70-40203
- Development of thrust dynamometer for measuring performance of jet and rocket engines
[NASA-CASE-XLE-05260] c14 N71-20429
- Development of temperature compensated thrust measuring gage for measuring forces as function of time in environment with varying temperature
[NASA-CASE-XGS-02319] c14 N71-22965
- Micro-pound extended range thrust stand for small rocket engines
[NASA-CASE-GSC-10710-1] c28 N71-27094
- THRUST VECTOR CONTROL**
Thrust vector control by secondary injection of fluid into rocket nozzle flow field to separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294
- High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
- Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
- Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-MFS-20831] c28 N71-29153
- Development of thrust control system for application to control of aircraft and

spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595

Development of vortex fluid amplifier for throttling rocket exhaust
[NASA-CASE-LEW-10374-1] c28 N73-13773

An improved system for imposing directional stability on a rocket-propelled vehicle
[NASA-CASE-MFS-21311-1] c31 N74-30311

THRUST-WEIGHT RATIO
Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XMF-03198] c30 N70-40353

THYROID GLAND
Apparatus for producing high purity I-123 --- for thyroid measurement
[NASA-CASE-LEW-10518-3] c15 N74-10476

TILES
Strain arrester plate --- bonding rigid thermal insulation tiles to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c18 N74-15213

TIME CONSTANT
Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-IGS-01983] c10 N70-41964

TIME DISCRIMINATION
Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-IGS-00381] c09 N70-34819

TIME DIVISION MULTIPLEXING
Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-IGS-05918] c07 N69-39974

Time division multiplexer with magnetic latching relays
[NASA-CASE-XNP-00431] c09 N70-38998

Data processor having multiple sections activated at different times by selective power coupling to sections
[NASA-CASE-IGS-04767] c08 N71-12494

Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506

Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773

Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622

Time division multiplexed telemetry transmitting system controlled by programmed memory
[NASA-CASE-GSC-10131-1] c07 N71-24624

TIME FUNCTIONS
Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659

TIME LAG
Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930

Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506

Apparatus for estimating amplitude and sign of phase difference or time lag between two signals
[NASA-CASE-NPO-11203] c10 N72-20224

TIME MEASURING INSTRUMENTS
Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976

TIME OF FLIGHT SPECTROMETERS
Design and characteristics of time of flight mass spectrometer to measure or analyze gases at low pressures and time of flight of single gas molecule
[NASA-CASE-XNP-01056] c14 N71-23041

Cosmic dust analyzer using ion time of flight techniques to determine constituency of hypervelocity particles such as micrometeoroids
[NASA-CASE-MSC-13802-1] c30 N72-20805

TIME SERIES ANALYSIS
Device for performing statistical time-series analysis of complex electrical signal waveforms
[NASA-CASE-MSC-12428-1] c10 N73-25240

TIME SHARING
Integrated time shared instrumentation display for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507

TIME SIGNALS
Monitoring system for signal amplitude ranges over predetermined time interval
[NASA-CASE-XMS-04061-1] c09 N69-39885

Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-XNF-08875] c10 N71-23099

Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326

Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNF-06234] c10 N71-27137

System for generating timing and control signals during repetitive fixed length serial data transmission
[NASA-CASE-NPO-13125-1] c09 N73-18225

TIMING DEVICES
Design and development of synchronous servo loop control system
[NASA-CASE-XNF-03744] c10 N71-20448

Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-INP-08875] c10 N71-23099

Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
[NASA-CASE-GSC-11139] c09 N71-27016

Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NPO-12107] c08 N71-27255

High speed photo-optical time recorder for indicating time at exposure of each frame of high speed movie camera film
[NASA-CASE-KSC-10294] c14 N72-18411

TIRES
Temperature sensor warning system for pneumatic tires of aircraft and ground vehicles
[NASA-CASE-XLA-01926] c14 N71-15620

Resilient wheel design with woven wire tire and abrasive treads for lunar surface vehicles
[NASA-CASE-MFS-13929] c15 N71-27091

TISSUES (BIOLOGY)
Servo-controlled intravital microscope system
[NASA-CASE-NPO-13214-1] c14 N74-19093

TITANATES
Vacuum preparation of zinc titanate pigment resistant to loss of reflective properties
[NASA-CASE-MFS-13532] c18 N72-17532

TITANIUM
Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443

TITANIUM ALLOYS
Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NPO-10271] c17 N71-16393

Chemical spot tests for identification of titanium and titanium alloys used in aerospace vehicles
[NASA-CASE-LAR-10539-1] c17 N73-12547

TOLERANCES (MECHANICS)
Mechanism for restraining universal joints to prevent separation while allowing bending, angulation, and lateral offset in any position about axis
[NASA-CASE-XNP-02278] c15 N71-28951

TOOLS
Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-XNP-02107] c15 N71-10809

Development of adjustable attitude guide block for setting pins perpendicular to irregular convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571

SUBJECT INDEX

TRANSDUCERS

Hand tool for forming dimples and nipples on end portion of tubes
[NASA-CASE-XMS-06876] c15 N71-21536

Tool for mounting and removing studs with adhesive coated head portion
[NASA-CASE-MFS-20299] c15 N72-11392

Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-MFS-21485-1] c15 N74-25968

TOOTH DISEASES
Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-ERC-10338] c04 N72-33072

TORCHES
Computer controlled apparatus for maintaining welding torch angle and velocity during seam tracking
[NASA-CASE-XMF-03287] c15 N71-15607

Development of electric weeding torch with casing on one end to form inert gas shield
[NASA-CASE-XMF-02330] c15 N71-23798

TOROIDS
Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123

Improved structure and method of producing composite of gapped and ungapped cores
[NASA-CASE-NPO-13413-1] c09 N74-33738

TORQUE
Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744

Coupling arrangement for isolating torque loads from axial, radial, and bending loads
[NASA-CASE-XLA-04897] c15 N72-22482

TORQUE MOTORS
Low speed phaselock speed control system --- for brushless dc motor
[NASA-CASE-GSC-11127-1] c09 N74-10202

TORQUEMETERS
Remote-reading torquemeter for use where high horsepowers are transmitted at high rotative speeds
[NASA-CASE-XLE-00503] c14 N70-34818

Torque meter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725

TORSO
Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119

TOUCH
Mechanically operated hand which can depress trigger using touch control device
[NASA-CASE-MFS-20413] c15 N72-21463

Measuring method for cutaneous perception using instrument with elongated tubular housing
[NASA-CASE-MSC-13609-1] c05 N72-25122

Prosthetic limb with tactile sensing device
[NASA-CASE-MFS-16570-1] c05 N73-32013

TOWERS
Aerial capsule emergency separation device using jettisonable towers
[NASA-CASE-XLA-00115] c03 N70-33343

TOXICITY AND SAFETY HAZARD
Apparatus for remote handling of materials --- mixing or analyzing dangerous chemicals
[NASA-CASE-LAR-10634-1] c15 N74-18123

TOXICOLOGY
System for continuous monitoring of exhalations, weighing, and cage cleaning for animal exposed to controlled atmosphere for toxic study
[NASA-CASE-XAC-05333] c11 N71-22875

TRACE CONTAMINANTS
Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NPO-10144] c14 N71-17701

Heated tungsten filter for removing oxygen impurities from cesium
[NASA-CASE-XNP-04262-2] c17 N71-26773

TRACE ELEMENTS
Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863

TRACKING (POSITION)
Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736

Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699

Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125

TRACKING FILTERS
System for phase locking onto carrier frequency signal located within receiver bandpass
[NASA-CASE-XGS-04994] c09 N69-21543

TRACKING RADAR
Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460

Phase locked loop with sideband rejecting properties in continuous wave tracking radar
[NASA-CASE-XNP-02723] c07 N70-41680

Interferometric tuning acquisition and tracking radar antenna system
[NASA-CASE-XMS-09670] c07 N71-24625

Acquisition and tracking system for optical radar
[NASA-CASE-MFS-20125] c16 N72-13437

TRACKING STATIONS
Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-IXS-03509] c14 N71-23175

Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c07 N74-15838

TRAILING-EDGE FLAPS
Double hinged flap for boundary layer control over trailing edges of wings
[NASA-CASE-XLA-01290] c02 N70-42016

Apparatus for span loading to alleviate wake-vortex hazard behind aircraft
[NASA-CASE-ARC-10801-1] c02 N74-32428

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Low and zero gravity simulator for astronaut training
[NASA-CASE-MFS-10555] c11 N71-19494

Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474

TRAJECTORY ANALYSIS
Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394

Planetary atmospheric investigation using split trajectory dual flyby mode
[NASA-CASE-XAC-08494] c30 N71-15990

Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c14 N74-32888

TRAJECTORY CONTROL
Spacecraft trajectory correction propulsion system
[NASA-CASE-XNP-01104] c28 N70-39931

Development of technique for control of free flight rocket vehicles
[NASA-CASE-XLA-00937] c31 N71-17691

Attitude stabilizer for nonguided missile or vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873

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Fabrication of pressure-telemetry transducers
[NASA-CASE-XNP-09752] c14 N69-21541

Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-09768] c09 N71-12516

Transducer for measuring deflections from vibrating structures
[NASA-CASE-XLA-03135] c32 N71-16428

Describing device for surveying contour of surface using X-Y plotter and traveling transducer
[NASA-CASE-XLA-08646] c14 N71-17586

Rotary bead dropper and selector for testing micrometeorite transducers
[NASA-CASE-XGS-03304] c09 N71-22988

Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999

Transducer frame for use with extensometer to continuously monitor specimen sample
[NASA-CASE-XLA-10322] c15 N72-17452

Split range transducer
[NASA-CASE-XLA-11189] c10 N72-20222

Pulsed excitation voltage circuit for strain gage bridge transducers
[NASA-CASE-FRC-10036] c09 N72-22200

Passive type, magnifying scratch gage, force transducer
[NASA-CASE-LAR-10496-1] c14 N72-22437

Development of electronic detection system for remotely determining number and movement of enemy personnel
[NASA-CASE-ARC-10097-2] c07 N73-25160

Acoustical transducer calibrating system including differential pressure activating device
[NASA-CASE-FRC-10060-1] c14 N73-27379

Demodulator for carrier transducers
[NASA-CASE-MUC-10107-1] c09 N74-17930

Self-supporting strain transducer --- for measuring stress concentration points
[NASA-CASE-LAR-11263-1] c14 N74-25931

LC-oscillator with automatic stabilized amplitude via bias current control --- power supply circuit for transducers
[NASA-CASE-MFS-21698-1] c09 N74-26732

Diode quad transducer and discriminator circuit --- characteristics of electrical measuring apparatus
[NASA-CASE-ARC-10364-3] c10 N74-26760

Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c05 N74-27566

TRANSFER FUNCTIONS
Electronic optical transfer function analyzer using scanning image dissection system to produce representative output signal
[NASA-CASE-MFS-21672-1] c23 N73-22630

TRANSFORMERS
Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334

High impedance alternating current sensing transformer device between two bolometers for measuring insertion loss of test component
[NASA-CASE-XNP-01193] c10 N71-16057

Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800

Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893

Development and characteristics of electronically resettable fuse with saturable core current sensing transformer having two outside legs and center leg
[NASA-CASE-XGS-11177] c09 N71-27001

Development and characteristics of voltage regulator for connection in series with alternating current source and load using three leg, two-window transformer
[NASA-CASE-ERC-10113] c09 N71-27053

Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-NPO-10828] c33 N72-17948

Current protection equipment for saturable core transformers
[NASA-CASE-ERC-10075-2] c09 N72-22196

Fail-safe multiple transformer circuit configuration
[NASA-CASE-NPO-11078] c09 N72-25262

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[NASA-CASE-NPO-11966-1] c09 N74-17928

TRANSIENT LOADS
Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
[NASA-CASE-NPO-10883] c31 N72-22874

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Overcurrent protecting circuit for push-pull transistor amplifiers
[NASA-CASE-NSC-12033-1] c09 N71-13531

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Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317

Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463

RC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-XMF-00906] c09 N70-41655

Linear sawtooth voltage wave generator with transistor timing circuit having capacitor and zener diode feedback loops
[NASA-CASE-XMS-01315] c09 N70-41675

Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNP-02654] c10 N70-42032

High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516

Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015

Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126

Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926

Circuitry for high input impedance video processor with high noise immunity
[NASA-CASE-NPO-10199] c09 N72-17156

Ultra-stable oscillator with complementary transistors
[NASA-CASE-GSC-11513-1] c09 N74-20862

TRANSISTORS
Power supply with overload protection for series stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543

Solid state circuit for switching alternating current input signal as function of direct current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799

Broadband distribution amplifier with complementary pair transistor output stages
[NASA-CASE-NPO-10003] c10 N71-26415

Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236

Integrated microcircuits and complementary four-phase logic system
[NASA-CASE-NSC-14240-1] c10 N73-21240

Inverted geometry transistor for use with monolithic integrated circuit
[NASA-CASE-ARC-10330-1] c09 N73-32112

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Ablation article and surface for analyzing flow transition on ablative surface
[NASA-CASE-LAR-10439-1] c33 N73-27796

TRANSITIONAL MOTION
Centrifuge mounted motion simulator with elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815

Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-ILA-08801-1] c02 N71-11043

Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982

Positioning mechanism for converting translatory motion into rotary motion
[NASA-CASE-NPO-10679] c15 N72-21462

TRANSMISSION EFFICIENCY
Microwave power transmission system wherein level of transmitted power is controlled by reflections from receiver
[NASA-CASE-MFS-21470-1] c10 N74-19870

TRANSMISSION LINES
Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
[NASA-CASE-XKS-10543] c07 N71-26292

Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191

Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits

- [NASA-CASE-MSC-13201-1] c07 N71-28429
Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
[NASA-CASE-MFS-13687-2] c09 N72-22198
Development of phase control coupling for use with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206
Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c10 N74-14956
System for stabilizing cable phase delay utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c09 N74-17927
- TRANSMITTANCE**
Electro-optical system for scanning variable transmittance objects
[NASA-CASE-NPO-11106-2] c23 N72-28696
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538
- TRANSMITTER RECEIVERS**
Low weight, integrated thermoelectric generator/antenna combination for spacecraft
[NASA-CASE-XER-09521] c09 N72-12136
Transmitter receiver system for measuring millivolt electrical signals with high common mode potential
[NASA-CASE-XLE-03155-2] c09 N72-20205
Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-ERC-10324] c07 N72-25173
Development of timing device for conserving batteries on remote data collection platform by generating synchronous time windows
[NASA-CASE-GSC-11182-1] c31 N73-32769
Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c09 N74-12912
Digital communication system
[NASA-CASE-MSC-13912-1] c07 N74-30524
- TRANSMITTERS**
Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NPO-10649] c07 N71-24840
Multicarrier communications system for transmitting modulated signals from single transmitter
[NASA-CASE-NPO-11548] c07 N73-26118
Digital transmitter for data bus communications system
[NASA-CASE-MSC-14558-1] c07 N74-17888
Miniature multichannel biotelemeter system
[NASA-CASE-NPO-13065-1] c05 N74-26625
- TRANSONIC SPEED**
Construction of leading edges of surfaces for aerial vehicles performing from subsonic to above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
- TRANSONIC WIND TUNNELS**
Wind tunnel test section for simulating high Reynolds number over transonic speed range
[NASA-CASE-MFS-20509] c11 N72-17183
- TRANSPARENCE**
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XNS-04935] c05 N71-11190
- TRANSPIRATION**
Rocket chamber and method of making
[NASA-CASE-LEW-11118-2] c28 N74-28232
- TRANSPONDERS**
Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391
Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118
Loop transponder for regenerating code of nu-type ranging system
[NASA-CASE-NPO-11707] c07 N73-25161
Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c09 N74-12912
Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c07 N74-15838
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Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-XMP-00580] c11 N70-35383
- TRAVELING WAVE AMPLIFIERS**
Serrrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
[NASA-CASE-IGS-01022] c07 N71-16088
- TRAVELING WAVE MASERS**
Design of folded traveling wave maser structure
[NASA-CASE-XNP-05219] c16 N71-15550
Comb type traveling wave maser amplifier for improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831
- TRAVELING WAVE TUBES**
Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-IGS-10518] c16 N71-28554
- TRAVELING WAVES**
Traveling wave maser for operation in 7 to 20 GHz frequency range
[NASA-CASE-NPO-11437] c16 N72-28521
- TRIGGER CIRCUITS**
Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-IGS-03095] c09 N69-27463
Triggering system for electric arc driven impulse wind tunnel
[NASA-CASE-IMF-00411] c11 N70-36913
Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244
One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468
Voltage amplitude-responsive trigger circuit with silicon controlled rectifier
[NASA-CASE-GSC-10221-1] c09 N72-23171
Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c09 N74-20859
- TRIGONOMETRY**
Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references
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- TRIMERS**
New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244
Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579
- TRIODES**
Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
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- TRITIUM**
Method for determining state of charge of alkali batteries by using tritium as tracer
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- TRUSSES**
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High resistance cross flow heat exchangers for electrothermal rocket engines
[NASA-CASE-XLE-01783] c28 N70-34175
Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094
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[NASA-CASE-NPO-10431] c15 N71-29132
- TUMBLING MOTION**
Tumbling motion system for object demagnetization
[NASA-CASE-IGS-02437] c15 N69-21472
- TUNGSTEN**
Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes

- [NASA-CASE-IGS-04554] c15 N69-39786
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- [NASA-CASE-XLE-00455] c28 N70-38197
Two step process for cladding nuclear fuels with tungsten
- [NASA-CASE-INP-03704] c15 N71-17695
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- [NASA-CASE-XLE-02578] c25 N71-20747
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- [NASA-CASE-INP-04335] c17 N71-29137
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- [NASA-CASE-GSC-10695-1] c09 N72-25259
- TUNGSTEN ALLOYS**
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- [NASA-CASE-XLA-03105] c15 N69-27483
Cobalt-tungsten alloys with superior strength at elevated temperatures
- [NASA-CASE-LEW-10436-1] c17 N73-32415
- TUNING**
Active tuned circuits for microelectronic construction
- [NASA-CASE-GSC-11340-1] c10 N72-33230
Microwave generator using Gunn effect for magnetic tuning
- [NASA-CASE-NPO-12106] c09 N73-15235
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- [NASA-CASE-IGS-04999] c09 N69-24317
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Transpiration cooled turbine blade made from metallic or ceramic wires
- [NASA-CASE-XLE-00020] c15 N70-33226
Modification and improvement of turbine blades for maximum cooling efficiency
- [NASA-CASE-XLE-00092] c15 N70-33264
Preparation of nickel alloys for jet turbine blades operating at high temperatures
- [NASA-CASE-XLE-00151] c17 N70-33283
External device for liquid spray cooling of gas turbine blades
- [NASA-CASE-XLE-00037] c28 N70-33372
Apparatus for liquid spray cooling of turbine blades
- [NASA-CASE-XLE-00027] c33 N71-29152
Process for welding compressor and turbine blades to rotors and discs of jet engines
- [NASA-CASE-LEW-10533-1] c15 N73-28515
- TURBINE ENGINES**
Method and apparatus for improving operating efficiency and reducing low speed noise for turbine aircraft engines
- [NASA-CASE-LAR-11310-1] c28 N73-31699
- TURBINE PUMPS**
Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
- [NASA-CASE-MSC-13112] c03 N71-11057
Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
- [NASA-CASE-NPO-10467] c23 N71-26654
Supersonic-combustion rocket
- [NASA-CASE-LEW-11058-1] c28 N74-13502
- TURBINE WHEELS**
Locking device for retaining turbine rotor blades on turbine wheel
- [NASA-CASE-INP-00816] c28 N71-28928
Apparatus for welding blades to rotors
- [NASA-CASE-LEW-10533-2] c15 N74-11300
- TURBINES**
Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
- [NASA-CASE-INP-02862-1] c15 N71-26294
- TURBOCOMPRESSORS**
Multistage multiple reentry axial flow reaction turbine with reverse flow reentry ducting
- [NASA-CASE-XLE-00170] c15 N70-36412
- TURBOFAN ENGINES**
Supersonic fan blading --- noise reduction in turbofan engines
- [NASA-CASE-LEW-11402-1] c28 N74-28226
Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
- [NASA-CASE-LAR-11141-1] c02 N74-32418
- TURBOPANS**
Turbofans under wings to provide lift and thrust for STOL aircraft
- [NASA-CASE-LEW-11224-1] c02 N72-10033
- TURBOJET ENGINES**
Telescoping-spike supersonic nozzle for turbojet or ramjet engines
- [NASA-CASE-XLE-00005] c28 N70-39899
Design and development of gas turbine combustion unit with nozzle guide vanes for introducing diluent air into combustion gases
- [NASA-CASE-XLE-103477-1] c28 N71-20330
- TURBOMACHINERY**
Blade vibration damping pins for turbomachinery
- [NASA-CASE-XLE-00155] c28 N71-29154
- TURBOSHAPTS**
Remote-reading torque meter for use where high horsepower are transmitted at high rotational speeds
- [NASA-CASE-XLE-00503] c14 N70-34818
- TURBULENT FLOW**
System for measuring drag forces in a turbulently flowing fluid
- [NASA-CASE-ARC-10755-1] c14 N74-14115
- TURBULENT WAKES**
Apparatus for span loading to alleviate wake-vortex hazard behind aircraft
- [NASA-CASE-ARC-10801-1] c02 N74-32428
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Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
- [NASA-CASE-INP-00442] c31 N71-10747
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- [NASA-CASE-MSC-12209] c09 N71-24842
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- [NASA-CASE-GSC-11428-1] c09 N74-20864
- TURBTT**
Indexing mechanism for cathode array substitution in electron beam tube
- [NASA-CASE-NPO-10625] c09 N71-26182
- TWO BODY PROBLEM**
Instrument for measuring potentials on two dimensional electric field plot
- [NASA-CASE-XLA-08493] c10 N71-19421
- TWO PHASE FLOW**
Solenoid two-step valve for bipropellant flow rate control to rocket engine
- [NASA-CASE-IMS-04890-1] c15 N70-22192
Two phase fluid pressurization system for propellant tank
- [NASA-CASE-MSC-12390] c27 N71-29155
Two-phase flow system with discrete, impinging two-phase jets
- [NASA-CASE-NPO-11556] c12 N72-25292
- TYPEWRITERS**
Guide accessories for correctly aligning paper in typewriter to correct typographical errors
- [NASA-CASE-MFS-15218-1] c15 N73-31438
- U**
- U BENDS**
Elbow forming in jacketed pipes while maintaining separation between core shape and jacket pipes
- [NASA-CASE-INP-10475] c15 N71-24679
U shaped heated tube for distillation and purification of liquid metals
- [NASA-CASE-INP-08124-2] c06 N73-13129
- ULLAGE**
Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
- [NASA-CASE-MSC-12280] c27 N71-16348
- ULTRAHIGH VACUUM**
Solid lubricant applied to porous roller bearings prior to use in ultrahigh vacuum
- [NASA-CASE-XLE-09527] c15 N71-17688
Calibration of vacuum gauges for measuring total and partial pressures in ultrahigh vacuum region
- [NASA-CASE-IGS-07752] c14 N73-30390
Ultrahigh vacuum gauge with two collector electrodes

[NASA-CASE-LAR-02743] c14 N73-32324
In situ transfer standard for ultrahigh vacuum
gage calibration
[NASA-CASE-LAR-10862-1] c14 N74-15092

ULTRASONIC AGITATION
Development of ultrasonic radiation equipment
for removing material from host surface and
vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514

ULTRASONIC RADIATION
Ultrasonic biomedical measuring and recording
apparatus --- for recording motion of internal
organs such as heart valves
[NASA-CASE-ARC-10597-1] c05 N74-20726

ULTRASONIC TESTS
Ultrasonic scanner for radial and flat panels
[NASA-CASE-NFS-20335-1] c14 N74-10415
Ultrasonic scanning system for in-place
inspection of brazed tube joints
[NASA-CASE-NFS-20767-1] c15 N74-15130
Method and apparatus for nondestructive testing
--- using high frequency arc discharges
[NASA-CASE-NFS-21233-1] c23 N74-15395

ULTRASONIC WAVE TRANSDUCERS
Development of ultrasonic radiation equipment
for removing material from host surface and
vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514
Ultrasonic bone densitometer for measuring
calcium content of bone structures
[NASA-CASE-NFS-20994-1] c05 N73-30090
Reference apparatus for medical ultrasonic
transducer
[NASA-CASE-ARC-10753-1] c05 N74-13818

ULTRASONICS
Ultrasonic wrench for applying vibratory energy
to mechanical fasteners
[NASA-CASE-NFS-20586] c15 N71-17686

ULTRAVIOLET FILTERS
Ultraviolet filter of thorium fluoride and
cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332
Development of ultraviolet resonance lamp with
improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521

ULTRAVIOLET RADIATION
Ultraviolet radiation resistant alkali-metal
silicate coatings for temperature control of
spacecraft
[NASA-CASE-IGS-04119] c18 N69-39979
Development of ultraviolet resonance lamp with
improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521
Gas leak detection in evacuated systems using
ultraviolet radiation probe
[NASA-CASE-BRC-10034] c15 N71-24896
Phototropic composition of matter with
sensitivity to ultraviolet light and usable
for producing positive photographic images
[NASA-CASE-IGS-03736] c14 N72-22043
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538
Transmitting and reflecting diffuser --- for
ultraviolet light
[NASA-CASE-LAR-10385-2] c23 N74-13436
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c18 N74-21156
Light shield and cooling apparatus --- high
intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c15 N74-23066
Flame detector operable in presence of proton
radiation
[NASA-CASE-NFS-21577-1] c03 N74-29410

ULTRAVIOLET REFLECTION
Composition and production method of alkali
metal silicate paint with ultraviolet
reflection properties
[NASA-CASE-IGS-04799] c18 N71-24183
Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c18 N74-10542

ULTRAVIOLET SPECTRA
Ultraviolet chromatographic detector for
quantitative and qualitative analysis of
compounds
[NASA-CASE-BQN-10756-1] c14 N72-25428

ULTRAVIOLET SPECTROMETERS
Concave grating spectrometer for use in near and
vacuum ultraviolet regions

[NASA-CASE-IGS-01036] c14 N70-40003
Telespectrograph for analyzing upper atmosphere
by tracking bodies reentering atmosphere at
high velocities
[NASA-CASE-ILA-03273] c14 N71-18699

UMBILICAL CONNECTORS
Umbilical separator for rockets
[NASA-CASE-XNP-00425] c11 N70-38202
Remotely actuated quick disconnect mechanism for
umbilical cables
[NASA-CASE-XLA-00711] c03 N71-12258
Remotely actuated quick disconnect for tubular
umbilical conduits used to transfer fluids
from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259
Internal and external serpentine devices for
performing physical operations around orbital
space stations
[NASA-CASE-XNP-05344] c31 N71-16345
Breakaway multiwire electrical cable connector
with particular application for umbilical type
cables
[NASA-CASE-NPO-11140] c15 N72-17455
Gas operated quick disconnect coupling for
umbilical connectors
[NASA-CASE-NPO-11202] c15 N72-25450

UMBILICAL TOWERS
Emergency escape cabin system for launch towers
[NASA-CASE-IRS-02342] c05 N71-11199

UNDERWATER ENGINEERING
Ejectable underwater sound source recovery
assembly
[NASA-CASE-LAR-10595-1] c15 N74-16135

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Pressure regulator for space suit worn
underwater to simulate space environment for
testing and experimentation
[NASA-CASE-NFS-20332] c05 N72-20097
Underwater space suit pressure control regulator
[NASA-CASE-NFS-20332-2] c05 N73-25125

UNIFORM FLOW
Procedure for generating uniform flow at varying
velocities in wind tunnel test section
[NASA-CASE-ARC-10710-1] c11 N73-27175

UNLOADING
Bootstrap unloading circuits for sampling
transducer voltage sources without drawing
current
[NASA-CASE-XNP-09768] c09 N71-12516

UNMANNED SPACECRAFT
Device which separates and screens particles of
soil samples for vidicon viewing in vacuum and
reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036

UPPER ATMOSPHERE
Telespectrograph for analyzing upper atmosphere
by tracking bodies reentering atmosphere at
high velocities
[NASA-CASE-ILA-03273] c14 N71-18699
Development and operation of apparatus for
sampling particulates in gases in upper
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[NASA-CASE-BQN-10037-1] c14 N73-27376
Rocket having barium release system to create
ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c31 N74-27360

URINALYSIS
Automated fluid chemical analyzer for
microchemical analysis of small quantities of
liquids by use of selected reagents and
analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754
Enzymatic luminescent bioassay method for
determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052
Automatic device for assaying urine on bacterial
adenosine triphosphate content
[NASA-CASE-GSC-11169-2] c05 N73-32011

URINATION
Open type urine receptacle with tubular housing
[NASA-CASE-BSC-12324-1] c05 N72-22093

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V GROOVES

Vee-notching device --- with adjustable carriage
[NASA-CASE-NFS-20730-1] c14 N74-13131

VACUUM

Hole mobility of deposited semiconductor films

VACUUM APPARATUS

SUBJECT INDEX

in vacuum utilizing thermal gradient
 [NASA-CASE-YKS-04614] c15 N69-21460
 Operating properties of superconducting magnet
 in vacuum environment
 [NASA-CASE-XNP-06503] c23 N71-29049

VACUUM APPARATUS

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 minute mechanical displacements
 [NASA-CASE-YAC-00472] c15 N70-40180
 Sealing evacuation port and evacuating vacuum
 container such as space jackets
 [NASA-CASE-XNP-03290] c15 N71-23256
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 [NASA-CASE-XNP-09699] c06 N71-24607
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 [NASA-CASE-GSC-10518-1] c15 N72-22489
 Inductance device with vacuum insulation and
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 [NASA-CASE-LEW-10330-1] c09 N72-27226
 Development of apparatus for producing metal
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 [NASA-CASE-XLE-06461-2] c17 N72-28535
 Portable vacuum probe surface sampler for
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 [NASA-CASE-LAR-10623-1] c14 N73-30395
 Electrostatic entrained material measurement
 system --- comprising vacuum source and tube
 [NASA-CASE-MFS-22128-2] c14 N74-18098
 Fiber separating and cleaning method and apparatus
 [NASA-CASE-LAR-11224-1] c15 N74-20072
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VACUUM CHAMBERS

High-vacuum condenser tank for testing ion
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 [NASA-CASE-XLE-00168] c11 N70-33278
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 [NASA-CASE-LEW-11531] c15 N71-14932
 Space environmental work simulator with portions
 of space suit mounted to vacuum chamber wall
 [NASA-CASE-XNP-07488] c11 N71-18773
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 separately located ion gage pressures on
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 [NASA-CASE-XLE-00787] c14 N71-21090
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 [NASA-CASE-YER-11203] c14 N71-28994
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 [NASA-CASE-LAR-10031] c15 N72-22484
 Vacuum chamber with scale model of rocket engine
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 [NASA-CASE-MFS-20620] c11 N72-27262
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 with adapter for attachment to vacuum line and
 vacuum pump
 [NASA-CASE-LAR-10061-1] c15 N72-31483
 Apparatus for analyzing gas samples in
 containers including vacuum chamber, mass
 spectrometer, and gas chromatography
 [NASA-CASE-GSC-10903-1] c14 N73-12444
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 supporting test items in vacuum chamber
 [NASA-CASE-MFS-21362] c11 N73-20267

VACUUM DEPOSITION

Deposition method for epitaxial beta SiC films
 having high degree of crystallographic
 perfection
 [NASA-CASE-ERC-10120] c26 N69-33482
 Describing apparatus used in vacuum deposition
 of thin film inductive windings for spacecraft
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 [NASA-CASE-XNP-01667] c15 N71-17647
 Sputter proof evaporant source design for use in
 vacuum deposition of solid thin films on
 substrates
 [NASA-CASE-XNP-06065] c15 N71-20395
 Device for high vacuum film deposition with
 electromagnetic ion steering
 [NASA-CASE-NPO-10331] c09 N71-26701

VACUUM FURNACES

Apparatus for inserting and removing specimens
 from high temperature vacuum furnaces
 [NASA-CASE-LAR-10841-1] c15 N74-27900

VACUUM GAGES

Simulating operation of thermopile vacuum gage
 tube at high and low pressures
 [NASA-CASE-XLA-02758] c14 N71-18481
 Calibration of vacuum gauges for measuring total
 and partial pressures in ultrahigh vacuum region
 [NASA-CASE-XGS-07752] c14 N73-30390
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 [NASA-CASE-XLA-05087] c14 N73-30391
 In situ transfer standard for ultrahigh vacuum
 gage calibration
 [NASA-CASE-LAR-10862-1] c14 N74-15092

VACUUM MELTING

Electric furnace for vacuum and zero gravity
 melting of high melting point materials during
 earth orbit
 [NASA-CASE-MFS-20710] c11 N72-23215

VACUUM SYSTEMS

Shrink-fit vacuum system gas valve
 [NASA-CASE-XGS-00587] c15 N70-35087
 Leakproof soft metal seal for use in very high
 vacuum systems operating at cryogenic
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 [NASA-CASE-XGS-02441] c15 N70-41629
 Describing hot filament type Bayard-Alpert
 ionization gage with ion collector buried or
 removed from grid structure
 [NASA-CASE-XLA-07424] c14 N71-18482
 Describing sorption vacuum trap having housing
 with group of reentrant wall portions
 projecting into internal gas-pervious
 container filled with gas and vapor sorbent
 material
 [NASA-CASE-YER-09519] c14 N71-18483

VACUUM TUBES

Integrated structure vacuum tube
 [NASA-CASE-ARC-10445-1] c09 N74-29577

VALVE

High impact pressure regulator having minimum
 number of lightweight movable elements
 [NASA-CASE-NPO-10175] c14 N71-18625

VALVES

Actuator using compressed gas as driving force
 to control valve handling large liquid flows
 [NASA-CASE-XHQ-01208] c15 N70-35409
 Two component valve assembly for cryogenic
 liquid transfer regulation
 [NASA-CASE-XLE-00397] c15 N70-36492
 High pressure four-way valve with O ring adapted
 to pass across inlet port
 [NASA-CASE-XNP-00214] c15 N70-36908
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 diaphragms in valves or pressure switches
 [NASA-CASE-XNP-01962] c32 N70-41370
 Multiple vortex amplifier system as fluid valve
 [NASA-CASE-XNP-04709] c15 N71-15609
 Throttle valve for regulating fluid flow volume
 [NASA-CASE-XNP-09698] c15 N71-18580
 Development and characteristics of high pressure
 control valve
 [NASA-CASE-MSC-11010] c15 N71-19485
 Valve seat with resilient support ring for
 venting valves subjected to high pressure
 sealing loads
 [NASA-CASE-YKS-02582] c15 N71-21234
 Positive locking check valve for stopping
 reversed flow
 [NASA-CASE-XMS-09310] c15 N71-22706
 Valve assembly for controlling simultaneously
 more than one fluid flow, and having stable
 qualities under loads
 [NASA-CASE-XMS-05890] c09 N71-23191
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 [NASA-CASE-NPO-10606] c15 N72-25451
 Packless valve for use with evacuation chamber
 with adapter for attachment to vacuum line and
 vacuum pump
 [NASA-CASE-LAR-10061-1] c15 N72-31483
 Development and characteristics of combined
 pressure regulator and shutoff valve with
 variable pressure response characteristics
 [NASA-CASE-NPO-13201-1] c15 N73-26474
 Ultrasonically bonded valve assembly
 [NASA-CASE-NPO-13360-1] c15 N74-20073
 Flow control valve --- for high temperature fluids
 [NASA-CASE-NPO-11951-1] c15 N74-21065

Airlock
 [NASA-CASE-MFS-20922-1] c15 N74-22136

VANES

Design and Characteristics of device for sensing solar radiation and providing spacecraft attitude control to maintain direction with respect to incident radiation
[NASA-CASE-XMP-05535] c14 N71-23040

Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-NPO-11418-1] c14 N73-13420

VAPOR DEPOSITION

Deposition method for epitaxial beta sic films having high degree of crystallographic perfection
[NASA-CASE-ERC-10120] c26 N69-33482

Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-02057] c26 N70-40015

Water content in vapor deposition atmosphere for forming n-type and p-type junctions of zinc doped gallium arsenide
[NASA-CASE-XNP-01961] c26 N71-29156

Vapor deposition method for forming metallized tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259

Means of vapor deposition using electric current and evaporator filament
[NASA-CASE-LAR-10541-1] c15 N72-32487

Method for vapor deposition of thin films
[NASA-CASE-NFS-20775-1] c26 N73-23770

Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LEW-11262-1] c18 N74-13270

VAPOR PHASES

Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635

Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027

Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199

Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339

VAPOR PRESSURE

Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247

vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-XMP-04042] c15 N71-23023

VAPOR TRAPS

Describing sorption vacuum trap having housing with group of reentrant wall portions projecting into internal gas-pervious container filled with gas and vapor sorbent material
[NASA-CASE-XER-09519] c14 N71-18483

VAPORIZERS

Vapor generating boiler system for turbine motor
[NASA-CASE-XLE-00785] c33 N71-16104

VAPORIZING

Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372

development of method for controlling vapor content of gas
[NASA-CASE-NPO-10633] c03 N72-28025

VARACTOR DIODE CIRCUITS

Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429

VARACTOR DIODES

Varactor microwave frequency mixing circuit
[NASA-CASE-XGS-02171] c09 N69-24324

Multiple varactor for generating high frequencies with high power and high conversion efficiency
[NASA-CASE-XMF-04958-1] c10 N71-26414

Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c09 N74-32660

VARIABLE GEOMETRY STRUCTURES

Aerospace configuration with low and high aspect ratio variability for high and low speed flight
[NASA-CASE-XLA-00142] c02 N70-33286

Variable geometry wind tunnel for testing aircraft models at subsonic speeds
[NASA-CASE-XLA-07430] c11 N72-22246

VARIABLE SWEEP WINGS

Variable sweep wing configuration for supersonic aircraft
[NASA-CASE-XLA-00230] c02 N70-33255

Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266

Supersonic aircraft configuration providing for variable aspect ratio and variable sweep wings
[NASA-CASE-XLA-00166] c02 N70-34178

Supersonic aircraft variable sweep wing planform for varying aspect ratio
[NASA-CASE-XLA-00350] c02 N70-38011

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[NASA-CASE-XLA-03659] c02 N71-11041

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[NASA-CASE-ARC-10470-1] c02 N73-26005

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[NASA-CASE-XNF-00923] c28 N70-36802

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[NASA-CASE-XLE-00177] c28 N70-40367

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[NASA-CASE-XGS-04227] c15 N71-21744

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[NASA-CASE-IAC-04886-1] c14 N71-20439

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[NASA-CASE-MFS-20400] c31 N71-18611

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[NASA-CASE-MFS-20645-1] c15 N74-23070

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- [NASA-CASE-MFS-20386] c21 N71-19212
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- [NASA-CASE-XMS-04201] c14 N71-22990
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- [NASA-CASE-ERC-10292] c14 N72-25410
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- [NASA-CASE-XLE-01533] c11 N71-10777
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- [NASA-CASE-XLE-00288] c15 N70-34247
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- [NASA-CASE-XLE-01449] c15 N70-41646
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- [NASA-CASE-XKS-02582] c15 N71-21234
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- [NASA-CASE-XMS-09652-1] c05 N71-26333
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- [NASA-CASE-INP-03282] c28 N72-20758
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- [NASA-CASE-XNP-00459] c11 N70-38675
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- [NASA-CASE-YAC-11225] c14 N69-27486
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- [NASA-CASE-NPO-10556] c14 N71-27185
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- [NASA-CASE-GSC-11302-1] c14 N73-13416
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- [NASA-CASE-LAR-10083-1] c15 N71-27006

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Circuitry for generating sync signals in PM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281

Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026

Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102

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[NASA-CASE-XNP-01472] c14 N70-41807

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[NASA-CASE-ARC-10003-1] c09 N71-25866

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[NASA-CASE-GSC-10185-1] c07 N72-12081

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[NASA-CASE-NPO-13131-1] c16 N73-31467

Manually and automatically operable video switching system
[NASA-CASE-KSC-10782-1] c07 N73-32063

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[NASA-CASE-NPO-10140] c07 N71-24742

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Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102

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[NASA-CASE-NPO-10343] c07 N71-27341

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[NASA-CASE-NPO-10199] c09 N72-17156

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[NASA-CASE-KSC-10003] c10 N73-13235

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[NASA-CASE-XNP-06028] c09 N71-23189

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[NASA-CASE-NPO-10373] c03 N71-18698

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[NASA-CASE-XLA-08254] c14 N71-26161

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[NASA-CASE-NPO-11387] c14 N73-14429

Viscoelastic shock absorbing mount for electrical circuit board
[NASA-CASE-NPO-13253-1] c15 N73-31445

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[NASA-CASE-XNP-09462] c14 N71-17584

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[NASA-CASE-NPO-11387] c14 N73-14429

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Low density and low viscosity magnetic propellant for use under zero gravity conditions
[NASA-CASE-XLE-01512] c12 N70-40124

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Shock and vibration damping device using temperature sensitive solid amorphous polymers
[NASA-CASE-XAC-11225] c14 N69-27486

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[NASA-CASE-XLA-02079] c12 N71-16894

Mercury filled pendulum damper for controlling bending vibration induced by wind effects
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[NASA-CASE-XFR-04147] c11 N71-10748

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[NASA-CASE-MSC-13530-2] c06 N73-11107

VISORS

Detergent with glyceryl esters and oil as protective coating to prevent fogging of space suit visor
[NASA-CASE-MSC-13530-2] c06 N73-11107

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[NASA-CASE-XMS-12158-1] c31 N69-27499

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[NASA-CASE-MSC-13601-1] c05 N72-11088

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[NASA-CASE-XLE-02998] c14 N70-42074

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Earth satellite relay station for frequency multiplexed voice transmission
[NASA-CASE-GSC-10118-1] c07 N71-24621

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[NASA-CASE-KSC-10164] c07 N71-33108

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[NASA-CASE-HQN-10792-1] c09 N74-11049
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[NASA-CASE-MSC-13112] c03 N71-11057
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[NASA-CASE-XMS-05562-1] c09 N69-39986
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[NASA-CASE-XMS-04215-1] c09 N69-39987
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[NASA-CASE-XMS-00913] c10 N71-23543
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[NASA-CASE-GSC-10022-1] c10 N71-25882
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[NASA-CASE-GSC-10376-1] c14 N71-27407
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[NASA-CASE-NPO-11031] c07 N71-33606
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[NASA-CASE-NPO-11253] c09 N72-17157
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[NASA-CASE-HQN-10792-1] c09 N74-11049
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[NASA-CASE-XMS-09652-1] c05 N71-26133
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[NASA-CASE-LAR-11645-1] c02 N74-26456
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[NASA-CASE-XMS-10984-1] c10 N71-19417
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[NASA-CASE-XLA-01552] c07 N71-11284

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[NASA-CASE-MSC-13281] c31 N72-18859

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[NASA-CASE-XMS-01618] c14 N71-20741

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[NASA-CASE-XLA-00112] c11 N70-33287

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[NASA-CASE-XMS-01315] c09 N70-41675

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[NASA-CASE-NPO-11133] c10 N72-20223

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[NASA-CASE-NPO-13263-1] c15 N73-31443

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[NASA-CASE-ARC-10009-1] c15 N71-17822

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[NASA-CASE-GSC-10949-1] c07 N71-28965

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[NASA-CASE-MFS-20243] c23 N73-13662

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[NASA-CASE-XGS-00131] c09 N70-38995

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[NASA-CASE-ERC-10010] c10 N71-24862

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[NASA-CASE-MSC-12428-1] c10 N73-25240

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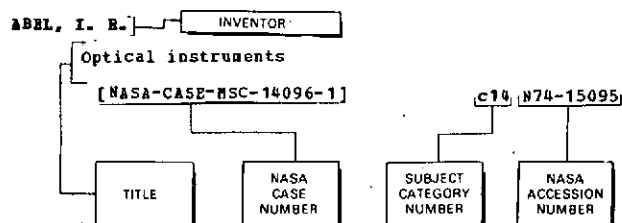
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 [NASA-CASE-LEW-11669-1] c05 N73-27062
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 [NASA-CASE-MSC-13332-1] c14 N72-21408

MCKAY, D. S.
 Oxygen production method and apparatus
 [NASA-CASE-MSC-12332-1] c15 N72-15476

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 Horizon sensor with a plurality of fixedly positioned radiation compensated radiation sensitive detectors Patent
 [NASA-CASE-XNP-06957] c14 N71-21088
 Light position locating system Patent
 [NASA-CASE-XNP-01059] c23 N71-21821

MCLEAN, P. E.
 Supersonic aircraft Patent
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MCLYMAN, C. W. T.
 Inverter oscillator with voltage feedback

[NASA-CASE-NPO-10760]	c09 N72-25254	Fluorescence detector for monitoring atmospheric pollutants	
MCILYAN, W. T.		[NASA-CASE-NPO-13231-1]	c14 N74-25932
Banded transformer cores		MERLETT, E. M.	
[NASA-CASE-NPO-11966-1]	c09 N74-17928	Horizon sensor with a plurality of fixedly positioned radiation compensated radiation sensitive detectors Patent	
Improved structure and method of producing composite of gapped and ungapped cores		[NASA-CASE-NXP-06957]	c14 N71-21088
[NASA-CASE-NPO-13413-1]	c09 N74-33738	MERRICK, V. K.	
MCMASTER, L. R.		Stabilization of gravity oriented satellites Patent	
Meteoroid detector		[NASA-CASE-XAC-01591]	c31 N71-17729
[NASA-CASE-LAR-10483-1]	c14 N73-32327	MERRILL, J. T., IV	
MCNEAR, E. F.		Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot	
Vapor phase growth of groups III-V compounds by hydrogen chloride transport of the elements		[NASA-CASE-LAR-10550-1]	c11 N74-30597
[NASA-CASE-LAR-11144-1]	c26 N74-27261	MESSINEO, S. V.	
MCNUTT, W. C.		Apparatus for positioning modular components on a vertical or overhead surface	
Dual latching solenoid valve Patent		[NASA-CASE-LAR-11465-1]	c15 N74-32926
[NASA-CASE-XMS-05890]	c09 N71-23191	MESSNER, A.	
MCRONALD, A. D.		A system for generating timing and control signals	
Thin film gauge		[NASA-CASE-NPO-13125-1]	c09 N73-18225
[NASA-CASE-NPO-10617-1]	c14 N74-22095	MESZAROS, G.	
MCWILLIAMS, I. G.		Recovery of radiation damaged solar cells through thermal annealing	
Two color horizon sensor		[NASA-CASE-IGS-04047-2]	c03 N72-11062
[NASA-CASE-ERC-10174]	c14 N72-25409	METCALFE, A. G.	
MEAD, D. C.		Silicide coatings for refractory metals Patent	
Variable frequency oscillator with temperature compensation Patent		[NASA-CASE-ILE-10910]	c18 N71-29040
[NASA-CASE-NXP-03916]	c09 N71-28810	METZGER, A. E.	
MEADOR, T. G., JR.		Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer	
Light shield and cooling apparatus		[NASA-CASE-NXP-05231]	c14 N73-28491
[NASA-CASE-LAR-10089-1]	c15 N74-23066	METZLER, A. J.	
MEALY, G. E.		Black-body furnace Patent	
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[NASA-CASE-XLE-01902]	c28 N71-10574	MEYER, A. J.	
High voltage divider system Patent		Oxygen production method and apparatus	
[NASA-CASE-ILE-02008]	c09 N71-21583	[NASA-CASE-MSC-12332-1]	c15 N72-15476
MEDCALF, W. A.		MEYER, A. J., JR.	
Gas filter mounting structure		Modification and improvements to cooled blades Patent	
[NASA-CASE-MSC-12297]	c14 N72-23457	[NASA-CASE-XLE-00092]	c15 N70-33264
MEINTZEL, A. J., JR.		Aerial capsule emergency separation device Patent	
Combined optical attitude and altitude indicating instrument Patent		[NASA-CASE-XLA-00115]	c03 N70-33343
[NASA-CASE-XLA-01907]	c14 N71-23268	Space capsule Patent	
MEISENHOLDER, G. W.		[NASA-CASE-XLA-00149]	c31 N70-37938
Photosensitive device to detect bearing deviation Patent		Vehicle parachute and equipment jettison system Patent	
[NASA-CASE-NXP-00438]	c21 N70-35089	[NASA-CASE-ILA-00195]	c02 N70-38009
Roll attitude star sensor system Patent		Ablation structures Patent	
[NASA-CASE-NXP-01307]	c21 N70-41856	[NASA-CASE-IMS-01816]	c33 N71-15623
MEISSINGER, H. F.		Space capsule Patent	
Method of and device for determining the characteristics and flux distribution of micrometeorites		[NASA-CASE-ILA-01332]	c31 N71-15664
[NASA-CASE-NPO-12127-1]	c14 N74-13130	MEYER, J. A.	
MELANED, L.		Altitude sensing device	
Angular velocity and acceleration measuring apparatus		[NASA-CASE-IMS-01994-1]	c14 N72-17326
[NASA-CASE-ERC-10292]	c14 N72-25410	MEYER, J. F.	
MELEFI, L. T., JR.		Time-division multiplexer Patent	
Gas analyzer for bi-gaseous mixtures Patent		[NASA-CASE-NXP-00431]	c09 N70-38998
[NASA-CASE-ILA-01131]	c14 N71-10774	MEYER, K. A.	
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[NASA-CASE-ILA-07424]	c14 N71-18482	[NASA-CASE-IAC-00074]	c15 N70-34817
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Technique for recovery of voice data from heat damaged magnetic tape		Connector - Electrical	
[NASA-CASE-MSC-14219-1]	c07 N74-27612	[NASA-CASE-XLA-01288]	c09 N69-21470
MENEFEE, E. O.		Missile stage separation indicator and stage initiator Patent	
Three-axis controller Patent		[NASA-CASE-ILA-00791]	c03 N70-39930
[NASA-CASE-IAC-01404]	c05 N70-41581	MICHAEL, J. L.	
Proportional controller Patent		Telemetry processor	
[NASA-CASE-IAC-03392]	c03 N70-41954	[NASA-CASE-GSC-11388-1]	c07 N73-24187
MENGES, H. J.		MICHEL, E. E.	
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[NASA-CASE-XLA-02619]	c10 N71-26334	[NASA-CASE-NXP-05297]	c15 N71-23811
Dielectric welding apparatus Patent		MICKELSEN, W. E.	
[NASA-CASE-LAR-10121-1]	c15 N71-26721	High-vacuum condenser tank for ion rocket tests Patent	
MENICHELLO, V. J.		[NASA-CASE-XLE-00168]	c11 N70-33278
Optically detonated explosive device		Electrostatic propulsion system with a direct nuclear electrogenerator Patent	
[NASA-CASE-NPO-11743-1]	c33 N74-27425	[NASA-CASE-XLE-00818]	c22 N70-34248
MENZER, C. A.		MIDDLETON, J. H.	
Horn antenna having V-shaped corrugated slots		Technique for extending the frequency range of digital dividers	
[NASA-CASE-LAR-11112-1]	c09 N74-29575		
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[NASA-CASE-XFS-21244-1] c20 N73-21523

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[NASA-CASE-LAR-11069-1] c04 N73-16061

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[NASA-CASE-NPO-11018] c08 N72-21200

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[NASA-CASE-XNP-00684] c21 N71-21688

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[NASA-CASE-NPO-10680] c31 N73-14855

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[NASA-CASE-LEW-10533-1] c15 N73-28515

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[NASA-CASE-LEW-11388-1] c15 N73-32358

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element bearings by diffusion welding
[NASA-CASE-LEW-11026-1] c15 N73-33383

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[NASA-CASE-XLE-00690] c25 N69-39884

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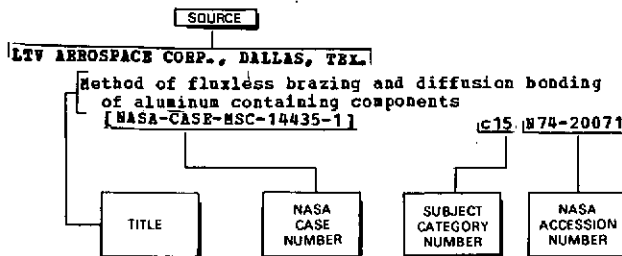
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 [NASA-CASE-GSC-10700] c23 N71-30027
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 source Patent
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BAYLOR UNIV., HOUSTON, TEX.
 EEG sleep analyzer and method of operation Patent
 [NASA-CASE-MSC-13282-1] c05 N71-24729
 Compressible biomedical electrode
 [NASA-CASE-MSC-13648] c05 N72-27103

BECKMAN INSTRUMENTS, INC., FULLERTON, CALIF.
 Pulse activated polarographic hydrogen detector
 Patent
 [NASA-CASE-XMF-06531] c14 N71-17575
 Electronic divider and multiplier using
 photocells Patent
 [NASA-CASE-XPR-05637] c09 N71-19480
 Pulse generating circuit employing switch means
 on ends of delay line for alternately charging
 and discharging same Patent
 [NASA-CASE-XNP-00745] c10 N71-28960
 Gas operated actuator
 [NASA-CASE-NPO-11340] c15 N72-33477
 Specific wavelength colorimeter
 [NASA-CASE-MSC-14081-1] c14 N74-27860

BECKMAN INSTRUMENTS, INC., SOUTH PASADENA, CALIF.
 Pneumatic system for controlling and actuating
 pneumatic cyclic devices
 [NASA-CASE-IMS-04843] c03 N69-21469

BECKON, DICKINSON AND CO., RUTHERFORD, N.J.
 Vacuum probe surface sampler
 [NASA-CASE-LAR-10623-1] c14 N73-30395

BELL AEROSPACE CO., BUFFALO, N.Y.
 Correlation type phase detector
 [NASA-CASE-GSC-11744-1] c09 N73-23291
 Modulator for tone and binary signals
 [NASA-CASE-GSC-11743-1] c07 N73-27107

BELL AEROSYSTEMS CO., BUFFALO, N.Y.
 Lunar landing flight research vehicle Patent
 [NASA-CASE-XPR-00929] c31 N70-34966
 Flexibly connected support and skin Patent
 [NASA-CASE-XLA-01027] c31 N71-24035
 Injection head for delivering liquid fuel and
 oxidizers
 [NASA-CASE-NPO-10046] c28 N72-17843
 Flight control system
 [NASA-CASE-MSC-13397-1] c21 N72-25595

BELLCOMM, INC., WASHINGTON, D.C.
 Physical correction filter for improving the
 optical quality of an image
 [NASA-CASE-HQN-10542-1] c23 N72-21663

BENDIX CORP., ANN ARBOR, MICH.
 Circuit breaker utilizing magnetic latching
 relays Patent
 [NASA-CASE-MSC-11277] c09 N71-29008

BENDIX CORP., DAVENPORT, IOWA.
 Dual stage check valve
 [NASA-CASE-MSC-13587-1] c15 N73-30459

BENDIX CORP., DETROIT, MICH.
 Deformable vehicle wheel Patent
 [NASA-CASE-MFS-20400] c31 N71-18611

BENDIX CORP., HUNTSVILLE, ALA.
 Multi axes vibration fixtures
 [NASA-CASE-MFS-20242] c14 N73-19421

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 Color perception tester
 [NASA-CASE-KSC-10278] c05 N72-16015

BENDIX CORP., TETERBORO, N.J.
 Evacuation valve
 [NASA-CASE-LAR-10061-1] c15 N72-31483

BENDIX RESEARCH LABS., SOUTHFIELD, MICH.
 Image tube
 [NASA-CASE-GSC-11602-1] c09 N74-21850

BOEING CO., COCOA BEACH, FLA.
 Positive contact resistance soldering unit
 [NASA-CASE-KSC-10242] c15 N72-23497
 Variable resistance constant tension and
 lubrication device
 [NASA-CASE-KSC-10723-1] c15 N73-23553

BOEING CO., HUNTSVILLE, ALA.
 Hydrogen fire blink detector
 [NASA-CASE-MFS-15063] c14 N72-25412
 Bore scope with variable angle scope
 [NASA-CASE-MFS-15162] c14 N72-32452
 A guide for a typewriter
 [NASA-CASE-MFS-15218-1] c15 N73-31438

BOEING CO., SEATTLE, WASH.
 Method of inhibiting stress corrosion cracks in
 titanium alloys Patent
 [NASA-CASE-NPO-10271] c17 N71-16393
 Strain sensor for high temperatures Patent
 [NASA-CASE-XNP-09205] c14 N71-17657
 Forming tool for ribbon or wire
 [NASA-CASE-XLA-05966] c15 N72-12408
 Solar cell assembly test method
 [NASA-CASE-NPO-10401] c03 N72-20033
 Thermal compression bonding of interconnectors
 [NASA-CASE-GSC-10303] c15 N72-22487
 Extrusion can
 [NASA-CASE-NPO-10812] c15 N73-13464
 Radiation sensitive solid state switch
 [NASA-CASE-NPO-10817-1] c08 N73-30135
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 [NASA-CASE-LAR-11522-1] c15 N74-34881

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 Data transfer system Patent
 [NASA-CASE-NPO-12107] c08 N71-27255

BROWN AND ROOT, INC., HOUSTON, TEX.
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 [NASA-CASE-MSC-13530-2] c06 N73-11107

BROWN ENGINEERING CO., INC., HUNTSVILLE, ALA.
 Air bearing Patent
 [NASA-CASE-XMF-01887] c15 N71-10617
 Collapsible nozzle extension for rocket engines
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 [NASA-CASE-MFS-11497] c28 N71-16224
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 [NASA-CASE-XMF-04966] c14 N71-17658
 Method of recording a gas flow pattern Patent
 [NASA-CASE-XMF-01779] c12 N71-20815
 Trigonometric vehicle guidance assembly which
 aligns the three perpendicular axes of two
 three-axes systems Patent
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 Vapor liquid separator Patent
 [NASA-CASE-XMF-04042] c15 N71-23023
 Thruster maintenance system Patent
 [NASA-CASE-MFS-20325] c28 N71-27095
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 [NASA-CASE-MFS-20619] c28 N72-11708

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 [NASA-CASE-IMP-08907] c23 N71-29123
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[NASA-CASE-XNP-04167-3] c25 N72-21693
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 [NASA-CASE-XNP-04167-2] c25 N72-24753
CATHOLIC UNIV. OF AMERICA, WASHINGTON, D.C.
 Electromagnetic wave energy converter
 [NASA-CASE-GSC-11394-1] c09 N73-32109
CHANCE VOUGHT CORP., DALLAS, TEX.
 Coupling for linear shaped charge Patent
 [NASA-CASE-XLA-00189] c33 N70-36846
 Spin forming tubular elbows Patent
 [NASA-CASE-XMF-01083] c15 N71-22723
 Single action separation mechanism Patent
 [NASA-CASE-XLA-00188] c15 N71-22874
CHRYSLER CORP., DETROIT, MICH.
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 environments and method of preparing the same
 Patent
 [NASA-CASE-MFS-14253] c33 N71-24858
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 [NASA-CASE-XMP-04208] c33 N71-29051
CHRYSLER CORP., HUNTSVILLE, ALA.
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 [NASA-CASE-XMF-04132] c15 N69-27502
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 modules Patent
 [NASA-CASE-MSC-12389] c33 N71-29052
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 [NASA-CASE-GSC-10786-1] c10 N72-28241
COMPREHENSIVE DESIGNERS, INC., SHERMAN OAKS, CALIF.
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 [NASA-CASE-NPO-11366] c11 N73-26238
COMPUTER CONTROL CO., INC., FRAMINGHAM, MASS.
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 [NASA-CASE-XNP-06032] c09 N69-21926
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 [NASA-CASE-XNP-06031] c15 N71-15606
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 amount of liquid in a tank Patent
 [NASA-CASE-MSC-12280] c27 N71-16348
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 [NASA-CASE-MFS-20830] c15 N71-30028
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 [NASA-CASE-XLE-103477-1] c28 N71-20330

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 High field Cds detector for infrared radiation
 [NASA-CASE-LAR-11027-1] c14 N74-18088
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 [NASA-CASE-HQN-10638-1] c15 N73-30460
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 [NASA-CASE-XMS-04312] c07 N71-22984
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 Recoverable single stage spacecraft booster Patent
 [NASA-CASE-XMF-01973] c31 N70-41588
 Switching circuit employing regeneratively
 connected complementary transistors Patent
 [NASA-CASE-XNP-02654] c10 N70-42032
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Collapsible pistons
 [NASA-CASE-MSC-13789-1] c11 N73-32152
DUKE UNIV., DURHAM, N.C.
 Regulated dc-to-dc converter for voltage step-up
 or step-down with input-output isolation
 [NASA-CASE-HQN-10792-1] c09 N74-11049

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 Method of forming ceramic to metal seal Patent
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 apertured electrodes Patent
 [NASA-CASE-XNP-03332] c09 N71-10618
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 Method of producing refractory bodies having
 controlled porosity Patent
 [NASA-CASE-LEH-10393-1] c17 N71-15468
 Soil particles separator, collector and viewer
 Patent
 [NASA-CASE-XNP-09770] c15 N71-20440
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 ballistic pendulum Patent
 [NASA-CASE-XMS-04201] c14 N71-22990
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 [NASA-CASE-XNP-00952] c10 N71-23271
 Ion engine casing construction and method of
 making same Patent
 [NASA-CASE-XNP-06942] c28 N71-23293
 Material handling device Patent
 [NASA-CASE-XNP-09770-3] c11 N71-27036
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ELECTRONIC IMAGE SYSTEMS CORP., CAMBRIDGE, MASS.
 Drying apparatus for photographic sheet material
 [NASA-CASE-GSC-11074-1] c14 N73-28489
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 wedge shaped configuration
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 Method and means for providing an absolute power
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 [NASA-CASE-ERC-11020] c14 N71-26774

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 Space simulation and radiative property testing
 system and method Patent
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 Thermal control system for a spacecraft modular
 housing
 [NASA-CASE-GSC-11018-1] c31 N73-30829
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 Relief valve
 [NASA-CASE-XMS-05894-1] c15 N69-21924
 Portable environmental control system Patent
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Dual latching solenoid valve Patent
[NASA-CASE-XMS-05890] c09 N71-23191

Water management system and an electrolytic cell therefor Patent
[NASA-CASE-MSC-10960-1] c03 N71-24718

Low cycle fatigue testing machine
[NASA-CASE-LAR-10270-1] c32 N72-25877

Process for separation of dissolved hydrogen from water by use of palladium and process for coating palladium with palladium black
[NASA-CASE-MSC-13335-1] c06 N72-31140

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[NASA-CASE-MSC-110/72] c05 N74-32546

GCA CORP., BEDFORD, MASS.
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[NASA-CASE-LAR-10180-1] c06 N71-13461

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[NASA-CASE-XNP-03930] c14 N69-24331

Method and apparatus for attaching physiological monitoring electrodes Patent
[NASA-CASE-XPK-07658-1] c05 N71-26293

Driving lamps by induction
[NASA-CASE-MPS-21214-1] c09 N73-30181

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[NASA-CASE-XNP-02588] c15 N71-18613

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[NASA-CASE-INP-01660] c14 N71-23036

Plating nickel on aluminum castings Patent
[NASA-CASE-XNP-04148] c17 N71-24830

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[NASA-CASE-XNP-05612] c09 N69-21468

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[NASA-CASE-XGS-01971] c15 N71-15922

Zero gravity separator Patent
[NASA-CASE-XLE-00586] c15 N71-15968

Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c06 N74-12813

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[NASA-CASE-XHQ-03903] c15 N69-21922

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[NASA-CASE-XGS-03505] c03 N71-10608

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[NASA-CASE-XGS-02011] c15 N71-20739

Multiparameter vision tester apparatus
[NASA-CASE-MSC-13601-1] c05 N72-11088

Automatic control of liquid cooling garment by cutaneous and external auditory meatus temperatures
[NASA-CASE-MSC-13917-1] c05 N72-15098

Method for measuring cutaneous sensory perception
[NASA-CASE-MSC-13609-1] c05 N72-25122

Reaction tester
[NASA-CASE-MSC-13604-1] c05 N73-13114

Air conditioned suit
[NASA-CASE-LAR-10076-1] c05 N73-20137

Compton scatter attenuation gamma ray spectrometer
[NASA-CASE-MPS-21441-1] c14 N73-30392

Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c14 N74-18090

Method of determining bond quality of power transistors attached to bed substrates
[NASA-CASE-MPS-21931-1] c09 N74-21858

Electrophoretic sample insertion
[NASA-CASE-MPS-21395-1] c14 N74-26948

Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MPS-21394-1] c12 N74-27744

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[NASA-CASE-XNP-01099] c14 N71-15969

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[NASA-CASE-MSC-10959] c15 N71-26243

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[NASA-CASE-MPS-13929] c15 N71-27091

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[NASA-CASE-XGS-01593] c03 N70-35408

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Bacteria detection instrument and method
[NASA-CASE-GSC-11533-1] c14 N73-13435

Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c05 N74-27566

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[NASA-CASE-GSC-11514-1] c03 N72-24037

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Foldable solar concentrator Patent
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[NASA-CASE-XLE-03603-2] c15 N71-17651

Filament wound container Patent
[NASA-CASE-XLE-03803] c15 N71-23816

Panelized high performance multilayer insulation Patent
[NASA-CASE-MPS-14023] c33 N71-25351

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[NASA-CASE-LAR-10373-1] c18 N71-26155

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[NASA-CASE-LAR-10440-1] c14 N73-32323

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[NASA-CASE-HQN-10364] c06 N71-27363

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[NASA-CASE-MSC-12168-1] c09 N71-18600

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[NASA-CASE-XMS-10964-1] c10 N71-19417

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Tungsten seal coat Patent
[NASA-CASE-XNP-03704] c15 N71-17695

Waveform simulator Patent
[NASA-CASE-NPO-10251] c10 N71-27365

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[NASA-CASE-XMS-09652-1] c05 N71-26333

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[NASA-CASE-XMP-02108] c31 N70-36845

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[NASA-CASE-MPS-10340] c15 N71-17628

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[NASA-CASE-MPS-12827] c14 N71-17656

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 Refractory porcelain enamel passive thermal control coating for high temperature alloys [NASA-CASE-MFS-22324-1] c18 N73-21471
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 Multilayer porous ionizer Patent [NASA-CASE-XNP-04338] c17 N71-23046
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Method and apparatus for decoding compatible convolutional codes
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 [NASA-CASE-ARC-10330-1] c09 N73-32112
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 Method of fluxless brazing and diffusion bonding
 of aluminum containing components
 [NASA-CASE-MSC-14435-1] c15 N74-20071

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MAELIN-ROCKWELL CORP., JAMESTOWN, N.Y.
 Drilled ball bearing with a one piece
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 [NASA-CASE-LAR-11224-1] c15 N74-20072
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 metal foil
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 [NASA-CASE-MSC-13512-1] c15 N72-22485
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 integrated circuit four-quadrant multiplier
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 Low distortion automatic phase control circuit
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 light signal Patent
 [NASA-CASE-GSC-10216-1] c23 N71-26722
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 Pretreatment method for anti-wettable materials
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 [NASA-CASE-XMS-03252] c15 N71-10658
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 Method for making a heat insulating and ablative
 structure
 [NASA-CASE-XMS-01108] c15 N69-24322
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 [NASA-CASE-XMS-05909-1] c14 N69-27459
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 corrosive, noxious and other fluids Patent
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**MCDONNELL-DOUGLAS ASTRONAUTICS CO., NEWPORT BEACH,
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 A meter for use in detecting tension in straps
 having predetermined elastic characteristics
 [NASA-CASE-MFS-22189-1] c14 N74-10421
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 manufacture Patent application
 [NASA-CASE-NPO-10863] c06 N70-11251
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 charges of fluid
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 [NASA-CASE-MFS-20922-1] c15 N74-22136
 Device for monitoring a change in mass in
 varying gravimetric environments
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 [NASA-CASE-MFS-21728-1] c14 N74-27865
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 radiation
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 A device for use in loading tension members
 [NASA-CASE-MFS-21488-1] c14 N73-23526
MCDONNELL-DOUGLAS CORP., NEWPORT BEACH, CALIF.
 Method of making membranes
 [NASA-CASE-XNP-04264] c03 N69-21337
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 Rocket nozzle test method Patent
 [NASA-CASE-NPO-10311] c31 N71-15643
 Reaction of fluorine with polyperfluoropolyenes
 [NASA-CASE-NPO-10862] c06 N72-22107
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 [NASA-CASE-NPO-10863-2] c06 N72-25152
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 [NASA-CASE-NPO-12122-1] c27 N74-20397
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[NASA-CASE-NPO-12061-1] c06 N72-21100

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Latching device
[NASA-CASE-MFS-21606-1] c15 N73-22417

Vacuum leak detector
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[NASA-CASE-XNP-06503] c23 N71-29049

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[NASA-CASE-XMP-03988] c15 N71-21403

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[NASA-CASE-LAR-10686] c14 N71-28935

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[NASA-CASE-XMS-02182] c10 N71-28783

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[NASA-CASE-LAR-10168-1] c09 N74-22865

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Optical data processing using paraboloidal mirror segments
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High field CDS detector for infrared radiation
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Anti-gravity device
[NASA-CASE-MFS-22758-1] c15 N74-22146

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Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c14 N74-32886

Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c14 N74-32887

Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c14 N74-32888

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Cryogenic apparatus for measuring the intensity of magnetic fields
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Protective circuit of the spark gap type
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[NASA-CASE-ARC-10268-1] c09 N70-12620

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High-temperature, high-pressure spherical segment valve Patent
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Magnetically centered liquid column float Patent
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[NASA-CASE-XAC-00139] c02 N70-34856

Temperature compensated solid state differential amplifier Patent
[NASA-CASE-XAC-00435] c09 N70-35440

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[NASA-CASE-XAC-00405] c05 N70-41819

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Apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29460

Shoulder harness and lap belt restraint system
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Nondispersive gas analyzing method and apparatus wherein radiation is serially passed through a reference and unknown gas
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Two degree inverted flexure
[NASA-CASE-ARC-10345-1] c15 N73-12488

Intumescent paint containing nitrile rubber
[NASA-CASE-ARC-10196-1] c18 N73-13562

Miniature ingestible telemeter devices to measure deep body temperature
[NASA-CASE-ARC-10583-1] c05 N73-14093

Temperature compensated light source using a light emitting diode
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[NASA-CASE-ARC-10194-1] c23 N73-20741

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Dual wavelength scanning Doppler velocimeter
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[NASA-CASE-ARC-10463-1] c09 N73-32111

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[NASA-CASE-XGS-04799]	c18 N71-24183	Caterpillar micro positioner
Strain gauge measuring techniques Patent		[NASA-CASE-GSC-10780-1] c14 N71-16283
[NASA-CASE-XGS-04478]	c14 N71-24233	Minimech self-deploying boom mechanism
Electromagnetic polarization systems and methods Patent		[NASA-CASE-GSC-10566-1] c15 N71-18477
[NASA-CASE-GSC-10021-1]	c09 N71-24595	Heated porous plug microthruster
		[NASA-CASE-GSC-10640-1] c28 N71-18766
		Optimum performance spacecraft solar cell system
		[NASA-CASE-GSC-10669-1] c03 N71-20031
		Monostable multivibrator
		[NASA-CASE-GSC-10082-1] c10 N71-20221

Roll alignment detector [NASA-CASE-GSC-10514-1]	c14 N72-20379	Method of detecting and counting bacteria in body fluids [NASA-CASE-GSC-11092-2]	c04 N73-27052
Cosmic dust sensor [NASA-CASE-GSC-10503-1]	c14 N72-20381	Protein sterilization method of firefly luciferase using reduced pressure and molecular sieves [NASA-CASE-GSC-10225-1]	c06 N73-27086
Solenoid valve including guide for armature and valve member [NASA-CASE-GSC-10607-1]	c15 N72-20442	Process for making RF shielded cable connector assemblies and the products formed thereby [NASA-CASE-GSC-11215-1]	c09 N73-28083
Fast response low power drain logic circuits [NASA-CASE-GSC-10878-1]	c10 N72-22236	Device for determining relative angular position between a spacecraft and a radiation emitting celestial body [NASA-CASE-GSC-11444-1]	c14 N73-28490
Trap for preventing diffusion pump backstreaming [NASA-CASE-GSC-10518-1]	c15 N72-22489	Microscope multi-angle, reflection, viewing adaptor and photographic recording system [NASA-CASE-GSC-11690-1]	c14 N73-28499
Resistance soldering apparatus [NASA-CASE-GSC-10913]	c15 N72-22491	Fastener stretcher [NASA-CASE-GSC-11149-1]	c15 N73-30457
Optical system support apparatus [NASA-CASE-XER-07896-2]	c23 N72-22673	Spacecraft attitude sensor [NASA-CASE-GSC-10890-1]	c21 N73-30640
SCR lamp driver [NASA-CASE-GSC-10221-1]	c09 N72-23171	Digital phase locked loop [NASA-CASE-GSC-11623-1]	c10 N73-31202
Potassium silicate zinc coatings [NASA-CASE-GSC-10361-1]	c18 N72-23581	Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions [NASA-CASE-GSC-11169-2]	c05 N73-32011
Synchronous orbit battery cyclor [NASA-CASE-GSC-11211-1]	c03 N72-25020	Radiation hardening of MOS devices by boron [NASA-CASE-GSC-11425-2]	c09 N73-32114
Flavin coenzyme assay [NASA-CASE-GSC-10565-1]	c06 N72-25149	Dish antenna having switchable beamwidth [NASA-CASE-GSC-11760-1]	c09 N73-32116
Location identification system [NASA-CASE-ERC-10324]	c07 N72-25173	Alphanumeric character generator for oscilloscopes [NASA-CASE-GSC-11582-1]	c09 N73-32120
A dc to ac to dc converter having transistor synchronous rectifiers [NASA-CASE-GSC-11126-1]	c09 N72-25253	Star tracking reticles [NASA-CASE-GSC-11188-1]	c14 N73-32320
Tungsten contacts on silicon substrates [NASA-CASE-GSC-10695-1]	c09 N72-25259	Peen plating [NASA-CASE-GSC-11163-1]	c15 N73-32360
Bacterial contamination monitor [NASA-CASE-GSC-10879-1]	c14 N72-25413	A dually mode locked Nd:YAG laser [NASA-CASE-GSC-11746-1]	c16 N73-32398
Honeycomb panels formed of minimal surface periodic tubule layers [NASA-CASE-ERC-10364]	c18 N72-25540	Structural heat pipe [NASA-CASE-GSC-11619-1]	c33 N73-32828
Honeycomb core structures of minimal surface tubule sections [NASA-CASE-ERC-10363]	c18 N72-25541	Low speed phase lock speed control system [NASA-CASE-GSC-11127-1]	c09 N74-10202
Gunn-type solid state devices [NASA-CASE-XER-07895]	c26 N72-25679	Ultraviolet light reflective coating [NASA-CASE-GSC-11786-1]	c18 N74-10542
Use of unilluminated solar cells as shunt diodes for a solar array [NASA-CASE-GSC-10344-1]	c03 N72-27053	Recorder/processor apparatus [NASA-CASE-GSC-11553-1]	c07 N74-15831
Active tuned circuit [NASA-CASE-GSC-11340-1]	c10 N72-33230	Axially and radially controllable magnetic bearing [NASA-CASE-GSC-11551-1]	c15 N74-18132
Electric motive machine including magnetic bearing [NASA-CASE-IGS-07805]	c15 N72-33476	Self-regulating proportionally controlled heating apparatus and technique [NASA-CASE-GSC-11752-1]	c33 N74-19583
Cosmic dust or other similar outer space particles impact location detector [NASA-CASE-GSC-11291-1]	c25 N72-33696	Method of making porous conductive supports for electrodes [NASA-CASE-GSC-11367-1]	c03 N74-19692
Method and apparatus for determining the contents of contained gas samples [NASA-CASE-GSC-10903-1]	c14 N73-12444	Piezoelectric relay [NASA-CASE-GSC-11627-1]	c09 N74-19852
System for stabilizing torque between a balloon and gondola [NASA-CASE-GSC-11077-1]	c02 N73-13008	Controllable high voltage source having fast settling time [NASA-CASE-GSC-11844-1]	c09 N74-19853
Diffuse reflective coating [NASA-CASE-GSC-11214-1]	c06 N73-13128	Formation of star tracking reticles [NASA-CASE-GSC-11188-3]	c14 N74-20008
Data processor with conditionally supplied clock signals [NASA-CASE-GSC-10975-1]	c08 N73-13187	Radiation hardening of MOS devices by boron [NASA-CASE-GSC-11425-1]	c24 N74-20329
Apparatus for vibrational testing of articles [NASA-CASE-GSC-11302-1]	c14 N73-13416	Amplitude steered array [NASA-CASE-GSC-11446-1]	c09 N74-20860
Method and system for ejecting fairing sections from a rocket vehicle [NASA-CASE-GSC-10590-1]	c31 N73-14853	Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly [NASA-CASE-GSC-11560-1]	c09 N74-20861
Elural beam antenna [NASA-CASE-GSC-11013-1]	c09 N73-19234	Ultra-stable oscillator with complementary transistors [NASA-CASE-GSC-11513-1]	c09 N74-20862
Bonding of sapphire to sapphire by eutectic mixture aluminum oxide and zirconium oxide [NASA-CASE-GSC-11577-1]	c15 N73-19467	High efficiency multifrequency feed [NASA-CASE-GSC-11317-3]	c09 N74-20863
Star tracking reticles and process for the production thereof [NASA-CASE-GSC-11188-2]	c21 N73-19630	Turnstile slot antenna [NASA-CASE-GSC-11428-1]	c09 N74-20864
Delayed simultaneous release mechanism [NASA-CASE-GSC-10814-1]	c03 N73-20039	Method and apparatus for checking fire detectors [NASA-CASE-GSC-11600-1]	c14 N74-21019
Doppler compensation by shifting transmitted object frequency within limits [NASA-CASE-GSC-10087-4]	c07 N73-20174	Long range laser traversing system [NASA-CASE-GSC-11262-1]	c16 N74-21091
Telemetry processor [NASA-CASE-GSC-11388-1]	c07 N73-24187	Method and apparatus for optically monitoring the angular position of a rotating mirror [NASA-CASE-GSC-11353-1]	c23 N74-21304
Signal-to-noise ratio determination circuit [NASA-CASE-GSC-11239-1]	c10 N73-25241	Image tube [NASA-CASE-GSC-11602-1]	c09 N74-21850
Mutation damper [NASA-CASE-GSC-11205-1]	c15 N73-25513	Polarization compensator for optical communications [NASA-CASE-GSC-11782-1]	c07 N74-22827
Low outgassing polydimethylsiloxane material and preparation thereof [NASA-CASE-GSC-11358-1]	c06 N73-26100		

High voltage distributor
[NASA-CASE-GSC-11849-1] c09 N74-22873

Apparatus for controlling the temperature of
balloon-borne equipment
[NASA-CASE-GSC-11620-1] c14 N74-23039

Improved method of detecting and counting bacteria
[NASA-CASE-GSC-11917-1] c04 N74-26619

Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c14 N74-26949

Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c05 N74-27566

Beat flow calorimeter
[NASA-CASE-GSC-11434-1] c14 N74-27859

Air conditioning system and component therefore
distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c15 N74-27902

Passive dual spin misalignment compensators
[NASA-CASE-GSC-11479-1] c21 N74-28097

Apparatus for simulating optical transmission
links
[NASA-CASE-GSC-11877-1] c07 N74-30532

Star scanner
[NASA-CASE-GSC-11569-1] c14 N74-30886

Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c09 N74-32660

Variable beamwidth antenna
[NASA-CASE-GSC-11862-1] c09 N74-32674

Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c14 N74-32886

Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c14 N74-32887

Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c14 N74-32888

Atomic standard with variable storage volume
[NASA-CASE-GSC-11895-1] c15 N74-33997

Bonding of sapphire to sapphire by eutectic
mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-2] c15 N74-34002

Two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c09 N74-34649

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Device for determining the accuracy of the flare
on a flared tube
[NASA-CASE-XKS-03495] c14 N69-39785

Quick attach and release fluid coupling assembly
Patent
[NASA-CASE-XKS-01985] c15 N71-10782

Parasitic probe antenna Patent
[NASA-CASE-XKS-09348] c09 N71-13521

Electronic checkout system for space
vehicles
[NASA-CASE-XKS-08012-2] c31 N71-15566

Apparatus for tensile testing Patent
[NASA-CASE-XKS-06250] c14 N71-15600

Weatherproof helix antenna Patent
[NASA-CASE-XKS-08485] c07 N71-19493

Valve seat with resilient support member Patent
[NASA-CASE-XKS-02582] c15 N71-21234

Diode and protection fuse unit Patent
[NASA-CASE-XKS-03381] c09 N71-22796

Optical monitor panel Patent
[NASA-CASE-XKS-03509] c14 N71-23175

Separator simulator Patent
[NASA-CASE-XKS-04631] c10 N71-23663

Controlled release device Patent
[NASA-CASE-XKS-03338] c15 N71-24043

Phonocardiogram simulator Patent
[NASA-CASE-XKS-10804] c05 N71-24606

VHF/UHF parasitic probe antenna Patent
[NASA-CASE-XKS-09340] c07 N71-24614

BCD to decimal decoder Patent
[NASA-CASE-XKS-06167] c08 N71-24890

Flammability test chamber Patent
[NASA-CASE-KSC-10126] c11 N71-24985

Video sync processor Patent
[NASA-CASE-KSC-10002] c10 N71-25865

Weld preparation machine Patent
[NASA-CASE-XKS-07953] c15 N71-26134

Validation device for spacecraft checkout
equipment Patent
[NASA-CASE-IKS-10543] c07 N71-26292

Internal work light Patent
[NASA-CASE-XKS-05932] c09 N71-26787

Emergency escape system Patent
[NASA-CASE-XKS-07814] c15 N71-27067

Voltage dropout sensor Patent
[NASA-CASE-KSC-10020] c10 N71-27338

Autoignition test cell Patent
[NASA-CASE-KSC-10198] c11 N71-28629

Protective suit having an audio transceiver Patent
[NASA-CASE-KSC-10164] c07 N71-33108

Ripple indicator
[NASA-CASE-KSC-10162] c09 N72-11225

High speed photo-optical time recording
[NASA-CASE-KSC-10294] c14 N72-18411

High speed direct binary-to-binary coded decimal
converter
[NASA-CASE-KSC-10326] c08 N72-21197

Automatic frequency control loop including
synchronous switching circuits
[NASA-CASE-KSC-10393] c09 N72-21247

Universal environment package with sectional
component housing
[NASA-CASE-KSC-10031] c15 N72-22486

Buffered analog converter
[NASA-CASE-KSC-10397] c08 N72-25206

Lamp modulator
[NASA-CASE-KSC-10565] c09 N72-25250

Cable stabilizer for open shaft cable operated
elevators
[NASA-CASE-KSC-10513] c15 N72-25453

Pressurized lighting system
[NASA-CASE-KSC-10644] c09 N72-27227

High speed direct binary to binary coded decimal
converter and scaler
[NASA-CASE-KSC-10595] c08 N73-12176

Geysering inhibitor for vertical cryogenic
transfer pipe
[NASA-CASE-KSC-10615] c15 N73-12466

Electronic video editor
[NASA-CASE-KSC-10003] c10 N73-13235

Character indicating display device
[NASA-CASE-XKS-00348] c09 N73-14215

Voltage monitoring system
[NASA-CASE-KSC-10736-1] c09 N73-23290

Signal conditioner test set
[NASA-CASE-KSC-10750-1] c14 N73-23527

Collapsible high gain antenna
[NASA-CASE-KSC-10392] c07 N73-26117

Floating baffle to improve efficiency of liquid
transfer from tanks
[NASA-CASE-KSC-10639] c15 N73-26472

Zero gravity liquid transfer screen
[NASA-CASE-KSC-10626] c14 N73-27378

Optical rotational sensor
[NASA-CASE-KSC-10752-1] c15 N73-27407

Television multiplexing system
[NASA-CASE-KSC-10654-1] c07 N73-30115

Dual digital video switcher
[NASA-CASE-KSC-10782-1] c07 N73-32063

Lightning tracking system
[NASA-CASE-KSC-10729-1] c09 N73-32110

Rocket borne instrument to measure electric
fields inside electrified clouds
[NASA-CASE-KSC-10730-1] c14 N73-32318

Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c14 N74-22113

Electric field measuring and display system
[NASA-CASE-KSC-10731-1] c14 N74-27862

Digital servo controller
[NASA-CASE-KSC-10769-1] c09 N74-29556

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Jet shoes
[NASA-CASE-ILA-08491] c05 N69-21380

Condenser - Separator
[NASA-CASE-ILA-08645] c15 N69-21465

Connector - Electrical
[NASA-CASE-XLA-01288] c09 N69-21470

A support technique for vertically oriented
launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540

Electromagnetic mirror drive system
[NASA-CASE-XLA-03724] c14 N69-27461

Evaporant holder
[NASA-CASE-XLA-03105] c15 N69-27483

Compensating radioneter
[NASA-CASE-XLA-04556] c14 N69-27484

Tubular coupling having frangible connecting means
[NASA-CASE-ILA-02854] c15 N69-27490

Fatigue-resistant shear pin
[NASA-CASE-ILA-09122] c15 N69-27505

Ablation sensor
[NASA-CASE-XLA-01781] c14 N69-39975

Aeroflexible structures
[NASA-CASE-XLA-06095] c01 N69-39981

Transient-compensated SCR inverter [NASA-CASE-XLA-08507]	c09 N69-39984	Parachute glider Patent [NASA-CASE-XLA-00898]	c02 N70-36804
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Capacitor power pak Patent Application [NASA-CASE-LAR-10367-1]	c03 N70-26817	Airplane take-off performance indicator Patent [NASA-CASE-XLA-00100]	c14 N70-36807
Disk pack cleaning table Patent Application [NASA-CASE-LAR-10590-1]	c15 N70-26819	Aerodynamic measuring device Patent [NASA-CASE-XLA-00481]	c14 N70-36824
Folding apparatus Patent [NASA-CASE-XLA-00137]	c15 N70-33180	Aircraft wheel spray drag alleviator Patent [NASA-CASE-XLA-01583]	c02 N70-36825
Infrared scanner Patent [NASA-CASE-XLA-00120]	c21 N70-33181	Attitude orientation of spin-stabilized space vehicles Patent [NASA-CASE-XLA-00281]	c21 N70-36943
Reentry vehicle leading edge Patent [NASA-CASE-XLA-00165]	c31 N70-33242	Continuously operating induction plasma accelerator Patent [NASA-CASE-XLA-01354]	c25 N70-36946
Motion picture camera for optical pyrometry Patent [NASA-CASE-XLA-00062]	c14 N70-33254	Check valve assembly for a probe Patent [NASA-CASE-XLA-00128]	c15 N70-37925
Variable sweep wing configuration Patent [NASA-CASE-XLA-00230]	c02 N70-33255	Space capsule Patent [NASA-CASE-XLA-00149]	c31 N70-37938
Variable sweep wing aircraft Patent [NASA-CASE-XLA-00221]	c02 N70-33266	Sandwich panel construction Patent [NASA-CASE-XLA-00349]	c33 N70-37979
Plasma accelerator Patent [NASA-CASE-XLA-00675]	c25 N70-33267	Reflector space satellite Patent [NASA-CASE-XLA-00138]	c31 N70-37981
Survival couch Patent [NASA-CASE-XLA-00418]	c05 N70-33285	Variable-geometry winged reentry vehicle Patent [NASA-CASE-XLA-00241]	c31 N70-37986
Landing arrangement for aerial vehicles Patent [NASA-CASE-XLA-00142]	c02 N70-33286	Vehicle parachute and equipment jettison system Patent [NASA-CASE-XLA-00195]	c02 N70-38009
Wind tunnel airstream oscillating apparatus Patent [NASA-CASE-XLA-00112]	c11 N70-33287	Landing arrangement for aerospace vehicle Patent [NASA-CASE-XLA-00805]	c31 N70-38010
Hydrofoil Patent [NASA-CASE-XLA-00229]	c12 N70-33305	Antenna system using parasitic elements and two driven elements at 90 deg angle fed 180 deg out of phase Patent [NASA-CASE-XLA-00414]	c07 N70-38200
High intensity heat and light unit Patent [NASA-CASE-XLA-00141]	c09 N70-33312	Despin weight release Patent [NASA-CASE-XLA-00679]	c15 N70-38601
Particle detection apparatus Patent [NASA-CASE-XLA-00135]	c14 N70-33322	Manned space station Patent [NASA-CASE-XLA-00258]	c31 N70-38676
Runway light Patent [NASA-CASE-XLA-00119]	c11 N70-33329	Missile stage separation indicator and stage initiator Patent [NASA-CASE-XLA-00791]	c03 N70-39930
Spherical solid-propellant rocket motor Patent [NASA-CASE-XLA-00105]	c28 N70-33331	Apparatus for producing high purity silicon carbide crystals Patent [NASA-CASE-XLA-02057]	c26 N70-40015
Jet aircraft configuration Patent [NASA-CASE-XLA-00087]	c02 N70-33332	Miniature vibration isolator Patent [NASA-CASE-XLA-01019]	c15 N70-40156
Aerial capsule emergency separation device Patent [NASA-CASE-XLA-00115]	c03 N70-33343	Aircraft instrument Patent [NASA-CASE-XLA-00487]	c14 N70-40157
Nozzle Patent [NASA-CASE-XLA-00154]	c28 N70-33374	Radiation direction detector including means for compensating for photocell aging Patent [NASA-CASE-XLA-00183]	c14 N70-40239
Air frame drag balance Patent [NASA-CASE-XLA-00113]	c14 N70-33386	Passive communication satellite Patent [NASA-CASE-XLA-00210]	c30 N70-40309
Flexible foam erectable space structures Patent [NASA-CASE-XLA-00686]	c31 N70-34135	Electrostatic plasma modulator for space vehicle re-entry communication Patent [NASA-CASE-XLA-01400]	c07 N70-41331
Nose gear steering system for vehicle with main skids Patent [NASA-CASE-XLA-01804]	c02 N70-34160	Micrometeoroid velocity measuring device Patent [NASA-CASE-XLA-00495]	c14 N70-41332
Surface roughness detector Patent [NASA-CASE-XLA-00203]	c14 N70-34161	Method of obtaining permanent record of surface flow phenomena Patent [NASA-CASE-XLA-01353]	c14 N70-41366
Variable-span aircraft Patent [NASA-CASE-XLA-00166]	c02 N70-34178	Means for communicating through a layer of ionized gases Patent [NASA-CASE-XLA-01127]	c07 N70-41372
Dynamic precession damper for spin stabilized vehicles Patent [NASA-CASE-XLA-01989]	c21 N70-34295	Quick release separation mechanism Patent [NASA-CASE-XLA-01441]	c15 N70-41679
Erectable modular space station Patent [NASA-CASE-XLA-00678]	c31 N70-34296	Flexible wing deployment device Patent [NASA-CASE-XLA-01220]	c02 N70-41863
Electric-arc heater Patent [NASA-CASE-XLA-00330]	c33 N70-34540	Self-sealing, unbonded, rocket motor nozzle closure Patent [NASA-CASE-XLA-02651]	c28 N70-41967
Ac power amplifier Patent Application [NASA-CASE-LAR-10218-1]	c09 N70-34559	Fatigue testing device Patent [NASA-CASE-XLA-02131]	c32 N70-42003
Method and apparatus for producing a plasma Patent [NASA-CASE-XLA-00147]	c25 N70-34661	Techniques for insulating cryogenic fuel containers Patent [NASA-CASE-XLA-01967]	c31 N70-42015
Gas actuated bolt disconnect Patent [NASA-CASE-XLA-00326]	c03 N70-34667	Double hinged flap Patent [NASA-CASE-XLA-01290]	c02 N70-42016
Logarithmic converter Patent [NASA-CASE-XLA-00471]	c08 N70-34778	Spacecraft separation system for spinning vehicles and/or payloads Patent [NASA-CASE-XLA-02132]	c31 N71-10582
Mandrel for shaping solid propellant rocket fuel into a motor casing Patent [NASA-CASE-XLA-00304]	c27 N70-34783	Method for molding compounds Patent [NASA-CASE-XLA-01091]	c15 N71-10672
Impact simulator Patent [NASA-CASE-XLA-00493]	c11 N70-34786	Automatic force measuring system Patent [NASA-CASE-XLA-02605]	c14 N71-10773
Accelerometer with FM output Patent [NASA-CASE-XLA-00492]	c14 N70-34799	Gas analyzer for bi-gaseous mixtures Patent [NASA-CASE-XLA-01131]	c14 N71-10774
Frangible tube energy dissipation Patent [NASA-CASE-XLA-00754]	c15 N70-34850		
Landing arrangement for aerial vehicle Patent [NASA-CASE-XLA-00806]	c02 N70-34858		
Method and apparatus for shock protection Patent [NASA-CASE-XLA-00482]	c15 N70-36409		
Inflatable honeycomb Patent [NASA-CASE-XLA-00204]	c32 N70-36536		
Thermal control of space vehicles Patent [NASA-CASE-XLA-01291]	c33 N70-36617		
Foam generator Patent [NASA-CASE-XLA-00838]	c03 N70-36778		

Multiple input radio receiver Patent
[NASA-CASE-XLA-00901] c07 N71-10775

Rotating space station simulator Patent
[NASA-CASE-XLA-03127] c11 N71-10776

Composite powerplant and shroud therefor Patent
[NASA-CASE-XLA-01043] c28 N71-10780

All-directional fastener Patent
[NASA-CASE-XLA-01807] c15 N71-10799

Hot air balloon deceleration and recovery system Patent
[NASA-CASE-XLA-06824-2] c02 N71-11037

Control for flexible parawing Patent
[NASA-CASE-XLA-06958] c02 N71-11038

Variable sweep aircraft Patent
[NASA-CASE-XLA-03659] c02 N71-11041

Translating horizontal tail Patent
[NASA-CASE-XLA-08801-1] c02 N71-11043

Space suit pressure stabilizer Patent
[NASA-CASE-XLA-05332] c05 N71-11194

Equipotential space suit Patent
[NASA-CASE-LAR-10007-1] c05 N71-11195

Recovery of potable water from human wastes in below-G conditions Patent
[NASA-CASE-XLA-03213] c05 N71-11207

Process for interfacial polymerization of pyromellitic dianhydride and 1,2,4,5-tetraamino-benzene Patent
[NASA-CASE-XLA-03104] c06 N71-11235

Imidazopyrrolone/imide copolymers Patent
[NASA-CASE-XLA-08802] c06 N71-11238

Adaptive compression of communication signals Patent
[NASA-CASE-XLA-03076] c07 N71-11266

Reentry communication by material addition Patent
[NASA-CASE-XLA-01552] c07 N71-11284

Cooperative Doppler radar system Patent
[NASA-CASE-LAR-10403] c21 N71-11766

Supersonic aircraft Patent
[NASA-CASE-XLA-04451] c02 N71-12243

Umbilical disconnect Patent
[NASA-CASE-XLA-00711] c03 N71-12258

Renote controlled tubular disconnect Patent
[NASA-CASE-XLA-01396] c03 N71-12259

Backpack carrier Patent
[NASA-CASE-LAR-10056] c05 N71-12351

Optical communications system Patent
[NASA-CASE-XLA-01090] c07 N71-12389

Analog to digital converter Patent
[NASA-CASE-XLA-00670] c08 N71-12501

Integrated time shared instrumentation display Patent
[NASA-CASE-XLA-01952] c08 N71-12507

SCR blocking pulse gate amplifier Patent
[NASA-CASE-XLA-07497] c09 N71-12514

Minimum induced drag airfoil body Patent
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[NASA-CASE-XMF-01129] c09 N70-38712

Slosh suppressing device and method Patent
[NASA-CASE-XMF-00658] c12 N70-38997

Air bearing Patent
[NASA-CASE-XMF-00339] c15 N70-39896

Instrument support with precise lateral adjustment Patent
[NASA-CASE-XMF-00480] c14 N70-39898

Segmented back-up bar Patent
[NASA-CASE-XMF-00640] c15 N70-39924

Collapsible loop antenna for space vehicle Patent
[NASA-CASE-XMF-00437] c07 N70-40202

Flexible back-up bar Patent
[NASA-CASE-XMF-00722] c15 N70-40204

Electro-optical alignment control system Patent
[NASA-CASE-XMF-00908] c14 N70-40238

Missile launch release system Patent
[NASA-CASE-XMF-03198] c30 N70-40353

Double-acting shock absorber Patent
[NASA-CASE-XMF-01045] c15 N70-40354

Portable alignment tool Patent
[NASA-CASE-XMF-01452] c15 N70-41371

Device for suppressing sound and heat produced by high-velocity exhaust jets Patent
[NASA-CASE-XMF-01813] c28 N70-41582

Unfired-ceramic flame-resistant insulation and method of making the same Patent
[NASA-CASE-XMF-01030] c18 N70-41583

Pulse counting circuit which simultaneously indicates the occurrence of the nth pulse Patent
[NASA-CASE-XMF-00906] c09 N70-41655

Support apparatus for dynamic testing Patent
[NASA-CASE-XMF-01772] c11 N70-41677

Locking device with rolling detents Patent
[NASA-CASE-XMF-01371] c15 N70-41829

Tank construction for space vehicles Patent
[NASA-CASE-XMF-01899] c31 N70-41948

Accumulator Patent Application
[NASA-CASE-MFS-10354] c12 N70-41976

Positive displacement flowmeter Patent
[NASA-CASE-XMF-02822] c14 N70-41994

Hydraulic support for dynamic testing Patent
[NASA-CASE-XMF-03248] c11 N71-10604

Fiber optic vibration transducer and analyzer Patent
[NASA-CASE-XMF-02433] c14 N71-10616

Method and means for damping nutation in a satellite Patent
[NASA-CASE-XMF-00442] c31 N71-10747

Heat pipe thermionic diode power system Patent
[NASA-CASE-XMF-05843] c03 N71-11055

Synthesis of siloxane-containing epoxy polymers Patent
[NASA-CASE-MFS-13994-1] c06 N71-11240

BI-carrier demodulator with modulation Patent
[NASA-CASE-XMF-01160] c07 N71-11298

Harness assembly Patent
[NASA-CASE-MFS-14671] c05 N71-12341

Magnetic matrix memory system Patent
[NASA-CASE-XMF-05835] c08 N71-12504

Pulse amplitude and width detector Patent
[NASA-CASE-XMF-06519] c09 N71-12519

Microwave power receiving antenna Patent
[NASA-CASE-MFS-20333] c09 N71-13486

Hybrid holographic system using reflected and transmitted object beams simultaneously Patent
[NASA-CASE-MFS-20074] c16 N71-15565

Reactance control system Patent
[NASA-CASE-XMF-01598] c21 N71-15583

Apparatus for welding torch angle and seam tracking control Patent
[NASA-CASE-XMF-03287] c15 N71-15607

Multivay vortex valve system Patent
[NASA-CASE-XMF-04709] c15 N71-15609

Injector assembly for liquid fueled rocket engines Patent
[NASA-CASE-XMF-00968] c28 N71-15660

Space capsule ejection assembly Patent
[NASA-CASE-XMF-03169] c31 N71-15675

Air cushion lift pad Patent
[NASA-CASE-MFS-14685] c31 N71-15689

Method of making a molded connector Patent
[NASA-CASE-XMF-03498] c15 N71-15986

Regenerative braking system Patent
[NASA-CASE-XMF-01096] c10 N71-16030

Condition and condition duration indicator Patent
[NASA-CASE-XMF-01097] c10 N71-16058

Method and apparatus for securing to a spacecraft Patent
[NASA-CASE-MFS-11133] c31 N71-16222

Method and apparatus of simulating zero gravity conditions Patent
[NASA-CASE-MFS-12750] c27 N71-16223

Passive optical wind and turbulence detection system Patent
[NASA-CASE-XMF-14032] c20 N71-16340

Serpentuator Patent
[NASA-CASE-XMF-05344] c31 N71-16345

Gravimeter Patent
[NASA-CASE-XMF-05844] c14 N71-17587

High pressure gas filter system Patent
[NASA-CASE-MFS-12806] c14 N71-17588

Burst diaphragm flow initiator Patent
[NASA-CASE-MFS-12915] c11 N71-17600

Vacuum deposition apparatus Patent
[NASA-CASE-XMF-01667] c15 N71-17647

Quick disconnect latch and handle combination
Patent
[NASA-CASE-MFS-11132] c15 N71-17649

Method and apparatus for precision sizing and
joining of large diameter tubes Patent
[NASA-CASE-XMF-05114] c15 N71-17650

Low temperature flexure fatigue cryostat Patent
[NASA-CASE-IMF-02964] c14 N71-17659

Precision stepping drive Patent
[NASA-CASE-MFS-14772] c15 N71-17692

Multi-mission module Patent
[NASA-CASE-XMF-01543] c31 N71-17730

Ratchet mechanism Patent
[NASA-CASE-MFS-12805] c15 N71-17805

Method of making impurity-type semiconductor
electrical contacts Patent
[NASA-CASE-XMF-01016] c26 N71-17818

Apparatus for the determination of the existence
or non-existence of a bonding between two
members Patent
[NASA-CASE-MFS-13686] c15 N71-18132

Static inverters which sum a plurality of waves
Patent
[NASA-CASE-XMF-00663] c08 N71-18752

Space environmental work simulator Patent
[NASA-CASE-XMF-07488] c11 N71-18773

Space manufacturing machine Patent
[NASA-CASE-MFS-20410] c15 N71-19214

Extensometer Patent
[NASA-CASE-XMF-04680] c15 N71-19489

Mechanical simulator of low gravity conditions
Patent
[NASA-CASE-MFS-10555] c11 N71-19494

Weld control system using thermocouple wire Patent
[NASA-CASE-MFS-06074] c15 N71-20393

Evaporant source for vapor deposition Patent
[NASA-CASE-IMF-06065] c15 N71-20395

Satellite despun device Patent
[NASA-CASE-XMF-08523] c31 N71-20396

Method of coating circuit paths on printed
circuit boards with solder Patent
[NASA-CASE-IMF-01599] c09 N71-20705

Elastomeric silazane polymers and process for
preparing the same Patent
[NASA-CASE-IMF-04133] c06 N71-20717

Method of producing alternating ether siloxane
copolymers Patent
[NASA-CASE-XMF-02584] c06 N71-20905

Honeycomb panel and method of making same Patent
[NASA-CASE-IMF-01402] c18 N71-21651

Portable milling tool Patent
[NASA-CASE-IMF-03511] c15 N71-22799

Energy absorbing device Patent
[NASA-CASE-XMF-10040] c15 N71-22877

Continuous detonation reaction engine Patent
[NASA-CASE-XMF-06926] c28 N71-22983

Adaptive tracking notch filter system Patent
[NASA-CASE-XMF-01892] c10 N71-22986

Meteorological balloon Patent
[NASA-CASE-XMF-04163] c02 N71-23007

Continuous turning slip ring assembly Patent
[NASA-CASE-XMF-01049] c15 N71-23049

Automatic welding speed controller Patent
[NASA-CASE-XMF-01730] c15 N71-23050

Positive dc to positive dc converter Patent
[NASA-CASE-XMF-14301] c09 N71-23188

Zero gravity apparatus Patent
[NASA-CASE-XMF-06515] c14 N71-23227

Positive dc to negative dc converter Patent
[NASA-CASE-XMF-08217] c03 N71-23239

Evacuation port seal Patent
[NASA-CASE-XMF-03290] c15 N71-23256

Azimuth laying system Patent
[NASA-CASE-XMF-01669] c21 N71-23289

Electron beam instrument for measuring electric
fields Patent
[NASA-CASE-IMF-10289] c14 N71-23699

Anemometer with braking mechanism Patent
[NASA-CASE-IMF-05224] c14 N71-23726

Apparatus for testing a pressure responsive
instrument Patent
[NASA-CASE-XMF-04134] c14 N71-23755

Electric welding torch Patent
[NASA-CASE-XMF-02330] c15 N71-23798

Swivel support for gas bearings Patent
[NASA-CASE-IMF-07808] c15 N71-23812

Welding skate with computerized control Patent
[NASA-CASE-IMF-07069] c15 N71-23815

Docking structure for spacecraft Patent
[NASA-CASE-XMF-05941] c31 N71-23912

High pressure helium purifier Patent
[NASA-CASE-IMF-06888] c15 N71-24044

Horizontal cryostat for fatigue testing Patent
[NASA-CASE-IMF-10968] c14 N71-24234

Method for leakage testing of tanks Patent
[NASA-CASE-IMF-02392] c32 N71-24265

Internal flare angle gauge Patent
[NASA-CASE-XMF-04415] c14 N71-24693

Pulse rise time and amplitude detector Patent
[NASA-CASE-XMF-08804] c09 N71-24717

System for maintaining a motor at a
predetermined speed utilizing digital feedback
means Patent
[NASA-CASE-IMF-06892] c09 N71-24805

Power system with heat pipe liquid coolant lines
Patent
[NASA-CASE-MFS-14114-2] c09 N71-24807

Magnetomotive metal working device Patent
[NASA-CASE-IMF-03793] c15 N71-24833

Apparatus for determining the deflection of an
electron beam impinging on a target Patent
[NASA-CASE-XMF-06617] c09 N71-24843

Transistor servo system including a unique
differential amplifier circuit Patent
[NASA-CASE-IMF-05195] c10 N71-24861

RC rate generator for slow speed measurement
Patent
[NASA-CASE-IMF-02966] c10 N71-24863

Method and apparatus for precision sizing and
joining of large diameter tubes Patent
[NASA-CASE-XMF-05114-3] c15 N71-24865

Duct coupling for single-handed operation Patent
[NASA-CASE-MFS-20395] c15 N71-24903

Brushless direct current tachometer Patent
[NASA-CASE-MFS-20385] c09 N71-24904

Self-lubricating gears and other mechanical
parts Patent
[NASA-CASE-MFS-14971] c15 N71-24984

Pulse width inverter Patent
[NASA-CASE-MFS-10068] c10 N71-25139

Isothermal cover with thermal reservoirs Patent
[NASA-CASE-MFS-20355] c33 N71-25353

Storage container for electronic devices Patent
[NASA-CASE-MFS-20075] c09 N71-26133

Method and apparatus for precision sizing and
joining of large diameter tubes Patent
[NASA-CASE-IMF-05114-2] c15 N71-26148

Filter system for control of outgas
contamination in vacuum Patent
[NASA-CASE-MFS-14711] c15 N71-26185

Image magnification adapter for cameras Patent
[NASA-CASE-IMF-03844-1] c14 N71-26474

Thickness measuring and injection device Patent
[NASA-CASE-MFS-20261] c14 N71-27005

Personal propulsion unit Patent
[NASA-CASE-MFS-20130] c28 N71-27585

Power system with heat pipe liquid coolant lines
Patent
[NASA-CASE-MFS-14114] c33 N71-27862

Method of making shielded flat cable Patent
[NASA-CASE-MFS-13687] c09 N71-28691

A dc motor speed control system Patent
[NASA-CASE-MFS-14610] c09 N71-28886

Cryogenic thermal insulation Patent
[NASA-CASE-XMF-05046] c33 N71-28892

Method of coating through-holes Patent
[NASA-CASE-IMF-05999] c15 N71-29032

Response analyzers for sensors Patent
[NASA-CASE-MFS-11204] c14 N71-29134

Current regulating voltage divider
[NASA-CASE-MFS-20935] c09 N71-34212

Graphite-reinforced aluminum composite and
method of preparing the same
[NASA-CASE-MFS-21077] c18 N71-34502

Nuclear mass flowmeter
[NASA-CASE-MFS-20485] c14 N71-11365

Fine adjustment mount
[NASA-CASE-MFS-20249] c15 N71-11386

Method of making foamed materials in zero gravity
[NASA-CASE-IMF-09902] c15 N71-11387

Air bearing assembly for curved surfaces
[NASA-CASE-MFS-20423] c15 N72-11388

Stud-bonding gun
[NASA-CASE-MFS-20299] c15 N72-11392

Apparatus for obtaining isotropic irradiation of a specimen
[NASA-CASE-MFS-20095] c24 N72-11595

Wind tunnel test section
[NASA-CASE-MFS-20509] c11 N72-17183

Multiple image storing system for high speed projectile holography
[NASA-CASE-MFS-20596] c14 N72-17324

Method of manufacturing semiconductor devices using refractory dielectrics
[NASA-CASE-IER-08476-1] c26 N72-17820

Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332] c05 N72-20097

Apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446

An airlock
[NASA-CASE-MFS-20922] c31 N72-20840

Photoetching of metal-oxide layers
[NASA-CASE-ERC-10108] c06 N72-21094

Liquid aerosol dispenser
[NASA-CASE-MFS-20829] c12 N72-21310

Optical probing of supersonic flows with statistical correlation
[NASA-CASE-MFS-20642] c14 N72-21407

Mechanically actuated triggered hand
[NASA-CASE-MFS-20413] c15 N72-21463

Hermetically sealed elbow actuator
[NASA-CASE-MFS-14710] c09 N72-22195

Shielded flat cable
[NASA-CASE-MFS-13687-2] c09 N72-22198

Shock wave convergence apparatus
[NASA-CASE-MFS-20890] c14 N72-22439

Bonding of reinforced Teflon to metals
[NASA-CASE-MFS-20482] c15 N72-22492

Inorganic thermal control coatings
[NASA-CASE-MFS-20011] c16 N72-22566

High temperature furnace for melting materials in space
[NASA-CASE-MFS-20710] c11 N72-23215

Siloxane containing epoxide compounds
[NASA-CASE-MFS-13994-2] c06 N72-25148

Silphenylenesiloxane polymers having in-chain perfluoroalkyl groups
[NASA-CASE-MFS-20979] c06 N72-25151

Emergency lunar communications system
[NASA-CASE-MFS-21042] c07 N72-25171

Lead attachment to high temperature devices
[NASA-CASE-ERC-10224] c09 N72-25261

Device for measuring bearing preload
[NASA-CASE-MFS-20434] c11 N72-25288

Accumulator
[NASA-CASE-MFS-10354-2] c12 N72-25306

Multiple in-line docking capability for rotating space stations
[NASA-CASE-MFS-20855-1] c31 N72-25853

Altitude simulation chamber for rocket engine testing
[NASA-CASE-MFS-20620] c11 N72-27262

Fixture for supporting articles during vibration tests
[NASA-CASE-MFS-20523] c14 N72-27412

Electrical connector
[NASA-CASE-MFS-20757] c09 N72-28225

Remote control manipulator for zero gravity environment
[NASA-CASE-MFS-14405] c15 N72-28495

Thermal compensating structural member
[NASA-CASE-MFS-20433] c15 N72-28496

Semiconductor transducer device
[NASA-CASE-ERC-10087-2] c14 N72-31446

Coaxial high density, hypervelocity plasma generator and accelerator with ionizable metal disc
[NASA-CASE-MFS-20589] c25 N72-32688

Process for the preparation of brushite crystals
[NASA-CASE-ERC-10338] c04 N72-33072

Adjustable force probe
[NASA-CASE-MFS-20760] c14 N72-33377

Polyimide resin-fiberglass cloth laminates for printed circuit boards
[NASA-CASE-MFS-20408] c18 N73-12604

Differential pressure control
[NASA-CASE-MFS-14216] c14 N73-13418

Redundant hydraulic control system for actuators
[NASA-CASE-MFS-20944] c15 N73-13466

Device and method for determining X ray reflection efficiency of optical surfaces
[NASA-CASE-MFS-20243] c23 N73-13662

Strain gauge ambiguity sensor for segmented mirror active optical system
[NASA-CASE-MFS-20506-1] c14 N73-17563

A leak detector
[NASA-CASE-MFS-21761-1] c14 N73-18444

Process for making diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457

Test stand system for vacuum chambers
[NASA-CASE-MFS-21362] c11 N73-20267

Material fatigue testing system
[NASA-CASE-MFS-20673] c14 N73-20476

Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c20 N73-21523

Electronic optical transfer function analyzer
[NASA-CASE-MFS-21672-1] c23 N73-22630

System for depositing thin films
[NASA-CASE-MFS-20775-1] c26 N73-23770

Ratemeter
[NASA-CASE-MFS-20418] c14 N73-24473

Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] c05 N73-25125

Barometers (peak wind speed anemometers)
[NASA-CASE-MFS-20916] c14 N73-25460

Electrostatic measurement system
[NASA-CASE-MFS-22129-1] c09 N73-26197

Self-energized plasma compressor
[NASA-CASE-MFS-22145-1] c25 N73-26721

Monitoring deposition of films
[NASA-CASE-MFS-20675] c26 N73-26751

Docking structure for spacecraft
[NASA-CASE-MFS-20863] c31 N73-26876

Wide temperature range electronic device with lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150

Restraint system for ergometer
[NASA-CASE-MFS-21046-1] c14 N73-27377

Multiplate focusing collimator
[NASA-CASE-MFS-20932-1] c14 N73-27380

Apparatus and method for skin packaging articles
[NASA-CASE-MFS-20855] c15 N73-27405

Ergometer
[NASA-CASE-MFS-21109-1] c05 N73-27941

Tilting table for ergometer and for other biomedical devices
[NASA-CASE-MFS-21010-1] c05 N73-30078

Ultrasonic bone densitometer
[NASA-CASE-MFS-20994-1] c05 N73-30090

Measurement system
[NASA-CASE-MFS-20658-1] c14 N73-30386

Collimator of multiple plates with axially aligned identical random arrays of apertures
[NASA-CASE-MFS-20546-2] c14 N73-30389

Automatically operable self-leveling load table
[NASA-CASE-MFS-22039-1] c14 N73-30428

Holographic thin film analyzer
[NASA-CASE-MFS-20823-1] c16 N73-30476

Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c16 N73-30478

Semiconductor surface protection material
[NASA-CASE-ERC-10339-1] c18 N73-30532

Polymerizable disilanol having in-chain perfluoroalkyl groups
[NASA-CASE-MFS-20979-2] c06 N73-32030

Redundant speed control for brushless Hall effect motor
[NASA-CASE-MFS-20207-1] c09 N73-32107

Induction motor control system with voltage controlled oscillator circuit
[NASA-CASE-MFS-21465-1] c10 N73-32145

Hole cutter
[NASA-CASE-MFS-22649-1] c15 N73-32376

Synthesis of superconducting compounds by explosive compaction of powders
[NASA-CASE-MFS-20861-1] c18 N73-32437

Remote manipulator system
[NASA-CASE-MFS-22022-1] c05 N74-10099

Orthotic arm joint
[NASA-CASE-MFS-21611-1] c05 N74-10100

Ultrasonic scanner for radial and flat panels
[NASA-CASE-MFS-20335-1] c14 N74-10415

Ergometer calibrator
[NASA-CASE-MFS-21045-1] c14 N74-11288

Digital computing cardiachometer
[NASA-CASE-MFS-20284-1] c05 N74-12778

Integrated circuit package with lead structure and method of preparing the same

[NASA-CASE-MFS-21374-1] c10 N74-12951
 Vee-notching device
 [NASA-CASE-MFS-20730-1] c14 N74-13131
 Pseudo-noise test set for communication system
 evaluation
 [NASA-CASE-MFS-22671-1] c14 N74-13146
 A variable frequency inverter for ac induction
 motors with torque, speed and braking control
 [NASA-CASE-MFS-22088-1] c09 N74-13894
 Solar energy power system
 [NASA-CASE-MFS-21628-1] c29 N74-14496
 Ultrasonic scanning system for in-place
 inspection of brazed tube joints
 [NASA-CASE-MFS-20767-1] c15 N74-15130
 Method and apparatus for checking the stability
 of a setup for making reflection type holograms
 [NASA-CASE-MFS-21455-1] c16 N74-15146
 Method and apparatus for nondestructive testing
 [NASA-CASE-MFS-21233-1] c23 N74-15395
 Real time moving scene holographic camera system
 [NASA-CASE-MFS-21087-1] c14 N74-17153
 Nonflammable coating compositions
 [NASA-CASE-MFS-20486-2] c18 N74-17283
 Metering gun for dispensing precisely measured
 charges of fluid
 [NASA-CASE-MFS-21163-1] c05 N74-17853
 Electrostatic entrained material measurement
 system
 [NASA-CASE-MFS-22128-2] c14 N74-18098
 Apparatus for calibrating an image dissector tube
 [NASA-CASE-MFS-22208-1] c14 N74-18100
 Omnidirectional wheel
 [NASA-CASE-MFS-21309-1] c15 N74-18125
 Reinforced polyquinoxaline gasket and method of
 preparing the same
 [NASA-CASE-MFS-21364-1] c15 N74-18126
 Manual actuator
 [NASA-CASE-MFS-21481-1] c15 N74-18127
 Testing device using X-ray lasers
 [NASA-CASE-MFS-22409-1] c16 N74-18153
 Cryogenic gyroscope housing
 [NASA-CASE-MFS-21136-1] c23 N74-18323
 Thermoelectric power system
 [NASA-CASE-MFS-22002-1] c03 N74-18726
 Two stage light gas plasma projectile accelerator
 [NASA-CASE-MFS-22287-1] c11 N74-18891
 A panel for selectively absorbing solar thermal
 energy and the method for manufacturing the
 panel
 [NASA-CASE-MFS-22562-1] c03 N74-19700
 Automatic frequency control for FM transmitter
 [NASA-CASE-MFS-21540-1] c07 N74-19790
 Microwave power transmission system wherein
 level of transmitted power is controlled by
 reflections from receiver
 [NASA-CASE-MFS-21470-1] c10 N74-19870
 A space vehicle
 [NASA-CASE-MFS-22734-1] c31 N74-20541
 Reduced gravity fecal collector seat and urinal
 [NASA-CASE-MFS-22102-1] c05 N74-20725
 Metabolic analyzer
 [NASA-CASE-MFS-21415-1] c05 N74-20728
 Automatic quadrature control and measuring system
 [NASA-CASE-MFS-21660-1] c14 N74-21017
 Thiophenyl ether disiloxanes and trisiloxanes
 useful as lubricant fluids
 [NASA-CASE-MFS-22411-1] c15 N74-21058
 Method of determining bond quality of power
 transistors attached to bed substrates
 [NASA-CASE-MFS-21931-1] c09 N74-21858
 Isolated output system for a class D
 switching-mode amplifier
 [NASA-CASE-MFS-21616-1] c09 N74-21859
 Airlock
 [NASA-CASE-MFS-20922-1] c15 N74-22136
 An internally supported flexible duct joint
 [NASA-CASE-MFS-19193-1] c15 N74-22145
 Anti-gravity device
 [NASA-CASE-MFS-22758-1] c15 N74-22146
 Low distortion automatic phase control circuit
 [NASA-CASE-MFS-21671-1] c10 N74-22885
 Two speed drive system
 [NASA-CASE-MFS-20645-1] c15 N74-23070
 Insert facing tool
 [NASA-CASE-MFS-21485-1] c15 N74-25968
 LC-oscillator with automatic stabilized
 amplitude via bias current control
 [NASA-CASE-MFS-21698-1] c09 N74-26732

Device for monitoring a change in mass in
 varying gravimetric environments
 [NASA-CASE-MFS-21556-1] c14 N74-26945
 Holography utilizing surface plasmon
 resonances
 [NASA-CASE-MFS-22040-1] c14 N74-26946
 Electrophoretic sample insertion
 [NASA-CASE-MFS-21395-1] c14 N74-26948
 Spray solenoid brake
 [NASA-CASE-MFS-21846-1] c15 N74-26976
 Device for configuring multiple leads
 [NASA-CASE-MFS-22133-1] c15 N74-26977
 Quick disconnect filter coupling
 [NASA-CASE-MFS-22323-1] c15 N74-26988
 Mixing insert for foam dispensing apparatus
 [NASA-CASE-MFS-20607-1] c15 N74-26989
 Thrust-isolating mounting
 [NASA-CASE-MFS-21680-1] c32 N74-27397
 Battery testing device
 [NASA-CASE-MFS-20761-1] c03 N74-27519
 Apparatus for establishing flow of a fluid mass
 having a known velocity
 [NASA-CASE-MFS-21424-1] c12 N74-27730
 Apparatus for conducting flow electrophoresis in
 the substantial absence of gravity
 [NASA-CASE-MFS-21394-1] c12 N74-27744
 Steady state thermal radiometers
 [NASA-CASE-MFS-21108-1] c14 N74-27861
 Conductive elastomeric extensometer
 [NASA-CASE-MFS-21049-1] c14 N74-27864
 Device for measuring tensile forces
 [NASA-CASE-MFS-21728-1] c14 N74-27865
 Three mirror glancing incidence system for X-ray
 telescope
 [NASA-CASE-MFS-21372-1] c14 N74-27866
 Real time, large volume, moving scene
 holographic camera system
 [NASA-CASE-MFS-22537-1] c14 N74-28932
 Flame detector operable in presence of proton
 radiation
 [NASA-CASE-MFS-21577-1] c03 N74-29410
 Ether-linked aryl tetracarboxylic dianhydrides
 [NASA-CASE-MFS-22356-1] c06 N74-29479
 Polyimides of ether-linked aryl tetracarboxylic
 dianhydrides
 [NASA-CASE-MFS-22355] c06 N74-29480
 An improved system for imposing directional
 stability on a rocket-propelled vehicle
 [NASA-CASE-MFS-21311-1] c31 N74-30311
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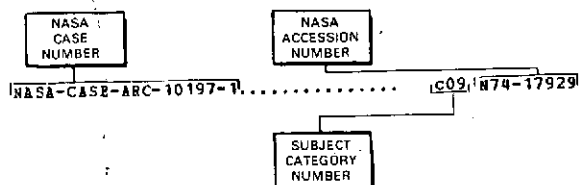
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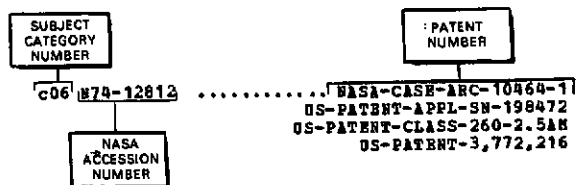
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