

REQUIREMENTS FOR PATENTABILITY



2010. 1.

(Note) If there is any inconsistency or ambiguity between the Korean version and English version, the Korean version shall prevail.

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Chapter 1 Industrial Applicability

1. Patent Act Article 29 (1) main paragraph

Inventions that have industrial applicability are patentable unless they fall under either of the following sub-paragraphs.

(i) and (ii) are omitted.

2. Purport

All inventions should be industrially applicable since the purpose of the Patent Act is to contribute to the development of industry (Patent Act Article 1). In this regard, the Patent Act Article 29 paragraph (1) stipulates that an invention is patentable only if the invention is considered industrially applicable. The term of “industry”, in the Patent Act Article 29 paragraph (1), shall be interpreted in the broadest sense. In other words, the term industry is interpreted to cover all activities included in useful and practical technologies.

(Reference) Paris Convention Article 1(3)

Industrial property shall be understood in the broadest sense and shall apply not only to industry and commerce property, but likewise to agricultural and extractive industries and to all manufactured or natural products, for example, wines, grains, tobacco leaves, fruits, cattle, minerals, mineral water, beer, flowers, and flours.

3. Relevant Provisions

Main paragraph of patent Act Article 29 paragraph (1) requires an invention to be “statutory” and “industrially applicable”. Therefore, these examination guidelines describe the requirement of “statutory invention” and of “subjects that involve industrial applicability”.

4. Statutory Inventions

Under the Patent Act Article 2 subparagraph (i), “Invention means the highly advanced creation of a technical idea utilizing the law of nature”, the invention shall satisfy the provision in order for a filed patent application to be statutory under the Patent Act.

However, the term “highly advanced” has been introduced to differentiate “device” under the Utility Model Act from “Invention” under the Patent Act, and this term is disregarded in determining whether the invention is statutory or not.

4.1 List of Non-statutory Inventions

The decision of whether an invention falls under the Patent Act Article 2 subparagraph (i) is not without challenge and the guidelines hereby exemplify the types of non-statutory inventions in order to help determine whether the invention is statutory.

4.1.1 A law of nature as such

Since a statutory invention shall utilize a law of nature, a law of nature as such including the second law of thermodynamics, the law of conservation of energy, etc. is not considered as a statutory invention.

4.1.2 Mere discoveries and not creations

A mere discovery is not deemed to be a creation because a discovery means to find out laws which exist in nature. A statutory invention requires to be a creation, and thus, mere discoveries, such as discoveries of natural things such as an ore or natural phenomena are not considered to be a statutory invention.

However, the method for artificially isolating substances from things in nature, not a mere discovery, is considered to be a statutory invention. So are the isolated chemical substances and microorganisms.

A use invention, which claims a novel use of a known material based on its inherent but newly found property, shall be treated distinctively from “a mere discovery” in the Patent Act. A mere discovery of a use of a known material does not constitute a statutory invention even if the use is novel. A novel use based on the newly found property is, however, considered a statutory invention only when a non-obvious inventive effort is made to discover the new property and provide the novel use.

4.1.3 Those contrary to a law of nature

Those contrary to a law of nature (e.g., perpetual motion) are not considered as a statutory invention since an invention must utilize a law of nature. If a claimed invention involves any means contrary to a law of nature, the claimed invention is not considered a statutory invention (Relevant court decision: Case No. 98Huh74 (Supreme Court, 4 Sept. 1998)).

4.1.4 Those in which a law of nature is not utilized

If a claimed invention utilizes any laws other than a law of nature (e.g., economic laws, mathematical methods, logics, cartography, etc.), arbitrary arrangements (e.g., a rule for playing a game as such) or mental activities (e.g., method for doing business as such, teaching skills as such, financial insurance scheme as such, tax code as such, etc.), the claimed invention is not considered to be statutory.

In the case where a claimed invention is not directed to logics, mathematical principles as such or a method directly using them but involves technical devices or a method which gives useful, concrete and tangible result by increasing or controlling the performance of a certain technical tools with the data, which is converted using mathematical manipulations, if the technical devices or technical methods are considered as universal, repetitive and objective, they are deemed as a statutory

invention which uses technical idea utilizing a law of nature.

Whether a claimed invention utilizes a law of nature shall be taken into account as a whole. Therefore, even if a part of matters defining an invention stated in a claim utilizes a law of nature, when it is judged that the claimed invention as a whole does not utilize a law of nature, the claimed invention is not statutory under the Patent Act. On the contrary, even if a part of matters (e.g., mathematical axioms) defining an invention stated in a claim does not utilize a law of nature, when it is judged that the claimed invention as a whole is considered as utilizing a law of nature, the claimed invention is deemed as statutory.

(Example 1)

A method for generating cryptographs through the combination of Alphabets, numbers and signs

(Example 2)

A method for creating a phonetic transcription of foreign languages comprising the step of: using the phenomena in which there is change in pronunciation formed by a set of vocal organs including the shape of throat and sound of tongue formed at pronouncing a certain word to indicate different pronunciation or characteristics of forming a phonetic transcription as the shape of lips changes (Relevant court decision: Case No. 2001Huh3453 (Patent Court, 17 Jan. 2002)).

(Example 3)

A method of comprehensive management for recycling garbages or waste comprising the steps of: distributing special bags bar-code stickers attached with personal information of a person who disposes garbage or waste to citizens; inviting the citizens to separate general waste and place garbage in special disposal bag with the bar-code stickers attached; collecting the disposal bags on a daily basis and discharging them at a waste disposal site; and sorting waste or garbage at the waste disposal site, wherein in the case of wrongly sorted garbage, the citizen who disposed garbage in a wrong disposal bag are detected by the bar-code and warned not to do it again (Relevant court decision: Case No. 2000Huh5438 (Patent Court, 21 Sept. 2001)).

4.1.5 Personal skill

A personal skill, which is acquired by personal practice and cannot be shared with third parties as a knowledge due to lack of objectivity, is not considered to be a statutory invention.

(Example 1)

A method of performing musical instruments, a method of throwing a spilt-fingered fast ball characterized in the way of holding the ball in fingers and throwing the same.

4.1.6 Mere presentation of information

A mere presentation of information where the feature resides solely in the content of the

information and its main objective is to present the information is not considered as a statutory invention.

(Example 1)

An audio compact disc where the feature resides solely in the music recorded thereon, computer program listings as such, and image data taken with a digital camera, etc.

However, if the technical feature resides in the presentation of information, the presenting per se, the means for presentation and the method for presentation, might be considered as a statutory invention.

(Example 2)

A plastic card on which information is recorded with letters, numbers and signs embossed on it (a technical feature residing in the means for presentation of information)

4.1.7 Aesthetic creations

An aesthetic creation may contain a visionary feature as well as a technical feature. Therefore, its evaluation is subjectively made. An aesthetic effect itself (e.g., paintings and carvings as such) is not considered as a statutory invention. However, if the aesthetic effect is achieved by a technical composition or other technical means, it is viewed as a statutory invention.

4.1.8 Computer programming language or computer program

A computer program is a mere list of instructions to operate a computer. Therefore, a computer program is not considered as a statutory invention. However, in the case of an invention where a data processing process by a computer program is specifically executed using a hardware, a data processing unit (machine) operating in association with the computer program, its operating method, and a computer readable medium carrying the computer program thereon are viewed as statutory inventions.

4.1.9 Those whose outcome of the claimed subject matter is not reproducible

An invention whose outcome of the claimed subject matter is not achievable and reproducible is not considered as statutory, even if the means to achieve the goal of the invention is sufficiently described. It does not mean that the possibility of reproduction of a claimed invention should account for 100%. Even with less than 100% possibility, the invention is considered to be reproduced if it is certain that the outcome is achievable.

4.1.10 Incomplete Invention

A statutory invention shall be complete and a complete invention is defined as an invention in which the subject matters shall be specified concretely and objectively so that a person with ordinary skill in the art may easily repeat the invention to achieve the

intended technical effect. The decision on whether an invention is complete shall be made by considering the invention as a whole such as its purpose, subject matters and operational effects of the invention indicated in the description of patent application in accordance with the state of the art at the time of filing (Case No. 93Huh1810 (Supreme Court, 27 Dec. 1994)).

If a subject matter lacks concrete means to solve the problem to be solved or if it is clearly impossible for the subject matter to solve the problem to be solved by any means presented in a claim, the claimed invention is not considered as statutory. However, in this case, the inventor can verify that the claimed invention solves the problem to be solved by means presented in a claim with an appropriate and concrete evidence such as reliable experimental data of third parties.

As one of the requirements to obtain a patent right, an examiner should distinguish between the requirement of completing an invention and that of satisfying description requirement. An incomplete invention or an invention yet to be completed at the time of filing cannot be amended later to correct the defect after the application is filed. However, in the case of deficiency of description requirement, it is possible to correct the defect through the amendment because an invention is complete at the filing but fails to make a description regularly. Therefore, if it is unclear under which cases the invention falls, it is desirable to notify the ground for rejection under the Patent Act Article 42 paragraph (3) rather than under the main paragraph of Article 29 paragraph (1).

4.2 Notification of ground for rejection in the case of non-statutory invention

If the claimed invention falls under the scope of the non-statutory inventions such as a law of nature as such, discoveries, subject matters against the law of nature, subject matters not using the law of nature, mere presentation of information, aesthetic creations or incomplete invention, the ground for rejection shall be notified with the reason that the subject matter is not “industrial applicable”, citing the main paragraph of Article 29 paragraph (1).

4.3 Difference between statutory invention under Patent Act and device under Utility Model Act

Under the Patent Act, devices (including a composite) and methods can be a patentable subject matter. However, under the Utility Model Act, a utility model may be granted only for devices that relate to the shape, construction of article, or a combination of articles. The subject matter of the utility model is a technical idea applied to the article described in claims, not the article itself.

4.3.1 Article under the Utility Model Act

There is no general definition prescribed about an article or articles described in Utility Model Act Article 4 paragraph (1). However, it is construed that a subject matter is generally considered as an article under Utility Model Act on condition that it is the

object for trade having a specific shape in space and the purpose of its use is clear.

The simple explanation about the shape, construction of an article, or a combination of articles is as follows:

(1) Shape

“Shape” is external figuration expressed in the line, the surface, and so on (e.g., the shape of the cam or the tooth shape of the gear, etc.).

(2) Construction

“Construction” is a configuration which is formed spatially and 3-dimensionally. It is expressed in the contour of articles. It is also shown in plane, side, front, and sectional (when necessary) views. A constructional feature needs not to be necessarily clear from outer appearances, however, a constructional difference is acknowledged when it is discriminated by cutting an article or using a physical/chemical analysis, even when two articles have the same appearances. A circuit of electronic products may be deemed to be a construction under Utility Model Act.

(3) Combination

Combination means that two or more articles are spatially separated respectively and have independent specific construction or shape, and moreover, show the usefulness for relating to each other functionally when used. For example, the fastening tools which consist of a bolt and a nut are a kind of combination.

4.3.2 Devices that do not relate to the shape or construction of article or a combination of articles

A process, a composition, a chemical substance, an object which is not fixed in a certain shape, animal variety, plant variety and the like do not fall under the scope of a statutory device under Utility Model Act.

(Reference)

When dependent claims delimit the material of the subject matter of an independent claim which is directed to a device, the subject matter of the dependent claims is considered as a statutory device relating to the shape or construction of an article or a combination of articles.

5. Industrially inapplicable invention

The following is a non-exhaustive list of “industrially inapplicable inventions.” Upon noticing that a claimed invention does not meet the requirements of industrial applicability, the ground should be indicated as specifically as possible in the notification of grounds for rejection.

5.1 Medical Activity

(1) List of industrially inapplicable inventions

(a) Methods for treatment of the human body by surgery, therapy or diagnosis, which are, hereafter, referred to “medical activities,” are considered industrially inapplicable.

A surgical method practiced on the human body by means of a surgical device (e.g., scalpel) or a method for treatment of the human body with a medicinal substance is regarded as medical activities, even when the method is not performed by medical doctors (including doctors of oriental medicine) or by medical or technical support staff.

(b) A method including medical activities at least in one step or as an inseparable part in a claim is not regarded as industrially applicable.

(c) When a method for treatment of the human body has both a therapeutic effect and a non-therapeutic effect (e.g., cosmetic effects) and both effects are inseparable, it is regarded as a method for treatment of the human body by therapy, which is industrially inapplicable.

(2) List of Industrially Applicable Inventions

(a) Medical devices as such to be used in surgery, therapy or diagnosis, and pharmaceutical medicines as such used for medical activities are industrially applicable.

(b) A method for operating a medical device, which is new, or a method of measurement by using a medical device is considered industrially applicable except for the method, which includes interaction between the human body and the medical device or substantial medical activities.

(c) A method for treating samples that have been discharged from a human body (e.g., urine, excrement, placenta, hair and nail) or extracted from a human body (e.g., blood, skin, cells, tumor or tissue) and a method for gathering data by analyzing such samples are considered industrially applicable when the method is composed of steps separable from medical activities.

(3) Notes for examining inventions including medical activities

Methods for treatment of the human body by surgery, therapy or diagnosis are industrially inapplicable in general. The method is, however, considered industrially applicable if it is clearly drafted in the claim that the method is limited to the animal body with the exclusion of human being (Case No. 90Huh250 (Supreme Court, 12 Mar. 1991)).

5.2 Inventions that cannot be commercially worked

An invention applicable only for personal use or an invention only for experimental or

academic purposes is regarded as industrially inapplicable. However, an invention concerning a marketable or tradable subject matter is considered industrially applicable even if the invention is applicable for the personal, experimental or academic use.

5.3 Inventions that cannot be implemented in practice

An invention which cannot be implemented in practice is not considered as industrially applicable even if it works in theory.

(Example 1)

A method for preventing an increase in ultraviolet rays associated with the destruction of the ozone layer by covering the entire surface of the earth with an ultraviolet ray-absorbing plastic film.

Even in the case where an invention has not been implemented at the time of the filing, the invention may be considered as industrially applicable if it is possible to be used in the industry in the future. Under the requirement of industrial applicability, it is sufficient that the invention be industrially applicable in the future. However, the invention would not be deemed to be industrially applicable if it is possible to be used in the industry only after the relevant technology is advanced (Case No. 2001Huh2801 (Supreme Court, 14 Mar. 2003)).

Chapter 2 Novelty

1. Patent Act Article 29 paragraph (1)

Inventions that have industrial applicability are patentable unless they fall under either of the following sub-paragraphs:

- (i) inventions publicly known or worked in the Republic of Korea or a foreign country before the filing of the patent application; or
- (ii) inventions described in a publication distributed in the Republic of Korea or a foreign country, or inventions publicly available through electric telecommunication lines as prescribed by Presidential Decree, before the filing of the patent application.

(Reference)

“Inventions publicly known or worked in the Republic of Korea” is revised into “inventions publicly known or worked in the Republic of Korea or a foreign country” on March 3, 2006. The revision shows that the terms of “being publicly known or worked” is expanded to meet the global standard. The revised term is applied to applications filed on or after October 1, 2006.

2. Purport

The purport of the Patent System is to grant an exclusive right in reward for the disclosure of an invention. Therefore, an exclusive right shall not be given to an invention already disclosed to the public. Under the Patent Act Article 29 paragraph (1), prior to the filing of the patent application, (i) inventions publicly known, (ii) inventions publicly worked (iii) inventions described in a publication, or (iv) inventions published through electric telecommunication lines as prescribed by Presidential Decree are not patentable due to lack of novelty.

3. Relevant Provisions

3.1 Publicly Known Invention

“A publicly known invention” means an invention which is known or to be known to the public if there has been no deliberate attempt to keep it secret in the Republic of Korea or a foreign country prior to the filing of the application. In interpreting of “prior to the filing of the application”, the time of filing refers to the exact point of time of filing, even to the hour and minute of the filing, not to the date of filing (if the invention is publicly known in a foreign country, the time is converted into Korean time). Also, “the public” means general people having no secrecy obligations with respect to the invention.

(Example 1)

Even if there is no publication of a patent registration, the patent application can be a prior art under Article 29 paragraph (1) subparagraph (i) after registration of patent. That is because the patented invention should be made available for public inspection upon request. However, if an application is not published, the invention of said

application shall not constitute the prior art under Article 29 paragraph (1) subparagraph (ii) as the application is not regarded as a publication distributed in the Republic of Korea or a foreign country before the filing of the patent application.

3.2 Publicly worked invention

“A publicly worked invention” means an invention which has been worked under the conditions where the contents of the invention are to be publicly known or can potentially be publicly known in the Republic of Korea or a foreign country (Definition of “working” refers to the Patent Act Article 2 subparagraph (iii)). Thus, “being public” means a situation where it is no longer kept in secret as a whole. Therefore, even when a small fraction of inner part of an invention is kept in secret with regard to working of the invention, it shall not be considered as a publicly worked invention.

(Example 1)

Conditions where the contents of the invention are considered to be publicly worked include, for example, a situation where a plant is exposed to an unspecified person during a facility tour and a person skilled in the art would have understood the contents of the invention by observing the manufacturing process associated with the invention. The conditions also include a situation where, although a visitor would not know the invention as a whole without knowing that inner parts which cannot be known by merely observing its exterior, the person is allowed to observe the inner parts or hear explanations regarding the parts (i.e. the request for observation or explanation is not to be refused by the plant).

3.3 Invention Described in a Distributed Publication

3.3.1 Distributed publication

A distributed publication is “a document, a drawing or other similar medium for the communication of information, duplicated by printing, mechanical or chemical methods, etc. for the purpose of disclosing the contents to the public through distribution”. A “Distribution” in the context of the wording “disclosing the contents to the public through distribution” means placing a publication as defined above in the condition where unspecified persons can read or see it. It does not necessitate the fact of a certain person’s actual access to such a publication.

Patent gazettes such as microfilm or CD-ROM should be considered as a distributed publication, since the public could refer to the contents of the film by using a display screen and obtain a copy of it.

In addition, non-patent literatures which are stored in floppy discs, slides, presentations or OHP materials as well as microfilms or CD-ROMs should be regarded as distributed publication, as far as they are produced to make available to the public.

3.3.2 Distribution

“Distribution” in the context of the wording “inventions described in a distributed publication” means placing a publication as defined above in the condition where unspecified persons can read or observe it. It does not require a person's actual access to such a publication.

3.3.3 Time of distribution

When the time of publication is indicated in a publication, it is presumed as follows:

① In the case where the time of publication is indicated in a publication

- (a) In the case where only the year of publication is indicated, the last day of that year;
- (b) In the case where the month and year of publication is indicated, the last day of the month of the year; and
- (c) In the case where the day, month and year of publication is indicated, that date.

② In the case where the time of publication is not indicated in a publication

- (a) The distribution date of a foreign publication is presumed in light of the period normally required to reach Korea from the country of the publication, as far as the date of its receipt in Korea is clear.
- (b) In the case where there is a derivative publication such as a book review, an extraction or a catalog, the date of distribution of the publication in question is presumed based on the publication date of the derivative publication.
- (c) In the case where there is a second edition or a second print of the publication, the date of distribution is presumed to be the publication date of the first edition indicated therein, provided that the cited contents in the second edition or second print of the publication accords with the contents of the first edition.
- (d) In the case where other appropriate information is available, the date of distribution is presumed or confirmed therefrom.

(Example 1)

It is socially accepted idea that catalogues are distributed as soon as they are published. Therefore, the claim that the published catalogues have not been distributed but kept in storage is not acceptable from experiences. In this regard, we make a decision that catalogues are distributed prior to the filing of the application as long as the evidence is concrete that the cited reference had been brought into the country before the filing of the application (Case No. 1991Huh1410 (Supreme Court, 14 Feb. 1992)).

3.3.4 Invention described in a publication

“An invention described in a publication” means an invention identified by the matters, which are directly and clearly described or considered to be essentially described, though not explicitly, in a publication.

“Matters essentially described, though not explicitly, in a publication” includes those directly derivable from the matters described, taking the common general knowledge into consideration.

(Example 1)

In order for a device to be described in a distributed publication, at least the structure of the device should be described. Therefore, if a device whose technical feature lies inside is merely exhibited in the form of photograph, it is not considered as a device described in a publication (Case No. 93Huh3767 (Patent Court, 9 Jul. 1998)).

3.4 Inventions publicly available through electric telecommunication lines

3.4.1 Purport

With the advancement of communication technologies such as the Internet, the number of technologies published over the Internet has been dramatically increasing. It is suggested that the technological advance should be reflected on the patent system since technologies published on the internet can be considered as prior art comparable to those published in print with regard to public availability, transmission speed and the quality of technology except that there is a possibility that the date and the contents of the publication can be easily fabricated after publishing due to the characteristics of internet.

However, considering that “Printed publication” under Article 29 paragraph (1) subparagraph (ii) is defined as “copied documents, drawings and photographs to be published in print either by a mechanical or a chemical method” (Case No. 92Huh377 (Supreme Court, 27 Oct. 1992)), technologies published over the Internet did not constitute a prior art in accordance with Article 29 paragraph (1) subparagraph (ii), which set out an invention described in a publication, but had rather been considered as a publicly known invention set forth in the Article 29 paragraph (1) subparagraph (i).

Therefore, according to the proclaimed revision on Article 29 paragraph (1) subparagraph (ii) on February 3, 2001, inventions available to the public over the Internet that has public confidence with regard to the date and contents of the publication shall be given the same status as “inventions described in a publication” set forth in Article 29 paragraph (1) subparagraph (ii).

An invention published by the electric telecommunication lines prescribed by Presidential Decree constitutes a prior art under Article 29 paragraph (1) subparagraph (ii) of the Patent Act, whereas an invention by the other electric telecommunication lines constitutes a prior art under Article 29 paragraph (1) subparagraph (i).

3.4.2 Requirement of an invention available to the public through electric telecommunication lines that constitutes a prior art under Article 29 paragraph (1) subparagraph (ii)

(1) Inventions publicly known to the public through electric telecommunication lines

A telecommunication line includes public bulletin board, e-mail group using a telecommunication line as well as Internet. Furthermore, a new electric or

electromagnetic telecommunication method which might appear in the future as the technology advances is also included (Reference: Telecommunications Basic Act Article 2 subparagraph (i)).

Telecommunication lines do not always require physical lines. The term “telecommunication” means transmission or reception of code, words, sound or image through wired, wireless, optic, or other electro-magnetic processes.

Publication through a CD-ROM or a diskette shall not be regarded as an invention published through telecommunication lines but as an invention described in a publication distributed.

(2) Invention made available to the public

In order for an invention known to the public through electric telecommunication lines to have a status of prior art as an invention described in a publication distributed, the invention shall be “the one available to the public”.

“Public” means an unspecified person who is not obliged to keep an invention secret. “Available to” means being in the situation where the invention can be seen by an unspecified person. Therefore, “available to the public” does not require actual access to the invention.

Even if an invention is published through an electric telecommunication line prescribed by Presidential Decree, the invention is not considered as being available to the public when the invention is only accessible by a specific person who is bound to secrecy not by the general public. To determine whether an invention is made available to the public, an examiner needs to decide if the invention is available on a Web site with a general search engine and if the web site is encoded in such a way that it cannot be read by the public. An invention can constitute a prior art only in the case where it is considered as being available to the public.

(3) Inventions published through electronic telecommunication lines owned by an entity prescribed by the Presidential Decree

In order to cite technical art made available to the public through electric telecommunication lines as prior art as in the case of the printed publications, it is required that the cited technical art should be made available to the public by “designated entities” under the Presidential Decree. Designated entities under the Presidential Decree shall fall under the following;

(a) Governments, local self-governed communities, foreign government, foreign local self-governed communities or international organizations

The Organizational Act of the Government or the Law of Self-governed Community determines if an entity belongs to the group of government or local self-governed communities under the Article 1bis (i) of Enforcement Decree of the Patent Act.

Whether an entity corresponds to one from the group of foreign government or foreign local self-governed communities will be determined by its related Act and subordinate statute of each foreign country. For example, the electric telecommunication lines owned by Korean Intellectual Property Office (hereinafter refers to KIPO) such as cyber bulletin is a typical electric communication line under the Article 1bis (i) of Enforcement Decree of the Patent Act.

KIPO has granted the same prior art status on the inventions disclosed on Web-site run by KIPO as the inventions described in the publication distributed. Publishing inventions on the Internet is currently possible, which is faster and more economical than publishing in a CD-ROM or a written form. Under the previous Patent Act, KIPO published inventions either in a CD-ROM or in a written form only. Under the current Patent Act, KIPO grants the same status of prior art on the inventions disclosed on the Internet as publications in a CD-ROM or a written form.

Also the term “International organization” is defined to include intergovernmental organizations but does not include nongovernmental organizations such as Asian Patent Attorneys Association. Intergovernmental Organization includes the United Nations, World Intellectual Property Organization (WIPO), World Trade Organization (WTO) and the European Union as well as regional patent offices such as European Patent Office (EPO), African Intellectual Property Organization (OAPI), Eurasian Patent Organization (EAPO) and African Regional Industrial Property Organization (ARIPO).

(b) National/Public schools under the Higher Education Act Article 3 or foreign national/public universities

National/public schools under Higher Education Act Article 3 refer to national schools established and run by government or public schools established and run by local self-governing groups among schools for providing higher education under Higher Education Act Article 2 (universities and colleges such as industrial college, education college, specialized college, communication college, technological college and others). Whether a college falls under “foreign national/public university” relies on its related Act and subordinate statute of each foreign country.

(c) National/public research institutes in this country or foreign country

National/public research institutes in this country include research institutes (including the inspection center and laboratory) run by local self-governing communities or government-sponsored research institutes. Whether a foreign institute is one of national/public research institutes of foreign country will be determined by its related Act and subordinate statutes of each country.

(d) Corporation designated and publicly notified by the Commissioner of Korean Intellectual Property Office

Korea Invention Promotion Association (KIPA) and Organization for Data Management Center (currently, Korea Institute of Patent Information) are designated as “corporations

established for the purpose of carrying out works related to patent information” of Enforcement Decree of the Patent Act Article 1bis subparagraph (iv) under public notification on electric telecommunication line managing corporations regarding patent information (Public notification of Korean Intellectual Property Office No. 2001-2). Korea Invention Promotion Association (KIPA) and Korea Institute of Patent Information (KIPI) conduct delegated affairs offered by Korean Intellectual Property Office. Both corporations are managed and governed by Korean Intellectual Property Office. The electric telecommunication lines used by those corporations are therefore reliable.

3.4.3 Finding the time and content of publication

It is important to decide the time and content of publication regarding the invention published via electric telecommunication lines. If an examiner finds the time of publication and the content of the art regarding said invention from the electric telecommunication lines under the Article 1bis of Enforcement Decree of the Patent Act, he or she can cite the invention as prior art without any additional verification. Whoever is not convinced of the examiner’s finding can argue against the indicated time and content of publication on the basis of solid evidence.

If an examiner cites the invention available to the public from the electric telecommunication lines as prior art in the process of examination, he or she shall describe not only the source of the cited invention but the time of publication. If an examiner is not able to find the time of publication, he or she can cite the invention as prior art after verifying that the cited invention was published before the filing of the application (or priority date) through additional searches.

In the electronic telecommunication lines, the time of publication is defined as the time of posting the relevant technology on the electronic telecommunication lines. Therefore, in the case of citing the electronic technical art retrieved from the electronic telecommunication lines, the time of publication is the time the invention was posted on the electronic telecommunication lines, even in the case that the invention has been previously published.

3.4.4 Method of Citation

In citing electronic technical information retrieved from the electronic telecommunication lines, the bibliographical items such as author, title, name of publication and pages (or drawings and graph), date of publication, date of searching and home page address, as far as they have been known, shall be listed in compliance with WIPO Standards ST.14.

However, in the case of citing a patent document published on the internet, an examiner is allowed to describe the cited documentation in the same way as patent official gazettes in the form of CD-ROM without indicating the date of searching and home page address.

3.4.5 Notes

(1) Websites hyperlinked from the electric telecommunication lines under the Presidential Decree

The electric telecommunication lines under Article 1bis of Enforcement Decree of the Patent Act is deemed reliable. However, other web sites hyper-linked through the electric telecommunication lines shall not be considered reliable under Article 1bis of Enforcement Decree of the Patent Act. It is because its credibility regarding the information such as the time of publication and the content cannot be guaranteed since the web-site is run by other entities that are not those prescribed in the Presidential Decree.

(2) Difference between the electronic communication lines under the Presidential Decree and other electronic communication lines

A publicly known invention under Article 29 paragraph (1) subparagraph (i) of the Patent Act is defined as an invention that is or could be publicly known to an unspecific person. Therefore, inventions available to the public through the electronic communication lines other than those under the Presidential Decree, which is publicly known to an unspecific person before filling an application, fall under “the publicly known invention”.

“Inventions publicly known through the electronic communication lines” have a different status as prior arts depending on whether or not the electronic communication lines are prescribed under the Article 1bis of the Enforcement Decree of the Patent Act.

For an invention publicly known through the electronic communication lines under the Article 1bis of the Enforcement Decree of the Patent Act, an examiner can cite the invention as prior arts without additional searches to confirm the contents of technology and the date of posting. On the other hand, in the case of other publicly known inventions, an examiner can cite the invention as prior art only when the examiner can confirm the date of actual posting on the electronic communication lines.

A publicly known invention posted on web-sites not defined under Article 1bis of the Enforcement Decree of the Patent Act wherein the web-sites exclusively allow users in a certain area to connect (e.g., web-sites exclusively allowing to connect only from computers in a certain US college) falls under publicly known invention in foreign countries (applied only to applications filed after Oct 1, 2006). Therefore, the invention can be cited as a prior art under the Article 29 paragraph (1) subparagraph (i) of the Patent Act. However, the invention cannot be cited as a prior art under the Article 29 paragraph (1) subparagraph (ii) of the Patent Act since the invention was not publicly known through the electric communication lines under the Article 1bis of the Enforcement Decree of the Patent Act.

If an invention is publicly known through the web-site (if the college above is a national university) under Article 1bis of the Enforcement Decree of the Patent Act, as the invention was not only published in foreign countries but also publicly known through

the electronic communication lines, the invention can be cited as a prior art under the Article 29 paragraph (1) subparagraph (i) and the Article 29 paragraph (1) subparagraph (ii) as well (applied only to applications filed after Oct 1, 2006).

4. How to assess novelty

(1) The examiner shall assess whether or not a claimed invention is novel by judging whether the claimed invention falls within the scope of the inventions set forth in the provision of Article 29 paragraph (1) subparagraph (i) to (ii).

(2) The claims must describe the subject matter for which protection is sought. (Article 42 paragraph (4)) Thus, the assessment of novelty on an invention is based on the subject matters described in the claims.

(3) When there are two or more claims in an application, assessment over novelty should be made for each claim.

4.1 Specifying the invention disclosed in claims

4.1.1 General principle of specifying inventions

(1) When the claim statements are clear, specifying the claimed invention should be made as stated in the claim. The terminology described in the claims are interpreted as having a general meaning and scope generally accepted in the technical field with the exception of the case wherein the terminology has a specific meaning which is explicitly defined in the description. The terminology should be interpreted in an objective and reasonable way by taking into consideration of its technical meaning, taken together with the common general knowledge at the time of filing, based on the general meaning of the terminology.

(2) In the case where the description of claims is clearly understood, an examiner should avoid limited interpretation just by referencing detailed description of the invention or drawings in finding technical features of invention.

In the case where subject matters are not described in the claims but in the detailed description of invention or drawings, an examiner should specify the invention as not being described in the claims. On the contrary, in the case where the subject matters are described in the claims, an examiner should consider the subject matters in claims when specifying an invention.

It is possible to consider the detailed description of invention or drawings in understanding the subject matters disclosed in the claims but it is noted that an examiner should not specify the claims by applying subject matters not described in the claims. For example, where the scope of the subject matters described in the claims are broader than embodiments in the detailed description, novelty and inventive step should not be assessed by interpreting the specific embodiments described in the detailed description as the claimed invention.

(Example 1)

In a case where “cream” is described in the claims and “the highly preserved cream which contains less moisture than bean-paste” is disclosed in the detailed description as an embodiment, as the term “cream” generally refers to fat taken from milk, regardless of content of moisture, the claimed invention should not be interpreted to be limited to the embodiment of the detailed description since a person skilled in the art can clearly understand the term.

(Example 2)

In a case where “thin film type probe” is described in the claims and “a certain pattern is formed on the tip of the probe in the longitudinal direction” is disclosed in the detailed description, the claimed invention should not be interpreted as the thin film type probe with a certain pattern formed on the tip of the probe in the longitudinal direction, since “thin film type probe” is a clear terminology.

(Example 3)

In a case where the rotation direction of brush roller is not disclosed in the claims but brush roller which rotates around a body of rotation is disclosed in the drawings, the claimed invention should not be interpreted to be limited to the rotation direction of brush roller just by referring to the rotation direction described in the drawings.

(3) In the case where an applicant specifically defines a term in the detailed description to the extent that it is clearly understood that the term is different from any general meaning in order to specify the term as having a specific meaning other than general meaning in the technical field to which an invention pertains, the term is interpreted as a term with the specific meaning defined in the detailed description.

However, only the description of a specific concept included in a generic concept of the term described in the claims in the detailed description and drawings does not fall under the specific definition aforementioned.

(Reference)

A term in a patent specification is interpreted with the general meaning in the technical field and its usage should be consistent over the whole specification. However, if an applicant intends to use a certain term to have a specific meaning, an applicant is allowed to define the meaning of the term. So, the term can be simply interpreted according to the specific definition when the meaning of term is defined in the description (Case No. 97Huh990 (Supreme Court, 22 Dec. 1998)).

(4) In the case where a term disclosed in the claims is obscure and unclear, an examiner should examine whether the subject matter of invention can be comprehended in view of the detailed description, drawings, and common general knowledge as of the time of filing. The examiner can notify the applicant a ground for rejection on the ground of lack of clarity in describing specification and novelty at the same time, when the claimed invention can be readily comprehended in view of the detailed description or drawings, and common general knowledge as of the time of filing.

(5) If a claimed invention is not clear, even in view of the detailed description in the specification, the drawings and the common general knowledge as of the time of filing, examination of novelty is not conducted and the ground for rejection due to lack of clarity in describing specification is notified.

4.1.2 Principle of specifying invention which includes special expression

(1) A product specified by its work, function, property, or characteristic (hereinafter referred to as “the function, characteristic, etc.”)

When describing claims, it is possible to state the structure, method, functions, materials or a combination of these factors for the purpose of clarifying which matters are subject to protection. When function, characteristic, etc. are disclosed in the claims to limit the subject matters of the claimed invention, an examiner should not exclude the function, characteristic, etc. from the features of the invention when interpreting the claims. When a claim includes an expression specifying a product by its function, characteristic, etc., such an expression should, in principle, be construed as every product that has such function, characteristic, etc., except when it should be construed otherwise because the expression is specifically defined in the detailed description.

However, it is noted that there are also cases where a product described by its function, characteristic, etc. should not be construed as a specific product among all products that have such function, characteristic etc. when taking into account the common general technical knowledge at the time of the filing.

(Example 1)

In a case where “means to selectively join plastic materials” is disclosed, it is appropriate that “the means to selectively join” mentioned here should not apply to materials such as a magnet which is difficult to join with plastic material.

(2) The claim which includes an expression specifying a product by its use (limitation of use)

Where a claim includes an expression specifying a product by its use (i.e. limitation of use), the examiner should interpret the claimed invention only as a product specially suitable for the use disclosed in the claim, by taking into account the detailed descriptions in the specification and drawings, and the common general technical knowledge at the time of the filing. Even if a product includes all technical characteristics described in the claims, an examiner should not regard the product as the product described in the claim when the product is not appropriate for the relevant use or when the product needs conversion to be used. For example, “crane hook with a shape of ~” merely indicates a hook including technical features with size and strength suitable for a crane. So it is appropriate that the crane hook should be construed as a different product from “fishing hooks” with regard to the structure.

If a product with a limitation of use is regarded as not being specifically suitable for

such use by taking into account the specification and drawings, and the common general technical knowledge at the time of the filing, it is construed that a limitation of use has no impact in specifying an invention, thereby the limitation of use does not have influence in the assessment of novelty.

(Example 1)

In the case where an embossing non woven fabric “used in agriculture” with limitations of weight and thickness is described in the claim and an embossing non woven fabric with the same numerical limitations is disclosed in a catalogue published prior to the time of filing, if it is considered that the claimed invention is not particularly suited to be used in agriculture, a limitation of use does not have influence in specifying the claimed invention, and thus novelty is denied based on the cited inventions in the catalogue.

(3) A product specified by its manufacturing process (product-by-process claim)

A product invention should be (except for certain particular cases where it is impossible to specify the product without using a manufacturing process thereof) described in such a way that the technical constitutions are directly stated in the claim, even if the manufacturing process of the product is disclosed in the product claim. Thus, an examiner should compare the claimed product itself specified by the description of the claim with a prior art published prior to the time of filing when assessing novelty and inventive step, unless there is a special reason in the description of the claim. The special reason aforementioned should only be accepted by the examiner in extremely exceptional cases such as when it is greatly difficult to specify the product in the ordinary way in the relevant technical field.

Where a claim includes a statement specifying a product by its manufacturing process, such a statement is construed as meaning a product per se unless it should be construed as a different meaning according to the definition in the detailed description. If an identical product can be obtained by a different process from the one stated in the claim, the claimed invention is not novel where the product is publicly known prior to the time of filing. Thus, even if applicant’s intention is to limit the claimed invention to only the product which is obtained by the particular process, such as a claim reading as “Z which is obtained solely by process A”, the claimed invention should be treated in the same way aforementioned.

(Example 1)

In a case where “panel formed by cutting process using wave shaped blade of a knife” is described in the claims and the panel is the subject matter to be protected, it is construed that there is no difficulty in directly specifying the structure of the panel in the technical field. It is appropriate to make a distinction between the panel defined by its manufacturing process and the claimed invention without taking into account of the manufacturing process. When comparing the claimed invention and the cited invention, both inventions show the same wave or cloud shape on the striped surface in the natural form. Therefore, the claimed invention is regarded as the same invention with the cited invention.

(4) Claims consisting of the preamble and the body (Jepson type claim)

Even in the case of Jepson type claim which consists of the preamble and the body, an invention should be construed as a whole including the preamble because the type of claims does not change the technical scope.

The subject matters described in the preamble should not be regarded as publicly known just because of the fact that the subject matters are described in the preamble. The reason is that the claim type does not show that the matter of facts has occurred. Even if all subject matters described in the preamble are publicly known, it is not appropriate to compare only the subject matters in the characterization part (body) excluding the preamble of the claim with a prior art because the technical idea of the whole invention including the publicly known subject matters of the preamble is the subject matter in determining patentability.

(Example 1)

In the case where the subject matters described in the body of the Jepson type claimed invention are anticipated in the cited invention but the subject matters of the preamble such as spark plug and ventilator are not described in the cited invention, it is not appropriate that said spark plug and ventilator are treated as publicly known just because those are shown in the preamble. Moreover, an object of determining the patentability is the technical idea of the claimed invention as a whole body which includes the preamble. So, an examiner should not deny novelty based on the cited invention which does not include the technical features of the preamble.

(Reference)

In the case of the description type which consists of the preamble and the body (the type called Jepson type claim), the preamble can be construed as various meanings such as (a) limiting the technical field of inventions (b) limiting the product to which the technology of invention is applied and (c) excluding the scope of the right protected given that the invention is publicly known. The body which is combined with the preamble is the technical characteristics of the claimed invention subject to protection.

4.2. Finding of a cited invention

Finding an invention which is cited during in assessing novelty under the Patent Act Article 29 paragraph (1) subparagraph (i) and (ii) (hereinafter referred to as “cited invention”) is as follows.

4.2.1 Publicly known invention

A “publicly known invention” means an invention the contents of which have been known to an unspecified person without obligation of secrecy in the Republic of Korea and a foreign country before the filing of an application. Finding a cited invention is basically carried out based on the matters publicly known. Taking into consideration the common general knowledge as of the filing, if a person skilled in the art can easily

arrive at the matters described in the invention, the matters are considered as being publicly known.

(Reference)

The common general knowledge means technologies generally known to a person skilled in the art (e.g., well known art or commonly used art). “Well-known art” means technologies generally known in the relevant technical field, e.g., those appeared in many prior art documents, those widely known throughout the industry, or those well-known to the extent needless to present examples. “Commonly used art” means well-known art which is used widely.

4.2.2 Publicly worked invention

A “publicly worked invention” means an invention which has been worked under the conditions where the contents of the invention are to be publicly known. Therefore, it is enough to decide whether the invention is “publicly worked” without assessing whether the invention is “publicly known”.

“A publicly worked invention” means an invention which has been worked under the conditions where the invention is or can potentially be publicly known to an unspecific person through the medium of machinery or systems, etc. Therefore, the finding an invention can be carried out on the basis of the subject matters embodied in machinery or systems, etc. The matters directly derivable from the facts in view of the common general knowledge as of the working can also be a basis for the finding of a publicly worked invention.

4.2.3 Invention described in a distributed publication

“Invention described in a distributed publication” means an invention which is explicitly or implicitly described in a publication. “Being implicitly described in a publication” means that a person skilled in the art can easily recognize the invention. Such an invention can be considered as an invention described in a distributed publication.

4.2.4 Notes for finding of cited inventions

(1) A manuscript for a journal of an academic society is usually kept secret against a third party, even after the receipt of the manuscript by the academic society. Therefore, the invention described in that manuscript is not considered a publicly known invention until its contents are released.

(2) A company produces a catalogue to promote the company or to introduce and promote its products. Therefore, if the catalogue is produced, the catalogue is considered as a distributed publication except for special circumstances where the catalogue was not actually distributed.

(3) In the case where the filing date of a patent application is the same as the date of the

publication, the claimed invention does not lose novelty under the Article 29 paragraph (1) subparagraph (ii) of the Patent Act, except when the filing time of application is clearly after the time of publication.

(4) The time of publication for a thesis is being when the thesis is distributed to an unspecified person in public or enters into university libraries after the final thesis examination, except when the contents of the thesis are announced in an open space before the final thesis examination.

4.3 Method of assessing whether a claimed invention is novel

Novelty of a claimed invention is assessed by comparing the matters specifying the claimed invention and the matters disclosed in the cited invention, and extracting the difference between them. Where there is no difference between the matters specifying a claimed invention and the matters disclosed in the cited invention, the claimed invention is not novel. Where there is a difference, the claimed invention is novel. In addition, the claimed invention is not novel when it is substantially or exactly identical to the cited invention.

“The substantially identical invention compared with prior arts” means that there is no newly produced effect, since the difference in the concrete means for solving problems is caused by mere addition, conversion or deletion of well-known or commonly used arts and the difference between the claimed invention and the cited invention does not practically affect the technical idea of the claimed invention (Case No. 2001Huh1624 (Supreme Court, 26 Feb. 2003)).

4.3.1 Assessing novelty on invention with numerical limitation

An invention with a numerical limitation means that some parts of subject matters of an invention described in the claims are defined by specific numerical values. In the case where an invention in the claims includes a numerical limitation, a claimed invention is regarded as being novel when the claimed invention is not identical to the cited invention even when the numerical limitation is not considered.

When a claimed invention is identical to the cited invention except for numerical limitation, the assessment of novelty comes under the following criteria.

(1) In a case where no numerical limitation is found in the cited invention while new numerical limitation is included in a claimed invention, the invention is regarded as novel. However, if the numerical limitation can be arbitrary chosen by a person skilled in the art or it can be hinted in a cited invention in view of the common technical knowledge at the time of filing, novelty of the invention is denied in general.

(2) In a case where the numerical range of the invention described in the claims is included in the numerical range disclosed in a cited invention, the novelty is assessed by the critical significance of the numerical limitation. For the critical significance of the numerical limitation to be acknowledged, a remarkable change in the effect of the

invention is required across the boundary of the numerical limitation and the following conditions should be satisfied: 1) The technical meaning of the numerical limitation should be described in the description, 2) the embodiments in the detailed description or supplemental materials should prove that the upper and lower limits of the numerical limitation is critical. Generally, it should be objectively confirmed that the range is critical with experimental results which cover inside and outside the range of the numerical limitation.

(3) In a case where the numerical range of invention described in the claims includes the numerical range of the cited inventions, novelty can be denied at once.

(4) In a case where the numerical range of the claimed invention is different from that of cited invention, novelty is regarded novel in general.

4.3.2 Assessing novelty in parameter inventions

(1) A parameter invention is an invention in which an applicant arbitrarily creates a certain parameter which is not standard or commonly used in physics or chemistry, parameterizes it arithmetically by using the correlation between plural parameters, and employs it as a part of essential element of the invention. Since the technical features may not be precisely defined by the claims itself in the parameter invention, the assessment of novelty for the parameter invention shall be performed only after figuring out them based on the detailed description and drawings, and common knowledge.

(2) Novelty regarding a parameter invention is assessed by interpreting the parameter itself as part of the claims. It is important to note that novelty for the invention should not be assessed by only novelty of the parameter itself. Novelty regarding a parameter invention described in the claims is denied in general if limiting the invention with the parameter only experimentally identifies properties or characteristics of a publicly known product or there is a change only in expression by using a parameter.

(3) In a parameter invention, if there is a “reasonable doubt” that the claimed invention and the cited invention are identical, an examiner can await written arguments or a certificate of experimental results after notifying the ground for rejection on novelty without comparing strictly the claimed invention with cited references since it is generally hard to compare the claimed invention with a cited invention regarding assessing novelty on parameter invention. If the ground for rejection is no longer kept by the applicant’s arguments the ground for rejection is dissolved. However, an examiner should decide to reject the patent application with regard to novelty, if the reasonable doubt is not dissolved.

(4) An examiner might have an aforementioned reasonable doubt in the following cases: (a) In a case when the parameter described in claims is converted with a different definition and a test/measurement method, and then the claimed invention is found to be identical with the cited invention, (b) In a case when an examiner evaluates the parameter of a cited invention according to a measurement/evaluation method in the description and obtains the same subject matter as that of claimed invention, (c) In a

case when an embodiment in the detailed description of the claimed invention is identical to that of the cited invention.

(5) In a case when an examiner notifies the ground for rejection of a parameter invention, the examiner has to concretely describe the ground of reasonable doubt, and if necessary, the examiner can propose a way to dissolve the reasonable doubt.

(6) The examination criteria described in (1)-(5) are not applied to a claimed invention when the parameter of the claimed invention is standard, commonly used or proved to be easily understandable by a person skilled in the art.

4.4 Notes for assessing novelty

(1) If the inventions described in the claims and a cited invention are expressed in a generic concept or a specific concept, the following items should be considered in assessing novelty:

(a) If a claimed invention is expressed in a generic concept and a cited invention is expressed in a specific concept, the invention in the claims is not novel. “Generic concepts” is defined as concepts integrating matters in the same family or the same genus, or those integrating a plurality of matters with the common characteristic.

(Example 1)

If a claimed invention is described as a metal and a cited invention is described as a copper (Cu), the claimed invention is not novel.

(b) If a claimed invention is expressed in a specific concept and a cited invention is expressed in a generic concept, in general, the claimed invention has novelty. However, when an invention expressed in a specific concept can be directly derived from such a generic concept in consideration of the common general knowledge, the novelty for the claimed invention is denied by specifying an invention expressed in specific concept as a cited invention. An invention expressed in a specific concept cannot be derived from the inventions expressed in a generic concept, even if the invention expressed in a specific concept simply belongs to a generic concept or the elements of the specific concept can be presumable in the terms in generic concept.

(Example 1)

Silver is described in the claim as a superconducting cable material for electric power transmission and a cited documentation discloses a superconducting metal cable. If using silver as a cable material to activate super conductivity in the field of electric power transmission belongs to commonly known art, novelty of the claimed invention can be denied, as a person skilled in the art can conceive superconducting silver cable without undue difficulty.

(2) In assessing novelty, the comparison shall not be conducted between a claimed invention and a combination of two or more cited inventions. Assessing patentability by a combination of two or more cited inventions is not related to novelty, but to inventive

step. Except when a cited invention cites a distinct publication (e.g., publication which provides detailed information of a technical feature), the distinct publication is regarded as a cited invention and able to be cited as assessing novelty. When a dictionary and a reference are needed to interpret a term described in the cited reference, the dictionary and the reference are regarded as a cited reference and can be cited.

(3) If two or more inventions are described in a claim such as in a Markush type claim (multiple claims or features selectively cited or described, etc.), the ground for rejection on each invention can be notified on the ground that the invention does not involve novelty or an inventive step based on one single prior art.

(4) In a case where there are more than two embodiments in a cited documentation, an examiner should not assess novelty by combining the two embodiments. Assessing patentability through combination of cited embodiments is not a matter of novelty but inventive step. However, it is exceptional when one cited invention is obviously drawn from more than two embodiments in considering common general knowledge.

(5) In the case where the applicant admits the background technology to be publicly known in a specification or written opinion, an examiner can assess novelty concerning a claimed invention by citing the background technology.

5. Inventions not considered to be publicly known, etc.

5.1 Patent Act Article 30

(1) In the case public disclosure of an invention made by a person who has a right to obtain a patent falls under any of the following subparagraphs and the person files a patent application within six month from the date of disclosure, the invention is not considered to correspond to any of the inventions under the subparagraphs of Article 29(1) upon assessing if the invention complies with Article 29(1) or (2).

(i) When a person with the right to obtain a patent causes the invention to fall under either subparagraph of Article 29(1); nonetheless, this provision does not apply where a patent application or a patent registration is published in the Republic of Korea or a foreign country in accordance with a treaty or law

(ii) When, against the intention of a person with the right to obtain a patent, the invention falls under either subparagraph of Article 29(1)

(2) A person who intends to take advantage of Article 30 paragraph (1) subparagraph (i) shall state purport of such intention to the Commissioner of the Korean Intellectual Property Office when filing a patent application; the person shall also submit a document proving the relevant facts to the Commissioner of the Korean Intellectual Property Office, within thirty days from the filing date of the patent application.

5.2 Purport of the system

According to the Article 29(1), a publicly known invention prior to the filing of the

patent application is not novel. However, under the Article 30, even if an invention is published prior to the filing of the patent application, the invention is not considered to be publicly known when the required conditions set forth in the Article are met. The invention, therefore, cannot be cited as a prior art in assessing novelty and inventive step in accordance with the Article 29(1) and (2). The Article, however, provides no retrospective effect regarding the date of filing.

The purpose of regulation is to encourage an applicant to obtain a patent even after he or she publishes his or her own invention and to encourage early publication of an invention to facilitate industrial development of the country.

The regulation was amended on 3 March 2006. The amendment intends to benefit an applicant when he or she publishes an invention both in the Republic of Korea or a foreign country, except for the cases such as publication of a patent application or a patent registration. The reason is that with the advancement of internationalism regarding publicly known or used inventions it is necessary to allow publicly known or used inventions abroad to get benefits from this system and that there are applicants who attempt to publish their theses on the Internet not in the conventional scientific journals in print. Moreover, since the grace period applies to limited types of disclosures, a decision with regard to applying the provision gives burdens on both applicants and examiners.

5.3 Requirements for inventions under Article 30 paragraph (1)

5.3.1 Where an invention is laid open by a person with the right to obtain a patent prior to the filing of the application

(1) Although an invention is laid open (/disclosed) by a person with the right to obtain a patent prior to the filing of the application, the invention is not considered to be publicly known when the invention falls under either subparagraph of Article 29 paragraph (1) as set forth in Article 30 paragraph (1) subparagraph (i) and meets the following requirements:

- (a) The invention is publicly known (/disclosed) by a person with the right to obtain a patent
- (b) A patent application shall be filed by a person with the right to obtain a patent within six month from the date of disclosure (when the date of disclosure is unclear, the first day of the month or the year of the disclosure may be applied);
- (c) The purport of taking advantage of the provision of Article 30 shall be stated in the application; and
- (d) Documents proving the relevant facts shall be submitted within thirty days from the filing date.

(2) To be considered as inventions which are not considered to be publicly known before the filing of the patent application, the inventions must meet either of the subparagraphs of Article 29 paragraph (1) along with aforementioned requirements (a) to (d).

5.3.2 When an invention is publicly known, against the intention of a person with the right to obtain a patent

When an invention is publicly known against the intention of a person with the right to obtain a patent, it does not matter how the invention is publicly known. However, the person with the right to obtain a patent shall also file a patent application within six months from the date of disclosure, without the need to state the purport of taking advantage of Article 30 in the application.

5.3.3 Differences between the disclosure by a person with the right to obtain a patent and the disclosure against the intention of the person

(1) In filing a patent application claiming the provision of Article 30, there are two cases. The first case is when a person with the right to obtain a patent causes the invention to be publicly known, and the second case is when the invention is publicly known against the intention of the person. Both cases have requirements in common that (i) the patent application be filed within six months of the date on which the invention is publicly known, and (ii) the invention considered to be publicly known be examined on a claim by claim basis. However, there are differences in the person who publicly disclosed the invention and the medium used for the disclosure and submission of the required documents proving the relevant facts.

(2) The term “being publicly known by a person with the right to obtain a patent” means a disclosure by an inventor or the person’s entitled successor. Therefore, when a person without the right to obtain a patent disclosed the invention, even with the consent of the person with the right to obtain a patent, the provision of Article 30 may not apply to the invention. Meanwhile, the term “being publicly known against the intention of a person with the right to obtain a patent” refers to a disclosure against the intention of an inventor or the person’s entitled successor. Whether an invention is publicly known against the intention of a person with the right is assessed in consideration of the right holder’s true intention to lay open the invention at the time when the invention is publicly known.

(3) For both cases where an invention is publicly known by a person with the right to obtain a patent and by a person against the intention of a person with the right to obtain a patent, the type of disclosure is not limited. In the case of disclosure by a person with the right to obtain a patent, the provision of Article 30 cannot be applied when the patent application has been published in Republic of Korea or in a foreign country according to the treaties and laws.

(4) A person intending to take advantage of the provision of Article 30 for the reason that the invention is publicly known by the person with the right to obtain a patent shall state the purport in the application. If not, it is not allowed to amend the application later for placing the purport in the application. Meanwhile, a person intending to take advantage of the provision of Article 30 for the reason that the invention is publicly known against his or her intention does not need to state the purport in the application.

5.4 The procedure to take advantage of the provision of Article 30

5.4.1 When a person with the right to obtain a patent has laid open the invention before the filing

(1) The patent application should be filed within six months from the date on which the provision of Article 30(1) subparagraph (i) applies to the invention. In other words, the applicant shall state, when filing the application, that the person intends to take advantage of the provision of Article 30(1) subparagraph (i).

(2) The applicant shall submit documents proving the relevant facts that the provision of Article 30 applies to the invention, within thirty days from the filing date.

(3) For an international patent application, notwithstanding Article 30 paragraph (2), a person intending to take advantage of Article 30 paragraph (1) shall state the purport in the application and submit the documents proving the relevant facts within thirty days from the relevant date (the date for submitting domestic documents) as prescribed in Article 201 paragraph (4) (Refer to Article 200 of the Patent Act and Article 111 of Enforcement Rule of the Patent Act).

(4) It shall be proven that a person who disclosed an invention is the person who has the right to obtain a patent. Where the person who disclosed the invention is not the inventor or applicant, the applicant shall submit documents proving that, when disclosing the invention, he or she was a successor to the person with the right to obtain a patent or succeeded a lawful successor of the right to obtain a patent from by relevant documents.

5.4.2 When the invention is disclosed against the intention of a person with the right to obtain a patent

A person intending to take advantage of Article 30 shall prove that the invention is disclosed or used against the intention of the person. A claim of the fact that the invention is publicly known and the requirements of proving the fact are individually judged on a case by case basis. Where an invention is publicly known against the intention of a person with the right to obtain a patent under Article 30 paragraph (1) subparagraph (ii), it might be difficult to prove how the invention was publicly known since it is not the case that the right holder voluntarily discloses the invention as in the case of Article 30 paragraph (1) subparagraph (i). Therefore, the fact that the invention is publicly known against the intention of a person with the right to obtain a patent may be proved in various ways.

5.5 Examination to decide whether Article 30 applies to an invention

5.5.1 Formality examination

When a patent application with the statement under the provision of Article 30 paragraph (2) is filed, a formality examination shall be conducted to examine whether

the application is filed within six months from the date on which the invention is publicly known and whether the invention is publicly known by a person with the right to obtain a patent. Whether the invention publicly known is identical to the invention filed or not is examined at the substantive examination procedure.

Even if a person submits a document proving that an invention is displayed at an exhibition, the applicant is invited to submit a complementary proof to identify the fact, if it is difficult to identify the invention displayed at the mentioned exhibition. However, as for the organizer of the exhibition, title, date, and venue of the exhibition, only when the submitted documents are in doubt, the Office may ask the applicant to add documents to prove the fact.

Notwithstanding the submission of the written intention to take advantage from the provision of Article 30, if the claim falls under any of the following subparagraphs, the office gives the applicant a notice to correct defects:

- (a) When a person who disclosed an invention is different from the person who filed or invented the invention;
- (b) When the patent application is filed more than six months after the disclosure date of laying open the invention;
- (c) When an applicant puts the wrong disclosure date and type of the disclosure on the application and puts incorrect information on the documents proving that the invention is not considered to be publicly known; or
- (d) When the submitted documents are not enough to prove the relevant fact.

When the applicant does not make an amendment within a designated period upon the notification, the office invalidates the claiming procedure under Article 30 (in this case, the filing procedure is effective).

5.5.2 Substantive examination

An examiner reviews all of the submitted documents and examines the invention when a formality defect is not found in the application. The disclosures that fall under any of the provisions of Article 30 are not considered as prior art with the meaning of Article 29 paragraph (1) or (2). However, when the procedure does not meet the requirements set forth in Article 30, the submitted documents may be used as prior art.

5.5.3 Notes

(1) When a person with the right to obtain a patent discloses an invention multiple times before the filing of a patent application, the provision of Article 30 applies to the all acting of disclosure if the disclosures meet the requirement of Article 30 paragraph (2). If a disclosure is inseparably related to at least one or the other disclosures, the applicant is exempted from the submission of a document proving the relevant facts after the second disclosure. In this case, the period of six months prescribed in Article 30 will be calculated from the earliest date of disclosure. “The disclosure which is inseparably related to one more disclosures” is prescribed in the Article 30 paragraph (1) subparagraph (i) and the applicable cases are as follows:

(a) an examination which takes two or more days; (b) examination and explanation distributed on the date of examination; (c) the first edition and second edition of a publication; (d) the collections and oral presentation of the collections in a society; (e) oral presentation and a lecture booklet; (f) a lecture tour; and (g) display in an exhibition and catalog of the displayed product.

(2) When there are an invention (A) which is filed claiming that it is not considered to be publicly known and another invention (B) which is the same as invention (A) but laid open by a third person between the date of disclosing the invention (A) under Article 30 paragraph (1) subparagraph (i) and the filing date of the invention (A), an examiner shall reject the application of invention (A) for the reason of lacking novelty, except the obvious case: the laying open of the invention (B) was made by learning from the disclosure (A).

The laying open of invention which was made by a third person “after learning from a disclosure, which is not considered to be publicly known”, covers the case when a third person reproduces the invention which was publicly known by a person with the right to obtain a patent at an examination, publication, announcement in an academy, and display in an exhibition. After sending an applicant a notification of grounds for rejection for the above reason, the examiner shall decide to reject an application if the applicant can’t establish the fact that the third person laid open the invention after learning from a disclosure which is not considered to be publicly known, or that the invention is filed against the intention of the applicant.

(3) When a person filed a patent application (A) within six months from the date on which the invention is publicly known and took advantage from the provision of Article 30, and on the same filing date, a third person filed a patent application (B) with the same invention as (A), Article 36 paragraph (2) applies to applications (A) and (B). It means that (A) and (B) are related to the same invention which is filed on the same date, and the applicants of (A) and (B) should reach an agreement on who will obtain a patent for the invention. Moreover, in consideration that (B) is filed after the invention is publicly known, (B) is deemed to lack novelty and therefore the applicant who filed (B) may not obtain a patent, without applying the provision of Article 36. In this case, the examiner shall not send a notification of rejection and decide the rejection because (B) lacks novelty but instruct both applicants to report on the results of the consultation under Article 36 paragraph (6). According to the provision of Article 36, the examiner shall let both applicants know that only the person agreed upon by all the applicants after consultation may obtain a patent for the invention. Upon the examiner’s instruction for consultation, where the applicant who filed the application (B) withdraws the filing, the applicant who filed the application (A) may obtain a patent.

(4) When a patent application is filed by a person with the right to obtain a patent and the application is published in the patent gazette, Article 30 of the Patent Act does not apply. It is because the publishing is not the voluntary intention of the applicant under Article 64 paragraph (1), which prescribes that the Commissioner of the Korean Intellectual Property Office shall lay open a patent application in the patent gazette after the prescribed date of filing. However, the provision of Article 30 applies when the

publication is made after the procedure of filing has been terminated by withdrawal, revoke or final rejection before the invention is laid-open, because the publication is considered as the one against the intention of the applicant.

(5) When an applicant files a patent application claiming priority under the relevant treaty, the applicant shall file the patent application in the Republic of Korea within six months of the date of disclosure to which Article 30 apply in order to take advantage of the provision. However, with regard to a patent application which contains a priority claim based on a patent application filed in the Korean Intellectual Property Office, the applicant may take advantage of the provision of Article 30 if the earlier application is filed within six months of the date of disclosure, even though the subsequent application is not filed within the six months.

(6) The provision of Article 30 paragraph (1) subparagraph (i) is also applied to the followings: (a) when a person with the right to obtain a patent asks to disclose an invention to a third person and the invention is disclosed by the third person; and (b) when the third person discloses an invention by referring after obtaining permission from a person with the right to obtain a patent (implied consent is also included).

Above mentioned case (a) covers the following cases: (i) when a person with the right to obtain a patent commits the disclosure of an invention to a third person, including the case when the name of inventor or the right holder is stated, and (ii) when a person with the right to obtain a patent sends a press release or script of an invention to a newspaper and the invention is laid open; in this case, although the name of inventor or the right holder is not stated, the fact that the person who wrote to the newspaper is the right holder should be proved.

A disclosure referring to an invention of a person with the right to obtain a patent covers the following cases: (i) when a person, who has not the right to obtain a patent, clarifies the inventor or company for which the inventor works in paper or article and refers to the invention, and (ii) when a company for which the inventor works discloses the invention in printed manner such as a catalog.

In a case that two or more persons jointly make an invention or file an application, among presenters who disclosed the invention, at least one person is the same with the inventor or applicant, the provision of Article 30 may apply to the invention without any need to prove that the inventor or applicant is the person who disclosed the invention. However, if there is no relation between the inventor or applicant and the person who disclosed the invention, the applicant is required to submit the following documents: (i) a document proving the fact that a person who presents an invention is the person with the right to obtain a patent at the time of presentation of the invention (ii) a document proving that an invention is disclosed by a request from the person with the right to obtain a patent and (iii) a document proving that a person who presents an invention got permission for referring to the invention from the person with the right to obtain a patent.

Chapter 3 Inventive Step

1. Patent Act Article 29 paragraph (2)

Notwithstanding paragraph (1), where a person with ordinary skill in the art to which the invention pertains would have been able to easily make the invention based on the inventions prescribed in each subparagraph of paragraph (1) before the filing of a patent application, the patent shall not be granted for such an invention.

2. Purport

The purport of Article 29 paragraph (2) of the Patent Act is not to grant a patent to inventions that could be easily made by a person skilled in the art because granting a patent to such an invention that does not contain any inventive step or significant improvement in technology compared to a prior art is against the objectives of the patent system and not only gives an exclusive right to an inventor, but also even hampers the technical progress due to the limitation of accessing the technology by a third party.

(Reference)

The term “inventive step” is not defined in the Patent Act, however, an invention is considered to be in lack of inventive step if the invention could be easily made by the person in the art with the prior art referred to in each subparagraph of paragraph (1) of Article 29. Otherwise, the invention has an inventive step under Article 29 paragraph (2) of the Patent Act.

3. Relevant provisions

3.1 Before the filing of a patent application

“Before the filing of a patent application” does not refer to the simple concept of the filing date, but means the definite time, in hours, minutes and seconds at the time of filing. For instance, if an invention is publicly known outside Republic of Korea and the point of time when the invention has become publicly known precedes the filing time of a patent application in Korean local time, then this invention is considered as a cited invention under Article 29 paragraph (1) of the Patent Act.

3.2 A person with ordinary skill in the art

The criterion for an inventive step is subjected to “a person with ordinary skill in the art to which the invention pertains” (referred to as “a person skilled in the art” hereinafter). “A person skilled in the art” refers to a hypothetical person who has common general knowledge in the art to which the claimed invention pertains and the ability to use ordinary technical means for research and development (including experiment, analysis, manufacture, etc.); who has the ability to exercise ordinary creativity in selecting materials and changing designs, optimizing numerical ranges and replacing elements with equivalent parts; and who is able to comprehend based on his/her own knowledge

all technical matters regarding the state of the art in the field to which a claimed invention pertains at the time of filing a patent application.

“The state of the art” includes the common general knowledge and other publicly known technical matters as well as an invention(s) referred to in any of the subparagraphs of paragraph (1) of Article 29. It also relates to all types of information relevant to the technical field of the invention described in the claims, including ordinary methods to conduct daily works and experiments.

3.3 Invention that could have been easily made

“Where a person with ordinary skill in the art would have been able to easily made the invention based on the inventions prescribed in each subparagraph of paragraph (1) of Article 29” refers to whether a person skilled in the art can easily conceive the invention described in the claims by exercising ordinary creativity or based on motivation induced from the invention(s) that is(are) publicly known prior to the filing of the patent application.

4. General principles of assessing the inventive step

(1) An inventive step is decided whether “an invention described in the claims” as filed can be easily made by a person skilled in the art based on an invention(s) defined in Article 29 paragraph (1) of the Patent Act (hereinafter “cited invention(s)”), prior to the filing of the patent application. If “the invention in the claims” can be easily made by a person skilled in the art by a prior art(s), the invention in the claims is lack of an inventive step.

(2) When there are two or more claims in an application, the assessment should be made for each claim.

(3) Notifying applicants of the grounds for rejection regarding novelty is different from that of an inventive step. However, it is allowed to notify applicants of the ground for rejection regarding the inventive step along with that of novelty in order to simplify the examination procedures.

(Reference)

The inventive step of the patent application is assessed on the assumption that the claimed invention is novel. Therefore, an assessment whether the claimed invention is novel compared to publicly known should be distinct from an assessment whether the claimed invention can be easily made by a person skilled in the art. Therefore, in order to assess the inventive step of the claimed invention, an assessment of novelty should come first (Case No. 91Ma540 (Supreme Court, 2 Jun. 1992)).

(4) Regarding a claim which contains more than two inventions such as Markush type claims (including multiple claims and a claim that recites elements selectively), if the examiner notifies the applicant of the grounds for rejection with regard to a certain invention, the examiner needs to precisely point out the invention along with the

grounds for rejection with regard to novelty or the inventive step.

5. Method of assessing the inventive step

The examiner shall make efforts to consider the overall state of the art that a person skilled in the art would consider at the time of filing an application and, at the same time, shall thoroughly consider the purpose, technical structure, and advantageous effects of the invention while paying attention to the opinion of the applicant, comprehensively assessing whether the claimed invention has an inventive step in consideration of its specific purpose and effectiveness, and focusing on the difficulty of the technical structure of the claimed invention.

Assessment of the inventive step shall be done by focusing on (a) whether the cited prior art(s) provides any motivation to a person skilled in the art to arrive at the claimed invention or (b) whether the difference(s) between the prior art(s) and the claimed invention can be considered as an exercise of ordinary creativity, in consideration of (c) whether the claimed invention has any advantageous effects over the cited prior art(s).

5.1 Procedures of assessing the inventive step

The procedures of assessing the inventive step are as follows:

(1) First, specify the claimed invention. The method of specifying the claimed invention is the same with that of “assessing novelty” in Chapter 2.

(2) Secondly, specify the cited invention(s). The method of specifying the cited inventions is the same with that of “assessing novelty” in Chapter 2. The examiner shall specify the cited inventions from the point of view of a person skilled in the art, on the assumption of the common technical field and technical problems of the claims of present invention.

(3) Select the cited invention which is the closest to the claimed invention (herein after “the closest cited invention”) and makes a clear difference by comparing the closest cited invention with the claimed invention. In doing so, the examiner shall take into consideration the structural combination of the elements of an invention. More specifically, organically combined structural elements of an invention shall be compared as one integrated unit (without being separated) with their corresponding elements in the cited invention.

(4) The examiner assesses whether an invention described in the claims can be easily made by a person skilled in the art, in view of cited inventions and the common general knowledge before the filing, although there is a difference between the claimed invention and the cited invention(s).

5.2. Selection of the cited invention

(1) A cited invention, which is the object of comparison with a claimed invention in the

assessing the inventive step, shall be, in principle, selected from the same technical field as the claimed invention or from a reasonably relevant technical field to the problem, effect, and use of the claimed invention. The same technical field shall refer to, in principle, the industrial field where the invention is applied, but shall also refer to the technical field that can be inferred from the effects or functions of some (or all) comprising elements of the claimed invention. Even if the prior art is in a different technical field from a claimed invention, it can be recognized as a cited invention in the case that the prior art might be applied to other technical fields or used by the applicant in the process of solving a specific technical problem.

When a claimed invention is compared to the prior art in a different technical field, the examiner should take into account the eligibility of citation such as the relevance of two technical fields, the close similarity of a problem to be solved, and the close similarity of a function or operation.

(Example 1)

The claimed invention relates to a container cap, which can seal or unseal a container for plant nutrition easily and completely. The cited invention discloses an eruption closure assembly to be used for liquids of different viscosities. The technical field of the claimed invention is similar to that of the cited invention since both inventions relate to an apparatus for sealing or unsealing a liquid container. Hence, the eruption closure assembly is properly chosen as a cited invention.

(Example 2)

The technical fields of an umbrella and a parasol are not exactly the same, but are considered to be proximate to each other since the upper cover can be unfolded with the supporting pole at its center. Hence, the inventive step of the umbrella can be denied by citing the parasol as a prior art.

(Example 3)

The claimed invention relates to a method of preventing damages due to harmful insects by trunk injection, which is a method of injecting medication into a tree and filling a bore after the injection. Cited invention 1 relates to a method of disposing of a bore in a tree after trunk injection. Cited invention 2 relates to a method of injecting antibiotic into trees to eradicate insects through trunk injection. As there are enough grounds to consider that cited inventions 1 and 2 and the claimed invention are in the same technical field, the inventive step of claimed invention can be denied due to cited inventions 1 and 2.

(2) “The closest cited invention” means the most relevant prior art among cited inventions that a person skilled in the art would choose and which disclose most of the technical features of a claimed invention. Hence, it is desirable to choose the closest cited invention among inventions that are in proximate technical field or have the same effect or use, or relate to a technical problem to be solved that is identical or similar to that of the claimed invention.

(Example 1)

An umbrella can be the closest cited invention in denying the inventive step of a parasol because improving the portability of a foldable object by making its size smaller when folded is a common technical problem to be solved in the relevant technical field.

(3) When there is a description in a publication leading away or in an opposite direction from the invention described in claims, caution should be used in determining the publication as the cited invention. However, regardless of inadequate description of a prior art for conceiving a claimed invention, the eligibility of a cited invention shall be maintained if it is possible to arrive at the technical idea of the claimed invention from other aspects such as a close relation between technical fields, a close similarity of a function or operation, etc.

(Example 1)

The claimed invention relates to a probe card and is in the same technical field with cited invention 1 which comprises all technical features of the claimed invention except that the cited invention does not disclose a means to control the overall flatness. However, there is no description in the cited invention 1 to preclude the adoption of such a means to control the overall flatness, nor it is technically difficult to introduce such a means considering its technical structure. Hence, the inventive step of the claimed invention can be denied by combining the technical features of cited invention 1 and a means of controlling the orientation of a substrate disclosed in cited invention 2 (which is in the same technical field as the claimed invention).

(4) If the applicant admits in the specification that a technology presented as a prior art is publicly known prior to the filing of the application, the technology may be properly selected as a cited invention at the time of filing, in assessing the inventive step of a claimed invention.

(5) Even though the prior art constitutes an incomplete expression or there is a defect in some of the prior art, it can be cited in assessing the inventive step, when the person skilled in the art can readily understand the technical features of the claimed invention based on common technical knowledge or empirical rules.

(Example 1)

The claimed invention relates to a pharmaceutical compound to treat neuro-degenerative disorders by using an estrogen compound alone. A person skilled in the art can easily recognize from the cited invention that sexual hormones such as estrogen are effective for curing neuro-derogative disorders. And if this fact is not contrary to the technical common sense at the time of filing the application, the cited invention can be used as a prior art to assess the inventive step even if some defects exist in the description of the cited invention due to insufficiently disclosed pharmaceutical effects and real experiments.

6. Grounds of assessing the inventive step

6.1 Probable cause or motivation

The following cases can be significant grounds for assessing that a person skilled in the art would have been led to the claimed invention based on the cited invention; suggestions shown in the disclosures of the cited inventions, a common problem to be solved described in claims, a common function or operation, close relevance of technical fields.

6.1.1 Suggestions shown in the disclosures of the cited inventions

Suggestions shown in the disclosures of the cited inventions relevant to a claimed invention can be significant grounds for assessing that a person skilled in the art would have been led to the claimed invention.

(Example 1)

The claimed invention discloses a technical method of establishing a condenser, a motor, and a compressor in an airtight cooling apparatus. The cited invention discloses a method of setting up the relevant structure of a cooling compressor in an airtight cooling apparatus. The cited invention differs from the claimed invention only in that the cited invention does not specifically mention a heat exchanger built in the airtight cooling apparatus of the claimed invention. If the cited invention implicitly suggests the heat exchanger built in the airtight cooling apparatus, which is a relevant component of the cooling apparatus, the technical feature of claimed invention is merely a matter of design option when the general technical knowledge in the relevant field of the art is applied.

6.1.2 Common problem to be solved

(1) A common problem to be solved can be a significant ground for assessing that a person skilled in the art would have been led to the claimed invention by applying or combining cited inventions.

If the technical problems to be solved described in the claimed invention and cited invention are not in the same technical field, the examiner decides whether the technical problem of the claimed invention is obvious in the relevant field of the art or easily conceivable in light of technical common sense, and whether that reasoning can be used as a ground for denying the inventive step by scrutinizing the technical problem.

(Example 1)

The claimed invention discloses an animal-shaped winter cap which creates a unique fashion style and offers protection against cold by covering not only one's head and ears but also the areas around the neck, cheeks, and lips. Cited invention 1 relates to an animal-shaped winter cap, and cited invention 2 is directed to a mask hood to protect one's face by covering all parts of the face except for the eyes in the event of extremely cold weather. In this case, the technical fields of the cited inventions are identical or proximate to that of the claimed invention. Moreover, problems to be solved by the claimed invention and its solutions seem to be suggested in each of the cited inventions. Hence, there seems to be no difficulty in combining the cited inventions, and therefore the claimed invention would have been readily derived from the cited inventions by a

person skilled in the art.

(Example 2)

The claimed invention is directed to a snap action diaphragm to adjust snap-action of a diaphragm by controlling the degree of a slope of an outer circumference of the diaphragm by applying power on it. The cited invention relates to a thermostat which is activated in accordance with a temperature change. The technical problems of both claimed and cited inventions correspond to each other in that both inventions disclose a method to control the snap-action of a diaphragm. However, the two inventions differ from each other in that the diaphragm of the claimed invention is activated according to pressure changes, while that of the cited invention is set in motion in accordance with temperature changes. Nonetheless, the inventive step of the claimed invention would be denied if the difference does not have any significant influence over the gist of claimed invention and a person skilled in the art can easily apply a thermally actuated method to the pressure actuated diaphragm without exercising any creative thinking.

(2) Even in the case of a cited invention with a different problem compared to a claimed invention, if it is obvious that a person skilled in the art can easily arrive at the claimed invention through a mere exercise of ordinary creativity, the inventive step of the claimed invention can be denied.

(Example 1)

The claimed invention relates to a carbon disc brake with grooves designed to prevent the attachment of water drops on its surface. Cited invention 1 discloses a carbon disc brake, and cited invention 2 shows a metal disk brake with grooves designed to remove dusts from its surface. These technical problems are not exactly the same, but a person skilled in the art would readily arrive at the carbon disk brake with grooves by simply combining the technical feature of cited invention 2 with the carbon disk brake of cited invention 1 without exercising any creative thinking, thereby the inventive step of the claimed invention can be denied.

6.1.3 Common function or operation

A common function or operation of a claimed invention and a cited invention is a well-founded ground that a person skilled in the art would have arrived at the claimed invention.

(Example 1)

The claimed invention discloses a home filtering apparatus with a filtering part of a specific structure. Cited invention 1 relates to a home filtering apparatus, which is exactly the same as the claimed invention except for the structure of the filtering part. Prior art 2 is directed to a filtering apparatus for an automobile that has the same structure in the filtering part as that of the claimed invention. The filtering apparatuses described in the cited inventions 1 and 2 are identical to that of the claimed invention with respect to their function and operation. Considering that the claimed invention set forth the problem to be solved, which is generally required in the field of the filtering apparatus, and is not in a different technical field from the cited inventions, applying the

filtering part described in cited invention 2 to the filtering apparatus of cited invention 1 is deemed to be obvious to a person skilled in the art.

6.1.4 Close relation of technical fields

The notion that there exists a publicly known technical means for solving the technical problem set out in the claimed invention in the relevant technical field can be a strong ground that a person skilled in the art would have made the claimed invention.

(Example 1)

If a cited invention discloses gloves that have a structure similar to the socks of the claimed invention, as gloves and socks belong to similar technical fields and they are related to each other, a person skilled in the art would have considered applying the structure of the gloves to socks.

6.2 Mere exercise of ordinary creativity of a person skilled in the art

A common improvement comprising general applications of a known art, inferences from the known physical properties, or references to other technical fields to solve a known problem falls into the scope of ordinary creativity of a person skilled in the art. Practices in such scope include selection of an optimal material among the publicly known materials to achieve a specific goal, optimization of a numerical value range, replacing with equivalents, and mere modification of design in applying a specific technology, partial removal of technical features and mere change of the use. When the differences between the claimed invention and the cited invention fall within the aforementioned scope, it is usually considered that a person skilled in the art would have readily made the claimed invention, unless there is another ground for assessing the inventive step.

6.2.1 Replacement with Equivalents

Replacing a part of an invention with a publicly known part, which is capable of carrying out the same function and interchangeable, is not considered being inventive for it falls within the scope of ordinary creativity of a person skilled in the art, unless otherwise the replacement has an unforeseeable advantage.

In order to acknowledge the replacement with equivalents as a mere exercise of ordinary creativity of a person skilled in the art, it should be justified that the replacement is obvious to a person skilled in the art at the time of filing the application in addition to the fact that the substituted known feature functions as an equivalent. The examiner is allowed to submit the proof that the substituted feature had been known as an equivalent before the filing of the present application in the same technical field.

(Example 1)

In case that the present invention claiming a heat exchanger differs from the prior art only in the substitution of silicon carbide (SiC) with Aluminum that is an equivalent of SiC, the inventive step should not be acknowledged if it had been known that SiC and

Aluminum are equivalent in the technical field of a small and anti-corrodible heat exchanger prior to the time of filing.

(Example 2)

The claimed invention relates to the use of magnesium carbonate to facilitate crystal formation by accelerating the reaction, whereas the prior art uses magnesium oxide instead of magnesium carbonate. However, if it had been known that magnesium carbonate transforms into magnesium oxide when the reaction temperature rises over 1,300 °C, the substitution of magnesium carbonate for magnesium oxide is considered a mere replacement with equivalents. Therefore, the claimed invention does not involve an inventive step.

(Example 3)

The claimed invention relates to a drill comprising a hydraulic motor, and the prior art relates to a drill comprising an electric motor. It is well-known at the time of filing the application that a hydraulic motor and an electric motor can be alternatively used. An inventive step of the invention is not acknowledged unless there exists an unforeseeable advantage in the adoption of the hydraulic motor.

6.2.2 Simple modification of design in applying specific technology

When an invention is merely drawn by applying normal design procedures maintaining the technical concept of the prior art and is not considered to have an effect unforeseen in the prior art, the inventive step of the invention cannot be acknowledged.

For example, if the difference between the claimed invention and the cited prior art is only caused by the application of particular parameters such as size, proportion, relative dimensions, and amount from a limited range of possibilities, the inventive step cannot be acknowledged. On the contrary if the difference can lead to any particular change in the function or operation with an unforeseeable advantage, the invention is regarded as involving an inventive step.

(Example 1)

The claimed invention comprises the protrusions installed on the upper and lower sides of the door to be engaged with insertion grooves to prevent the movement of a microwave door upon opening or closing the door. The invention differs from the prior art in the structure of the protrusions and the insertion grooves with regard to their size, numbers, and position. The difference in the structure can be obtained by a normal design procedure to adopt insertion members and engagement members. Therefore, the inventive step is not acknowledged.

(Example 2)

Compared with a microcomputer used in the Kimchi refrigerator of the prior art, a control circuit for an electric massager of the claimed invention differs only in the information on the resistance values and a control means for operating an electric motor which are adjusted for the electric massager. Considering the state of the art in the design technology of the microcomputer at the time of filing, a skilled person could

have readily arrived at the difference by applying a normal design procedure. Hence, the inventive step is denied.

(Example 3)

The claimed invention concerns a cover of the level gage for a water tank wrapped with a heat-insulating means. The prior art relates to a door with a sealing means attached on its inner surface. Although the present invention, at the first sight, seems to be drawn by simply replacing the sealing means of the prior art with a heat-insulating means, advantages unforeseen should not be disregarded in assessing an inventive step such that the heat-insulating means of the present invention would prevent the level gage from being frozen and cracked upon a sudden drop in temperature. The effects arising from the design procedure should be carefully considered in assessing the inventive step.

6.2.3 Partial removal of constituents

The claimed invention is not considered inventive when the removal of a function or an effect as a result of the omission of some constituents disclosed in the prior art is obvious to a person skilled in the art. However, considering the state of the art, the inventive step can be acknowledged when the omission of some constituents does not affect the function of the invention or rather enhances the function.

(Example 1)

The prior art is a toothpaste containing water-soluble silicate, wherein the silicate forms a teeth surface membrane having the effect of protecting sensitive teeth from a stimulus, whereas the claimed invention does not contain said water-soluble silicate to lower the manufacturing costs. At this time, the effect of silicate for coating the surface of teeth and preventing them from stimulus is also removed. For this matter, the present invention is not considered to be inventive.

6.2.4 Mere change and limitation of use

Mere change in the use of a known invention or a further limitation of such use is not considered inventive. In other words, the claimed invention, which is distinguished from the prior art only in a modification of its use or further extension of its use without exhibiting any advantage, is not considered inventive.

(Example 1)

A synthetic oil which delays the change of lubricating properties is disclosed in the prior art, whereas the claimed invention discloses reuse of synthetic oil as cutting oil during a cutting process. In this case, the inventive step is denied if the cutting oil is naturally recyclable due to a delayed change of the lubricating properties considering the state of the art at the time of filing.

6.2.5 General application of known art

The claimed invention, which merely consists of a known technique in a closely

analogous situation in order to solve a problem posed by the prior art with readily anticipated effect, is not inventive. However, the claimed invention is considered inventive when the application of the known technique leads to unexpected advantageous effects in combination with other components in comparison with the prior art.

(Example 1)

The claimed invention is characterized in transforming conventional Woowhang chungshimwon (pill-type herbal medicine) into liquid type for administration. The inventive step is denied if such a transformation in the administration type from a solid pill type to a liquid form for oriental medications is within common practice.

(Example 2)

The claimed invention relates to formation of a leak detecting hole in a pipe connecting joint, which is not considered inventive since the technical feature of making a penetrating hole in the outer surface to observe the inner space of an article is commonly practiced without exercising any ingenuity.

(Example 3)

The claimed invention, which relates to a tray for storing components of a ball grid array integrated circuit, is not considered inventive in the case that the pin type component for integrated circuit has already begun to be replaced with a ball grid type component at the filing time of the application, since a person skilled in the art would adopt without any special difficulty the ball grid type tray which is prevalent at the filing time of the invention.

6.3 Advantageous effects to be considered

(1) If an effect derived from matters defining a claimed invention is advantageous in comparison with an effect of a cited invention, it is taken into consideration as a fact to affirmatively support its inventive step.

(Reference 1)

Under Article 29 paragraph (2) of the Patent Act, if a claimed invention could have been easily made from the prior art before the filing of a patent application by a person skilled in the art, a patent for such an invention may not be granted. However, when an advantageous effect compared to the cited invention is so remarkable that it could not have been foreseen by a person skilled in the art from the state of the art, there may be cases where the inventive step is not denied (Case No. 96Huh825 (Supreme Court, 26 Sept. 1997)).

(Reference 2)

If a claimed invention is made by collecting and improving commonly known and commonly used arts, the claimed invention is not considered to be inventive except the case where it is difficult to colligate the arts and achieve a new advantageous effect more than that expected from the prior arts, thereby the cited invention could not have been easily made by a person skilled in the art from the prior art, and the case where a

new technical method is added to the claimed invention(Case No. 96Huh221 (Supreme Court, 30 May 1997)).

(2) Even if the claimed invention is considered to be easily made by combining cited inventions at the first glance, if the claimed invention has an advantageous effect, such as qualitatively different or qualitatively the same but quantitatively prominent effect, in comparison with those of the cited inventions, and if the advantageous effect could not have been foreseen by a person skilled in the art from the state of the art, the inventive step can be acknowledged.

Particularly, in the case of an invention in a technical field in which an effect of a product is difficult to predict from its structure, such as a selection invention and a chemical invention, the advantageous effect compared to the cited invention is an important factor to positively infer the inventive step.

(Reference)

The inventive step of a composition of dyes comprising more than two chemical compounds mixed in a certain ratio should be assessed over the effect derived from the composition itself. Even though individual elements of the chemical compounds are publicly known, the claimed invention has an inventive step if mixing the chemical compounds in a certain ratio leads to unexpected results (Case No. 90Hu1567 (Supreme Court, 15 Apr. 1994)).

(3) Though the advantageous effect of the claimed invention is superior to that of the prior art and is not explicitly disclosed in the detailed description, the examiner can assess the inventive step from the inventor's assertion and evidence like experiment results, if the effect is easily recognized by a person skilled in the art from the detailed description and the structure of the invention shown in the drawings. In the case where the advantageous effect of the claimed invention which is superior to that of the prior art is either disclosed in the detailed description or easily recognized by a person skilled in the art from the detailed description and the drawings even though it is not explicitly disclosed in the description, the examiner can assess the inventive step based on the inventor's assertion of the advantageous effect.

However, the effect merely based on the inventor's assertion should not be taken into consideration in assessing the inventive step if the advantageous effect is neither disclosed nor inferred from the description or drawings.

(Example 1)

The claimed invention relates to a blood-cupping device characterized by a half-open barrel extendably installed on the lower part of an operation stick, which is aimed at easily checking the movable rubber plate inserted in the barrel and facilitating the airflow through the half-open barrel while removing the main cup body. In this case, if the effects of the half-open barrel are remarkably ensured from the description and common knowledge by a person skilled in the art, it is taken into consideration in assessing the inventive step.

6.4 Assessing the inventive step according to the invention type

6.4.1 Assessing the inventive step of a selection invention

“A selection invention” is an invention which comprises indispensable elements with a more specific concept selected from a generic concept disclosed in a cited invention, wherein the specific concept is not directly disclosed in the cited invention.

In the case of selecting optimized conditions by experiments from publicly known technology, the inventive step of the claimed invention cannot be acknowledged because selecting the best or suitable concept from publicly known technology comes within the scope of an exercise of ordinary creativity of a person skilled in the art. However, if a selection invention generates an advantageous effect in comparison with a cited invention, the inventive step of the selection invention can be acknowledged. In this case, all specific concepts included in the selection invention should have advantageous effects, which are qualitatively different or qualitatively the same but quantitatively prominent. The detailed description of the selection invention should precisely explain that the invention generates an advantageous effect in comparison with the cited invention, and needs not to provide experimental materials to confirm the prominence of the effect. If reasons of refusal are notified due to the effect, the applicant can assert the effect concretely by submitting materials relating to experimental comparisons.

(Example 1)

Both a claimed invention and a cited invention relate to a chemical compound for protecting a nerve, which is used for curing a regressive disease of the central nervous system. If the claimed invention relates to a chemical compound with a more specific concept which is not directly disclosed in the cited invention, and the oral activity of the claimed invention generates ten times more advantageous effects than the cited invention, the inventive step of the claimed invention can be acknowledged.

6.4.2 Assessing the inventive step of an invention including numerical limitations

“An invention with numerical limitation” is an invention wherein some parts of indispensable elements of the invention are expressed by specific numerical values.

Selecting an optimal numerical range by experiments from the publicly known art is normally considered as an exercise of ordinary creativity of a person skilled in the art, and hence the inventive step is generally denied. However, a claimed invention has an inventive step if there is more advantageous effect than the effect of the cited invention within a limited numerical range. This advantageous effect should be a remarkably improved effect regarding the overall scope of the numerical limitation, and a necessity of a critical significance of the numerical limitation is determined under the following criteria.

(1) The critical significance of the numerical limitation is required, when the claimed invention and the cited invention have a common problem to be solved and a

qualitatively same effect.

(2) If the two inventions each have different problems to be solved and qualitatively different effects, the critical significance of the numerical limitation is not required even though the two inventions have the same matters defining the inventions except for the numerical limitation.

For the critical significance of the numerical limitation to be acknowledged, a remarkable change in the effect of the invention is required across the boundary of the numerical limitation and the following conditions should be satisfied: 1) The technical meaning of the numerical limitation should be described in the description, 2) the embodiments in the detailed description or supplemental materials should prove that the upper and lower limits of the numerical limitation is critical. Generally, it should be objectively confirmed that the range is critical with experimental results which cover inside and outside the range of the numerical limitation.

(Example 1)

The claimed invention relates to a soundproof pipe with a numerical limitation in that one rotation of a screw is limited within the tube length which is 12 times longer than the inner diameter. However, since there is no technical explanation of limiting 12 times longer than the inner diameter in the description, it only means that the spiral of a screw is merely not too much moderate and there is no special effect. Therefore, the numerical limitation of the claimed invention is considered to be technically meaningless.

(Example 2)

The claimed invention relates to a ceramic backside material for an arc welding to make a back bead shape better. The technical difference of the claimed invention is a backside material comprising 0.01-0.7% iron-oxide. If this numerical value is merely a numerical limitation that a person skilled in the art can reach by an exercise of ordinary creativity and there is no heterogeneous remarkable effect within the range of this numerical limitation, the claimed invention is not considered to have an inventive step.

(Example 3)

Even though the manufacturing ingredients or process of the claimed invention is similar in some part or identical to those of the cited inventions, if the claimed invention is different from the cited inventions in view of its characteristics such as additives in processing or a ratio of manufacturing ingredients and thus the quality and economical efficiency of the complete goods are greatly improved, the claimed invention is considered to have an inventive step (Case No. 91Hu1298 (Supreme Court, 12 May 1992)).

(Reference)

If a claimed invention defines the range of technical elements of a known cited invention with numerical values, no other technical elements to prove an inventive step are added, and the numerical limitation is merely a supplemental material, and if there is no remarkable effect within the range of the numerical limitation, the claimed invention is merely a numerical limitation within the scope of the common practice of a person skilled in the art. In other words, if the claimed invention and the cited invention have

the same problems to be solved and are different only in the limited numerical values, and if there is no mention in the description about remarkable effects in employing the limited numerical values, it is difficult to admit there is a remarkable effect within the range of the limited numerical values.

6.4.3 Assessing the inventive step of a parameter Invention

(1) A parameter invention is an invention in which an applicant arbitrary creates a certain parameter which is not standard or commonly used in physics or chemistry, parameterizes it arithmetically by using the correlation between plural parameters, and employs it as a part of essential element of the invention. Since the technical features may not be precisely defined by the claims itself in the parameter invention, the assessment of the inventive step for the parameter invention shall be performed only after figuring out them based on the detailed description and drawings, and common knowledge.

(2) As the functions and characteristics described in the claim define the subject matter of an invention, the examiner should not compare the claimed invention with the cited invention without considering the functions and characteristics. In case of a parameter invention, the inventive step should be assessed by taking into account the functions or characteristics caused by a parameter. For assessing the inventive step of a parameter invention, it should be firstly considered whether a technical meaning exists in introducing a parameter. If the parameter described in claims is merely a matter of expression form different from a publicly known invention or a matter of confirming the intrinsic features of a publicly known invention, and if the cause and effect relationships between the parameter and the advantageous effect are weak, the inventive step is denied. However, if the parameter invention is a type of an invention with a numerical limitation, the assessment criteria for the invention with numerical limitation can be applied. In this case, even without the technical meaning of the parameter, as long as a qualitatively different or qualitatively the same but quantitatively prominent effect of the claimed invention is considered to be caused by the numerical limitation, the inventive step of the parameter can be acknowledged.

(3) Although it is difficult to figure out or convert a certain parameter in a claim and to compare the claimed invention with the cited invention, the examiner notifies the applicant of the grounds for rejection due to the inventive step without having to strictly compare the claimed invention with the cited invention and wait for the applicant's proof statement, if there is a reasonable doubt that the parameter invention can be easily derived from the cited invention.

If the examiner has difficulty in maintaining the grounds for rejection due to the applicant's refutation, the grounds for rejection are cancelled. If the grounds for rejection are not overcome by the applicant's argument, the examiner may make a decision of rejection under Article 29 paragraph (2).

(4) The examiner might have reasonable doubt in the following cases: (a) the parameter described in the claims is converted with a different definition and a test/measurement

method, and then the claimed invention is found to be easily derived from the cited invention. (b) the examiner evaluates the parameter of the cited invention according to the measurement/evaluation method in the description, and then the claimed invention is proved to be similar to the cited invention. (c) an embodiment in the description of the claimed invention is similar to that of the cited invention.

(5) If the examiner notifies the applicant of the grounds for rejection with regard to a parameter invention, the examiner has to concretely describe the grounds of reasonable doubt, and if necessary, the examiner can propose a solution to dissolve the reasonable doubt.

(6) If the parameter of the claimed invention is standard, commonly used or proved to be easily understandable by a person skilled in the art, the examination criteria described in (1)-(5) are not applied.

(Reference)

In comparison of the claimed invention having certain properties or characteristics with the cited invention having different properties or characteristics, if the claimed invention becomes similar or identical to the cited invention as a result of converting the properties or characteristics of the claimed invention to different definitions and measurement methods, or if an embodiment of the claimed invention in the description is similar or identical to one of the cited invention, the claimed invention is not considered to be novel and have an inventive step because the two inventions should be considered to be similar or identical to each other (Case No. 2001Huh2658 (Supreme Court, 28 Jun. 2002)).

6.4.4 Assessing the inventive step of a product invention described by its manufacturing process

Although a manufacturing process is described in the claims of the product invention, the examiner can assess the inventive step of the product invention by comparing the product itself defined by the description with a publicly known invention without considering the manufacturing process because an applicant should directly describe the product in the claim when defining a product invention except for special circumstances where the product can only be specified by the manufacturing process thereof.

When novelty and an inventive step are assessed, it is not the manufacturing process but the product itself described by its manufacturing process to be claimed. Therefore, the examiner shall compare “the product itself” in the claim with a publicly known product. The examiner does not have to take into account the manufacturing process or a manufacturing apparatus of the product. At least, the product described by properties, features and composition is judged in this case.

(Example 1)

The claimed invention is a belt coupling apparatus for a seat belt and is described in the claims with a manufacturing method, comprising the steps of: bending a part of a plate from one lateral side to other lateral side and concurrently putting the bent part back to

the first lateral side. In this case, as there is no difficulty in characterizing the seat belt via its composition, the examiner can assess the inventive step by comparing the seat belt defined by the manufacturing method with the cited invention, without considering the manufacturing method.

(Example 2)

The claimed invention relates to a „Cannaf tea’ described by producing process, and it is described in the claims that the available components are the „Cannaf leaves’ whose inorganic content is increased by heating (60 C, 45min.) and infra-red radiation (1.6 Kw, 30-45 min.). In this case, if it is proved, based on the description of the specification, that the inorganic content of the „Cannaf leaves’ produced by the described process is remarkably increased, the inventive step of the „Cannaf tea’ produced by the described process is acknowledged because of the change of the tea properties.

7. Assessment of the inventive step of a combination invention

(1) A combination invention is an invention comprising novel solutions by gathering technical features disclosed in the prior art as a whole in order to solve a technical problem.

The claimed invention is to be considered as a whole so that, the inventive step of the invention shall not be denied merely because each element described in a claim is deemed to be known from or obvious over the cited inventions.

In a claim disclosing a plurality of elements, the assessment of the inventive step relies not upon each independent element, but upon the technical idea of the claimed invention, the respective elements of which are structurally combined as a whole. Therefore, when assessing the inventive step, the examiner shall consider the difficulty in forming structurally combined elements as a whole based on the principle of a problem solution, rather than consider whether individually dissected elements in the claim are publicly known. In addition, the examiner shall consider the unique effect that the invention has as a whole.

(2) The assessment of the inventive step of the combination invention can be made by combining more than two disclosures (including well-known or commonly used arts) but the combination of the disclosures is limited to the condition where a person skilled in the art can easily combine the disclosures at the time of filing. In this case, there is no special limit on the number of prior art to be combined. When the examiner assesses the inventive step by combining various prior arts, the examiner mainly considers whether the cited inventions contain a motivation or hint leading to the claimed invention by combining or assembling the prior arts. Nevertheless, taken into account the state of the art, the common general knowledge at the time of filing, the general problems of the field, the trend and demands in the technical industry, the examiner can deny the inventive step of the claimed invention if the combination of prior art disclosure is deemed to be easily made by a person skilled in the art (Case No. 2005Huh3284 (Supreme Court, 6 Sept. 2007)).

(Reference)

“Well-known art(s)” means disclosures generally known in the relevant technical field like technologies widely known throughout the industry, technologies that appeared in many prior arts or technologies well known to the extent to present examples. “Commonly-used art(s)” means a well-known art which is used widely.

(Example 1)

The claimed invention relates to a web game server enabling users to download a game via the Web. The technical feature of the claimed invention differs from that of the cited invention only in that a game program and game data are separately downloaded in the claimed invention. Then, the inventive step of the claimed invention is not acknowledged because a person skilled in the art can simply combine the features with the cited inventions without any difficulty if the technical difference in the game program and game data separately downloaded is deemed to have been merely a well-known art in view of the state of the art at the time of filing.

(Example 2)

The claimed invention relates to a method of counting securities by extracting serial numbers via an image sensor. Compared to the cited inventions, the claimed invention differs from cited invention 1 only in that the cited invention 1 recognizes security denominations via an optical sensor, and cited invention 2 comprises the step of sorting currency notes via an image sensor. Considering the state of the art at the time of filing and the fact that the prior art disclosures fall under the same technical field, the difference between the invention sought to be patented and the prior art would have been obtained by substituting the image sensor of the cited invention 2 for the optical sensor of the cited invention 1 without difficulty. Therefore, it would have been obvious to a person skilled in the art to combine the cited inventions 1 and 2, thereby arriving at the claimed invention.

(3) The assessment whether a prior art discloses a motivation, hint, or the like for a combination shall be comprehensively reviewed the following: whether the motivation, hint, or the like is explicitly taught in the prior art; whether the motivation, hint, or the like is inherent from the technical problem to be solved by the invention; or whether the motivation, hint, or the like is a part of the common general knowledge or empirical rules of a person skilled in the art.

(Example 1)

Cited invention 1 discloses a protective cover of a baby carriage comprising a transparent window made of a flexible plastic material, while the claimed invention describes a protective cover with a transparent window whose material is changed to a rigid plastic material disclosed in cited invention 2 in order to protect the eyesight of an infant. In this case, if a public TV program reported that a flexible plastic material used for the transparent window of a baby carriage damaged the eyesight of an infant prior to the priority date and if the fact that a rigid plastic material did not result in such a problem fell under the common general knowledge of the art to which the invention pertains, a person skilled in the art could have changed the material of the transparent window disclosed in the cited invention 1 to the rigid plastic material of the cited

invention 2 without any difficulty. Therefore, the claimed invention would have been obvious to a person skilled in the art.

(4) In general, as a hint or motivation of a combination of a prior art disclosure and another disclosures referred by it seems to be suggested in a prior art disclosure, it is obvious to combine them and therefore the inventive step is denied. In addition, combining a plurality of technical features in the same disclosure is considered obvious, because a person skilled in the art would have combined the technical features without difficulty.

In general, it is considered to be obvious to combine a well-known technology with another prior art disclosure. However, when a combination with a well-known technology results in an advantageous effect, the combination is not regarded as obvious.

(Example 1)

If cited invention 1 discloses all elements except for a leading portion of the claimed invention, and the leading portion of the claimed invention is substantially the same as the guide member of cited invention 2 referred to in cited invention 1, it would have been obvious to combine the cited invention 2 with the cited invention 1, thereby arriving at the claimed invention because the combination of the cited inventions 1 and 2 can be considered as being already implied.

(5) In general, if a combination invention achieves an effect by a functional interaction between technical features, which is different from or greater than the sum of the effects of the individual technical features, e.g., a combined synergistic effect, the inventive step may be acknowledged since a set of technical features is considered to be a technically meaningful combination. If a combination invention described in a claim is regarded merely as a juxtaposition (array) or aggregation (simple collection) of features, the inventive step of the combination invention can be denied by proving that the individual features are obvious insofar as there are no other grounds supporting the inventive step.

(Example 1)

The claimed invention is similar to the cited invention 1 except for a servo motor modified from a hydraulic actuator of cited invention 1 and a bending means described in cited invention 2 and substituted for the spindle of cited invention 1. In this case, if the modification or substitution of the elements does not lead to structural difficulties and the functional effect of new elements is not regarded as greater than the summed effects of the cited invention 1 and the cited invention 2, the claimed invention falls within an aggregation, and is therefore denied inventive step.

(Example 2)

The claimed invention corresponds to an aggregation of an ordinary injection molding machine disclosed in cited invention 1, a vacuum chamber disclosed in cited invention 2, and a mold fastening system disclosed in cited invention 3, wherein the vacuum chamber enables injection molding to be performed in vacuum and the mold fastening

system facilitates work convenience. In this case, if the combination of the elements does not lead to particular difficulties, nor does the functional effect result in any remarkable difference, the aggregation is considered to be obvious to a person skilled in the art, thereby arriving at the claimed invention.

(6) In assessing the inventive step of a combination invention, it should be noted that the combination of one or more cited inventions with the closest cited invention may indicate the presence of an inventive step. In addition, it should be noted that the higher number of combined cited inventions, the more likely is that the claimed invention results from an *ex post facto* view or lacks a valid ground for rejection. When assessing whether it would have been obvious to combine two or more other prior arts, the examiner should take into consideration of the followings: (a) whether there is possibility to combine them, (b) whether the prior arts come from similar or neighboring technical fields, and (c) whether there is a reasonable basis to associate each other for the combination.

8. Other factors in assessing inventive step

In principle, the assessment of the inventive step is to consider comprehensively the objective, technical constitution, and functional effect of an invention described in a claim, i.e., to assess the uniqueness of the objective and the remarkableness of the effect as a whole, mainly based on the difficulty of technical structure. However, there might be other factors in assessing the inventive step. Thus, the examiner should not readily reach the conclusion that the claimed invention lacks an inventive step when a written opinion submitted by an applicant claims that the claimed invention is not obvious for the following reasons:

(1) If a prior art document teaches not to refer to the prior art thereof, i.e., if there is a description in the prior art document that precludes the reasoning that a person skilled in the art would easily arrive at the claimed invention, the inventive step is not denied by the prior art despite the similarity between the prior art and the claimed invention. In addition, the fact that the prior art in a prior art document is described as inferior cannot be necessarily considered as a factor that precludes the inventive step.

(2) Commercial success or favorable responses from the industry or the fact that the claimed invention had not been implemented by anybody for a long time before the claimed invention was filed may be regarded as indicative of the inventive step as a secondary evidence. However, those facts alone are not to be regarded as indicative of the inventive step. First of all, as the inventive step should be assessed based on the contents disclosed in the specification (i.e., the objective, structure, and effect of the invention), commercial success is not to be regarded as a reference for the assessment of the inventive step, provided that such success is not derived from the technical features of the invention but from other factors (e.g., improvement in sales techniques or advertising).

(Example 1)

Although a mobile video pop song accompaniment of the claimed invention made a hit

in Japan with a signed two-year export contract worth \$84,000,000, this cannot prove that the success is based only on the superiority of a technical structure of the claimed invention. In addition, if the success is assessed as deriving from the sales techniques of a salesperson, evidence of the commercial success alone is not to be regarded as a factor in guaranteeing the inventive step.

(Example 2)

The claimed invention is related to a method of fixing metal accessories on a handrail, wherein a welding hole and a curved surface each have a size appropriate for welding so that internal welding can be performed. If the claimed invention had a better functional effect than a connection apparatus of a handrail pillar of prior external welding but the claimed invention had not been implemented before filing, then it would be regarded as non-obvious for a person skilled in the art to arrive at the claimed invention.

(Reference)

Given that the claimed device has a distinguished functional effect but has not been implemented before filing, it is deemed to be highly non-obvious to a person skilled in the art to devise the claimed device of this case (Case No. 99Hu1140 (Supreme Court, 14 Dec. 2001)).

(3) The fact that a claimed invention solves a technical problem that a person skilled in the art has attempted to solve for a long time or fulfills a long-felt need may be regarded as an indication of the inventive step. In addition, such a solution of a technical problem or a need should have been recognized by a person skilled in the art for a long time and be fulfilled by the claimed invention for the first time. To accept this as an indication of inventive step, an objective evidence is required.

(4) If an invention is made by technical means which a person skilled in the art has abandoned due to technical prejudice interfering with the research and development of a technical problem in the relevant field of the art, thereby solving the technical problem, this is regarded as an indicator of the inventive step.

(5) If a claimed invention proposes means for overcoming technical difficulties not resolvable by other means or for solving a technical problem, this is regarded as an advantageous evidence for an inventive step.

(6) If a claimed invention falls within the area of a brand-new technology and has no prior art relevant to the invention, or if the closest prior art to the invention is far away from the invention, the inventive step is likely to be acknowledged.

9. Notes on assessment of inventive step

(1) When assessing inventive step it requires precaution to avoid a *posteriori* analysis in the light of knowledge obtained from the matters disclosed in the specification of a patent application, which is the subject of examination, because the examiners may come to a conclusion from a *posteriori* analysis that a person skilled in the art could have carried out the claimed invention without difficulty.

(Example 1)

The claimed invention is related to a terminal comprising a tapping mode for use in an emergency situation, which blocks reception of a voice signal in a receiving unit and allows emission of a voice only in a transmitting unit, whereas the cited invention merely describes „preventing others from noticing reception of a voice from a terminal’. Because such a description of the cited invention cannot be readily drawn to the specific technical constituents of the claimed invention by a person skilled in the art, regarding the claimed invention as being obvious and readily derivable from the description of the cited invention is considered as a result of an *ex post facto* analysis in the light of what is disclosed in the specification of the claimed invention is known to the examiner during the examination process.

(2) If an independent claim has an inventive step, its dependant claim is deemed to be inventive as well. On the contrary, if an independent claim does not have an inventive step, the inventive step assessment should be made for each dependant claim.

(3) When a product invention has an inventive step, a process invention for making said product and a use invention for using said product also have an inventive step in principle.

(4) In the case that a claim is described either in a Markush form or as a subject matter comprising one selected among the group consisting of multiple alternative constituents, the claimed invention is not considered inventive if at least one embodiment of Markush alternatives appears not to involve an inventive step over the prior art. In such cases, the applicant can overcome the grounds for rejection by simply deleting the Markush alternative for which claim is not allowable for lack of inventive step. However, upon assessing the inventive step of such claims, precaution is needed not to generalize the effect of one selective embodiment to the entire scope of the claimed invention.

(Example 1)

If the claimed invention relates to neuroprotective chromanol compounds including various chemical compounds as alternatives, all embodiments of the chemical compounds should have a remarkable effect over the prior art in order for the claimed invention to be granted. Therefore, it is inappropriate to grant a patent for the whole invention merely based on the experimental data concerning the effect of the formula (III) compound, which is the only alternative described in the specification, for being significantly effective in comparison with the prior art.

(5) A retrogressive invention does not involve an inventive step. Granting a patent to a retrogressive invention runs against the purpose of the Patent Act. Moreover, a retrogressive invention would be barely conducted and rather have a negative effect on those who conduct it, even if an exclusive right is given to the retrogressive invention by granting a patent.

(6) If the cited invention is regarded as a well-known art or a commonly-used art, the examiner may notify the applicant of the grounds for rejection without any evidential

material attached. However, it is inappropriate to cite a well-known art or a commonly-used art as the closest cited invention without any support by evidential materials.

If an applicant claims that the invention is not a well-known art or a commonly-used art in a written opinion in response to the grounds for rejection on the basis of the well-known technology without any evidential material attached, the examiner should in principle provide an evidential material regarding the grounds for rejection. However, in the case that the examiner has difficulties in providing an evidential material, the examiner may deny the inventive step by thoroughly explaining why the invention falls under a well-known art and a commonly-used art or pointing out why the applicant's argument is not proper. The evidential materials with regard to a well-known art and a commonly-used art are textbooks, introductory books, dictionaries of technical standards, national standards (KS) in the field of the art to which the subject matter pertains, and so forth.

(7) As the inventive step of an invention is individually assessed, not binding to the precedents of examination of other inventions, in the case of a patent application for a specific invention, examination precedents in foreign countries, which have differences in the legal systems and customs, can only be used as references and do not exert a direct effect on assessing patentability of the invention.

(8) Although the implementation of the claimed invention is prohibited due to a restriction imposed by the laws of Korea or abroad, such a restriction is not taken into consideration in assessing the inventive step.

(Example 1)

If the claimed invention and the cited invention differ only in a method of lottery drawing, which cannot be readily modified by the lottery designers only because the practice is strictly prohibited by the law, the inventive step is denied when the claimed invention is obvious to a skilled person in view of the state of the art for a restriction imposed by the law is not taken into consideration.

Chapter 4 Enlarged Concept of Novelty

1. Patent Act Article 29 paragraph (3)

Notwithstanding Patent Act Article 29 paragraph (1), where a patent application is filed for an invention that is identical to an invention or device described in the description or drawing(s) originally attached to another application for a patent or a utility model registration that has been filed before the filing date of the patent application and laid open or published after the filing of the patent application, the patent shall not be granted for such an invention. However, this shall not apply where the inventor of the concerned patent application and the inventor of the another application for a patent or utility model registration are the same person, or the applicant of the concerned patent application and the applicant of the another application for a patent or utility model registration are the same person at the time of filing of the concerned patent application.

2. Purport

An invention described in the specification or drawing(s), even if not included in the claims, which is usually opened to the public by a laying-open of application or publication of registration, has been contributed, from the applicant's perspective, to the society without reward. Granting an exclusive right to another applicant who filed a subsequent application which claims the invention belonging to the public is inconsistent with the purpose of the Patent Act, which gives exclusive rights for a limited period to new inventions as a reward for the disclosure. Therefore, granting a patent to such subsequent invention is not allowed under the Article 29 paragraphs (3) and (4).

Moreover, the Article 29 paragraphs (3) and (4) aim to prevent the following problem: In the case the invention having been described only in the specification and drawings of an application is further included in the claims by the amendment, it is possible that such an application becomes a prior application under the meaning of the Article 36 of the Patent Act. This leads to deferring of an examination on the subsequent application until the examination of the prior application is terminated.

3. Conditions to apply Article 29 paragraph (3) and (4) to an application

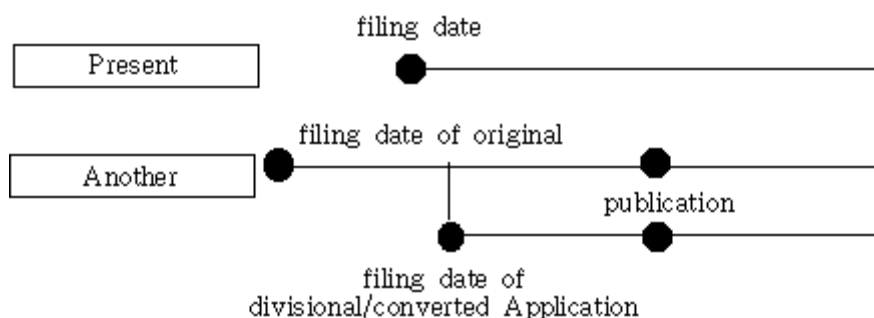
In order to notify the grounds for rejection under Article 29 paragraph (3) and (4) of the Patent Act, the following conditions must be met.

(1) Another application for a patent or for a registration of a utility model cited as a reference under the Article 29 paragraph (3) and (4) (referred to as "another application" hereinafter) is required to have been filed prior to the filing date (the filing date of the first filing country in case of the application with priority claim under the Paris Convention or the filing date of prior application in case of the application with domestic priority claim) of the concerned patent application (referred to as "present application" hereinafter).

① In the case where another application is a divisional application or a converted application(double application in case of the application filed prior to 1 October 2006), the critical date of filing as a reference regarding to the Article 29 paragraph (3) and (4) is the actual filing date of a divisional application or a converted application, not the date of filing of the original application.

(Example 1)

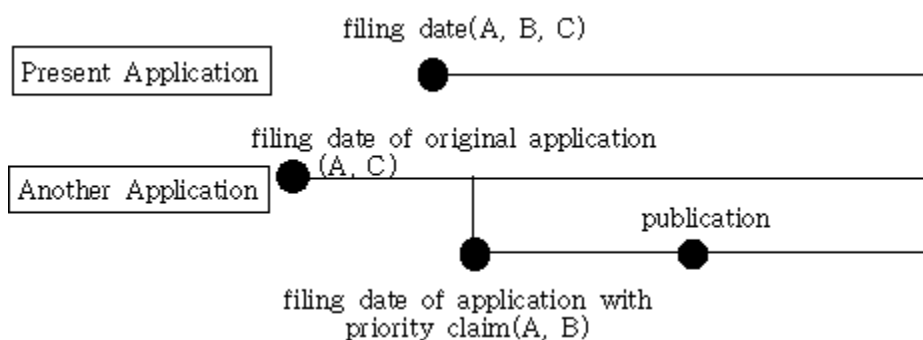
When applying Article 29 paragraph (3) to the divisional application or a converted application, the filing date of such application is not the filing date of original application. Thus, it is after the filing date of the present patent application and the divisional application or a converted application cannot be cited as a prior art. However, the original application of such application can be another application and be cited as prior art if the filing date of the original application is prior to that of the present patent application (see figure below).



② In the case where another application is accompanied with a priority claim under the Paris Convention, the filing date in the country of origin is deemed as the filing date of another application, for an invention commonly disclosed in the specification or drawings(referred to as an “initial specification, etc.” hereinafter) attached to the application in the country of origin and in the specification or drawings originally attached to the present application with the priority claim.

(Example 1)

The invention A of another application can be cited as a prior art of the present patent application, if the filing date of invention A disclosed in the application filed in the country of origin as a reference is deemed to the date of filing in the country of origin when applying Article 29 paragraph (3). The invention B cannot be cited as a prior art if the invention B was not disclosed in the application filed in the country of origin. Meanwhile, the invention C, which is described in the application filed in the country of origin but is not included in the present application with priority claim, was not disclosed in the application filed in Republic of Korea and cannot be cited as a prior art of the present patent application.



③ In the case where an examiner cites an invention initially disclosed in a specification of a prior application which was a basis for a domestic priority claim or an application with a domestic priority claim thereof (referred to as a “subsequent application” hereinafter) as an invention of another application under the Article 29 paragraph (3) and (4), it is treated as follows:

(a) The invention commonly disclosed in the initial specification of both prior and subsequent applications, is deemed as another application filed on the filing date of prior application and should be applied in the provision of Patent Act Article 29 paragraph (3) and (4) (Patent Act Article 55 paragraph (3) and (4)). The invention solely disclosed in the initial specification, etc. of a subsequent application but not in that of prior application, is deemed as another application filed on the filing date of subsequent application and should be applied in the provision of Patent Act Article 29 paragraph (3) and (4) (Patent Act Article 55 paragraph (4)). The invention solely disclosed in an initial specification etc. of prior application but not in that of subsequent application should not be applied in the provision of Patent Act Article 29 paragraph (3) and (4) (Patent Act Article 55 paragraph (4)).

A prior application is deemed to have been withdrawn when one year and three months (or immediately for the application for a registration of a utility model filed after 1 July 2001) has elapsed after the filing date of the prior application (Patent Act Article 56 paragraph (1)), thus it is not laid open. Therefore, where a subsequent application is laid open or published, the invention commonly disclosed in the initial specification of both prior and subsequent applications is deemed to be considered as laying-open at the time for lay-open or publication of the subsequent application. In addition, for an invention which was not disclosed in the initial specification of the prior or subsequent applications but newly added through the amendment, the treatment above does not apply. Where an invention was not described in the initial specification of the subsequent application but described in the initial specification of the prior application, the invention is not considered to be laid open to the public. Therefore, the Article 29 paragraph (3) and (4) are not applied to such an invention.

(b) In the case of (a), where a prior application is an application with a domestic priority claim (including a priority claim under the Paris Convention), the invention commonly disclosed in the specification of both prior and subsequent applications and also disclosed in the original application which is a basis for the priority claim of the prior application is deemed as another application filed on the filing date of subsequent

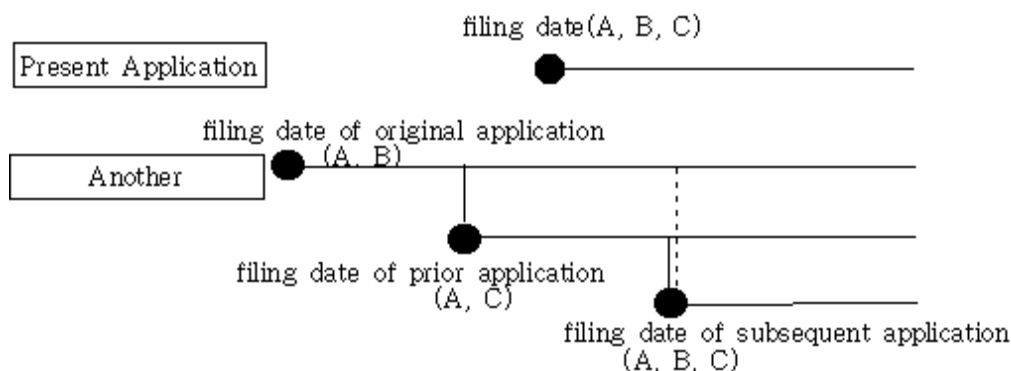
application and should be applied in the provision of Patent Act Article 29 paragraph (3) and (4) (Patent Act Article 55 paragraph (5)).

(Example 1)

As example ① shows below, where a subsequent application is filed with a priority claim based only on a prior application, among the inventions A and C described in the prior application, the invention A disclosed in the original application filed at the country of origin, which is a basis of the priority claim of the prior application under the Paris Convention, is considered to be filed at the filing date of subsequent application under Article 29 paragraph (3). Therefore, invention A of the subsequent application cannot be cited as a reference under Article 29 paragraph (3) even though the invention A is described in the prior application. The invention C of the prior application can only be cited as a reference.

(Example 2)

Meanwhile, as example ② shows below, where a subsequent application was filed with priority claims based on the application filed at the country of origin as well as a prior application, the invention A of the prior application can be cited as a reference under Article 29 paragraph (3).



(Footnote)

Case ①: In the case where a subsequent application is filed with a priority claim based only on a prior application

Case ②: In the case where a subsequent application is filed with priority claims based on the application filed at the country of origin as well as a prior application

(2) Another application should be laid open or published for registration after the present application was filed.

Once an application is laid open or published for registration, the status of the application as another application still remains effective despite rejection or grant of a patent, invalidation, withdrawal or abandonment of the application. However, in the case where an application is erroneously laid open to the public, after the decision of rejection, invalidation, withdrawal and abandonment of the application, the application cannot be cited as a reference under Article 29 paragraph (3).

(3) The invention described in claims of the present application should be identical to the invention or utility model which is described in the initial specification, etc. of another application

The invention described in claims of the present application should be completely or substantially identical to the invention or utility model which is described in the initial specification, etc. of another application. In addition, even if the matters which have been described in the initial specification of another application are omitted by the amendment after the filing, Article 29 paragraph (3) is applied.

4. Rules for the proviso of the Article 29 paragraph (3)

An application falling within the following conditions are not considered as another application under Article 29 paragraph (3) and (4).

(1) In a case where an inventor of the present application is the same as the inventor of another application

“The inventor” of the present application and another application means the inventor described in the application document. In case of joint inventions, all inventors of present application must be completely identical with those of another application. However, if the applicant proves the fact that all inventors are practically the same although all inventors are not completely match, an examiner can admit the applicant’s argument. In a case where an applicant adds or amends an inventor of an application after an examiner notifies the applicant of the grounds for rejection, in which another application is cited as a reference due to the difference of the inventor, the examiner has a right to request documents to testify that the inventors added or amended are true inventors.

(2) In the case where the applicant of the present application at the time of filing is the same as the applicant of another application

The applicants of the present and another application should be identified and compared at the time of filing the present application to determine whether the applicants are the same. In the case of plural applicants, all of the applicants indicated in the two applications must be the same. Even in the case of the subsequent discrepancy of applicants caused by the change of name, inheritance or a merger of applicants of the present and another applications between the filing date of the present application and that of another application, the sameness of applicants remains effective only if the applicants of the present and another applications are substantially same.

5. In the case of international application under Article 29 paragraph (4)

Where another application is an international application or international application considered to be a patent application by decision, the following points are different when applying Article 29 paragraph (3), compared to another application which is not

an international application.

In a case where another application is an international application, in Article 29 paragraph (3), “laid open” refers to “laid open or international publication under PCT Article 21” and “an invention or device described in specification or drawings initially attached to the application on the filing date” means “an invention commonly described in description, claims and drawings submitted at the date of filing of the international application and its translation”.

Under Article 29 paragraph (3) and (4) in the international application with the domestic priority claim, it is considered that the invention described in the specification or drawings of prior application being the basis of the domestic priority claim among inventions commonly described in description, claims and drawings submitted at the date of filing of the international application and its translation, is considered to be laid open to the public at the time of international publication under PCT Article 21 or publication of registration(Article 202 paragraph (2)).

Under Article 29 paragraph (4), where another application is an international application, the scope of applying an enlarged concept of novelty of the international application includes the invention commonly described in description, claims and drawings submitted at the date of filing of the international application and its translation. However, the present application shall be rejected by an invention described in the international application (Article 55 paragraph (4)) in the case where the international patent application is a prior application and is the basis of domestic priority claim for another application, if the subject matter of the present application is the same as the invention described in the description, claims and drawings submitted at the date of filing of the international application.

6. Method of assessing the identity

Determination of Article 29 paragraph (3) and (4) depends on whether the claims of the present invention is identical to the invention specified in the description or drawings in another application at its filing (hereinafter referred to as “cited invention”).

6.1 Procedure of assessing the identity

(1) Specify an invention of the present application described in the claims. The method of finding invention is identical to that of assessing novelty in chapter 2.

(2) Specify a cited invention. The cited invention is specified according to the subject matters described in a description, etc. of another application. The subject matters which can be obtained by the common general knowledge might be the basis of a cited invention under Article 29 paragraph (3) and (4).

(3) Find identity and difference by comparing the claimed invention of the present invention with cited invention. In this case, the claimed invention should not be compared with the invention by combining two or more than two cited inventions.

(4) When no difference is found between the invention set forth in claims and the cited invention, the claimed and cited inventions are identical. The identity of the inventions includes the substantial identity.

6.2 Substantive method of assessing the identity

Novelty is assessed by comparing whether a present invention and a cited invention are identical. The identity of invention is related with assessing novelty as well as inventive step (Article 29 paragraph (2)), invention not considered to be publicly known (Article 30), enlarged concept of novelty (Article 29 paragraph (3), (4)), protection of lawful holder of a right (Article 33, 34), prior application (Article 36), succession to the right to obtain a patent (Article 38 paragraph (2), (3), (4)), divisional application (Article 52), converted application (Article 53) and application with the priority claim (Article 54, 55). Therefore, the criteria of assessing the identity of invention shall be available under the cases mentioned above.

(1) Assessing identity of the inventions relies on identity and difference from the comparison of elements between the claimed invention and the cited inventions.

(2) In a case where there is a difference in elements between the claimed invention and the cited inventions, two inventions are not identical. However, when there is no difference between them, the claimed invention is identical to the cited invention.

(3) In the case where the claimed invention is completely or substantially identical to a cited invention, the claimed invention is identical to the cited invention.

Chapter 6 Unpatentable Invention, etc.

1. Patent Act Article 32

Notwithstanding Article 29 paragraph (1) to (2), an invention liable to contravene public order or morality or to injure public health shall not be patented.

2. Purport

For reasons of public interest, Article 32 stipulates that a patent would not be granted for “inventions liable to contravene public order or morality or to injure public health” even if the invention is regarded patentable under Article 29 paragraph (1) to (2). As a result, a patent cannot be granted under the Article 32 without having to consider patentability requirements under Article 29.

3. Unpatentable invention

3.1 Invention liable to contravene public order or morality

An invention liable to contravene public order or morality is considered as unpatentable. In general, the two words are not separately used but more specifically, public order refers to the general interest of society or country and morality means moral sense generally accepted by a society or by a particular group of people. Therefore, it is no wonder that a patent cannot be granted for an invention likely to contravene public order or morality without having to consider the objective of the Patent Act.

An invention which falls within subject matters under Article 32 is an invention with the aim to contravene public order or morality as well as the disclosure or its use against public order or morality. But it does not extend the case where an invention is likely to go against public order or morality as a result of improper use of the invention against its original purpose.

For example, in a case where an apparatus (Bingo) of a present invention is aimed at entertaining not gambling or other gambling behavior clearly disclosed in the description and furthermore it is considered that the apparatus is likely to be devised for entertainment use not wrongdoing, the apparatus would not oppose public order or morality by only the reason that an apparatus could be improperly used.

3.2 Invention liable to injure public health

An invention liable to injure public health is equally treated as an invention to contravene public order or morality aforementioned. The assessment of whether an invention harms the public health should be made in the same way that whether the invention contravenes public order and morality is assessed.

In a case where a present invention is manufacturing process invention, an examiner should consider whether the manufacturing process itself and the product made by the

manufacturing process would injure public health.

Even in the case where researches of academic journals show that a product made by a manufacturing process of present invention would injure public health, if the Ministry of Health and Welfare approves the manufacture of medicines under Pharmaceutical Affairs Act, it does not mean that the invention can injure public health due to the research results of academic journals.

In addition, in a case where an invention achieves the original useful purpose but the result of the invention would injure public health, an examiner is supposed to consider whether a method to eliminate the harmful effect of the present invention exists or whether the effect of the invention is advantageous or not.