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A Legislative Proposal to End Bootlegging in the Patent System

JAMES VAN SANTEN*

I. INTRODUCTION

Congress, pursuant to its Constitutional mandate,¹ has established a broad range of protection for the creative work of inventors and artists.² However, the stringent patent requirements imposed by the Supreme Court³ and the nonapplicability of copyrights to utilitarian matters⁴ leaves a great void in this range of protection.

A patent, in effect, bestows a seventeen-year⁵ monopoly⁶ upon

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The views expressed herein are personal and are not the views of the law firm or of the clientele with which he is associated.

1. "The Congress shall have the Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries; . . ." U.S. CONST. art. I, §8.

2. Inventions are protected by the Patent Law, 35 U.S.C. §§ 1-293 (1976); artistic creations are protected by the Copyright Law, 17 U.S.C. §§1-810(1976).

3. See part III C *infra*.

4. See part IV A *infra*.

5. 35 U.S.C. §154 (1976). "Every patent shall contain . . . a grant to the patentee . . . , for the term of seventeen years . . . , of the right to exclude others from making, using, or selling the invention throughout the United States. . . ." *Id.*

6. The Honorable Howard T. Markey, Chief Judge of the Court of Customs and Patent Appeals, warns that:

The loose application of the pejorative term *monopoly* to the property right of exclusion represented by a patent, can be misleading. Unchecked it can also destroy the constitutional and statutory scheme reflected in the patent system.

If the patent be valid, it takes nothing from the public, as does the *monopoly* against which our anti-trust laws are directed. On the contrary, it gives to the public, by definition, that which the public never before had.

the successful applicant. In light of the monopolistic aspects of this exclusive grant, the Supreme Court has developed a stringent test of patentability.⁷ This view reflects the Court's determination that the purpose of the patent system is to add to the sum of useful knowledge rather than to reward the individual.⁸

The problem with this approach is that it fails to recognize the need for protection of technological developments falling short of invention.⁹ An innovator needs some assurance that his or her efforts will be protected from technological plagiarism. Indeed, it is generally recognized in our society that innovators should not be denied the rewards of their labor by those who would copy.

The Patent and Trademark Office has responded to the need for protection of meritorious developments by the application of a standard or patentability less stringent than that used by the Supreme Court.¹⁰ While this is effective to a degree, since relatively few patents are challenged through the courts,¹¹ it is not an acceptable approach to the problem. Not only is this dual standard unacceptable from a theoretical standpoint, but it also suffers from practical defects. A tenacious and well-funded litigant can generally succeed in having such a patent invalidated.¹²

The purpose of this article is to examine the development and reasoning underlying these two divergent views of patentability, and the consequences of such a dual standard. It is concluded that the patent system, in its present form, is not suitable to prevent "fraud, piracy, and stealing." The development of a "technological copyright" is suggested as an appropriate legislative remedy.

II. OVERVIEW OF THE EXISTING LEGISLATIVE PROTECTION FOR INVENTION AND ARTISTIC ACHIEVEMENTS

The very apparent discrepancy between patent law doctrine as determined and administered by the Patent Office and as determined and administered by the Supreme Court of the United

That a patent, like stocks, bonds, and other property, may be misused in a plan violative of an anti-trust law does not render the property right in the patent a monopoly in the anti-social anti-competitive sense, any more than it does the property right in stocks and bonds.

Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152, 1160 n.8 (6th Cir. 1978).

7. See part III C *infra*.

8. "The primary purpose of our patent system is not reward of the individual but the advancement of arts and sciences." Sinclair & Carroll Co., Inc. v. Interchemical Corp., 325 U.S. 327, 330-31 (1945) (footnote omitted).

9. See part IV *infra*.

10. See part III A *infra*.

11. See note 99 *infra*.

12. See text at note 122 *infra*.

States, suggests that the Patent and Trademark Office, in league with the patent bar, has established within the framework of the patent system a sub rosa system of "technological copyright."¹³ That response has been made to the demand by entrepreneurs in our industrial economy for the protection of their discoveries against fraud, piracy and stealing.¹⁴ The conflict between such a sub rosa system and the doctrinal precepts evolved by the judiciary results in distortions which to date have not been resolved through the enactment of appropriate legislation.

The Patent Statute of 1953 fails to recognize that the "basic assumption of our patent law may be false,"¹⁵ and actually tends to perpetuate the conflict between the Patent Office and the Supreme Court.¹⁶ Accordingly, it appears to be of particularly serious consequence that there is a revitalized renewal of conflict between the two competing philosophies as to the mission to be fulfilled by the patent system. On the one hand, classical legal doctrine provides that technological developments should be protected only if they are synergistic,¹⁷ non-obvious,¹⁸ "inventions"¹⁹ of geniuses and exhibit differences *in kind*.²⁰ On the other hand, there is the unofficial equitable doctrine that meritorious techno-

13. As used in this article, *technological copyright* shall refer to a patent granted by the Patent and Trade Office upon the detection of a difference in degree rather than a difference in kind. See discussion part V *infra*.

14. *Fraud, piracy, and stealing* are to be distinguished from independent development. A patent gives the patentee an exclusive monopoly for seventeen years from the date of the patent issuance. 35 U.S.C. § 154 (1976). What this article envisions is a lesser degree of protection afforded an artist under the copyright law.

15. *Marconi Wireless Telegraph Co. of America v. United States*, 320 U.S. 1, 63 (1943).

The basic assumption of the patent law is that:

The primary purpose of the patent system is not reward of the individual but advancement of the arts and sciences. The function of a patent is to add to the sum of useful knowledge, and one of the purposes of the patent system is to encourage dissemination of information concerning discoveries and inventions." 60 AM. JUR. 2d *Patents* §1 (1972) (footnotes omitted).

16. See text at notes 94-98 *infra*.

17. As used in the patent law, the term *synergism* refers to "the simultaneous action of two [or more] agencies which together produce a total effect greater than the sum of their individual effects." *Republic Industries, Inc. v. Schlage Lock Co.*, 433 F. Supp. 666, 669 n.10 (S.D. Ill. 1977). See also note 87 *infra* and accompanying text.

18. See generally 35 U.S.C. §103 (1976).

19. See part III *infra*.

20. "There is no question that a 'different product,' that is, one differing in kind rather than degree, is essential for patentability, but it is the difference in

logical improvements discovered by innovators deserve legal protection even though such improvements exhibit differences merely *in degree*.²¹

The Patent Statute is limited to only four statutory classes of patentable subject matter: (1) methods or processes, (2) machines, (3) manufactures, and (4) compositions of matter.²² Each of these statutory classes is generally considered as embracing subject matter of utilitarian purposes.²³

The right to proscribe the copying of original works is conferred by the Copyright Statute²⁴ which establishes several classes of copyrightable material including writings, dramatic compositions, works of art and photographic subjects.²⁵ Recovery for infringement of a copyright can be had only upon proof of copying.²⁶ Independent production is a good defense.²⁷ But if the copyright

properties or characteristics that illustrates this difference in kind." *Rem-Cru Titanium v. Watson*, 147 F. Supp. 915, 919 (D.D.C. 1956).

21. The court's view on the requirement of difference in kind rather than degree is apparent in *United Specialties Co. v. Industrial Wire Cloth Products Corp.*, 186 F.2d 426, 429 (6th Cir. 1951):

[I]t has never been thought that mere difference, in those rare cases where the difference in degree is so marked and involves the solution of a problem long recognized but not earlier solved, so that a difference in degree becomes, in effect, a difference in kind.

The author believes that the Patent and Trade Office holds a more liberal view and will grant patents in matters involving a mere change in degree.

22. 35 U.S.C. §§1-293 (1976).

23. "The basic quid pro quo contemplated by the Federal Constitution and the Congress for granting a patent monopoly is the benefit derived by the public from an invention with substantial utility." 60 AM. JUR. 2d *Patents* §44 (1972), *citing* *Brenner v. Munson*, 383 U.S. 519 (1966).

"The design of the patent laws is to reward those who make some substantial discovery or invention, which adds to our knowledge and makes a step in advance in the useful arts." *Atlantic Works v. Brady*, 107 U.S. 192, 200 (1882).

An older test of utility was that a thing could be considered useful if it was nonfrivolous and nondeleterious, but it is now established that an invention is not useful, within the meaning of 35 U.S.C. §101, merely because it is not positively harmful to society. Utility means that the invention is capable of being beneficially used for the purpose for which it was invented. Hence, an invention is not useful if it is inoperative or if it constantly exposes a user to death or great bodily harm. On the other hand, an invention need not work perfectly in order to be useful. 60 AM. JUR. 2d *Patents* §45 (1972) (footnotes omitted).

24. 17 U.S.C. §§101 *et seq.* (1976). The two requisites of copyright are (1) publication or notice of the proprietor's claim to copyright, and (2) deposit of certain copies or prints with claim of copyright in the Copyright Office. 17 U.S.C. §§401, 408 (1976). A nominal registration fee is also required. 17 U.S.C. §708 (1976).

25. 17 U.S.C. §102 (1976).

26. 17 U.S.C. §501 (1976).

27. "The test for copyright infringement is 'whether the one charged with the infringement has made an independent production, or made a substantial and unfair use of the complainant's work.'" *Life Music, Inc. v. Wonderland Music Co.*, 241 F. Supp. 653 (S.D.N.Y. 1965), *citing* *Nutt v. Nat'l Inst. for Imp. of Memory*, 31 F.2d 236 (2d Cir. 1929).

owner wins, his recoveries can be quite substantial.²⁸

There is thus a legislatively defined range of recognizable originality which extends from the "flash of creative genius" or synergistic non-obvious discovery supposedly experienced by patent greats such as Camras, Land, Steinmentz and Edison²⁹ (afforded patent protection) to the efforts of the composer responsible for so limited a creative development as the jingles employed in radio commercials³⁰ (protected by copyright law).

The sub rosa system of "technological copyright," if it can be called such, resulting from the practice of the Patent Office in granting patents merely upon the detection of a difference in degree rather than a difference in kind, has its counterpart in a more direct effort on an opposite tack by members of the bar to extend the scope of the Copyright Statute to include subject matter having utilitarian purpose. It appears, however, that by doctrinal infusion the courts have written into our copyright and patent laws the same rule of mutual exclusion as appears in the British Law by express Act of Parliament. In other words, the courts have held that Congress has provided two separate and distinct fields of protection: the copyright for non-utilitarian objects, and the patent for utilitarian objects.

III. THE CONCEPT OF INVENTION

Before enactment of the 1953 Patent Statute, the existing laws contributed little insofar as a definition of the standard of invention was concerned, merely providing that "[a]ny person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improve-

28. See 17 U.S.C. §§501-10 (1976). The copyright owner may seek injunctions, damages, an accounting, costs and attorney's fees as well as impounding of the alleged infringing materials and ultimately, if the court deems just, destruction of such materials.

29. In 1940, Marvin Camras discovered the breakthrough which made magnetic recording feasible. It was patented on behalf of the Illinois Institute of Technology Research Institute (IITRI). Doctor Edward Land discovered and patented the Polaroid Land Camera. Steinmetz is generally credited with having invented fundamental ideas in alternating current systems and Edison the electric light bulb.

30. In *Jackson v. Quickslip Co.*, 110 F.2d 731 (2d Cir. 1940), a greeting card copyright was enforced showing a bag with a tag "It's in the bag." In *Roth Greeting Cards v. United Card Co.*, 429 F.2d 1106, 1110 (9th Cir. 1970), protection was enforced on a card showing "a colored drawing of a cute moppet suppressing a smile and, on the inside, the words 'i wuv you.'"

ments thereof, . . . may upon payment of the fees required by law, . . . and due proceeding had . . . obtain a patent therefore".³¹ The substance of those provisions was not substantially changed under the 1953 Patent Statute.³²

A. The Patent Office Examination System

The "due proceeding had" consists of a preliminary examination in regard to the subject matter contained in each application for patent conducted by the examining corps of the Patent and Trademark Office. During the course of such proceedings, the Patent and Trademark Office standard of invention is applied which has been developed along the lines suggested by Judge Learned Hand, "In such matters we look rather to history than to our own powers of divination, if history is at hand."³³

The historical record consulted by the examining corps of the United States Patent Office consists primarily of prior patents issued both in this country and those patents appearing in the journals of other countries having patent systems. To a lesser degree, the technical literature developed in the various arts and sciences is also used.

The examination system of the United States Patent Office is truly astounding. Patentable subject matter is broken into a classification containing more than 90,000 subclasses and 309 main classes. Applications are examined by 1265 experts divided in approximately 68 separate art groups of 15 examining group units. The preliminary examination conducted by United States Patent and Trademark Office is considered by many to be quite rigid since approximately thirty-five percent of the more than 100,000 patent applications filed each year are initially rejected.³⁴

Although applications are frequently rejected for failure to comply with formal requirements, it is probably fair to generalize that the many applications claiming novel material are rejected at least once as failing to define invention over the disclosures of one or more prior art reference patents.

It is important to note that the system of examination followed in the United States patent system takes the form of an *ex parte*

31. 35 U.S.C. §31 (1946) (derived from Act July 8, 1870, ch. 230, §24, 16 Stat. 201).

32. 35 U.S.C. §101 (1976).

33. *H.C. White Co. v. Morton E. Converse & Son Co.*, 20 F.2d 311, 313 (2d. Cir. 1927).

34. Roughly two-thirds of the applications mature into formal Letters Patent - 72,832 in 1977 out of a total of 109,773 filed. The average length of prosecution is approximately nineteen months. Statistics are based on figures released by the United States Patent and Trademark Office in 1977. 1977 COM. PAT. T.M. ANN. REP. 9.

proceeding wherein the patent applicant is usually represented by an attorney who "prosecutes" the application for patent until the application is either ultimately abandoned or claims are held allowed and the patent application is passed to issue.³⁵

The claims³⁶ of the originally filed patent application are frequently distinguished from the alleged anticipatory prior art through the verbal sophistries of the technical claim language frequently devised by clever attorneys who are themselves technical experts familiar with the status of the history at hand. The practical effect of this type of practice is that the United States Patent and Trademark Office permits many patents to be issued merely upon detection of a difference in degree rather than the establishment of a real difference in kind.³⁷

Paradoxically the Patent Office relies on the stringencies of competition to make the ultimate ruling regarding the propriety of the patent monopoly grant in doubtful cases of patentability. The mind-set of the United States Patent Office was articulated as early as the 1869 pronouncement of Commission Fisher relative to the test of utility in determining inventiveness. "Utility . . . refers rather to a utility of purpose than a utility of means The best test of utility is use; and in the busy competition of trade this test is soon applied, and the judgment of the inventor is affirmed or reversed by an inexorable tribunal."³⁸

In other words, in a case of doubtful inventiveness, the Patent

35. The Patent Office advises individuals who file applications *pro se* to obtain the services of a competent Patent Attorney.

36. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

[A] claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

35 U.S.C. §112 (1976).

37. Note the comment in *Gelardin v. Revlon Products Corp.* 164 F.2d 910, 913 (2d Cir. 1948):

The examiner had steadily refused to allow any claims in the face of Morrison, . . . and he then yielded only after one of those personal interviews which are so often successful. What arguments were used we cannot know; but it is easy to understand how the obsessive persistence of a skillful solicitor might overcome the examiner's doubts. After all, he might have reasoned, it was not unfair to yield, if he was in genuine doubt. At least that gave the applicant his only chance, and the public would have protection of an equally interested opponent to present the other side.

38. *Ex Parte Cheesbrough*, [1869-1871] Dec. Com. Pat. 18, 19 (1869).

Office Examiner is inclined to issue the patent since a technical development not "really" worth a patent grant will be properly consigned to limbo by that "inexorable tribunal," the great American public.

B. *The Judicial View of Patentability*³⁹

Judicial interpretation of the broad mandate given by the Congress in establishing the patent system has resulted in a large, unwieldy body of case law, most of which ultimately turns about the question of what constitutes "invention." "The long history of the word 'invention' in the Courts is an illustration of the word magic of the savage or the universals of the medieval scholastic realists."⁴⁰

Unlike the standards of invention employed by the Patent Office in handling an *ex parte* proceeding, the decisions of the courts are usually based on a determination of the validity of an issued patent involving subject matter in actual commercial use. These determinations generally appear to be based on assumption or premise that the test of inventiveness is supposedly objective; that a determinable *difference in kind* must exist rather than a mere *difference in degree*, if the claims of a patent are to be considered valid.

The customary *inter partes* proceeding before the courts in connection with litigated patent cases avails the court of many advantages never accruing to the Patent Office Examiner during an *ex parte* proceeding. Opposing litigants make exhaustive investigations of the prior patented art, the literature, the analogous arts, foreign patented art and foreign literature, and trade publications. In addition, this mass of technical material is frequently interpreted for the court by technical experts so as to assist the court in establishing the status of the prior art and the affected industry at the time the alleged "invention" occurred to measure the differences between such prior art and the claim being considered, and to determine the level of skill in the particular art.

Although the trial courts hearing patent cases were permitted to exercise broad judicial prerogative in a fairly enlightened environment, before the Patent Statute of 1953 the so-called objective test of inventiveness was laid down by the United States Supreme Court in the somewhat ambiguous terms of whether the

39. "Day is day and night is night but who shall tell me where the day ends and night begins?"—Judge Tomlin.

40. H.E. Potts, *Invention and Graduated Validity*, 24 J. PAT. OFF. SOC'Y 629, 634 (1942) (footnotes omitted).

patent met the test of "inventive genius."⁴¹

Guided by this flexible standard, the lower courts exercised considerable latitude in the recognition of meritorious technological achievement and frequently endorsed the Patent and Trademark Office's findings of patentability by conveniently disregarding or by minimizing the significance or pertinence of the prior art offered as a defense to the validity of a contested patent. If the question of patentability appeared to be close, the "doctrine of commercial success" was occasionally relied upon as demonstrating the satisfaction of a longstanding need, thereby making it easier for the trial court arbiter to recognize the presence of invention.⁴²

The decisions of the United States Supreme Court prior to enactment of the 1953 Patent Statute were not particularly helpful in formulating a truly objective test of "patentability." The *Graver Tank* cases,⁴³ for example, were regarded by some as an intimation that the high court would tolerate an extension or liberalization of the statutory standard of invention. In the first *Graver Tank* case,⁴⁴ the Court suggested that a finding of invention made by two lower courts would not be upset in the absence of an exceptional showing of error. In the second *Graver Tank* case,⁴⁵ the classical "doctrine of equivalents"⁴⁶ was reexamined and sus-

41. The usage of the word genius in determining inventiveness has been widely used as evidenced by the compilation found in *Great Atl. & Pac. Tea Co. v. Supermarket Equip. Corp.*, 340 U.S. 147, 154-55 n.* (1950):

"Inventive genius"—Mr. Justice Hunt in *Reckendorfer v. Faber*, 92 U.S. 347, 357; "Genius or invention"—Mr. Chief Justice Fuller in *Smith v. Whitman Saddle Co.*, 148 U.S. 674, 681; "Intuitive genius"—Mr. Justice Brown in *Potts v. Creager*, 155 U.S. 597, 607; "inventive genius"—Mr. Justice Stone in *Concrete Appliances Co. v. Gomery*, 269 U.S. 177, 185; "Inventive genius"—Mr. Justice Roberts in *Mantle Lamp Co. v. Aluminum Products Co.*, 301 U.S. 544, 546, "the flash of creative genius, not merely the skill of the calling." *Cuno Corp. v. Automatic Devices Corp.*, 314 U.S. 84, 91.

42. "[C]ommercial success simply means 'much use in the trade.'" *Bradley v. Great Atl. & Pac. Tea Co.*, 78 F. Supp. 388, 392 (E.D. Mich. 1948).

"The Supreme Court has indicated that commercial success is weighty, but not conclusive evidence of utility." 60 *AM. JUR. 2d Patents* §46 (1972) (footnote omitted).

43. *Graver Tank Mfg. Co. v. Linde Air Products Co.*, 336 U.S. 271 (1940); *Graver Tank Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605 (1950).

44. 336 U.S. 271 (1949).

45. 339 U.S. 605 (1950).

46.

The essence of the doctrine is that one may not practice a fraud on a patent. . . . "To temper unsparing logic and prevent an infringer from stealing the benefit of an invention" a patentee may invoke this doctrine to

tained. The trial court's decision that the defendant had merely colorably avoided literal infringement of patent claims and should therefore be held as an infringer was affirmed. Although Mr. Justice Black and Mr. Justice Douglas dissented, it is significant to note that both of these Justices quickly agreed with the majority court that: "'[F]raud' is bad, 'piracy' is evil, and 'stealing' is reprehensible."⁴⁷

The thrust of the dissent was that the protection of the business community against fraud, piracy and stealing, although a commendable purpose, should not be provided by the patent system, particularly if it becomes necessary to extend or distort the existing statutory framework to effect such protection. However, the temporary encouragement of the patent bar through the rare phenomenon of validation of a patent by the United States Supreme Court was short-lived.

Of particularly significant import was the decision in *A & P*,⁴⁸ which involved an invention consisting of what the trial court found was a supermarket check-out counter comprising "a new and useful combination" of elements each known to the prior art.⁴⁹ The court of appeals had also held that the patent in question was valid and that it presumably qualified for endorsement by the Supreme Court on the basis of the ruling in the first *Graver Tank* case.

The Supreme Court departed from the "two court endorsement rule," however, and noted that the standard of invention applied by the lower court was not sufficiently exacting. The Court firmly resisted any temptation to give a new definition to the term "invention," and merely acknowledged the nebulous character of the concept by noting that the Index to Legal Periodicals lists "no less than sixty-four articles relating to combination patents and the theory and philosophy underlying the patent laws."⁵⁰ The Court also took a sideways glance at the oft exercised lifesaver "commercial success" and disposed of its possible applicability by stating that: "commercial success without invention will not make

proceed against the producer of a device "if it performs substantially the same function in substantially the same way to obtain the same result."

Sanitary Refrigerator Co. v. Winters, 280 U.S. 30, 42. The theory on which it is founded is that if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape. *Machine Co. v. Murphy*, 97 U.S. 120, 125.

Graver Mfg. Co. v. Linde Air Products Co., 339 U.S. 605, 608 (1950) (footnote omitted).

47. *Id.* at 612 (Black, J. and Douglas, J., dissenting).

48. *Great Atl. & Pac. Tea Co. v. Supermarket Equip. Corp.*, 340 U.S. 147 (1950).

49. *Id.* at 149 n.3.

50. *Id.* at 150 n.5.

patentability.”⁵¹

Many have argued that the findings of invalidity in the *A & P* case failed to shed light on any legal principle of patent law. Interestingly, the *A & P* case was a precursor to the current notion of synergism. The Court declared: “the conjunction or concert of known elements must contribute something; only when the whole in some way exceeds the sum of its parts is the accumulation of old devices patentable. . . . Two and two have been added together, and still they make only four.”⁵²

Not all of the justices were content to merely strike down the patent. Mr. Justice Douglas, speaking for himself and for Mr. Justice Black in a special concurrence, projected the concept of “patentability” to a constitutional level of abstraction in what appears to be an attempt to doctrinally restate the objectives of the patent system.

The standard of patentability is a constitutional standard, and the question of validity of a patent is a question of law. *Mahn v. Harwood*, 112 U.S. 354, 358. The Court fashioned in *Graver Mfg. Co. v. Linde Co.*, 336 U.S. 271, 275, a rule for patent cases to the effect that this court will not disturb a finding of invention made by two lower courts, in absence of a very obvious and exceptional showing of error. That rule, imported from other fields, never had a place in patent law. Having served its purpose in *Graver Mfg. Co. v. Linde Co.*, it is now in substance rejected. The Court now recognizes what has long been apparent in our cases: that it is the “Standard of Invention” that controls. That is present in every case where the validity of a patent is in issue. It is that question which the Court must decide. No “findings of fact” can be a substitute for it in any case. The question of invention goes back to the constitutional standard in every case. We speak with final authority in that constitutional issue as we do on many others.

The attempts through the years to get a broader, looser conception of patents than the Constitution contemplates have been persistent. The Patent Office, like most administrative agencies, has looked with favor on the opportunity which the exercise of discretion affords to expand its own jurisdiction. And so it has placed a host of gadgets under the armour of patents — gadgets that obviously have had no place in the constitutional scheme of advancing scientific knowledge. A few that have reached this Court show the pressure to extend monopoly to the simplest of devices.⁵³

The concurring justices then compiled what is termed a “list of incredible patents which the Patent Office has spawned.” The list, according to Mr. Justice Douglas, “dramatically illustrates how far our patent system frequently departs from the constitu-

51. *Id.* at 153 (citing *Toledo Pressed Steel Co. v. Standard Parts, Inc.*, 307 U.S. 350 (1939)).

52. 340 U.S. 147, 152 (1950).

53. *Id.* at 155-56 (Douglas, J., concurring).

tional standards which are supposed to govern.”⁵⁴

Following the *A & P* decision in 1950, a substantial number of lower courts yielded to the Supreme Court admonition to “scrutinize combination patent claims with a care proportioned to the difficulty and improbability of finding invention in an assembly of old elements.”⁵⁵ Apparently the lower courts were ready to agree with the Supreme Court that:

The function of a patent is to add to the sum of useful knowledge. Patents cannot be sustained when, on the contrary, their effect is to subtract from former resources freely available to skilled artisans. A patent for a combination which only unites old elements with no change in their respective functions, . . . obviously withdraws what already is known into the field of its monopoly and diminishes the resources available to skillful men.⁵⁶

One of the greatest contributors to the scholarship of patent law was the late Learned Hand. In *Jungersen v. Otsby & Barton Co.*,⁵⁷ Mr. Justice Frankfurter paid tribute to Judge Hand by adopting his dissenting opinion⁵⁸ as his own.⁵⁹ Judge Hand observed “that Congress has never seen fit to extend its constitutional power to ‘discoveries’ as such in defining the realm of patentable items.”⁶⁰ Rather, Congress has limited patents to the four statutory categories outlined in 35 U.S.C. section 101.⁶¹ Hand concluded, “[h]owever trifling the physical change may be, . . . added ‘invention,’ is needed; and ‘invention,’ whatever else it may be, is within the category of mental activities and of those alone.”⁶²

C. *The Patent Statute of 1953*

Subsequent to *Jungersen*, Congress passed a new patent act which went into effect on January 1, 1953.⁶³ This act adopted a new standard of invention—the test of nonobviousness⁶⁴—which

54. *Id.* at 158 (Douglas, J., concurring).

55. *Id.* at 152.

56. *Id.* at 152-53.

57. 335 U.S. 560 (1949).

58. *Jungersen v. Baden et al.*, 166 F.2d 807, 811 (2d Cir. 1948).

59. 335 U.S. 560, 569 (1949) (Frankfurter, J., dissenting).

60. *Id.*

61. 35 U.S.C. §101 (1976) Inventions patentable. Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

62. 335 U.S. 560, 569-70 (1949).

63. 35 U.S.C. §§1-293 (1976).

64. 35 U.S.C. §103 (1976). Conditions for patentability; non-obviousness subject matter.

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

was of equal import to those of utility⁶⁵ and novelty.⁶⁶

One of the clearest judicial descriptions of the 1953 Patent Statute analyzing the new standard of "invention" was made by Circuit Judge Learned Hand in *Lyon v. Bausch & Lomb Optical Co.*⁶⁷ Judge Hand analyzed the applicable statute and the preceding case law, holding that section 103 of the new patent statute substantially restored the original gloss *in ipsissimis verbis* of *Hotchkiss v. Greenwood*,⁶⁸ namely, that a patentable change is demonstrated if it had not been "obvious . . . to a person having ordinary skill in the art."⁶⁹

Thus, Judge Hand found that section 103 of the new patent statute imposed a less strict test of invention than that required in *A & P* and in other decisions of the last twenty-five years.

Therefore we at length come to the question whether Lyon's contribution, his added step, was enough to support a patent. It certainly would have done so twenty or thirty years ago; indeed, it conforms to the accepted standards of that time. . . . We do not see how any combination of evidence could more completely demonstrate that, simple as it was, the change had not been "obvious * * * to a person having ordinary skill in the art" —§ 103. On the other hand it must be owned that, had the case come up for decision within twenty, or perhaps twenty-five, years before the Act of 1952 went into effect on January 1, 1953, it is almost certain that the claims would have been held invalid. The Courts of Appeal have very generally found in the recent opinions of the Supreme Court a disposition to insist upon a stricter test of invention that it used to apply—indefinite it is true, but indubitably stricter than that defined in § 103. Indeed, some of the justices themselves have taken the same view.⁷⁰

In footnotes omitted herein, Judge Hand listed samples of decisions of courts of appeal which applied a "stricter test of invention" than that defined in the new patent statute at section 103, and cited the Supreme Court decision of *Jungersen v. Ostby & Barton Co.*⁷¹

The interpretation of the new patent statute by Judge Hand in

art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

65. See note 23 *supra*.

66. *Novelty* as a prerequisite to the patentable invention, "involves presence of some element or the new position of an old element in combination, difference from anything found in any prior structure." *National Slug Rejectors v. A.B.T. Mfg. Corp.*, 164 F.2d 333, 335 (7th Cir. 1947). See generally 35 U.S.C. §102 (1976). The 1952 reviser said of section 103 that, "the section is added to the statute for uniformity and definiteness." 35 U.S.C.A. § 103 note (1970).

67. 224 F.2d 530 (2d Cir. 1955), *cert. denied*, 350 U.S. 911 (1955).

68. 52 U.S. (11 How.) 248 (1850).

69. 35 U.S.C. §103 (1976).

70. 224 F.2d at 534-35 (footnotes omitted).

71. 335 U.S. 560 (1949).

Bausch & Lomb Optical Co. received some endorsement, but was not followed in other jurisdictions. The Court of Appeals for the Eighth Circuit, for example, acknowledged "the more liberal standards announced in the *Bausch & Lomb Optical Co.* case," in *Steffan v. Weber Heating & Sheet Metal Co.*,⁷² but in *Caldwell v. Kirk Manufacturing Co.*,⁷³ called attention to the fact that "[m]ore exacting standards for determining patentable invention have been applied by the courts in recent years than was formerly the case."⁷⁴

Judge Hand again had an opportunity to construe section 103 in *Vacheron & Constantin-Le Coultre Watches, Inc. v. Benrus Watch Co.*⁷⁵ wherein he took a position somewhat reminiscent of the suggestions made earlier by Judge Thurman Arnold before the enactment of the 1953 patent statute.⁷⁶ He indicated in the decision that the validity of a patent cannot be summarily determined merely by a comparison of the prior art with the disclosure of the patent.

[T]he validity of design patents like that of all patents depends upon the general state of the industry involved. The amendment of 1952 § 103, Title 35, —provides that "a patent may not be obtained * * * if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."

. . . [I]t seems to us that it was necessary to adduce the testimony of those so skilled as to whether in their judgment it was the combination of the three elements that constituted the attraction of the watch. Without such testimony we cannot say that the success of the watch was not due to the skill of the patentee in marketing the goods. We must therefore await a trial in which the *conditions of the industry may be explored* before we pass upon the issue of validity.⁷⁷

Because much of the case law was built upon the metaphysical concept of inventive novelty, great uncertainties existed. It is in the nature of technology to develop in incremental steps. Every new invention draws upon what is already known.

Decided in 1950, the *A & P* case was the last major patent decision of the Supreme Court prior to the Patent Act of 1952 which

72. 237 F.2d 601, 604 (8th Cir. 1956).

73. 269 F.2d 506 (8th Cir. 1959).

74. *Id.* at 509.

75. 260 F.2d 637 (2d Cir. 1958).

76. Thurman Arnold, qua Judge Arnold, seemed to suggest at one time that a further extension of the objective test was appropriate for trial court judges, even to the extent of considering the *effect* of a patent grant. Such an approach could conceivably require the study of an industry by non-legal experts to assist the court in making some sort of a determination as to the possible adverse effects produced by the establishment of a monopoly grant in reference to a particular technological advance occurring within that industry. See *Monsanto Chemical Co. v. Coe*, 145 F.2d 18 (D.C. Cir. 1944); *Potts v. Coe*, 140 F.2d 470 (D.C. Cir. 1944).

77. *Vacheron & Constantin-Le Coultre Watches v. Benrus Watch Co.*, 260 F.2d 637, 641 (2d Cir. 1958) (emphasis added).

was signed into law by President Truman and which went into effect in 1953. In 1965, after more than a decade of cases under the new patent statute, the Supreme Court broke its fifteen year silence on patent matters and granted certiorari in a so-called trilogy of cases.⁷⁸ The Court definitively interpreted the meaning and the requirements of the section 103 usage of "obviousness". The Court carefully realigned the precodification authorities behind the ancient and venerable decision of *Hotchkiss v. Greenwood*,⁷⁹ declaring that Congress had intended to set as the test of patentability the requirements of a new difference in kind which could be measured in terms of obviousness to a person of ordinary skill in the pertinent art. The Court directed the manner in which the lower courts were to proceed in conducting their judicial inquiry by stating, in what has probably become the most frequently quoted language ever to appear in the patent jargon:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, longfelt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.⁸⁰

However, the Court resisted any temptation to find the less strict test of invention suggested by Judge Hand. "We believe that this legislative history, as well as other sources, shows that the revision was not intended by Congress to change the general level of patentable invention."⁸¹

Mr. Justice Clark, writing for a virtually unanimous court,⁸² stressed language used by Mr. Justice Douglas in his concurring

78. *Graham v. John Deere Co.*, 383 U.S. 1 (1965). On the same day the Supreme Court decided *United States v. Adams*, 383 U.S. 39 (1965).

79. 52 U.S. (11 How.) 248 (1850). In *Hotchkiss* plaintiff had acquired a patent for the use of clay and porcelain in making knobs for doors and furniture. Plaintiff sued defendant for patent infringement. Before deciding whether the patent had been infringed, the court sought to determine whether the patent was valid. The Supreme Court upheld the lower courts' finding that it was not.

Justice Nelson, writing for the majority, concluded that this substitution of one material for another required only the amount of skill and ingenuity possessed by an ordinary artisan in the particular trade. It was not an invention in that the effect of using clay was not distinguishable from that achieved by using metal or some other material.

80. 383 U.S. 1, at 17-18 (1965).

81. *Id.* at 17, (footnote omitted).

82. Mr. Justice Stewart took no part in the consideration of the *Calmar v.*

opinion in *A & P*: "This is the *standard* expressed in the Constitution and it may not be ignored. And it is in this light that patent validity 'requires reference to a standard written into the Constitution'."⁸³

The decision resulted in the creation of a framework of relative stability. However, this definitive concept of obviousness which appeared following *Graham v. John Deere Co.*, lasted only until the Supreme Court re-introduced a judicial gloss which took the form of the test of synergism. In 1969, the Court decided *Anderson's-Black Rock*,⁸⁴ a case in which the inventor had combined a heater with a paving machine, thereby eliminating the need for a worker to preheat a joint in the pavement. Mr. Justice Douglas speaking for a unanimous court stated: "A combination of elements may result in an effect greater than the sum of the several effects taken separately. No such synergistic result is argued here."⁸⁵ This language was reminiscent of the language that had appeared in the *A & P* case.⁸⁶

A recent Supreme Court decision which added fuel to the fire was *Sakraida v. Ag Pro, Inc.*⁸⁷ The patent involved a cleaning method for flushing manure out of cow barns. The record presented to the Supreme Court depicted a stormy history of review. The district court had originally invalidated the patent on a summary judgment motion. The Fifth Circuit Court of Appeals reversed and remanded for trial. The district court again invalidated the patent. For a second time, the appellate court reversed. The district court granted a third trial on the basis of newly-discovered evidence, and the court of appeals again reversed holding that "the combination of these old elements to produce an abrupt release of water on the barn floor from storage tanks or pools can properly be characterized as synergistic, that is result[ing] in an effect greater than the sum of the several effects taken separately."⁸⁸

The Supreme Court sided with the district court and, harking back to Greek mythology and the diversion of the river Alpheus

Cook and Colgate-Palmolive v. Cook cases. Mr. Justice Fortas took no part in the consideration of any of the three cases. *Id.* at 37.

83. *Id.* at 6. The Court in *Graham* stated optimistically: "[T]he § 103 additional condition, when followed realistically, will permit a more practical test of patentability . . . We believe that strict observance of the requirements laid down here will result in that uniformity and definiteness which Congress called for in the 1952 Act." *Id.* at 17-18.

84. *Anderson's-Black Rock, Inc. v. Pavement Salvange Co., Inc.*, 396 U.S. 57 (1969).

85. *Id.* at 61.

86. See text accompanying note 28 *supra*.

87. 425 U.S. 273 (1976).

88. *Id.* at 282.

by Hercules to flush the Augean stables, held that there was no synergism displayed sufficient to warrant the statutory imprimatur of invention, regardless of the contrary conclusion reached by the court of appeals on the same consideration. "We cannot agree that the combination of these old elements . . . can properly be characterized as synergistic . . . [but] falls under the head of 'the work of the skillful mechanic, not that of the inventor.'"⁸⁹

The idea of infusing synergism with such new vitality has created additional woes to those in the patent profession. Judge William C. Conner for the Southern District of New York, himself a former patent trial lawyer, correctly pointed out that synergism in a mechanical combination is a physical impossibility:

I would not try to interpret the synergism requirement literally, because, I must confess, except in the chemical and pharmaceutical and electrical arts, virtually every invention consists of a combination of old elements and every element, considered individually, performs its customary function in the new combination. A lever always acts like a lever, a resistor always acts like a resistor, and so on; and the overall performance of the combination is always precisely equal to the contributions of the several components, no more, no less.⁹⁰

"[T]he overall performance of the combination is always precisely equal to the sum of the functions of its components. In the real world, two plus two never equals five."⁹¹

Current patent law symposiums suggest with alarm that the Supreme Court has "legislated" a new test which somehow or another transcends the usual statutory tests of novelty, utility and nonobviousness.⁹²

Meanwhile, the United States Patent Office has spurned any use of synergism by the Examining Corps as a test for determining the qualifications for a patent. Donald W. Banner, recently appointed Commissioner of Patents and Trademarks, upon taking office, echoed former Commissioner Dann in saying that he saw no reasons to change the procedures of the United States Patent and Trademark Office in response to the *Sakraida* case.⁹³

89. *Id.*

90. W. Conner, *Trial of Patent Infringement Cases: The Art of Swimming Upstream*, 1977 AM. PAT. L. ASSOC. BULLS. 619, 623 (Speech at Annual Meeting).

91. W. Conner, *Some Highly Personal Reflections on Section 103*, 5 AM. PAT. L. ASSOC. J. 77, 85 (1977).

92. David A. Anderson, *Synergism in the Lower Federal Courts*; Homer J. Schneider, *Nonobviousness, The Supreme Court and the Prospects for a Stable Law*; John Marshall Law School Twenty-Second Annual Conference, *More Developments in Intellectual Property Law* (February 23 and 24, 1978).

93. CHI. PAT. L. A. BULL. (1978). Former Commissioner-Marshall A. Dann in-

Prior to the enactment of the Patent Statute of 1953, the test of invention relied upon a finding of a "flash of genius," and the court decisions indicated a preference for various objective standards. The 1953 Patent Statute substituted the statutory test of "nonobviousness" and the Supreme Court in *Graham v. John Deere Co.* supplied a definitive pattern of inquiry by which reasonable objectivity could be pursued in the interpretation of the statute. In recounting the history of the drafting of section 103, Judge Rich of the Court of Customs and Appeals has said that the key concept behind section 103 was to get away from the troublesome concept of invention and to write the law in terms of the requirements for patentability. "This", he observed, "is the simple idea which many courts and many patent lawyers still have not taken."⁹⁴

Have we once again closed the circle? Does the Supreme Court expect a return to the application of the pre-statute standards around a new magic word? It would appear that this is the case.

The Court of Appeals for the Eighth Circuit, at least, finds no specific magic in synergism:

In the patent law context, "synergism" has no talismanic power; synergism is merely one indication of nonobviousness. What is required, when a synergism analysis is appropriate, is simply a determination that the combination of elements in a patent produces "an effect greater than the sum of the several effects taken separately."⁹⁵

It may be inevitable that the patent bar shall continue to be confronted with Janus approaches—the courts insisting on using a supposedly objective formula which distinguishes inventions from mere improvements, believing that a real difference in kind is conceptually possible; the Patent Office granting patents as if the difference between inventions and mere improvements were one of degree, the degree being considered through the alternative allowance of broad, or highly restrictive claims.

The judiciary espouses objectivity while reacting to a subjective element, pretending to have a formula that is objective and there-

sisted that the Patent and Trademark Office adhere to the statutory nonobviousness standard, despite *Anderson's-Black Rock* and *Sakraida*, 949 O.G. No. 1, p.3 (8-3-76); see also PATENT, TRADEMARK AND COPYRIGHT JOURNAL No. 290, p. A-2 (8-12-76).

94. Rich, *Why and How Section 103 Came To Be*, published in Coursebook, 1977 Patent Law Conference (B.N.A. 1978) at 1:209. Writing of current law, Judge Clark's law clerk in *Graham* has said: "In reading the later cases, I lament along with you the fact that the courts have strayed from the methodology in the *Trilogy* cases. . . . It appears that what has apparently happened is that the search for *mots justes* has been revived. . . ." Reed, *Some Reflections on Graham v. John Deere Co.*, published in Coursebook, 1977 Patent Law conference (B.N.A. 1978) at 2:301, p. 2:307.

95. *Clark Equip. Co. v. Keller*, 570 F.2d 778, 789 (8th Cir. 1978), citing *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 397 U.S. 57, 61 (1960).

fore fair. Yet, as a practical matter, cases are decided according to a subjective standard which is dependent on the personal, social, and economic predilections of the judge.⁹⁶

Perhaps we must assume that invention is indefinable because the concept involves a subjective 'value judgment', or say with Dr. Stringham that "inventive level is one of the law's standards or norms, or values. The subsumption of any given instance must depend on the exercise of human judgment, hunch, value criticisms, gut reaction."⁹⁷

In other words, the concept of "patentability" is a legal fiction and the sophisticated patent attorney would be well advised to realize the limitations attendant upon the employment of such a legal fiction as a tool of the trade. Such a sophisticate must be sensitive to the element of change in the law; he must be versed in the field of economics, and particularly, responsive to the current economic attitudes towards monopolies and monopoly grants; and he must be aware of the influence of the social sciences on the judicial mind lest he tend to discount the importance of social relationships.

IV. THE DILEMMA

The dilemma with which we are faced is manifested by a comparison of the practically unattainable standard of invention established in the theoretical patent system visualized by Mr. Justice Douglas⁹⁸ to the increased bootleg aspect of the patent system as administered by the Patent and Trademark Office which has been utilized by the business community with varying degrees of effectiveness despite restrictive pronouncements by the Supreme Court.

An important consideration in the analysis of this problem is the realization that in recent years the incentive theory has been so greatly emphasized that to many persons it appears to be the sole justification for the patent system. The incentive to invent, if it can be called that, is generated by the prospect of remuneration and business success.

96. *Cf.*, Mr. Justice Jackson in *Jungersen*, 336 U.S. at 572 (Jackson, J., dissenting), "the only patent that is valid is one which this Court has not been able to get its hands on."

97. Stringham, *OUTLINE OF PATENT LAW* 222 (1932).

98. *See* Mr. Justice Douglas' concurring opinion in *Great Atl. & Pac. Tea Co. v. Supermarket Equip. Co.*, 340 U.S. at 154-55 (1950).

The development of engineering technology in the contemporary economy has produced a salaried class of professional inventors, employed by big business, whose sole job it is to conceive inventions. The inventor falling in this category is identified with a technological development as an assignee; his personal contact with the patent system, *per se*, is only vicarious.

The small and mid-size business enterprise, on the other hand, is frequently operated by technically skilled owners or administrators who serve in a dual capacity as inventor and manager. Survival of these business entities depends upon their ability to keep in step with technological improvements.

Another classification of inventor found in the industrial economy includes both the individual inventor, completely independent of manufacturing business entities, and the professional research laboratory technician, the outside inventor. The inventions of an independent inventor or a research laboratory technician are salable commodities. Proper patent protection facilitates identification of the intangibles conceived and sold by this type of inventor. Reasonable anticipation of the issuance of a patent is virtually a prerequisite to the actual marketing of the invention to a prospective purchaser.

The issuance of a patent is, of course, looked upon by entrepreneurs as a convenient device to aid in financing developments, recouping investments, recovering research costs, depreciating for tax purposes, et al. In this sense, the incentive theory is important. It appears, however, that the underlying demand in the business community is for a legal framework of protection for "discoveries" made by a business enterprise against what has been loosely and inaccurately termed "unfair competition."

More specifically, entrepreneurs at all levels of business endeavor demand protection of their original discoveries against fraud, piracy and stealing; in other words, against "technological plagiarism." They seek to prevent their competitors from copying with impunity the technological developments for which they are responsible, whether those developments represent a flash of creative genius or merely a display of industrial artistry or "technical know-how."

The tendency of the Patent and Trademark Office to issue formal Letters Patent upon detection of a difference in degree has been favorably exploited by contemporary businessmen to obtain protection against fraud, piracy and stealing in diverse fields of competitive endeavor.⁹⁹ In this regard, it appears that the action

99. Of all patents granted in the United States only a very small percentage (less than 2%) are ever litigated. Thousands of successful business deals are

of the Patent and Trademark Office is a response to a genuine need heretofore unacknowledged by adequate legislation. This need has been responded to by the Patent Office in the only available manner, namely, lowering the standard of patentability required to support the formal allowance of a patent grant.¹⁰⁰

Critics of the patent system have strongly emphasized that the unscrupulous monopolist benefits unreasonably from the promiscuous issuance of patents since flimsy patents are used to coerce and obstruct the efforts of an honest competitor attempting to gain entry into an industry. It appears that "patent expense" is a necessary expense of doing business in some lines of endeavor. In many instances the so-called flimsy patent is obtained as a defensive measure to obtain whatever slight degree of protection might be available in preventing competitors from copying with impunity, the commercial designs of others.

Neither the admonitions of the Supreme Court nor the 1953 Patent Statute have had a profound effect in successfully raising and maintaining the standard of invention throughout the entire examining corps of the Patent Office. Generally, the momentum of business activity in which the Patent Office finds itself is far removed from the high level of constitutional abstraction established by the Supreme Court. The difficulties encountered by the Patent Office Examiner, in measuring the quantum of a specific technological advance, are conveniently and easily resolved merely by acceding to the persistent patent applicant or his patent lawyer and by consigning the issued patent to the "inexorable tribunal," the competitive market. In a sense, this is a free enterprise solution of a monopoly determination problem.¹⁰¹

based on patent applications and patents which have never come before the courts.

100. It has always been held that the issuance of a patent by the Patent and Trademark Office as an administrative agent of the United States, will carry a presumption of validity. It is uncontrovertible that this presumption is now weak in comparison to the findings of other administrative bodies. Because there have been a number of foolish and unfounded grants in the past, well-founded judicial theory will find some patents so clearly void that a mere reading thereof requires, as a matter of law, a judicial declaration of invalidity. See Judge Chambers' opinion in *Syracuse v. Paris*, 9 Cir., 234 F.2d 65 (9th Cir. 1956). Such letters are vulgarly dubbed "zombies" or "scarecrows." *Hansen v. Safeway Stores, Inc.*, 238 F.2d 336, 339 (9th Cir. 1956).

101. An attitude towards interviews between Patent Office Examiners and attorneys, different than that expressed in *Gelardin v. Revlon Products Corp.*, 164 F.2d 910, 913 (2d Cir. 1948), see note 16 *supra*, is illustrated by the decision in *Application of Willingham*, 282 F.2d 353, 356 (C.C.P.A. 1960):

The federal district courts are in more intimate contact with the business world which demands protection for its discoveries against fraud, piracy and stealing, and particularly with the businessmen that use the patent system to obtain such protection. A district court decision distinguishing the *A & P* case is typical of the circumvention of the attempts of Mr. Justice Douglas and Mr. Justice Black to raise the standard of invention:

The Schreyer patent would seem to survive these rigorous standards [the standards of the *A & P* case]; the combination of elements familiar to the steam iron industry constitutes contribution to the art. The old elements in combination fulfill new functions; the hinged handle, for instance, acts as a mount for the closure device and the closure mounted thereon serves as a safety valve. In no sense could the elements, united as they are here be classed as "what already is known."¹⁰²

Appellate decisions following in the wake of *Sakraida* indicate, however, that on the appellate level, the doctrinaire approach of the United States Supreme Court has been taken quite seriously. In the First Circuit,¹⁰³ the court sustained district court findings which "established a sufficient 'synergistic' effect . . . to cross the legal borderline. . . ."¹⁰⁴

In the Second Circuit,¹⁰⁵ the court saw *Sakraida* as having "laid to rest" the "theory that [objective] 'secondary' considerations must be given weight before a determination of obviousness can be made."¹⁰⁶ A different panel of the same court split two-to-one in holding a patent valid where the inventor revealed "a flash of brilliance . . . by departing from the norm" having produced an "unobtainable result," and distinguishing *Sakraida*.¹⁰⁷

The Third Circuit,¹⁰⁸ in a split decision, reversed a district court stating, "we cannot agree that the district court's findings reveal any more of a synergistic effect than [*Sakraida*]."¹⁰⁹ In the Fifth

We think it proper to take judicial notice of the fact that such interviews are common and usually are conducted in the spirit of a free and open discussion as to the merits of the invention, the pertinency of the prior art and the allowability of claims. We feel certain that the interview referred to in the amendment of February 10, 1954, in the original application must have been of this type and that appellant's attorneys must as a result of the interview have been very confident of the competency of the examiner to have permitted him to use his "discretion" in deleting claim 12 and substituting claim 15 therefor.

102. *Schreyer v. Casco Prods. Corp.*, 97 F. Supp. 159, 164 (D. Conn. 1951).

103. *International Tel. & Tel. Corp. v. Raychem Corp.*, 538 F.2d 453 (1st Cir. 1976).

104. *Id.* at 457 (citing *Sakraida*).

105. *Digitronics Corp. v. New York Racing Ass'n., Inc.*, 553 F.2d 740 (2d Cir. 1977).

106. *Id.* at 748.

107. *U.S. Philips Corp. v. National Micronetics, Inc.*, 550 F.2d 716, 723 (2d Cir. 1977).

108. *Systematic Tool & Mach. Co. v. Walter Kidde & Co.*, 555 F.2d 342 (3d Cir. 1977).

109. *Id.* at 350.

Circuit,¹¹⁰ the court agreed with the district court's invalidity holding finding "no synergistic interplay."¹¹¹ In the Sixth Circuit,¹¹² the court characterized the "concept of synergistic result" as having "evolved to determine what constitutes the 'key requirement,' of patentability."¹¹³

The Seventh Circuit initially reacted conservatively by viewing *Sakraida* as being merely a reaffirmation of *Graham v. John Deere Co.*¹¹⁴ However, in *St. Regis Paper Co. v. Bemis Co.*,¹¹⁵ a split panel reversed a district court holding of validity, supported in full by *Graham v. John Deere Co.* findings, on the ground that: "Unless the combination is 'synergistic . . . ,' it cannot be patented."¹¹⁶

The Ninth Circuit reversed a district court and invalidated a patent without relying significantly on *Sakraida*.¹¹⁷ The Tenth Circuit, in *Rutter v. Williams*,¹¹⁸ invalidated a patent and reversed a district court, but cited *Sakraida* only as authority for the lack of a new or different function in the combination.¹¹⁹

At the Third Annual Judicial Conference of the Court of Customs and Patent Appeals, one of the speakers reminded those in attendance that the CCPA had at least impliedly endorsed *Sakraida* in *Application of Castner*.¹²⁰

Finally, in *Roanwell Corp. v. Plantronics, Inc.*,¹²¹ Mr. Justice White and Mr. Justice Brennan dissenting in the denial of a writ of certiorari to the Second Circuit noted specifically, "The District Court here made no finding that the combination produced a synergistic or any other nonobvious result."¹²²

110. *Fred Whitaker Co. v. E.T. Barwick Indus., Inc.*, 551 F.2d 622 (5th Cir. 1977).

111. *Id.* at 631.

112. *Reynolds Metals Co. v. Acorn Bldg. Components, Inc.*, 548 F.2d 155 (6th Cir. 1977).

113. *Id.* at 161 (quoting *Philips Indus., Inc. v. State Stove Mfg. Co.*, 522 F.2d 1137, 1141 (6th Cir. 1975)).

114. *Pederson v. Stewart-Warner Corp.*, 536 F.2d 1179, 1180 (7th Cir. 1976).

115. 549 F.2d 833 (7th Cir. 1977).

116. *Id.* at 838. In *Scholl Inc. v. S.S. Kresge Company*, 580 F.2d 244 (7th Cir. 1978), the court omitted mention of *Graham* and *Sakraida* and returned to a pre-statute invention test as a criterion for obviousness.

117. *Kamei-Autokomfort v. Eurasian Automotive Prods.*, 553 F.2d 603 (9th Cir. 1977).

118. 541 F.2d 878 (10th Cir. 1976).

119. *Id.* at 881.

120. 518 F.2d 1234 (C.C.P.A. 1975).

121. 429 U.S. 1604 (1977).

122. *Id.* at 1666 (White, J., dissenting).

Based on the general reactions noted, it would appear that any litigious minded defendant sufficiently well endowed to finance a lawsuit through the trial and appellate states, significantly increases the odds of obtaining the invalidation of a contested, but meritorious patent application. Chief Judge Markey noted “[i]t is not uncommon for an infringer-contemnor to wrap itself in the mantle of public defender against ‘monopoly,’ in reliance on an unthinking monopolophobia it mistakingly hopes to find in the courts.”¹²³ On a moral plane, it is easy to agree with Mr. Justice Black that fraud is bad, piracy is evil and stealing is reprehensible. Thus, where the patent system fails to afford protection against technological plagiarism, the entrepreneur has few avenues of available relief.

A. *The Mutual Exclusion Doctrine*

The doctrine of mutual exclusion prevents recourse to the Copyright Statute.¹²⁴ In the case of *Taylor Instrument Cos. v. Fawley-Brost Co.*,¹²⁵ a manufacturer of patented temperature recording machinery attempted to invoke the law of copyright to protect the sale of charts used on the recording machinery. The Seventh Circuit Court of Appeals held that such a chart was not subject to copyright protection and held crucial the distinction between an object of explanation and an object of use. The court held that “objects of explanation” are subject to copyright protection and “objects of use,” must be safeguarded, if at all, by Letters Patent.¹²⁶

The Seventh Circuit Court of Appeals subsequently had an additional opportunity to consider another, closer case involving a sculptural lamp base.¹²⁷ The originator of the lamp base attempted to obtain copyright protection for two statuettes of Balinese dancers which were manufactured and sold with lamp sockets attached for use as desk lamps. The plaintiff’s claim of copyright was based on the theory that the statuettes constituted three dimensional works of art as currently classified under section 5(g) of the Copyright Code.¹²⁸ It was not disputed that the defendant had placed an identical product on the market.

123. *Panduit Corp. v. Stahlin Bros. Fiber Works*, 575 F.2d 1152, 1160 n.8 (6th Cir. 1978).

124. “Literary property in a book cannot be protected . . . otherwise than by copyright; and an exclusive right to an invention . . . cannot be secured by copyright, but only by a patent.” 18 AM. JUR. 2d, *Copyright and Literary Property* §20 (1965) (footnotes omitted).

125. 139 F.2d 98 (7th Cir. 1943).

126. *Id.* at 100.

127. *Stein v. Expert Lamp Co.*, 188 F.2d 611 (7th Cir. 1951).

128. 17 U.S.C. §5(g) (1976). *Stein* was based on the predecessor statute.

The trial judge held that the plaintiff's submission of the statuettes with sockets to the copyright office was evidence of the intended practical use and that the plaintiff could not find protection under the Copyright Statute. The complaint was dismissed inasmuch as it related to alleged copyright infringement. The Seventh Circuit Court of Appeals affirmed this order, citing *Baker v. Seldon*.¹²⁹ Parallel cases in other circuits by the same litigants ultimately resulted in a decision by the United States Supreme Court in favor of the copyright registrant.¹³⁰

Other courts, attempting to protect meritorious technological improvements against plagiarism, have reached a point of resignation. For example, in *Merit Manufacturing Co. v. Hero Manufacturing Co., Inc.*,¹³¹ a lower court affirmed a judgment invalidating a patent relating to a bobbin used in the textile industry. The device had enjoyed an amazing success, with sales of 7 million in six years totaling \$745,000.00.

In affirming the decision invalidating the patent, Judge Learned Hand, speaking for the Second Circuit Court of Appeals, stated:

It is, however, a complete answer that no change of structure was in fact necessary, because no new use of an old device will ever support a patent. That is not to say that the grant of a patent for a new use would be beyond the scope of the constitutional powers of Congress, which extend to "discoveries"; it follows from the fact that Congress has been content since the beginning to limit the exercise of its powers to an "art, machine, manufacture, or composition of matter." This has been so often decided, and we have ourselves too often discussed it, that we need do no more than cite the decisions.

.....

. . . . In obedience to the artificial limits with which the statute puts upon invention, we must charge Gomberg with an acquaintance with Toegel's "reel," including the use for which it was designed; so that the only remaining question is as to the changes he made. . . . Perhaps it would be desirable that an inventor should not be charged with acquaintance with all that the Patent Offices of this and every other country contain, and with all that has ever been publicly sold or used in the United States; although in that event it would be an inevitable corollary that infringements should be limited to plagiarisms. With such consideration we have nothing to do; as the law stands, the inventor must accept the position of a mythically omniscient worker in his chosen field. As the arts proliferate with prodigious fecundity, his lot is an increasingly hard one.¹³²

129. 101 U.S. 99 (1879).

130. *Mazer v. Stein*, 347 U.S. 201 (1954). The narrow issue presented turned on whether a projecting lamp stub rendered a utilitarian nature to the artistic work. The Court held it did not.

131. 185 F.2d 350 (2d Cir. 1950).

132. *Id.* at 351-52 (footnote omitted, emphasis added).

In *Frank B. Killian & Co. v. Allied Latex Corp.*,¹³³ Judge Learned Hand, again stated:

Killian is entitled to whatever merit is due to the first person who satisfies a long existing need. Moreover, presumably, he designed his machine from the ground up and without suggestion or cue; and we may well agree that, taken as a feat, that displayed enough originality to support a patent. However, as we have just said in disposing of the "Bead-Rolling Patent," the law does not use such a subjective test in judging a patent; on the contrary, it imputes to the inventor an *omniscience which will again and again deprive him of the reward that his talents as an individual might otherwise deserve. That is a corollary of a monopoly*, not limited to plagiarists.

. . . .

As we have said, the inventor must justify his contribution against all that has gone before, known and unknown. Yet when he seeks to use the arts failure to anticipate him as evidence of his own perspicacity, he must appraise the art's ineptitude by the art's actual knowledge; he may not impute to it in acquaintance with any part of what went before of which it was not aware. It may result that he will benefit the art by a discovery of what it had practically never possessed or had possessed and lost. But there is no room for "lost arts" in the case of inventions, "described in printed publications in this or any foreign country"; the statute is plain and inexorable.¹³⁴

B. *Nonobviousness as a Test of Patentability*

In more recent cases, some courts have been persuaded to articulate a public abhorrence of plagiarism in terms of a relationship to the concept of nonobviousness. For example, in the decision of the Seventh Circuit Court of Appeals in *Copease Manufacturing Co. v. American Photocopy Equipment Co.*,¹³⁵ the court stated: "in the case at bar there is significant support of the view that the Eisbein invention was not obvious, in the fact that defendants purchased and copied the machines of the patentee and one of his licensees."¹³⁶

Even the Supreme Court recognized that the Constitution, article I, section 8, and federal statute,¹³⁷ forbid copying of subject matter which is disclosed and claimed in a valid United States Letters Patent. Selling an article which is an exact copy of another patented article is likely to produce confusion as the source of the article.¹³⁸

The inferences that may be drawn from copying . . . are two-fold. *First*, copying suggests that there was a significant innovation in the invention which has been patented. *Second*, it suggests that the invention is significantly useful so that competitors must react in some way if they are to re-

133. 188 F.2d 940 (2d Cir. 1951).

134. *Id.* at 943-44 (emphasis added).

135. 298 F.2d 772 (7th Cir. 1961).

136. *Id.* at 781.

137. 35 U.S.C. §§1-256 (1954).

138. See *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234 (1964); *Sears Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225 (1964).

main in business. While neither of these inferences can be considered in connection with the *threshold question of obviousness*, they are significant *secondary indicators* and are relevant to a finding of *nonobviousness*.¹³⁹

It appears that there is little hope for substantive change under the 1953 Patent Statute. The Statute fails to deal effectively with the dilemma resulting from inadequate legislative protection against technological plagiarism of worthwhile discoveries. It deals primarily with the symptoms manifesting the differences between the outlook shared by the patent bar, the Patent and Trademark Office, and members of the industrial economy on the one hand and the Supreme Court on the other, but fails to effect any cure of the disease which gives rise to the symptoms.

"Nonobviousness" appears to be the obverse of the "flash of genius" particularly if measured in terms of "synergism." Either expression implies measurement of the quantum of invention, a test which ultimately hinges on subjective standards.

If we recognize that the concept of "patentability" is a useful legal fiction analagous to such other legal fictions as "negligence" and "due care," etc., its use as a tool in the law of patents will accommodate limitations while reflecting the element of change with the law. The concept, as such, enjoys a stability which is not affected by legislative tinkering.

Accordingly, a sophisticated court responsive to attitudes toward monopolies and monopoly grants, particularly in an era of collectivism, will not blindly choose to be shackled by innocuous terminology. With the refuge of subjectivism so convenient in the test of "nonobviousness," any patent definition of a low caliber invention will be in danger of eventual invalidation under the pressures of rough justice and practical politics.

It is unlikely that an attempted expansion of the patent laws or the copyright laws by judicial interpretation will ever receive the approval of the Supreme Court even though such enlargement would protect deserving novel and useful technological development which fulfill the constitutional objective by promoting the progress of science and the useful arts.

In *Parker v. Flook*,¹⁴⁰ the Supreme Court by six-to-three majority held that a process wherein the only novel feature was a math-

139. *Systematic Tool & Mach. Co. v. Walter Kidde & Co.*, 390 F. Supp. 178, 194 (E.D. Pa. 1975), *rev'd* 555 F.2d 342 (3d Cir. 1977). *Cf.*, R. Robbins, *Subtests of "Non-Obviousness" A Non-Technical Approach to Patent Validity*, 112 U. PA. L. REV. 1169, 1178-80 (1964).

140. 98 S. Ct. 2522 (1978).

emational formula was not eligible for patent protection. Significantly, the majority of the Court underscored the limited scope of its decision, stating, “[N]either the dearth of precedent, nor this decision, should therefore be interpreted as reflecting a judgment that a patent protection of certain novel and useful computer programs will not promote the progress of science and the useful arts, or that such protection is undesirable as a matter of policy.”¹⁴¹ The decision emphasized that the courts must proceed cautiously when asked to extend patent rights, and presumably to extend copyright rights as well: “Difficult questions of policy concerning the kinds of programs that may be appropriate for patent protection and the form and duration of such protection can be answered by the Congress on the basis of current empirical data not equally available to this tribunal.”¹⁴² In a footnote, the Court observed that even among those who favor patentability of computer programs, the seventeen-year protection of the current Patent Act is questioned as needed or appropriate.¹⁴³

V. PROPOSAL: A LEGISLATIVE COMPROMISE

To effectively resolve, by way of legislative compromise, the difficulties inherent in recognizing the need of fairness and justice in dealing with the pressures and forces of our competitive economy, as acknowledged, alternatively by the Patent Office and the aspirations of the Supreme Court, the existing framework of legislation should be augmented to afford protection to technological developments contemporarily classified as unpatentable inventions or uncopyrightable subject matter.

For example, upon obtaining due proceeding in the Patent Office in connection with the prosecution of the usual patent application, the examining corps of the Patent Office should be authorized to recommend the issuance of a “technological copyright.” This “technological copyright” should be made available where the patent application does not represent a sufficient advancement of the prior art to warrant the grant of formal letters patent and the attendant seventeen-year exclusionary privilege.¹⁴⁴ Procedurally, such a grant should be based on the same

141. *Id.* at 2528.

142. *Id.* (footnote omitted).

143. *Id.* n.19.

144. A discovery lacking novelty, i.e. an application rejectable under 35 U.S.C. §102 (1954), would not be eligible for any protection. However, computer software could be made eligible for protection under the theory of “technological copyright” in complete harmony with the philosophy of the Supreme Court expressed in *Flook*.

full disclosure required of current patent applications, but restricted by a single caveat stating that the protection afforded by a single claim is limited in scope to "[t]he technological developments substantially as shown and described."

The legal rights granted under legislation should be similar to those already enumerated in the well articulated body of case law developed relating to the copyright statute. In this regard, the recognized doctrines of dedication, of access, and of substantial duplication could be effectively utilized.¹⁴⁵

"Dedication,"¹⁴⁶ for example, would occur if the "technological copyright" did not issue within "X" years after filing of the patent application. This provision would give an incentive to prompt publication and thereby reduce the backlog of applications in the

The National Commission on New Technological Uses of Copyrighted Works has recommended protection of computer programs with a copyright by statutory amendment. NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT, 2 (1978). A general discussion of the scope of copyright laws protection and resolutions considered by the A.B.A. for changes in the copyright law are found in [1971-1975] A.B.A. SEC. PAT., T.M., COPYRIGHT L. PROC. 87-90 (1974); *Id.* 129-34 (1975). See also related 1974 and 1975 Committed Reports of Section of Patent, Trademark, and Copyright Law.

145. There was an effort made during the recent legislative negotiation to extend the new Copyright Law to protect the appearance of useful articles. Title II of the Senate bill proposed to establish a new form of protection of "original ornamental designs of useful articles." The title which consisted of thirty-five sections, offered a limited short-term form of protection for designs. That protection was based on copyright principles but was provided separately from the Copyright Law itself.

The House amendment deleted Title II of the bill entirely, together with two subsections of section 113 dealing with the interrelationship between Titles I and II. It revised the definition of "pictorial, graphic, and sculptural works" in section 101 to clarify the distinction between works of applied art subject to protection under the bill and industrial designs not subject to copyright protection.

The Conference Committee adopted the House amendments. See H.R. REP. NO. 94-1476, 94th Cong., 2d Sess. 105 (1976) reprinted in [1976] U.S. CODE CONG. & AD. NEWS 5659. More specifically, under the bill, section 201 of proposed Title II contemplated 5 year protection, renewable for 5 additional years, beginning with the date of first publishing a design, for a useful article having features of two or three dimensions which make an article attractive or distinct in appearance. So far as determinable, Title II was ultimately stricken from the bill for no reported reason other than that the legislators lacked the time and the inclination to hold further hearings.

146. The copyright concept of dedication is that "once a work is published without obtaining a copyright, it is dedicated to the public and may be republished by others in any way they may see fit . . ." 18 AM. JUR. 2d *Copyright and Literary Property* §84 (1965).

Here the concept of dedication would be that if the applicant did not prosecute his application seasonably his work would be dedicated and opened to the general public.

Patent and Trademark Office resulting from administrative appeals or other prolongations of the patent application procedure.

Evidence of "access"¹⁴⁷ would be necessary to prove infringement of a "technological copyright." Stated affirmatively, independent development would be a defense to a charge of infringement. Since the purpose of the legislation would be to protect discoveries against fraud, piracy and stealing, this characteristic would serve to protect the honest inventor.

"Substantial duplication" is another doctrine found in the substantive law of copyrights and design patents which excuses minor similarities.¹⁴⁸ A so-called technological copyright would not be infringed upon unless the act of infringement had the earmarks of "access" coupled with substantial duplication.¹⁴⁹

Each of these concepts are generally understood by members of the legal profession and would minimize the difficulty and unfamiliarity encountered with the administration of a new body of law.

It would further appear that the procedural mechanics of a technological copyright provision could be administered by the Patent Office within the reference framework now existing. This would preclude the necessity of establishing any new bureaus or administrative agencies.

As a practical matter, it is believed the examining corps of the Patent Office would be greatly encouraged to raise the standard of invention necessary to qualify for a full-fledged patent since the various examining divisions could examine and issue technological copyrights under the current classification system. It is assumed that many patent disclosures of the type regularly rejected by the Supreme Court would thus be given a protected status as technological copyrights, a device which would be highly beneficial to the industrial economy¹⁵⁰ and would promote the constitutional objective.

It would be necessary to distinguish the technological copyright from the "non-utilitarian copyright" for purposes of enforcement. In this regard, an effective limitation similar to that imposed on the issuance of a design patent could be employed allowing a se-

147. Access is merely physical availability of the copied material to the copier.

148. "The appropriation must be of a 'substantial' or 'material' part of the protected work." 18 AM. JUR. 2d *Copyright and Literary Property* §108 (1965) (footnote omitted).

149. There is no apparent need for application of the patent law doctrine of equivalents as contrasted with the copyright law doctrine of substantial duplication. Cf. *Graver Tank* cases, note 43 *supra*.

150. "On May 9, 1978, President Carter directed that an Industrial Innovation Coordinating Committee . . . develop . . . a set of policy options to address issues and problems bearing on industrial innovation." 43 Fed. Reg. 24,116 (1978).

lected term of 3 1/2, 7 or 14 years, depending on the payment of an increased fee to the government.

There are many substantial advantages to the incorporation of a technological copyright into our present patent system. The establishment of a system of technological copyrights would, for example, promote the progress of the sciences because a more complete reference library would be available in the Patent and Trademark Office. This library would include the abandoned patent applications, which are now maintained in secrecy unless voluntarily published by the applicant. The issuance of technological copyrights would go far towards overcoming this deficiency in our present patent system¹⁵¹ with a much faster turnover rate because of earlier dedication.

The legislative establishment of a technological copyright would also serve to clarify the nebulous body of common law doctrine relating to confidential disclosures and trade secrets.

The independent engineer or small businessman dealing with a large business entity as a supplier is an economic phenomenon occurring with increasing regularity. If the advantages of a technological copyright were made available to such an entrepreneur he would be afforded the opportunity to safely bargain, sell and protect the type of meritorious technological developments and discoveries which are presently unpatentable and uncopyrightable, but which involve burdensome engineering, development, and production expenditures.

The common law doctrine currently available to practitioners protecting creativity embodies a hodgepodge of legal reasoning frequently couched in terms of property rights, quasi-contract or quantum meruit, breach of contract, and trade secrets. The courts have struggled with the distortions of these established legal categories appearing in various branches of substantive law in an attempt to safeguard the entrepreneur against fraud, piracy and stealing, largely because of the void between the availability of valid patent and copyright protection.

The Supreme Court has withdrawn the lower courts' power to preempt the federal patent and copyright laws by granting protection to newly discovered improvements under state unfair com-

151. The Patent Office practice of publishing disclosure by way of a defensive publication has not proved to be a particularly popular device. No official statistics are currently available.

petition legislation.¹⁵² Thus, the technological copyright would serve as a federal codification of the principle that those who copy with impunity should not be rewarded by society at large, a moral principle that appears to have a sound ground in our folklore.

The United States Patent and Trademark Office has warned of the burgeoning problems of information storage and retrieval it confronts. In a vast reorganization move estimated to have cost \$250,000, the Patent Office administration, in 1962-63, undertook to regroup the Examining Divisions to more realistically classify the arts, and to streamline the examining procedure. However, the reclassification has not materially improved the record of "disposals" (applications processed to issue or final termination).

Although the technological copyright approach discussed above would assist the Patent and Trademark Office in the administration of an improved standard of patentability, it would not relieve the Patent and Trademark Office of its growing problems respecting the search for novelty. Most applicants would probably file an application on the basis of a request for a formal patent. Failing in that request, they could then petition to transfer the application to the status for registration of a claim to technological copyright. In the alternative, the structure of the system adopted could be similar to that adopted and currently used by the Netherlands, France, Japan, Australia, Brazil and Germany.¹⁵³ Each of these countries utilizes a deferred examination concept and awards "petty patents" under various names.

In France, a patent applicant must request an examination and pay a substantial examination fee within two years of the filing of his patent application. If no such request is made, the patent application becomes a "certificate of utility" for a period of six years from the date of filing. Chemical compositions are not eligible.

In Japan, a patent application may be converted into a "utility model," even after an examination has resulted in the denial of a request for a Japanese patent. A life period of a "utility model" is

152. *Compco Corp.*, 376 U.S. 234 (1964); *Sears Roebuck & Co.*, 376 U.S. 225 (1964).

153. For discussions on German and Japanese patent law see generally Graettinger, *Some Practical Aspects of (West) German Patent Practice*, 54 J. PAT. OFF. SOC'Y 322 (1972); Hagen, *Scope of Protection of a German Patent*, 55 J. PAT. OFF. SOC'Y 401 (1973); Lynfield, *German Utility Models*, 47 J. PAT. OFF. SOC'Y 374 (1965); Muller, *German Patent Law*, 59 J. PAT. OFF. SOC'Y 89 (1977); Sharp, *Japanese Patent Practice and the Impact Thereof upon American Commerce*, 55 J. PAT. OFF. SOC'Y 712 (1973); Tanabe & Wegner, *Japanese Patent Law*, (Pts. 1-4) 58 J. PAT. OFF. SOC'Y 565, 647, 703, 768 (1976); *Petty Patents in the Federal Republic of Germany: a Solution to the Problem of Computer Software Protection?* 8 SW.U.L. REV. 888 (1976).

ten years from the date of publication. Again, chemical compositions are not eligible.

In Germany, a patent applicant may file with his regular patent application an auxiliary *Gebrauchmuster*. If an infringer appears while the regular patent application is being prosecuted before the German Patent Office, the auxiliary *Gebrauchmuster* can be issued immediately to serve as the basis of an infringement action. The life of the *Gebrauchmuster* is five years.

Under the deferred examination approach, the order of procedure would be reversed. Patent applications would be examined initially only for matters of form, whereupon the disclosure would be promptly published and registered. Prompt publication is a *sine qua non*. During this period of registration, the registrant would be entitled to the protection of a technological copyright for either a fixed prescribed term, or until issuance of formal letters patent based on the same disclosure.

Upon filing an appropriate petition and paying additional fees more nearly commensurate with the cost involved, the petitioner could then request a search for novelty and issuance of formal letters patent for the remainder of an extended term.

Meanwhile, the disclosure having been published, the various market factors in the free enterprise system would assist the Examiners of the United States Patent and Trademark Office in searching for and locating the most pertinent prior art. Thus, by the time a judgment was made regarding patentability or "nonobviousness," the Patent Office Examiners would be able to afford the applicant the virtual equivalent of an *inter partes* consideration.

That alternative appears to be particularly consonant with the principles of free enterprise inasmuch as it shifts the cost of searching directly onto the parties affected without unnecessarily raising the cost of entering a new business and without necessitating an increase in the size or cost of the affected government agency.

It has been more than twenty-five years since there has been any major patent legislation, a quarter century marked by a general disenchantment with the patent system on the part of Ameri-

can industry.¹⁵⁴ It is incumbent upon the bar to provide the leadership and proposals necessary to revitalize the system.

154. In 1977, of 109,773 patent applications filed in the United States Patent & Trademark Office, 39,663 were filed by foreign citizens. [1977] COMM. OF PAT. AND T.M. ANN. REP.