THE NEW UNITED STATES PATENT ACT IN THE LIGHT OF COMPARATIVE LAW I

Stefan A. Riesenfeld

GENESIS AND GENERAL CHARACTER OF THE PATENT LAW REVISION

On January 1, 1953 the New Patent Act of the United States went into effect. The recent first anniversary of this legislation thus makes it appropriate to reassess its principal accomplishments and make a first attempt at taking stock of unfulfilled expectations and first signs of defects.

The enactment of the new statute constituted the culmination of protracted efforts towards a revision and recodification of the patent law, a movement which had come into existence at the beginning of the Thirties, if not before, and entered into an acute stage in the year

---

*This is the first of two articles dealing with the new Patent Act. In a subsequent article Mr. Riesenfeld will discuss the changes in patent procedure before the Patent Office and in the courts. Ed.

† LL.B., University of California, S.J.D., Harvard University; Professor of Law, University of California; Author of THE LAW OF MUTUAL INSURANCE COMPANIES (in German 1933), PROTECTION OF COASTAL FISHERIES UNDER INTERNATIONAL LAW (1942), MODERN SOCIAL LEGISLATION (1951).


2. Of course it is impossible to ascribe a definite date of origin to the demands for a revision which were voiced by various groups of both industry and the legal profession. But it may be mentioned that as early as 1932 the Committee on Patents of the House of Representatives held hearings on a general patent law revision, Hearings before Committee on Patents, House of Representatives, on General Revision of Patent Laws, 72d Cong., 1st Sess. (1932). Further impetus was given to the movement for a modernization of the patent laws by the Roosevelt Administration. The Temporary National Emergency Committee, which was established in 1938 to study economic concentration in the United States, drew the patent system into the ambit of its investigations and, among other activities in that respect, caused Professor Hamilton to produce a study which was subsequently published. HAMILTON, PATENTS AND FREE ENTERPRISE (TNEC Monograph 31, 1941). In 1941, President Roosevelt, by Executive Order No. 8977, 3 CODE FED. REGS. 316 (Supp. 1941),
1949. The new code represents the fifth codification of the American patent law which commenced with the Patent Act of April 10, 1790. This statute, which predicated the grant of a patent upon an examination by a special board as to the usefulness and importance of the invention and thus was a forerunner of the modern system, had only a short-lived existence. It was superseded by another patent act of 1793 which adhered to the so-called "registration principle." The next general patent law revision took place in 1836. The statute of that year re-established the examination principle and, generally speaking, originated the system presently in operation. The act remained in force until a complete revision was enacted in 1870. When in 1874 the federal laws were subjected to a general revision and consolidation, the patent law was included in the new statute book without established the National Patent Planning Committee consisting of five members with the task of conducting a comprehensive survey and study of the American patent system. In execution of this charge, the committee published three reports on fundamental problems of its field of inquiry. The American Patent System, H.R. Misc. Doc. No. 239, 78th Cong., 1st Sess. (1943); Government-Owned Patents on Inventions of Government Employees and Contractors, H.R. Doc. Misc. No. 22, 79th Cong., 1st Sess. (1945); Third Report on the American Patent System, H.R. Doc. Misc. No. 283, 79th Cong., 1st Sess. (1945). However, the creation of a new committee by the Secretary of Commerce, following a directive of the President, issued in April, 1945, terminated the work of the commission, before its final completion.

3. In that year it was suggested that, since the Committee on the Judiciary, House of Representatives, had jurisdiction over both the revision of laws and the subject of patents and had entrusted the discharge of these functions to the same subcommittee, the committee should undertake the preparation of a bill to revise the patent laws. The committee took up this suggestion and prepared, and published early in 1950, a preliminary draft of a "Proposed Revision and Amendment of the Patent Laws" (1950). After the receipt of comments and criticisms from interested groups and agencies a bill to revise and codify the patent laws was drafted and introduced in Congress during the summer of 1950. H.R. 9133, 81st Cong., 2d Sess. (1950). After the solicitation of further comments a revised bill was reintroduced in the following year. H.R. 3760, 82nd Cong., 1st Sess. (1951). The subcommittee in charge of the matter held extensive hearings on the bill during June, 1951. Hearings before Subcommittee No. 3 of the Committee on the Judiciary on H.R. 3760, 82d Cong., 1st Sess. (1951). As a result of these hearings the bill was again modified and introduced. H.R. 7794, 82d Cong., 2d Sess. (1952). This bill was passed by the Congress as Pub. L. No. 593, 82d Cong., 2d Sess. (July 19, 1952). See the legislative history outlined in H.R. REP. No. 1979, 82d Cong., 2d Sess. (1952). The House Report in toto with some slight changes in the introduction, SEN. REP. No. 1923, 82d Cong., 2d Sess. (1952).

4. 1 STAT. 109 (1790).


6. 1 STAT. 318 (1793).

7. 5 STAT. 117 (1836).


9. 16 STAT. 198 (1870).

10. REV. STAT. (1875).
changes, although it was distributed over several chapters. In the course of time advances in technology necessitated a multitude of amendments and additions which gradually rendered the law cumbersome and in some ways inconsistent. The revisions and codification of 1952, therefore, satisfied a strongly felt need.

The American patent law reform of 1952 is the third of the recent four great patent law revisions in the Anglo-American legal systems. In 1949, the United Kingdom completed its revision which had commenced shortly before the end of the Second World War. The new South African Act to consolidate and amend the law relating to patents was signed in 1952, a few weeks prior to the approval of the American statute. In the same year, shortly after the United States completed its new code, Australia finished her revision which had been initiated in the middle Thirties. As might perhaps have been expected, the reforms in the United States, as well as those in the United Kingdom and Australia, introduced no revolutionary changes; although they took account of certain modern trends and made numerous and, in some instances, far reaching amendments. They remained considerably less radical than the socialistic arrangements established in the U.S.S.R., Czechoslovakia, and the so-called German Democratic Republic. It must be admitted, however, that the reforms in

12. U.K. Patents Act, 1949, 12, 13 and 14 Geo. 6, c. 87.
13. The English patent law reform started with the appointment of the Patent Law Reform Committee by the Board of Trade in 1944. This committee published two Interim Reports and one Final Report, Cmd. No. 6618 (1945); Cmd. No. 6789 (1946); and Cmd. No. 7206 (1947).
16. For a translation and brief discussion of the Russian Act concerning inventions and technical improvements see Prince, The New Soviet Patent Law, 28 J. Pat. Off. Soc’y 261 (1946); for a summary see White and Ravenscroft, Patents Throughout the World 305 (2d ed. 1952). The Russian law gives the inventor the choice between a patent in the traditional sense and an author’s certificate which entitles recipient to a remuneration from the state and to certain other privileges.

It may also be noted in this connection that the German patent law has traditionally contained a provision prescribing that: “The effects of patents shall be limited so far as is necessary if the government decrees that the invention be exploited in the interest of the public welfare.” In such case the patent owner is entitled to
both the United States and Australia remained considerably more conservative than those in the United Kingdom. The new patent law in the United States in particular was designed to strengthen rather than to curtail the rights of the patent owner. It may perhaps still be recalled that shortly before the outbreak of World War II the American patent system had become the storm center of a violent controversy over economic policies and that, like Helena in Goethe's Faust, it formed the object of much praise and of much censure. However, the National Patent Planning Commission which investigated the operation of the American Patent law between the years 1943 and 1945 gave the existing system a clean bill of health and recommended, unequivocally and rather boastfully, the retention of its major features:

"The system has accomplished all that the framers of the Constitution intended. . . .

". . . The basic principles of the present system should be preserved. The system has contributed to the growth and greatness of our Nation. . . .

". . . [A]fter careful study, the Commission has reached the conclusion that the American system is the best in the world.

just compensation, Patent Act of the German Federal Republic of May 5, 1936, §8, as revised by statute of July 18, 1953, R.G. Bl. pt. I, 615. The nature of this limitation has been characterized by the German Supreme Court and the text-writers as a "special type of compulsory license." See 1 REImER, PATENTGESETZ UND GESetz BETREFFEND DEN SCHUTZ VON GEBRAUCHSMUSTERN 370 (1949).

19. The Australian patent law reform followed generally the recommendations of the United Kingdom Committee and adopted in substance the provisions of the 1949 British Act. The Australian revision committee, however, rejected, among other matters, the provisions of the British Act which empower the Comptroller to revoke a patent within twelve months from its grant upon application of a third party and after an administrative hearing. It also refused to adopt the elaborate catalogue of grounds upon which the Comptroller is authorized to grant "licenses of right," or to revoke the patent. U.K. Patents Act, 1949, 12, 13 and 14 Geo. 6, c. 87, §§ 33, 37, 39, 41, 42. See The Patents Act 1952, 27 Aust. L.J. 2, 6 (1953).

20. Professor Walton Hamilton of the Yale University Law School voiced perhaps the most severe and influential criticism of the American patent system as a source of abuses in his T.N.E.C. Monograph. He summarized his findings in the following sentences: "Thus it has come about that a patent is harnessed to causes it was never meant to serve. It may be used as a shield against public policy, as an immunity to the general law. It may be employed to exempt concerns from the rule of the market and the severities of the rivalry for trade. . . . In such employment a wayward patent system has strayed far from the office to which it was appointed by the Constitution." HAMILTON, PATENTS AND FREE ENTERPRISE 162 (TNEC Monograph 31, 1941). Professor Hamilton's views met violent opposition in FOLK, PATENTS AND INDUSTRIAL PROGRESS (1942). Of more recent discussions of the working of the patent systems in the United States and Canada mention should be made of BENNETT, THE AMERICAN PATENT SYSTEM (1943); DREWS, THE PATENT RIGHT IN THE NATIONAL ECONOMY OF THE UNITED STATES (1952); FOX, MONOPOLIES AND PATENTS, A STUDY OF THE HISTORY AND FUTURE OF THE PATENT MONOPOLY (1947).

21. See note 2 supra. Members of the Commission were Charles T. Kettering, Chester C. Davis, Francis P. Gaines, Edward F. McGrady and Owen D. Young.
The American patent system should be adjusted to meet existing conditions without destroying its basic principles."  

Similar, though perhaps somewhat more restrained views were advanced by the British departmental Patent Law Reform Committee:

"We are in favour of the retention of the present system in this country, and this view is supported by witnesses who have appeared before us, representing both inventors and the commercial users of inventions. . . . Although we favour the retention of the present system and the general frame of the existing patent law, we believe that there are several respects in which it can be improved."  

The new American, British, Australian and South African patent laws thus not only have preserved the traditional system of a private, exclusive and transferable right of limited duration for the benefit of the inventor; they also have remained members of the great family of laws which adhere to the so-called examination system, that is, predicate the patent grant upon a successful examination on the merits by an administrative agency. In this latter respect the four patent laws mentioned are related to those of some other important industrial nations, primarily the German Federal Republic, but stand in sharp contrast to those of France, Italy, and Switzerland. As mentioned before, the examination system had been intro-

23. On the appointment of this Committee, see note 12 supra.
24. Patents and Designs Acts, Second Interim Report of the Departmental Committee (Cmd. No. 6789 at 4 (1946)). The Australian revision committee reported likewise that the patent law in that country, on the whole, was working satisfactorily and that it was not necessary to "recommend any radical changes in the existing system." See the summary of the report in The Patents Act 1952, 27 Aust. L.J. 2 (1953).
26. Patent Law of 5 July 1844 (Sirey, Lois Annotées, 2e Série 1831-1848, 810) with numerous subsequent amendments. The act provides in §11 that "Patents for which applications are duly made are granted without previous examination at the risk and danger of the applicants and without guaranty of the novelty or merit of the invention or the reliability or accuracy of the description." (Italics added.) From the initial letters of the clause "sans garantie du gouvernement" systems which are patterned after the French law are frequently referred to as the S.G.G.-systems.
27. The Italian patent law presently in force is chiefly contained in the Civil Code of 16 March 1942, §§2584 et seq. and the Royal Decree of 29 June 1939, No. 1127, concerning patents for industrial inventions.
28. Federal Patent Law of 21 June 1907, as amended by statutes of 9 Oct. 1926 and 15 May 1929. The present Swiss law does not provide for an examination of the patent application except as to its compliance with the formal requirements prescribed by the statute and the regulations thereunder and specifies expressly that: "The patents are granted without guaranty of the existence, utility or novelty of the invention." (Act of 9 Oct. 1926, §3) The introduction of the examination system, however, has been much discussed in recent times, see Etienne, L'examen préalable des brevets d'invention, Diss. Univ. of Neuchatel (1950).
duced in the United States as early as 1790 when the original patent act was passed. The second patent act, however, had soon abandoned it for the registration method and it was restored only in 1836 with the passage of the third patent statute.

The most important changes and improvements of the patent law, in the technical sense, that are accomplished by the new patent code may perhaps be classified conveniently into four main categories and discussed in that arrangement, viz., amendments relating to the:

1. objects of, and other substantive conditions for patent protection;
2. content and scope of patent protection;
3. formal requirements for patent protection;
4. enforcement of patent protection.

**SUBSTANTIVE PREREQUISITES FOR PATENT PROTECTION**

The Constitution vests in the Congress 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." Obviously every American patent law must keep within the frame thus circumscribed. Accordingly, Congressional draftsmen and the courts have endeavored traditionally to define the patentable objects and the other prerequisites for patentability (usefulness, novelty and attainment of the standard of invention) with reference to the scope of the constitutional authorization. The new patent code, of course, had to remain within the accepted boundaries, but in many respects it constitutes a significant enlargement of the previously available area of patent protection.

**Enlargement of the Definition of Patentable Objects**

The preceding patent law defined the objects of patentable inventions as "... any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, or ... [any] asexually reproduced ... distinct and new variety of plant, other than tuber-propagated plant. ..." With the exception of the inclusion of plant patents which were introduced only in 1930,

---

29. 1 Stat. 109 (1790).
30. 1 Stat. 318 (1793).
31. 5 Stat. 117 (1836).
34. Ibid.
this somewhat old-fashioned catalogue stemmed from the Patent Act of 1793. That statute in turn had borrowed most of its list from the slightly different enumeration of patentable inventions contained in the act of 1790 which had expanded the single term "manufacture" defined as the object of permissible patents in the celebrated Statute of Monopolies of 1623. The Patent Act of 1952 increases the field of patentable inventions. Section 101 of the new code provides for "... any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. ..." Apart from the omission of the reference to the asexually reproduced nontuberous plants, patents for which are now regulated in a special chapter, the only change in the new statutory catalogue is the replacement of the term "art" by the term "process." It is, however, important to note that the new act includes a special definition of the word "process" and provides that: "The term 'process' means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter or material." The substitution of the expression-troika "process, art or method" in lieu of the single wheel-horse "art" should not amount to an actual change in the law. It has been recognized since early days that a "process" or "method" is covered by the statutory term "art." Originally the draftsmen of the new act intended to eliminate completely the expression "art" from the statutory language since they deemed it antiquated and misleading. But upon protests by representatives

35. 1 STAT. 318 (1793).
36. 1 STAT. 110 (1790). This statute defined as patentable objects "... any useful art, manufacture, engine, machine, or device, or any improvement therein. ..."
37. Statute of Monopolies, 1623, 21 JAC. I, c. 3, § 6. This act authorized the grant of patents for "... the sole Working or Making of any Manner of new Manufactures. ..." For the history and significance of this act, see especially FOX, MONOPOLIES AND PATENTS, A STUDY OF THE HISTORY AND FUTURE OF THE PATENT MONOPOLY (1947).
40. 66 STAT. 797, 35 U.S.C.A. § 100(b) (Supp. 1952).
41. "A process, eo nomine, is not made the subject of a patent in our act of Congress. It is included under the general term 'useful art.'" Corning v. Burden, 15 How. 252, 267 (U.S. 1853). For other early cases discussing the concept and statutory authorization of "process patents" as contrasted with products or machine patents see particularly Cochrane v. Deener, 94 U.S. 780, 787-88 (1876); Tilghman v. Proctor, 102 U.S. 707, 722, 728 (1880); Fermentation Co. v. Maus, 122 U.S. 413, 427 (1887). See also CURTIS, A TREATISE ON THE LAW OF PATENTS §§ 9-19 (4th ed. 1873); 1 WALKER, PATENTS 38 et seq. (7th ed., Deller, 1937).
42. See the definition of process as contained in H.R. 3760 § 100(b), 82d Cong., 1st Sess. (1951), and the comments relating thereto made by Mr. P. J. Federico, the Examiner in Chief in the Patent Office, who acted as an adviser of the drafting committee during the hearings on the bill, Hearings before Subcommittee No. 3 of the Committee on the Judiciary on H.R. 3760, 82d Cong., 1st Sess. 37 (1951).
of industry and the Department of Defense, voiced during the congressional hearings, the term "art" returned through the backdoor of the definition section into the final form of the bill and thus into the law.

Of much greater significance than this change in phraseology is the new statutory recognition that the invention or discovery of a new use of a known process, machine, manufacture, composition of matter or material may be patentable. Under the previously governing law, especially in recent years, the courts had persistently refused to find any legislative authority for mere "use-patents," particularly with respect to compositions of matter, such as chemical substances. The controlling line of cases—although foreshadowed by, and probably anchored in, an early decision by the Supreme Court—is known to the profession as the Thuau doctrine. In the case by that name the Court of Customs and Patent Appeals rejected patentability as a "new therapeutic product for the treatment of diseased tissue" for a known condensation product obtained by condensing metacresol sulfonic acid with an aldehyde, although the court had to concede that the inventor had "made a valuable discovery in the new use of the composition involved." The reason for the holding was not lack of inventiveness but the court's view that "... a patent for a new use for an old substance quite unchanged is not authorized by the patent laws because such use is not the invention or discovery of 'any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof' as required by ... 35 USCA § 31." This rule, although approved by Judge Learned

43. See the testimony given during the above-mentioned hearings by Mr. G. E. Folk, Adviser to the Committee on Patents of N.A.M., Id. at 51, and by Capt. G. N. Robillard representing the Department of Defense, Id. at 78.
44. H.R. 7794; 82d Cong., 2d Sess. § 100(b) (1952). The report from the Committee on the Judiciary, House of Representatives, which accompanied H.R. 7794, failed, however, to comment on the re-inclusion of the term "art." H.R. Rep. No. 1923, 82d Cong., 2d Sess. 6 (1952).
45. Ansonia Brass & Copper Co. v. Electrical Supply Co., 144 U.S. 11 (1892). In that case the Court denied the patentability of a method of insulating wires with a non-combustible covering, because the method was not new although the inventor had discovered its fireproof quality. In his opinion, Mr. Justice Brown stated: "... nothing is better settled in this court than that the application of an old process to a new and analogous purpose does not involve invention, even if the new result had not before been contemplated." Id. at 18. This statement was later reiterated with approval in the frosted lamp bulb case, General Electric Co. v. Jewel Co., 326 U.S. 242, 247 (1945). It must be noted, however, that in the Ansonia case Mr. Justice Brown defined the crucial issue specifically as a "question of patentable novelty" and one of "invention" rather than one of patentable subject matter as such and that he conceded expressly that "... if an old device or process be put to a new use which is not analogous to the old one, and the adaptation of such process to the new use is of such a character as to require the exercise of inventive skill to produce it, such new use will not be denied the merit of patentability." Ansonia Brass & Copper Co. v. Electric Supply Co., supra at 18.
47. Id. at 347 (Italics by the court).
Hand and followed by a series of judicial decisions, had been criticized by text writers and at least questioned on policy grounds by the National Patent Planning Commission. A relaxation was therefore to be expected.

Unfortunately the scope of the new code's recognition of use patents is not as clear as might be desirable. It remains open to doubt how far the section in question modifies or limits the Thuau doctrine, although the new act certainly alters the statutory basis of that decision. In the first place, it must be noted that while the code refers to new uses of machines, compositions of matter and material as well as of processes, the patentability of new uses seems to be limited to process or method patents, and the Revision Notes make it evident that the framers of the act intended such treatment of use claims. As a matter of claim drafting it is therefore necessary to protect the discovery of new uses by means of process or method claims and not of product claims. In the second place, the background of the amendment gives reason to assume that a newly discovered use for a known substance, machine or process is still only patentable if it is not merely analogous or cognate to the uses heretofore made. On policy reasons it would be unfair to deprive a previous inventor or the public of the benefits of a process, machine or product merely because it has been discovered that such process, machine or product possesses desirable qualities heretofore not apparent which

48. Old Town Ribbon & Carbon Co. v. Columbia Ribbon & Carbon Mfg. Co., 159 F.2d 379 (2d Cir. 1947). In that decision Judge Hand made it clear again that the denial of the patentability of new uses was not based on the absence of invention but on the lack of statutory authorization for use patents. Id. at 382.

49. Application of Haller, 161 F.2d 280 (C.C.P.A. 1947); Application of Benner, 174 F.2d 938 (C.C.P.A. 1949); Merit Mfg. Co. v. Hero Mfg. Co., 185 F.2d 350 (2d Cir. 1950); Application of Craige, 188 F.2d 505 (C.C.P.A. 1951); Application of Craige, 189 F.2d 620 (C.C.P.A. 1951); Application of Shackell, 194 F.2d 720 (C.C.P.A. 1952); Application of Rishoi, 197 F.2d 342 (C.C.P.A. 1952); Application of Aronberg, 198 F.2d 840 (C.C.P.A. 1952).


51. In its final report, the National Patent Planning Commission listed as one of the problems which it had taken under consideration but had not fully investigated prior to its sudden discharge: "Making possible the exploitation of so-called use patents, that is patents involving mainly the use of unpatented materials . . ." Third Report on the American Patent System, H.R. Doc. 283, 79th Cong., 1st Sess. 4 (1945).

52. See Revision Notes to Section 101, contained in the appendices to H.R. Rep. No. 1923 and S. Rep. No. 1979, 82d Cong., 2d Sess. (1952): "The remainder of the definition clarifies the status of processes or methods which involve merely the new use of a known process, machine, manufacture, composition of matter, or material; they are processes or methods under the statute . . . ."

53. This is also the position of the Patent Office, see the report of a speech by Mr. Federico, BULL. AM. PAT. L. ASS'N 107 (1953).
warrant the intensification or expansion of the accepted use.\textsuperscript{54} Conversely, it should make no difference whether the new use relates to a known process or to a known product. Intimations to the contrary found in the case of United Mattress Machinery Co. v. Handy Button Machine Co.\textsuperscript{55} reveal a perturbing misunderstanding of the act. Perhaps it is fair to state that in essence the new statutory definition of "process" restores the broad principles of patentability flowing from a careful analysis of the exposition given by the Supreme Court in the Ansonia case discussed before.\textsuperscript{56}

It is perhaps worth noting that in liberalizing the scope of patentable inventions the American law has stayed with the trend of the patent legislation of the other industrial powers. The new Patent Act of the United Kingdom defines an invention broadly as "any manner of new manufacture the subject of letters... patent within section six of the Statute of Monopolies and any new method or process of testing applicable to the improvement or control of manufacture...."\textsuperscript{57} While the general part of the definition stems from the Patents and Designs Act, 1907,\textsuperscript{58} the special recognition of the testing and control processes was added by the reform of 1949\textsuperscript{59} which also eliminated the formerly existing statutory restrictions upon the patentability of chemical products and upon the scope of the patent...
rights relating to substances intended for food or medicine. The German Patent Act avoids any definition or enumeration of the subject matter of patentable inventions and requires merely commercial exploitability. In this connection, it might be pointed out particularly that the practice in both Germany and the United Kingdom recognizes the validity of patents for new uses of known contrivances, products or processes, although, in those countries, too, adherence to the requirement that the discovery of the new use be characterized by inventive ingenuity intrinsically confines the field of such patents to comparatively narrow limits.

Despite the extension of patentability to new uses of known processes, machines and materials it must not be concluded that the well established rule which excludes the mere discovery of natural laws and phenomena or the scientific explanation of the operation of known devices or processes from the realm of patentable inventions has lost its recognition. The Supreme Court has repeatedly invoked this principle and occasionally, as in the case of Funk Bros. Seed Co. v. Kalo Inoculant Co., has applied it in a manner which has met with

---

60. Introduced by the Patents and Designs Act, 1919, 9 & 10 Geo. 5, c. 80, § 38A. For the reasons which prompted the repeal of this provision see National Patent Planning Comm’n, op. cit. supra note 51, at 21 et seq., 48.

61. Patents Act, 5 May 1936 (R.G. Bl. pt. II, 117) § 1. The German law, however, specifically excludes product patents for foods and medicinal articles and substances produced by means of chemical reactions and permits only the grant of process patents in these cases.

62. For the status of use-patents as recognized “patent-category” in German law see 1 Reimer, Patentgesetz und Gesetz betreffend den Schutz von Gebrauchsmustern 84, 95 et seq. (1949).

63. For details concerning the law of the United Kingdom see Meinhardt, Inventions, Patents and Monopoly 64 (2d ed. 1950); Terrell and Shelley, Law of Patents 123 (9th ed. 1951); 24 Halsbury, Laws of England 554, 598 et seq. (2d ed., Lord Hailsham, 1937). One of the leading cases in the field is Gadd & Mason v. Mayor, 67 L.T.R. 569, 9 T.L.R. 42 (C.A. 1892), in which a patent was upheld for the adaptation to the construction of gasometers of a previously known method for floating docks and pontoons. The Canadian law follows the British practice in recognizing use-patents. 1 Fox, Canadian Law and Practice Relating to Letters Patent for Inventions 138 et seq. (3d ed. 1948); but see id. at 57. Cognate to use-patents are the so-called “selection-patents” (in Germany called “Auswahlpatente”) in which the invention consists in the choice of a particular member of a group of substances or processes, by reason of some special and hitherto undetected properties of this member, for the achievement of a desired result. They are likewise recognized in Germany, as well as in the United Kingdom. 1 Reimer, Patentgesetz und Gesetz betreffend den Schutz von Gebrauchsmustern 83 (1949); 24 Halsbury, Laws of England 600 (2d ed., Lord Hailsham, 1937). The Patent Law Reform Committee rejected proposals for a special legislative definition in these cases. Patent Law Reform Comm., op. cit. supra note 59, at 29.


65. 333 U.S. 127 (1948). In that case the Court, with two justices dissenting, invalidated product claims for an agriculturally important composite culture of mutually compatible strains of Rhizobium bacteria, arrived at by deletion of mutually
vigorouse objections from the commentators. It is again interesting to observe that the American cases on this point are in accord with the British and German practice although American patent law parlance does not differentiate carefully between "discovery" and "invention" as is customary in British, German and other European patent terminology. It seems safe, however, to predict that the rule that mere scientific discoveries are not patentable will create some particularly difficult borderline questions in the recognition of patents for new uses.

**Utility and Novelty**

American patent law, like other patent law, requires as a condition for the grant of a patent that the subject matter of the invention possess utility and novelty. Both attributes have a technical character. The framers of the new act, however, only felt a need for liberalization of the latter concept.

**Retention of the Decisional Interpretation of Utility**

Like its predecessors, the new patent code refrains from defining the concept of utility. According to the controlling case law, however, an invention is held to be useful if it has a function which by the accepted standards of society is considered bene-inhibiting strains. The basic discovery consisted in the detection and isolation of the mutually non-inhibitive strains. The methods for selecting these particular strains and producing a bacterial culture followed well known laboratory procedures. Justice Douglas, speaking for the majority of the Court, reasoned that since the discovery of non-inhibitive strains as such was not a patentable invention and since the method of making use of it as such was not patentable for lack of novelty, the resulting product was likewise not entitled to patent protection.


67. For the distinction between discovery and invention in British and Canadian law see 24 Halsbury, Laws of England 591 (2d ed., Lord Hailsham, 1937); Meinhardt, Inventions, Patents and Monopoly 48, 61 (2d ed. 1950); Terrell and Shelley, Law of Patents 17 (9th ed. 1951); 1 Fox, The Canadian Law and Practice Relating to Letters Patent for Inventions 56 (3d ed. 1948). For the same distinction in German law see Isay, Patentgesetz 45 (5th ed. 1931); Seligsohn, Patentgesetz 29 (7th ed. 1932); 1 Reimer, Patentgesetz und Gesetz betreffend den Schutz von Gebrauchsmustern 41 (1949). The French Patent Act of 1844, while declaring every new discovery or invention in all branches of industry as patentable (Art. 1), denies patent protection expressly to "theoretical or purely scientific principles, methods, systems, discoveries and ideas, for which industrial applications are not set forth." (Art. 30); compare 1 Casalonga, Traité technique et pratique des brevets d'invention 68 ff. (1949). With respect to the international efforts to secure legal protection for scientific discoveries and ideas see 1 Casalonga, id. at 74 et seq.; Hanson, Patent Rights for Scientific Discoveries (1930); Steyn, Proprietary Rights in Inventive Ideas and Discoveries, 70 So. Afr. L.J. 266 (1953).
ficial and if it is capable of performing this function. Utility thus possesses a social and a technical aspect. American law agrees in this respect with that of other nations, as for instance Germany. The requisite practical operability, however, need not reach the standard of perfection. It is sufficient that the subject of the invention performs the specified function in a rudimentary fashion. This is especially true where a basic or pioneer patent is in question.

Redefinition of Novelty

The concept of novelty on the other hand is the object of a detailed statutory definition. Novelty in the sense of the patent law is not an absolute notion but is a term of art which circumscribes the absence of certain factors and conditions which the law considers to be anticipation of the invention and destructive of the quality of newness. Again the American law agrees generally in that respect with the law of other countries, although the

71. 66 Stat. 797, 35 U.S.C.A. §102 (Supp. 1952) provides:
"Conditions for patentability; novelty and loss of right to patent
A person shall be entitled to a patent unless—
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or
(c) he has abandoned the invention, or
(d) the invention was first patented or caused to be patented by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application filed more than twelve months before the filing of the application in the United States, or
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or
(f) he did not himself invent the subject matter sought to be patented, or
(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other."
particular circumstances which determine the question of priority and anticipation vary considerably from country to country.\textsuperscript{73}

Most of the grounds which the new statutory catalogue lists as destroying novelty were either explicitly recognized by the former statute\textsuperscript{74} or were developed by the adjudications of the Supreme Court. Thus, the new § 102(e) constitutes a codification of the rule laid down in \textit{Milburn Co. v. Davis-Bournonville Co.},\textsuperscript{75} while the new § 102(g) casts into statutory language a rule which is the product of judicial glosses enunciated on the basis of somewhat differently worded sections in the former law.\textsuperscript{76} The only real innovation is the provision\textsuperscript{77} that a patent, secured by the applicant or his legal representatives or assigns in a foreign country on an application filed more than twelve months prior to the filing of the application in the United States, destroys novelty of the invention only if such patent was actually granted prior to the filing of the domestic application. In that respect the law has been liberalized in favor of the inventor.\textsuperscript{78}

In addition to re-cataloguing and liberalizing the conditions which destroy novelty and codifying the principles which determine priority of invention in general, the framers of the new act pruned and simplified the provisions which control the effects upon the state of the prior art produced by “knowledge or use thereof, or other activity with respect . . . [to the invention] in a foreign country.”\textsuperscript{79} This question had already called for special intervention by Congress in 1946 as result of the decision of the Supreme Court in the case of


\textsuperscript{75} 270 U.S. 390 (1926).

\textsuperscript{76} See Philadelphia & Trenton R.R. v. Stimpson, 14 Pet. 448, 462 (U.S. 1840); Gayler v. Wilder, 10 How. 477, 496-98 (U.S. 1850); Coffin v. Ogden, 18 Wall. 120, 124-25 (U.S. 1873); Loom Co. v. Higgins, 105 U.S. 580, 592-94 (1881); The Telephone Cases, 126 U.S. 1, 555 (1888); Milburn v. Davis-Bournonville Co., 270 U.S. 390, 399 (1926); Corona Cord Tire Co. v. Dovan Chemical Corp., 276 U.S. 358, 362, 363 (1928); Radio Corp. v. Radio Engineering Laboratories, 293 U.S. 1, 11-14 (1934); Marconi Wireless Telegraph Co. v. United States, 320 U.S. 1, 34, 35 (1943). See also 1 Walker, Patents 377-96 (7th ed., Delier, 1937).


\textsuperscript{78} See the comments by Committee on the Judiciary, House of Representatives, H.R. No. 1923, 82d Cong., 2d Sess. 6 (1952) and Revision Notes to Section 102, id. at 17.

In that case the Court held that the owner of an American patent for an invention made but not patented abroad could enjoin the innocent use of the invention in the United States by a manufacturer where such use antedated the application for patent in the United States but was subsequent to the reduction to practice of the invention abroad. At that time section 72 of the patent law provided in substance that a patent granted to an inventor who at the time of the application believed himself to be the original inventor of the thing patented should not be void because of prior use or knowledge of the invention in a foreign country. The Court construed this provision as not protecting an American inventor who had neither applied for nor secured a patent and as thus exposing him to priority claims by another inventor based on prior reduction to practice of the invention achieved abroad. Congress proceeded to remedy the situation by adding a new section to the patent law which provided generally that use, knowledge or any activity with respect to an invention in a foreign country should not be material for the purpose of establishing the date of invention in proceedings in the Patent Office or in the courts of the United States, except in the instances where the patent law expressly accords foreign applications parity with domestic ones. As a result the status of section 72 was rendered extremely tenuous. If not repealed by implication it seemed at least to have become "wholly unnecessary." The new act therefore properly retains and incorporates only the section which was enacted in 1946 and excludes the more limited former section 72. In addition, of course, the new patent law re-enacts the rule—first adopted in 1903 to comply with article 4 of Industrial Property Convention of March 20, 1883, as amended by the additional act of Brussels of December 14, 1900—which attributes to a foreign application the priority effects of a domestic application, where the

83. See the comments to that effect in Proposed Revision and Amendment of the Patent Laws, Preliminary Draft With Notes 13 (Committee on the Judiciary, House of Representatives, Committee Print, (1950)).
86. 32 Stat. 1226 (1903).
foreign country accords similar reciprocity and the earliest date of such foreign application is not more than twelve months prior to the filing of the application in the United States.

**Stabilization of the Standard of Invention**

According to a firmly established rule of American patent law it is not sufficient for patentability that the process or product for which such protection is claimed possesses novelty and usefulness. In addition, it is necessary that such conception meets the “standard of invention.” 88 In that respect American patent law is in accord with the laws of the members of the British Commonwealth of Nations where either by statute or case law patent protection depends on the presence of an “inventive step,” 89 the patent law of Germany which insists upon attainment of the “level of invention,” 90 and the laws of other countries. 91

The formulation and application of the proper standard of invention had been the cause of great judicial pains and perplexity ever since the highest tribunal started wrestling with the problem in the early case of *Hotchkiss v. Greenwood.* 92 In that case, involving an

88. Representative is the statement by the U.S. Court of Customs and Patent Appeals in the recent case of Application of Neely, 205 F.2d 195, 197 (C.C.P.A. 1953), involving the invention of a garment envelope: “But novelty and usefulness alone are not sufficient to support the allowance of the appealed claims. To be allowable there must also be inventive subject matter in the claims.”

89. The new Patents Act of the United Kingdom authorizes opposition to the grant of a patent on the ground that the invention “... is obvious and clearly does not involve any inventive step. ...” U.K. Patents Act, 1949, 12, 13 & 14 Geo. 6, c. 87, §14(e), and also lists as ground for the revocation of a patent and as defense in an infringement action that the invention “... is obvious and does not involve any inventive step. ...” Id. §32(1)(f), (4). The necessity of an inventive step, however, is dispensed with in the case of a mere “patent of addition.” Id. §26(7). Similarly the new Australian and South African Patents Acts subject a patent application to opposition and a granted patent to revocation on the ground that the claimed invention is “obvious” and did not “involve an inventive step,” excepting again mere patents of addition, Australian Patents Act, No. 42 of 1952, §§59(1)(g), 109(1)(e), 76; South African Patents Act, No. 37 of 1952, §§23(1)(d), 40, 43(1). For the decisional law in the United Kingdom and Canada requiring and defining inventive ingenuity or skill, see 24 HALSBURY, LAWS OF ENGLAND 593 (2d ed., Lord Hailsham, 1937); MEINHARDT, INVENTIONS, PATENTS AND MONOPOLY 63 (2d ed. 1950); TERRELL AND SHELLEY, LAW OF PATENTS 120 (9th ed. 1951); FOX, MONOPOLIES AND PATENTS, A STUDY OF THE HISTORY AND FUTURE OF THE PATENT MONOPOLY 211, 248, 252, 255 (1947); 1 FOX, THE CANADIAN LAW AND PRACTICE RELATING TO LETTERS PATENT FOR INVENTIONS 163 (3d ed. 1948).

90. About the concept and the necessity of the “level of invention” (Erfundungshehe) see Lindenmaier, Zum Begriff der technischen Erfindung, 55 GEWERBL. RECHTSSCHUTZ UND URHEBERRECHT 12 (1953); 1 REIMER, PATENTGESETZ UND GESETZ BETREFFEND DEN SCHUTZ VON GEBRAUCHSMUSTERN 70 (1949); SELIGSOHN, PATENTGESETZ 38 (7th ed. 1932).

91. In France the practice requires a “création originale” or “idée inventive.” 1 CASALONGA, TRAITÉ TECHNIQUE ET PRATIQUE DES BREVETS D’INVENTION 104 (1949); see also Casalonga, *De La notion d’‘Erfundungshehe’ ou d’effort créateur en France,* GEWERBL. RECHTSSCHUTZ UND URHEBERRECHT, AUSLANDS—UND INTERNATIONALER TEIL 104 (1952).

92. 11 How. 248 (U.S. 1851).
improved method of making door and other knobs, Justice Nelson held that "unless more ingenuity and skill . . . were required in the . . . [improvement of the prior art] than were possessed by an ordinary mechanic acquainted with the business, there was an absence of that degree of skill and ingenuity which constitute essential elements of every invention." 98 A quarter of a century later Mr. Justice Hunt contrasted mere "mechanical skill" and "inventive genius" and held that exercise of the former was not entitled to the protection of the patent laws. 94 Again a few years later Mr. Justice Swayne, who had struggled with the standard of invention once before, 95 described the mental process which constitutes invention as a "flash of thought" —a formulation which he quoted from a brief in the case—but hastened to add "or . . . any exercise of the inventive faculty, more or less thoughtful." 96 Gradually the court settled on the phrase "inventive genius" as the test formula, 97 until in the famous case of Cuno Engineering Corp. v. Automatic Devices Corp. 98 Justice Douglas reached the culmination of the semantic progression by declaring that "the new device, however useful it may be, must reveal the flash of creative genius, not merely the skill of the calling." 99 This rhetorical flourish had the effect of a spark in a powder keg and the professional literature became swamped with expressions of protest and anxiety. 100 While some subsequent opinions indicated that other members of the supreme bench were not always willing to accept Justice Douglas' stringent views as to patentability, 101 other decisions poured new oil onto the

93. Id. at 267.
94. Reckendorfer v. Faber, 92 U.S. 347, 357 (1876) (involving the validity of a patent for the combination of a lead pencil and eraser).
95. Smith v. Nichols, 21 Wall. 112 (U.S. 1874) holding that "a patentable invention is a mental result" and that an improvement of an old invention is patentable only if a new idea, distinct from the conception which preceded it, be engrafted upon the old invention.
98. 314 U.S. 84 (1941).
99. Id. at 91.
100. It would seem useless to list the numerous articles published as a result of the Cuno case. Of the more recent writings see Dodds and Crotty, The New Doctrinal Trend, 30 J. PAT. OFF. Soc'y 83 (1948); Pitt, Patent Law: "Invention," 34 CORNELL L.Q. 663 (1949); Note, The Supreme Court and the "Standard of Invention," 49 Col. L. Rev. 685 (1949); Gerhardt, Patent Policy and Invention, 46 ILL. L. Rev. 609 (1951), 34 J. PAT. OFF. Soc'y 877 (1952); Prager, Standards of Patentable Invention from 1474 to 1952, 20 U. of Chi. L. Rev. 69 (1952); Kingsland, The Statutes and Decisions Presenting the Better Tests of Inventions, 34 J. PAT. OFF. Soc'y 473 (1952).
101. See Goodyear Co. v. Ray-O-Vac Co., 321 U.S. 275 (1944) and Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327 (1945). In the latter opinion Justice Jackson, commenting on the test of invention, observed that the patent system "is not concerned with the quality of the inventor's mind, but with the quality of his product."
flames\textsuperscript{102} and elicited the caustic comment from Mr. Justice Jackson "that the only patent that is valid is one which this Court has not been able to get its hands on."\textsuperscript{103}

It is therefore no wonder that industry and other interested professional groups made sustained efforts to secure legislative relief from the practical uncertainty and confusion which flowed from the "Patent Office[']s" passion for granting patents . . . [and the Supreme Court's] equally strong passion . . . for striking them down."\textsuperscript{104} This cleavage between the agency in charge of issuing patents and the judiciary was particularly accentuated by the fact that American patent law permits the lack of patentability to be raised as a defense in an infringement suit without time limitation and makes the issue directly cognizable by the courts.\textsuperscript{105} The National Planning Commission noted with alarm the "ever-widening gulf" between the Patent Office and the courts and recommended as a promising remedy that Congress enact a declaration of policy "that patentability be determined objectively by the nature of the contribution to the advancement of the art, and not subjectively by the nature of the process by which the invention may have been accomplished."\textsuperscript{106} In addition, the commission considered "greater observance of the presumption of the validity of patents to be another road to patent security."\textsuperscript{107} Various bills in the same vein were repeatedly introduced in Congress.\textsuperscript{108}

The new act follows these suggestions. Section 103 fixes an objective standard of invention by specifying on the one hand 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


\textsuperscript{103} Jungersen v. Ostby & Barton Co., 335 U.S. 560, 572 (1949) (dissenting opinion by Justice Jackson).

\textsuperscript{104} Ibid.

\textsuperscript{105} German patent law entrusts the adjudication of actions for the annulment of patents to the Patent Office, subject to judicial review. If the defendant in an infringement suit wishes to attack the patent because of lack of patentable invention the court cannot decide this issue but may only postpone its decision until the defendant has had opportunity to sue for annulment. But see 1 and 2 Reimer, Patentgesetz und Gesetz betreffend den Schutz von Gebrauchsmustern 216, 569, 593, 594, 1052 (1949, 1950).

\textsuperscript{106} The American Patent System, H.R. Misc. Doc. No. 239, 78th Cong., 1st Sess. 5, 6 (1943). The Commission recommended further that the district courts in infringement suits raising validity issues should secure an advisory opinion by the Patent Office on those questions.


\textsuperscript{108} For a list see Proposed Revision and Amendment of the Patent Laws 13 (Committee on the Judiciary, House of Representatives, Committee Print, 1950).
invention was made to a person having ordinary skill in the art to which said subject matter pertains," and by declaring on the other hand that "patentability shall not be negatived by the manner in which the invention was made." In addition, the new act elevates the presumption of validity to the dignity of a statutory mandate.\(^{109}\)

Whether these provisions will have the desired "stabilizing effect"\(^{110}\) remains to be seen. So far the courts have taken the view that the section in question "has apparently neither raised nor lowered the standard of invention."\(^{111}\) This construction should not be questioned, especially in view of the fact that members of the Supreme Court have presented their standard of invention as a constitutional principle.\(^{112}\) Since in the words of Mr. Justice Jackson "the concept of invention is inherently elusive"\(^ {113}\) the broad negative test of "non-obviousness" can do little to afford a touchstone of invention.\(^ {114}\) Perhaps the most that can be said is that Congress has "expressed a mood"\(^{115}\) and that it can be expected that both the Patent Office and the judiciary will do their best to respect it.

**CLARIFYING AND STRENGTHENING THE PATENTEE'S RIGHTS**

**Nature and Scope of the Patent Right in General: Transferability**

The new patent act incorporates a number of provisions designed to codify and clarify the nature and scope of patent protection. In general no substantive changes of the prior law were intended; the framers merely sought to cast some judge-made rules into statutory


110. The report of the Committee on the Judiciary, House of Representatives, accompanying the patent law bill made the following comment on the proposed section: "That provision paraphrases language which has often been used in decisions of the courts and the section is added to the statute for uniformity and definiteness. This section should have a stabilizing effect and minimize great departures which have appeared in some cases. . . ." H.R. Rep. No. 1923, 82d Cong., 2d Sess. 7 (1952).


language and to correct some apparently misleading definitions of the old law.

The Supreme Court had recognized long ago that "[t]he privileges granted by letters patent are plainly an instance of an incorporeal kind of personal property." 116 The new act now expressly provides that patents shall have the attributes of personal property. 117 While even formerly there had been no doubt that the patent confers upon the patentee the "exclusive property in the patented invention," 118 the exact character of the powers thus conferred had been subject to ambiguity. The old patent law provided that a patent should contain "... a grant ... of the exclusive right to make, use, and vend the invention or discovery. ..." 119 But the Supreme Court had found fault with this phrasing and pointed out that the Government was not granting the patentee the common law right to make, use and vend; that all that it conferred by the patent was the right to exclude others from making, using or vending the invention. 120 The new act brings the statutory language into harmony with that analysis and defines the patent as "a grant ... of the right to exclude others from making, using or selling the invention." 121 One of the purposes of this modification was to make it clear that the owner of a sub-servient patent could not exploit the invention without license from the owner of the dominant patent, a principle long recognized by the case law. 122 The famous though purely academic problem of whether or not a patent confers a true monopoly 123 is left untouched by the new act.

The new patent act has retained without material changes the provisions of the former law relating to the assignability of applica-

tions for patents, patents or any interest therein, and to the recognition of grants and conveyances of exclusive rights under the applications for patent or patents to the whole or any specified part of the United States. Consequently, American patent law has remained in harmony with the patent laws of other industrial nations which likewise provide for total or limited assignments and encumbrances of patents, as for instance the United Kingdom, France and Germany. Although the new American patent act, unlike that of the United Kingdom, has made no special provision for the recognition of equitable interests in or charges upon patents, there is no doubt that the precedents in point continue to control.

It should be noted in this connection that American case law has traditionally differentiated sharply between assignments in the technical sense of patent rights and mere grants of licenses. This distinction has been particularly important in the determination of the indispensable, necessary or proper parties in cases involving actions to obtain relief at law or in equity against infringement, actions to obtain declaratory or injunctive relief against threats of infringement suits, and interference proceedings; but it has been invoked also for other purposes, as for instance matters of taxation. In the leading case of Waterman v. Mackenzie, Mr. Justice Gray laid down the following tests and rules:


126. U.K. Patents Act, 1949, 12, 13 & 14 Geo. 6, c. 87 § 74(4).

127. E.g., Taylor Engines v. All Steel Engines, 192 F.2d 171 (9th Cir. 1951) (applying the equitable principles of after-acquired title).


130. See Nachod & United States Signal Co. v. Automatic Signal Corp., 105 F.2d 981 (2d Cir. 1939); Klumb v. Roach, 151 F.2d 374 (7th Cir. 1945); Paper Container Mfg. Co. v. Dixie Cup Co., 170 F.2d 333 (3d Cir. 1948).


"The patentee or his assigns may, by instrument in writing, assign, grant and convey, either, 1st, the whole patent, comprising the exclusive right to make, use and vend the invention throughout the United States; or, 2d, an undivided part or share of that exclusive right; or, 3d, the exclusive right under the patent within and throughout a specified part of the United States. Rev. Stat. § 4898. A transfer of either of these three kinds of interests is an assignment, properly speaking, and vests in the assignee a title in so much of the patent itself, with a right to sue infringers; in the second case, jointly with the assignor; in the first and third cases, in the name of the assignee alone. Any assignment or transfer, short of one of these, is a mere license, giving the licensee no title in the patent, and no right to sue at law in his own name for an infringement. Rev. Stat. § 4919 [Case citations omitted]. In equity, as at law, when the transfer amounts to a license only, the title remains in the owner of the patent; and suit must be brought in his name, and never in the name of the licensee alone, unless that is necessary to prevent an absolute failure of justice, as where the patentee is the infringer, and cannot sue himself. Any rights of the licensee must be enforced through or in the name of the owner of the patent, and perhaps, if necessary to protect the rights of all parties, joining the licensee with him as a plaintiff. Rev. Stat. § 4921 [Case citations omitted].

"Whether a transfer of a particular right or interest under a patent is an assignment or a license does not depend upon the name by which it calls itself, but upon the legal effect of its provisions."

This strict test by which a true assignment conferring "title" is present only if the grantee has the exclusive threefold right of making, using and vending the patented invention, at least in a particular territory, has never been questioned by subsequent cases. But the field thus left to licenses covers a multitude of different arrangements, ranging from a mere nonexclusive license conferring the privilege to make or use or vend the invention with the attendant "immunity" from an infringement suit 133 to an "exclusive" license which, though "short of a true assignment," gives the licensee rights "far more extensive than those remaining in the inventor." 134 Consequently, the courts have come to limit and relax the stringent procedural rules of the Waterman case. In addition to the exceptions listed in that case itself, the Supreme Court subsequently has permitted an exclusive licensee to bring suit in his own name to enjoin infringement

133. See, e.g., General Pictures Co. v. Western Electric Co., 304 U.S. 175, 181 (1938).
134. Nachod & United States Signal Co. v. Automatic Signal Corp., 105 F.2d 981, 983 (2d Cir. 1939) (comment to that effect by Judge A. Hand).
of the patent by a stranger, provided that he has joined the patent owner as co-plaintiff either with his consent or, if he is outside the jurisdiction, without it, or as defendant, if he refuses to join as plaintiff but can be served with process.\(^{135}\) The court has also apparently been inclined to recognize that the reason for the denial of an independent infringement action or of a joinder in such action to nonexclusive licensees is not so much the idea of title or the wording of the patent law as the need of protecting the alleged infringer against the harassment and danger of an excessive recovery inherent in a multitude of suits or claims.\(^{136}\) The lower federal courts, stimulated by the adoption of the federal rules of civil procedure,\(^{137}\) have likewise exhibited a tendency toward flexibility and liberalization, noticeable especially, though not alone, in cases involving declaratory relief against threats by licensees and interference proceedings.\(^{138}\) While the new patent act has repealed the former complex provisions which regulated separately relief at law and in equity in cases of infringement,\(^{139}\) and now simply accords "remedy by civil action for infringement" to the "patentee" and "his successors in title,"\(^ {140}\) it is believed that no material change in the law has been accomplished. Sound policy would require an exclusive licensee to be considered a real party in interest in an infringement suit, entitled to act at least as co-plaintiff with the holder of the title.

It is doubtful that American lawyers will derive comfort from the fact that in other laws also the status of the so-called exclusive licensee has created difficulties. The new Patents Act of the United Kingdom contains a specific definition of the term exclusive licensee.\(^ {141}\)

---

137. Especially FED. R. CIV. P. 17(a), 19(a), (b) and 20(a).
138. See Western Electric Co. v. Pacent Reproducer Corp., 42 F.2d 116 (2d Cir. 1930) (defining exclusive licensee for purposes of joinder in an infringement suit); Nachod & United States Signal Co. v. Automatic Signal Corp., 105 F.2d 981 (2d Cir. 1939) (holding that an exclusive licensee is an indispensable party in an interference proceeding); Paper Container Mfg. Co. v. Dixie Cup Co., 170 F.2d 333 (3d Cir. 1948) (holding that mortgagor is real party in interest in an action to obtain a patent involved in interference); United Lacquer Mfg. Corp. v. Maas & Waldstein Co., 111 F. Supp. 139 (D.N.J. 1953) (holding that the owner of a patent is a necessary but not indispensable party in a suit for declaratory relief against exclusive licensee claiming infringement by plaintiff).
141. U.K. Patents Act, 1949, 12, 13 & 14 Gzo. 6, c. 87, §101(1): "'Exclusive license' means a license from a patentee which confers on the licensee . . . to the exclusion of all other persons (including the patentee), any right in respect of the patented invention, and 'exclusive licensee' shall be construed accordingly. . . ."
and entitles him expressly to bring infringement suits in his own name, joining the patentee either as plaintiff or defendant. These provisions were intended to liberalize the strictness of the prior case law, but it is obvious that the term "exclusive licensee" is still rather narrowly defined. In France, the situation is likewise quite complex. While even an exclusive licensee is not entitled to sue for infringement, such relief is available if the arrangement is in reality a "disguised assignment."  

Recognition and Definition of Contributory Infringement; Limitation of the Misuse Doctrine  

Perhaps the most significant innovation made by the new patent act is the statutory recognition and definition of the concept of contributory infringement and the act's attempt to check the corrosion which the ever expanding doctrine of patent misuse had produced on that notion.  

American courts at a comparatively early date developed the principle that a patentee was entitled to relief against a third person not only if the latter had technically infringed upon a patent claim by practicing the invention in question without license, but also if he had merely supplied an unpatented machine or article to be used by another in the infringing manufacture of a patented combination or the infringing application of a patented process. The Supreme Court finally put its stamp of approval on this doctrine of contributory infringement by first adhering to it in substance and later by adopting it by name. In that respect the American development finds a striking parallel in Germany where the courts likewise have come to recognize a similar idea.

142. U.K. Patents Act, 1949, 12, 13 & 14 Geo. 6, c. 87, § 63.  
144. For details see 1 CASALONGA, TRAITÉ TECHNIQUE ET PRATIQUE DES BREVETS D'INVENTION 431 et seq. (1949); 2 id. at 84 et seq.  
148. In Germany the idea of contributory infringement, called "mittelbare Patentverletzung," was first judicially recognized by the Supreme Court in a 1927
The scope of the doctrine of contributory infringement, however, underwent vast vacillations, owing principally to the fact that in a certain sense it constituted a judicial extension of the patent "monopoly." The patentee's protection under this doctrine reached its high watermark in 1912 with the Supreme Court's decision in Henry v. Dick Company in which the Court held that where a patented machine was sold to a customer subject to a notice of restriction attached to the machine permitting it to be used only with unpatented supplies bought from the patentee, a sale of such articles by a third person with the knowledge that they would be used in violation of said restriction constituted contributory infringement. The Court differentiated prior decisions to the effect that a sale of a patented article placed the same outside the limits of the patent monopoly by insisting that this principle applied only to unconditional sales. The Court declared that a stipulation qualifying the right of use in a machine sold subject thereto had the effect that a breach would not only give rise to a right of action upon contract, but "would be at the same time an act of infringement, giving to the patentee his choice of remedies."

In the very next year, however, the Court began to recede from its broad conception of the patent monopoly and to whittle down the generous protection against infringement and contributory infringement. The new trend began with a decision which withheld the cloak of the patent monopoly from measures designed for resale price maintenance and denied that a retailer was liable for infringement for having sold a patented chemical at a price lower than the resale price specified by the manufacturer in a "notice to the retailer" printed on the package. The Court reaffirmed its attitude four years later when it failed to condone an evasion of its ruling attempted by resort to a resale price maintenance scheme which disguised retail sales as licensing agreements. On the same day on which this decision was


149. 224 U.S. 1 (1912).
151. This had been recognized in Bement v. National Harrow Co., 186 U.S. 70 (1902).
announced, the Court handed down another opinion which expressly declared that the decision in *Henry v. Dick Company* must be regarded as overruled. In that latter case, *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, it was held that the monopoly granted by the patent laws did not authorize the patentee "to prescribe by notice attached to a patented machine the conditions of its use and the supplies which must be used in the operation of it, under pain of infringement" by a purchaser or the purchaser's lessee. The Court buttressed its redefinition of the scope of the patent monopoly by advertising to the fact that since the *Dick* case Congress, "as if in response to that decision," had passed the Clayton Act and thus had given a most persuasive expression of public policy with respect to the proper scope of patent protection. The Court confined its decision expressly to the operation of patent protection and left the matter of contractual remedies open to subsequent consideration.

On the doctrinal ground thus prepared by the *Motion Picture Patents Co.* case, the Supreme Court erected a rapidly expanding theory of monopolistic patent misuse which not only entailed the specific legal sanctions imposed by the antimonopoly legislation but also resulted in the invalidity, as a matter of both patent and contract law, of the respective agreements. In addition, this theory was apt to deprive the patentee of his otherwise available protection through in-

---

156. *Id.* at 509.
159. *Id.* at 509.
161. See, e.g., *Boston Store v. American Graphophone Co.*, 246 U.S. 8 (1918) (price fixing agreements relating to patented articles are void as contrary to the general law and not actionable in federal courts even in diversity cases); *Carbice Corp. of America v. American Patents Development Corp.*, 283 U.S. 27 (1931) (condition in a license for the use of a patented container which requires that unpatented merchandise to be placed therein must be purchased from the exclusive licensee for the manufacture of such container will not be unenforceable as a matter of patent law); *Leitch Mfg. Co. v. Barber Co.*, 302 U.S. 458 (1938) (license for the use of a patented process cannot be conditioned upon use only with non-patented materials bought from patentee).
The Supreme Court, however, has, at least for the present, still excepted from the sweep of its "monopolistic misuse" doctrine, the right of the patentee to grant licenses for the manufacture and sale of patented articles upon the agreement by the licensee to observe prescribed resale prices, or upon the condition that the licensee restrict his sales to certain classes of users. In the later case a violation of such condition was held to constitute infringement not only by the licensee but also by a purchaser with knowledge.

Of course, a great deal of the success of the misuse doctrine was at the expense of the doctrine of contributory infringement. The latter was designed to protect the patentee or exclusive licensee against third parties furnishing unpatented materials known to be used in an infringement by the purchasers. Thus the policy of invalidating conditions in use licenses which required unpatented materials used with the patented invention to be purchased from the licensor or specified suppliers, of necessity curtailed the field of contributory infringement, and gave third party suppliers the liberty of ignoring such restrictions without danger of being subject to such suit. The earlier decisions denying relief against contributory infringement in these cases involved the supply of some "unpatented staple article of commerce" used either in the employ of patented articles, or as supply with

---

162. See, e.g., Morton Salt Co. v. Suppiger Co., 314 U.S. 488 (1942) (denial of injunctive relief against infringement of patented apparatus, where patentee had abused his patent monopoly by using it through tying clauses as a means of restraining competition with its sale of an unpatented article); B. B. Chemical Co. v. Ellis, 314 U.S. 495 (1942) (extending the principle of the Morton Salt Co. case to process patents).


166. In that respect American patent law coincides with the legal system of the United Kingdom and Germany which likewise attribute the sanction of infringement to limitations and conditions in licenses which are consistent with public policy and not specifically proscribed. See 24 HALSBURY, LAWS OF ENGLAND 715 (2d ed., Lord Hailsham, 1937); MEINHARDT, INVENTIONS, PATENTS AND MONOPOLY 156 (2d ed. 1950); TERRY AND SHELLEY, LAW OF PATENTS 262, 264 (9th ed. 1951); 1 REIMER, PATENTGESETZ UND GESETZ BETREFFEND DEN SCHUTZ VON GEBRAUCHSMUSTERN 384, 387 (1949).


patented machines,\textsuperscript{169} or as starting material in a patented process.\textsuperscript{170} But in the famous \textit{Mercoid} cases\textsuperscript{171} the Supreme Court went a step further. In the first of these cases, the Court denied relief for contributory infringement to the exclusive licensee of a combination or system patent who had sublicensed the use of the system on the condition that an unpatented element of the system—a particular control switch—be purchased from him.\textsuperscript{172} In the second case, the court denied relief for direct and contributory infringement to the owner of a system patent who had licensed certain competitors to manufacture and vend three unpatented switches which constituted an essential element of the patented system and who had granted licenses for the use of the patent only to purchasers of the switches from one of these manufacturers.\textsuperscript{173} Justice Douglas, who authored the controlling opinions, commented in the course of one of them: "The result of this decision . . . is to limit substantially the doctrine of contributory infringement. What residuum may be left we need not stop to consider."\textsuperscript{174}

Alarm over the doubt thus cast upon the vitality of the whole doctrine of contributory infringement\textsuperscript{175} and fear of further extensions of the misuse doctrine, which were accentuated by holdings or dicta in some decisions of the lower federal courts rendered in the wake of the \textit{Mercoid} cases,\textsuperscript{176} led to a clamor for legislative relief. The New York Patent Law Association sponsored a bill for the restoration of protection against contributory infringement, which was prepared in the committee on patent law and practice of the association, and

\textsuperscript{169} International Business Machines Corp. v. United States, 298 U.S. 131, 136 (1936).
\textsuperscript{171} Mercoid Corp. v. Mid-Continent Investment Co., 320 U.S. 661 (1944); Mercoid Corp. v. Minneapolis-Honeywell Regulator Co., 320 U.S. 680 (1944).
\textsuperscript{172} Mercoid Corp. v. Mid-Continent Investment Co., 320 U.S. 661 (1944).
\textsuperscript{173} Mercoid Corp. v. Minneapolis-Honeywell Regulator Co., 320 U.S. 680 (1944). It is interesting to observe that the four justices, who had dissented in the \textit{Mid-Continent} case, felt that the facts in the instant case were sufficiently different to compel them to concur in the result reached by the majority.
\textsuperscript{174} Mercoid Corp. v. Mid-Continent Investment Co., 320 U.S. 661, 669 (1944).
had it introduced in the Eightieth and the Eighty-first Congresses. The bill was the subject of extensive hearings but failed to pass. The framers of the new patent act, however, incorporated the contributory infringement bill, with slight alterations in phraseology, in their first revision bill and, with further changes in wording, in their subsequent bills. Thus, eventually it became a part of the new code, despite the objections which the Department of Justice had raised throughout the various hearings.

The new patent law defines as contributory infringement the sale of "a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention," if the seller knows that the object sold is "especially made or especially adapted for use in an infringement of such patent" and excludes specifically the sale of "a staple article or commodity of commerce suitable for substantial noninfringing use. . . ." The seller of so-called neutral articles is consequently protected against the danger of liability for contributory infringement. His position is similar under German law.

Joined with this re-establishment of a legitimate area for the doctrine of contributory infringement is a further provision which is designed to assure that certain acts by the patentee will not be held to constitute a misuse or illegal extension of the patent right. It is expressly declared that a patent owner shall not be denied relief for infringement or contributory infringement "by reason of his having done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringement of the patent; (2) licensed or authorized another

178. Hearings before Subcommittee on Patents, Trade-Marks and Copyrights of the Committee on the Judiciary on H.R. 5988, H.R. 4061 and H.R. 5248, 80th Cong., 2d Sess. (1948); Hearings before Subcommittee No. 4 of the Committee on the Judiciary, on H.R. 3866, 81st Cong., 1st Sess. (1950). As stated by Mr. Rich in the latter hearings, he and Messrs. Walker and Byerly of the New York Bar were the three principal authors of the bill. Id. at 2.
179. H.R. 9133, 81st Cong., 2d Sess., § 231(c)-(g) (1950).
183. See 1 REIMER, PATENTGESETZ UND GESETZ BETREFFEND DEN SCHUTZ VON GEBRAUCHSMUSTERN 313-15 (1949).
to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement." The exact import that the courts will attribute to this subsection, which is shrouded in unnecessarily obscure and mysterious phraseology, is hard to predict. It baffled various witnesses who testified with respect thereto in the congressional hearings,\(^8\) and perplexed commentators who dealt with it subsequent to the passage of the act.\(^1\) Even one of the three principal authors of the original draft of this subsection, which has remained unchanged in the material portions through all the legislative stages, seemingly has made conflicting and inaccurate statements regarding the types of situations which the first two of the three statutory categories of sanctioned activities were meant to embrace.\(^1\) Perhaps it is safe to assume that the courts will respect the apparent intent of the originators of this subsection and, accordingly, hold that a patentee or an exclusive licensee who manufactures and sells, or licenses the manufacture and sale of, a special though unpatented device or compound, chiefly useful only as a component of a patented combination or composition or for use with a patented process, will be permitted to protect himself against competition in the sale of these articles through appropriate limitations upon the use-licenses of the ultimate customers. In other words, the Mercoid cases no longer represent the law, Leeds & Catlin (No. 2)\(^1\) has been restored, at least within limits, but Carbice Corp. v. American Patents

---

185. See, e.g., the comment by Mr. Hackley, Chief of the Patent Section, Department of Justice, before a House Subcommittee in 1948: "... section 5 of the bill, as it is understood, is disapproved in that, if it means anything [1] it seems to negate much of the existing body of case law which has operated to prevent illegal extension of the patent grant. ..." Hearings on H.R. 5988, supra note 177, at 69.


187. Mr. Rich, one of the three authors of the subsection in question (see note 177 supra) testified in 1949 that H.R. 3866, §5(a), which has become §271(d) (1), referred to cases like the Lamp case (see note 45 supra) or the Mercoid case (see note 170 supra) where the patentee has been in the business of selling less than the entire invention claimed and has been making a profit out of it; while H.R. 3866 §5(b), which has now become §271(d) (2), referred to situations like the Mercoid situation in which the patentee licensed people to make switching units which had no other use except in the case of this invention. Hearings on H.R. 3866, supra note 177, at 14. But in 1951 Mr. Rich took the view that §271(d) (1) referred to situations such as that in the Barber Asphalt case (see note 169 supra), while §271(d) (2) covered the Mercoid type of situation. Hearings on H.R. 3760, supra note 180, at 174. Actually, both subsections use narrower language than would be necessary to immunize the situations involved in the Mercoid cases.

Continued Absence of Express Provisions for Compulsory Licenses

It is noteworthy that the new American patent act has maintained the silence of the former legislation with respect to the grant of compulsory licenses. The patent laws of many other industrial nations contain more or less elaborate provisions for the imposition of compulsory licenses, especially in cases where the patentee fails to exploit the patented invention commercially for a prolonged period, or where he refuses a license on reasonable terms to the owner of a dependent patent, or where the patent relates to food or medicinal preparations. In most instances, compulsory licenses may be decreed only after the expiration of three years from the issuance of the patent because of the restriction to that effect contained in the Convention of Union for the Protection of Industrial Property. Thus the Swiss patent act authorizes the grant of a compulsory license to any interested party three years after the issuance of the patent where the patented invention has not been sufficiently exploited in Switzerland and the patentee cannot justify such failure, or where a compulsory license is demanded by the public interest. The act also authorizes the grant of a compulsory license to the owner of a dependent patent needing a license from the dominant patentee where the second invention represents a notable technical advance and the three years have elapsed. The patent laws of Canada and the new acts of the United Kingdom, Australia and South Africa contain detailed though somewhat varying catalogues of conditions under which compulsory licenses may be imposed, generally but not in all cases after the expiration of the requisite three years from the sealing of the patent. Failure to practice the invention commercially in the country so as to meet domestic demands and benefit the local economy, refusal to grant licenses to the prejudice of domestic trade and industry, and the insertion of unfair and prejudicial restrictions in licenses

189. Cases cited notes 161 and 162 supra.
190. Art. 5 of the International Convention, as revised at London, June 2, 1934, authorizes the member states "to take the necessary legislative measures to prevent abuses which might result from the exercise of the exclusive rights conferred by the patent; for example, failure to use." 53 STAT. 1768, 1774 (1934). But it requires the expiration of a three-year period from the issuance of the patent prior to the imposition of compulsory licenses. Id. at 1775.
193. Patent Act of 1935, [1952] REV. STAT. OF CANADA c. 203, §§ 41(3), 67(2) (a)-(f); U.K. Patents Act, 1949, 12, 13 & 14, Geo. 6, c. 87, §§ 37(2) (a)-(e); 40(3); 41(1); Australian Patents Act, No. 42 of 1952, §§ 108, 110(1) (a)-(d); South African Patents Act, No. 37 of 1952, §§ 48(1), 49, 50(1), 50(6) (a)-(f).
granted are the principal reasons for such action. The United Kingdom and South Africa make an additional express provision for the benefit of the owner of a dependent patent which represents a substantial advance in the art.\textsuperscript{194} The German patent act contains a general clause providing for compulsory licenses, if such grant is in the public interest and the requisite three year period has elapsed.\textsuperscript{195}

In contrast to this policy of foreign patent laws, the Supreme Court has repeatedly affirmed that the American patent entitles the owner "... to use it himself and refuse to license it, or to retain it and neither use nor license it."\textsuperscript{196} As a result, nonuse is not a defense in an infringement action\textsuperscript{197} and cross-licensing between the owners of dominant and dependent patents will not be judicially compelled, although cross-licensing as such is looked upon with judicial favor.\textsuperscript{198} American courts have devised and applied the sanction of compulsory licenses only in cases of actual violations of the antimonopoly laws.\textsuperscript{199} It is perhaps regrettable that the drafters of the new code have closed their ears even to the very moderate proposals for compulsory licenses in the fields of public health and public safety advanced by the National Patent Planning Commission.\textsuperscript{200}

\begin{itemize}
\item \textsuperscript{194} U.K. Patents Act, 1949, 12, 13 & 14 Geo. 6, c. 87 §37(2) (d); South African Patents Act, No. 37 of 1952, §49.
\item \textsuperscript{195} German Patent Act, May 5, 1936, as revised July 18, 1953, §15. For the case law interpreting this section, see I REIMER, PATENTGESETZ UND GESETZ BETREFFEND DEN SCHUTZ VON GEBRAUCHSMUSTERN 621 (1949).
\item \textsuperscript{197} Continental Paper Bag Co. v. Eastern Paper Bag Co., 210 U.S. 405 (1908).
\item \textsuperscript{199} Cases cited note 163 \textit{supra}.
\end{itemize}