

Winter 12-1-1953

The Degree of "Invention" Necessary to Sustain a Patent

Roger G. Pierson

Follow this and additional works at: <https://scholarcommons.sc.edu/sclr>



Part of the [Law Commons](#)

Recommended Citation

Roger G. Pierson, The Degree of "Invention" Necessary to Sustain a Patent, 6 S.C.L.R. 201. (1953).

This Note is brought to you by the Law Reviews and Journals at Scholar Commons. It has been accepted for inclusion in South Carolina Law Review by an authorized editor of Scholar Commons. For more information, please contact digres@mailbox.sc.edu.

NOTES

THE DEGREE OF "INVENTION" NECESSARY TO SUSTAIN A PATENT

Introduction

During the past fifty years the pendulum of court decisions in patent law has swung from one extreme position favorable to the patentee to the present unfavorable extreme. In the past decade, doctrines representative of cornerstones of certainty have either been overturned or such confusion and doubt have been raised as to their application that lawyers' opinions frequently have been the result of pure speculation.¹

Perhaps the more realistic and practical approach to the question of the degree of "invention" necessary in a patent is that approach which is most often evidenced in writings — the negative approach. Conversely, another familiar approach is the affirmative approach. In the former you find an analysis of the things which in the past were, and thus ostensibly still are, unpatentable, and in the latter there is found an analysis of the classic decisions reached by the Supreme Court of the United States attempting in broad terms to establish the test for things which are or shall be patentable. Between the two there appears a great abyss of confusion, uncertainty and, to some extent, conflict, which it is the purport of this paper to explore and explain a portion of, with a view towards narrowing the gap of uncertainty — a combination of the negative and of the affirmative approach with affirmative conclusions. The validity of such an exploration may now be founded on the Patent Act of 1952,² a bill introduced by the late Representative Bryson of South Carolina,³ with particular reference to Section 103⁴ of the Act. This new section is added with the view that an explicit statement in the statute may have some stabilizing effect, and also to serve as a basis for the addition at a later time of some criteria which may be worked out.

1. 15 *The Shingle* 213 (1952).

2. 35 U. S. C.

3. H. R. 7794, May 12, 1952 (82nd Cong.).

4. 35 U. S. C. § 103: "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 art to which said subject pertains. Patentability shall not be negated by the manner in which the invention was made."

Section 103 is one of those matters of major importance; the statutory inclusion of a requirement for "invention", which has never before been dealt with in the statutes. Since it is firmly established as a prerequisite to patentability, it was felt that it was desirable to include it in the codification. And in doing so certain troublesome matters were dealt with, but without any attempt to define "invention", the undefinable.

First of all, Section 103 is a statement that a patent cannot be granted if "invention" is wanting, and want of "invention" is stated in terms of "obviousness", "obviousness" in view of the "prior art". And the "prior art" is that art which is prior according to Section 102.⁵ This obviousness must, first of all, be determined as of the time when the "invention" was made. This is not new law, but here it is where the courts cannot deviate from it. And it must be determined with reference to a person having ordinary skill in the art.

Finally, the last clause of Section 103 is intended to lay the ghost of the "flash of genius" furore. It says, "Patentability shall not be negated by the manner in which the invention was made". That is, long toil stands on an equal footing with genius.

Some of the critics crystallized an anti-patent attitude which denied recognition of the inventor as a public benefactor and which treated the grant to the inventor of his 17 year patent as a trespass upon the public domain. The aggressive antagonism of a few with their inaccurate and misleading treatment of the patent system appears as a heavy smoke-screen designed to obscure the constitutional purpose of the patent system. Even on the bench there are a few

5. 35 U. S. C. § 102: "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 applicants' 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.

judges who still give voice to the anti-patent philosophy. The rise of animosity recently became evident in the United States Supreme Court and moved Mr. Justice Jackson to say that the only valid patent is one upon which that Court has not been able to get its hands.⁶

Against that background we have a new patent law, illustrative of the faith of the Congress in the patent system as providing an incentive to invent.

History

The Constitutional Convention that wrote the American Constitution spent so little time, if any, debating the provision with regard to patents for inventions, that no debate is recorded. The inherent rights of the individual naturally included the principle of ownership for an equitable but limited period of the right to practice such inventions and discoveries as he might make. No debate was needed. It is interesting to note that this provision followed to a large degree, if not entirely, suggestions made in the Convention by James Madison of Virginia and Charles Pinckney of South Carolina.

The framers of the Constitution of the United States had the wisdom and foresight to incorporate therein a provision concerning inventions. Article I, Section 8, Clause 8 of the Constitution invests Congress with the power to enact the necessary legislation for the protection of inventions.⁷ The clause reads as follows: "The Congress shall have 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."

Based upon the constitutional provision, Congress has enacted legislation pertaining to patents. Concerning Congress' right to legislate, there is not the slightest doubt. The United States Supreme Court has spoken on this question in the case of *McClurg v. Kingsland*.⁸ In this case Mr. Justice Baldwin held that:

The powers of Congress to legislate upon the subject of patents is plenary by the terms of the Constitution, and as there are no restrictions on its exercise, there can be no limitation of their right to modify them at their pleasure so they do not take away the rights of property in existing patents.

6. See note 1 *supra*.

7. 1 WALKER ON PATENTS, c. 1 (1937).

8. *McClurg v. Kingsland*, 42 U. S. 202 (1843).

In view of the fact that patents are grants authorized by statute, it is important to understand that only those classes of inventions which are specifically enumerated by the patent statutes can be given patent protection. Patentable subject matter, as enumerated in the statutes, embraces five classes: arts, machines, manufactures, compositions of matter, or any new or useful improvements thereof and plants, asexually reproduced, other than tuber-propagated plants. In addition there is the provision for patents for a new, original, and ornamental design for an article of manufacture.⁹ The meaning of these designations, as laid down or interpreted by the courts, shall be referred to later.

The historical development of monopolies and of inventions may be traced from the Middle Ages through the Elizabethan and Jacobean eras to the Statute of Monopolies of 1623 and to the adoption of the American Constitution. A knowledge and understanding of this development is important in that a thorough grasp may be had of the salient distinctions between obnoxious and odious monopolies and beneficial grants for inventions as contemplated by our Constitution. Pursuing this investigation, we find the courts and writers in considering the exclusive rights granted to an inventor under the Patent Laws have reached divergent views. Some adhere to the view that a patent is not a monopoly, whereas others, equally as positive, express the opinion that a patent is a true and ideal monopoly sanctioned by positive law. By any standard it is difficult, if not impossible, to refer to a grant of a patent as an obnoxious monopoly. The making of an invention is generally the result of personal services, many sacrifices, much study, labor, ingenuity, and a considerable expenditure of time and money, and few persons have the required ability and inclination, without the hope of reward or remuneration, to devote the time, energy, and money to develop improvements in the useful arts and sciences for the public benefit.

As the people are benefited by the development of inventions, it is but natural that the inventor should receive some reward for disclosing his invention to the public. Such a reward will also stimulate inventive skill and energy and is one of the most effective methods of advancing national prosperity. The mode of rewarding the inventor is the result of statute law under which the inventor is granted certain exclusive privileges for a limited period of time. The grant of an exclusive privilege for a useful invention is not the granting of a monopoly. A monopoly is the exercise of an ex-

9. See note 7 *supra*.

clusive privilege granted to anyone for the sole buying, selling, making, working, or using anything which the public had *before* the exclusive privilege was granted.¹⁰

Many judges have rendered decisions expressing what is perhaps the prevailing view—that a patent is not a monopoly or certainly, if it is a monopoly, it is not obnoxious. The Supreme Court of the United States apparently adheres to this view.¹¹ In the case of *Allen v. Hunter*¹² a clear, concise decision was rendered with respect to this query:

Patentees are not monopolists. This objection is often made and it has its effect upon society. The imputation is unjust and impolitic. A monopolist is one who by the exercise of the sovereign power, takes from the public that which belongs to it, and gives to the grantee and his assigns an exclusive use. On this ground monopolies are justly odious. It enables a favored individual to tax the community, for his exclusive benefit, for the use of that to which every other person in the community, abstractly, has an equal right with himself. Under the patent law this can never be done. No exclusive right can be granted for anything which the patentee has not invented or discovered. If he claim anything which was before known, his patent is void. So that the law repudiates a monopoly. The right of the patentee entirely rests on his invention or discovery of that which is useful, and which was not known before. And the law gives him the exclusive use of the thing invented or discovered, for a few years, as a compensation for his ingenuity, labor, and expense in producing it. This, then, in no sense, partakes of the character of monopoly.

From around 1790 to 1836, the patent system had so stimulated the invention of new devices and utilities that it was revised and put upon a permanent business basis in 1836. The Patent Office was established as a separate bureau with a Commissioner in charge and the examination system was put into effect as a part of the American system. The growth and expansion of our economy in the next 160 years under the United States patent system is the greatest material achievement in human history. The first step in the production of a new thing is getting the idea. The reward is offered to

10. *Ibid.*

11. *Bloomer v. McQuewan*, 14 How. (55 U. S.) 539 (1852).

12. *Allen v. Hunter*, 1 Fed. Cas. 476 (C. C. Ohio 1885).

the man who can teach the public something new and useful. He is the indispensable man, because his services are indispensable.

In addition to technological changes from 1870 to date, there were equally important political and economic changes going on which affected the patent system. It is difficult to select only the items relating to the patent system when the patent system, the political system, and the economic system all interacted to produce changes in each other.

Cardozo said: "Logic and history, and custom and utility, and the accepted standards of right conduct are the forces which singly or in combination shape the progress of the law." "Which of these forces shall dominate in any case must depend largely upon the comparative importance or value of the social interests that will be thereby promoted or impaired. One of the most fundamental social interests is that law shall be uniform and impartial. There must be nothing in its action that savors of prejudice or favor or even arbitrary whim. Therefore in the main there shall be adherence to precedent. Yet the subjective element, the unconscious forces, the likes, dislikes, prejudices, the emotions, habits and convictions—the great tides and currents which engulf the best of men—do not turn aside in their course, and pass the judges by."¹³

Patent Law Compared with Anti-Trust Law

That the basic philosophies upon which Patent Law and Anti-Trust Law are founded are in contradistinction to one another is clear. Some refer to the two as mortal enemies, while others take what is perhaps a more pliable view that each is designed both to promote industry for the benefit of the individual and to protect the individual against certain sinister tendencies attributed to the uncontrolled growth of industry. Whether the two philosophies can be qualified to a point of refinement through which harmony may be reached is not of primary concern here. The question most probably would resolve itself into academic theory with questionable practical application. Suffice to say that a conflict does exist and each has had caustic effects upon the other. The effects of this conflict with respect to the degree of "invention" necessary in a patent is our only concern.

The economic situation after the Civil War, the rise of the great railroads, the exploitation of native as well as imported labor, coupled with the increased power of these tremendous enterprises brought

13. Cardozo, Benjamin N., *The Nature of the Judicial Process* (1922).

the appearance of a phenomenon of more or less evil character. Competitors began to realize that greater profits could be obtained by entering into combinations and agreements among themselves restricting commerce.

One manifestation of this hostile attitude was a movement called the Granger Movement. Other concerted movements sprang up until the country had become thoroughly imbued with the evils of greedy enterprise. Out of this hostility was born the anti-trust law. This law would soon clip the wings of the industrial vulture.

Many inventors from about 1900 on, began to be employed by the corporation and required to assign their inventions to the corporation as a part of their regular duties. More and more is matter of invention organized into a phase of the manufacturing business. Because of the technological impossibility of maintaining private research establishments, with respect to cost and otherwise, this appears to be the outgrowth of necessity and practicality rather than any preconceived idea of control by industrial corporations with an effort to monopolize inventors or their inventions. Yet with the change in the government's attitude, apparent with the passage of powerfully extended anti-trust laws, what effect upon, what repercussions, what subtle ramifications are there with respect to the courts' attitude towards sustaining the patents of large corporations? More important here is to what extent has this influenced the "degree of invention" necessary in a patent? In its efforts to curtail the admitted evils of over-extended industry, have the courts deprived inventors of their natural and statutory rights and sacrificed a system, whose abolition or emasculation is not merely a matter of slowing down our material benefits but is actually a step towards national deterioration?

Illustrative of the difficulties today of patent owners is a recent decision by the Court of Appeals for the Tenth Circuit, where a patent owner was held liable for damages in a patent suit brought by him, because of an anti-trust treble damages counterclaim, even though the owner *believed* some of the patents were infringed. The patent owner argued that holding him liable for bringing the infringement action amounted to a denial of free access to the courts, but, although the opinion agrees that free and unrestricted access to the courts must not be denied or imperiled, it also insists that the courts cannot be used as vehicles for maintaining and carrying out an unlawful monopoly.¹⁴

In rendering such a decision language from *American Tobacco Co.*

14. 21 L. W. 1013 (1952).

v. United States,¹⁵ an anti-trust suit with respect to size in an attempted conspiracy to monopolize, was deemed appropriate. The opinion there said that acts done to give effect to the conspiracy may be in themselves wholly innocent acts. Yet if they are part of the sum of the acts which are relied upon to effectuate the conspiracy which the statute forbids, they come within its prohibition. The construction placed upon this United States Supreme Court decision by the Court of Appeals for the Tenth Circuit renders risky attempts to enforce patent rights, especially in an atmosphere of extended hostility. Why else should one whose rights have been invaded to his best belief and knowledge be so heavily penalized? If it is an attempt to stay a flow of litigation or to caution would-be offenders of the anti-trust statutes, it reaches a danger point in denying justice to those who seek honest clarification of their rights.

Words — Meanings and Usage

Another consideration is one which is not unique to the subject under discussion, nor should it be the subject of generalizations or profundities. Words never mean the same to two different persons nor even twice to the same person. Each person has individual education and experiences — no two have had a word presented to them with the same associations. Research scientists, engineers and attorneys have different educations, read different books, talk different shorthand to each other, think in different patterns, so that between them mis- or non-comprehension is always possible. The judges prefer clarity in documents, and consciously, or worse, unconsciously, are prejudiced against an obscure and confused writing, be it a contract, insurance policy, patent, or other paper. And, as a matter of law, an ambiguous description in a patent, one that can be interpreted in two or more ways, is bad.¹⁶ Also, patent language of doubtful meaning is to be taken most strongly against the one who used it, namely, the inventor,¹⁷ so that a patent for a useful result is void if the description of the desired result differs from the description of the way to obtain the result.¹⁸

From the days of the ancient Greeks, through the lifetime of Leonardo da Vinci (1452-1519), until perhaps only 150 years ago a word such as "gear" meant a single or a very small number of objects. Today the word "gear" may mean any one of many thousands of ob-

15. *American Tobacco Co. v. U. S.*, 328 U. S. 781 (1945).

16. *Texas Co. v. Sinclair Co.*, 87 F. 2d 690 (2nd Cir. 1937).

17. *Hookless Fastener v. G. E. Prentice*, 68 F. 2d 848 (2nd Cir. 1934).

18. *Mitchell v. Tilghman*, 19 Wall. (U. S.) 287 (1873).

jects, as does the name of almost any other mechanical device. The increased difficulty in ascertaining what would be a new "gear" out of perhaps thousands of already applied "gears" is apparent. Therefore, because of the inadequacy of chosen words, both technical and otherwise, it is often very difficult for the judge or trier of fact to comprehend, to distinguish the fine details — the improvements.

In any event, in reviewing many of the patent decisions wherein "patentable invention" has been denied, the conclusion might be reached that the degree of necessary "invention" was there, yet because of miscomprehensions with respect thereto, often needless and confused qualifications have been placed upon what constitutes "invention".

Perhaps the culmination of an attitude of a tired court with respect to this problem was reached by the United States Supreme Court in the *Cuno* case,¹⁹ relying upon the classic "Flash of Genius" test. Many authorities and some of the courts believed that a new and perhaps insuperable standard of invention was being established, perhaps forgetting Edison's definition of genius as 98% perspiration and 2% inspiration. However, today, the *Cuno* decision, as previously pointed out, has been abrogated by the 1952 Patent Law.

Drafting patent applications is an art requiring large abilities and great industry for success. The expert attorney will not only be a master of English, at least to the extent that he can write grammatically, logically, and pleasingly, — he should also possess, in high degree, memory, to remember all the facts pertinent to what he is writing and the relevant patent law principles, readiness of mind to perceive the relations between the facts and the legal principles, and imagination to appreciate the possibilities of the fact-legal situation. All of this is not easy.

Review of Decisions

A brief skirmish with the views expressed by the courts with respect to the "degree of invention" necessary should lend a better conception to what has been previously referred to as an abyss of confusion, uncertainty and, to some extent, conflict. To fully appreciate and to understand the impact it is hoped the 1952 Patent Law will have on this problem, it is fundamental that one become acutely aware of this almost inextricable confusion. Only then can we salvage the remnants of clarity and attempt to affirmatively assess that which endures.

¹⁹. *Cuno Engineering Corp. v. Automotive Devices Corp.*, 314 U. S. 84 (1941).

When an application is received in the Patent Office, after processing in the initial stages, it is assigned to one of the divisions. Then when it reaches the division, it is assigned to one of the assistant examiners on the theory that it goes to the man in the Office best skilled in the particular art to which that application relates. It is his duty to make a complete search of the prior art, which includes not only American patents, but domestic and foreign publications and foreign patents. Yet prior knowledge and use of an "invention" in another country does not invalidate a patent granted here to an inventor who invented without knowledge of such foreign invention and use.²⁰

In general, when a person has invented some mode of carrying into effect a law of natural science, or a rule of practice, it is the application of that law or rule which constitutes the peculiar feature of invention.²¹ Every useful art has its technique which is practiced by those who are skilled in it, and which is broadened in its usefulness thereto from precedent to precedent. This is the process of "evolution" — a phenomenon in which the expectable follows the expectable. "Invention" is the antithesis of evolution, and connotes necessarily the achievement of the unexpected. It may properly be said to occur only when a demand for an advance in an art has built up a sufficient potential to cause the spark of some man's thought, by jumping an uncrossed gap between an outpost of that art and one of its desiderata, to give the world something new in process, product, or device.²² In many cases claim of invention thus described is based on the theory of chance discovery. While it is true that invention may be the result of accident, and one seeking a patent thereon need not understand or be able to state the scientific principles underlying his claim,²³ nevertheless he is charged with knowledge of the state of the art and hence, even if he had no actual notice thereof and therefore was experimenting blindly, he cannot overcome the negation of invention which results from actual disclosure by the prior art.²⁴

In order that a patent may be sustained it must appear that it embodies the element of utility.²⁵ One qualification apparent in the decisions is that it is not essential that utility exist in a high degree.

20. *Hurlbut v. Schillinger*, 130 U. S. 456 (1888).

21. *Electric Smelting and Aluminum Co. v. Pittsburgh Reduction Co.*, 111 Fed. 742 (W. D. N. Y. 1901), citing *Sewall v. Jones*, 91 U. S. 184 (1875).

22. *Less Car Load Lots Co. v. Pennsylvania R. Co.*, 10 F. Supp. 642 (S. D. N. Y. 1935).

23. *Diamond Rubber Co. v. Consolidated Rubber Tire Co.*, 220 U. S. 428 (1910).

24. *Derby v. Thompson*, 146 U. S. 476 (1892).

25. *Thompson v. Boisselier*, 114 U. S. 1 (1884).

It must be useful and beneficial to society.²⁶ Nor can a device used only for gaming be deemed useful, yet it is not invalid if used for gambling where it is equally capable of use on machines used for legitimate purposes.²⁷ The element of novelty is an essential requisite of the patentability of an invention or discovery. It is not material that the patentee had no actual knowledge of the anticipatory device.²⁸ Moreover, a patent will not issue for an apparatus which common knowledge would enable anyone to make or use.²⁹ Results, together with ingenuity in bringing them about, amount to "invention."³⁰

A classic decision was reached in the *Barbed Wire Case*³¹ establishing the "last step test". Under such circumstances courts have not been reluctant to sustain a patent to the man who has taken the final step which has turned a failure into a success. In the law of patents it is the last step that wins. It may be strange that, considering the important results obtained by the former inventor in his patent for barbed wire, it did not occur to him to substitute a coiled wire in place of the diamond shape prong, but evidently it did not, and to the man to whom it did ought not to be denied the quality of inventor. There are many instances in the reported decisions of the United States Supreme Court where a patent has been sustained in favor of the last of a series of inventors, all of whom were groping to attain a certain result, which only the last one of the number seemed able to grasp. Conspicuous among these is the case of *Webster Loom Co. v. Higgins*.³² In answer to the argument that the combination involved was a mere aggregation of old and well-known devices, the court held that even though it may have been under their very eyes, they may almost be said to have stumbled over it; but they certainly failed to see it, to estimate its value, and to bring it into notice. Now that it has succeeded, it may seem very plain to anyone that he could have done it as well. This is often the case with inventions of the greatest merit. It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produce a new and beneficial result never attained before, it is evidence of "invention".

26. *Atlantic Works v. Brady*, 107 U. S. 192 (1882).

27. *Fuller v. Berger*, 120 Fed. 274 (7th Cir. 1903).

28. As to what constitutes prior knowledge or use see 40 Am. Jur., Patents, § 33 *et seq.*

29. *Preston v. Manard*, 116 U. S. 661 (1885).

30. *Nat. Cash Reg. Co. v. Boston Cash*, 156 U. S. 502 (1894).

31. *The Washburn and Moen Manufacturing Co. v. The Beat 'Em All Barbed Wire Co.*, 143 U. S. 275 (1891).

32. *Webster Loom Co. v. Higgins*, 105 U. S. 580 (1881).

Evidence is admissible, yet not conclusive, that an article previously unsalable, has been made salable by the invention in question.³³ Adaptation to a new use, such as the use of an old machine for a new purpose does not constitute "invention".³⁴ The mere discovery of an additional function in a device invented by another does not constitute "invention".³⁵ A qualification of this dogmatic conclusion might be inferred where it was held that the addition of a new element to a combination is not "invention" *unless* the added element is one not plainly indicated by prior art.³⁶ Generally speaking, where there is found an aggregation or combination "invention" is not involved by merely uniting two elements.³⁷ Yet a combination claim may involve "invention", though every element is old, if a new result is accomplished or an old result reached by a new and better way.³⁸ A patentee may not, by improving one element of an old combination whose construction and operation are otherwise unchanged, repatent in effect the old combination by reclaiming it with the improved element substituted for the old element.³⁹

The application of an old purpose without any change in result is not "invention".⁴⁰ The application of an old process to a new material may involve "invention", but generally speaking it does not, and especially where the method operates in the same way and effects the same results.⁴¹ Substitution of new materials may amount to "invention" if it involves a new mode of construction, develops new properties and uses, produces a new mode of operation, results in a new function, is the first practical success in art in which substitution is made or in practice shows its more efficient action.⁴²

A change of form, size, place is generally held not to be "invention". Whether an improvement patent amounts to invention is a question of fact,⁴³ as is the determination of the fact whether the improvement presents some uncommon advance in the art or mere exercise of "the skill of the calling".⁴⁴ A patent for an improvement

33. *Keystone Mfg. Co. v. Adams*, 151 U. S. 139 (1893).

34. *In re Crews*, 36 F. 2d 135 [C. C. P. A. (Patents) 1929].

35. *In re Gauerke*, 86 F. 2d 330 [C. C. P. A. (Patents) 1936].

36. *Batcheller v. Henry Cole Co.*, 7 F. Supp. 898 (D. C. Mass. 1934).

37. *Apex Electrical Mfg. Co. v. Landers, Frary and Clark*, 21 F. Supp. 241 (D. C. Conn. 1937).

38. *Kendall v. Trico Products Corp.*, 31 F. 2d 522 (6th Cir. 1929).

39. *Lincoln Engineering Co. of Ill. v. Stewart-Warner Corp.*, 303 U. S. 545 (1937).

40. *Armstrong Seatag Corp. v. Smith's Island Oyster Co.*, 254 Fed. 821 (4th Cir. 1918).

41. *David E. Kennedy, Inc. v. Beaver Tile and Specialty Co.*, 232 Fed. 477 (S. D. N. Y. 1916).

42. *Ottenheimer Bros. v. Lebuivitz*, 5 F. Supp. 205 (D. Md. 1933).

43. *Thompson Spot Welder Co. v. Ford Motor Co.*, 265 U. S. 445 (1924).

44. *Textile Machine Works v. Louis Hirsh Co.*, 302 U. S. 490 (1938).

in rubber tired wheels, consisting of a solid rubber tire held in place in a flaring rim by the tension of two tightly drawn wires embedded in the rubber within the periphery of the flanges, which had almost universally been accepted as the termination of the struggle for a completely successful tire, and a tire so constructed possessing the function of rising, falling, and reseating itself under lateral strain, was held to involve patentable "invention", and not to have been anticipated by prior patents covering combinations of some of the same elements, but which did not possess the distinctive "tipping" function of the improved tire, and hence failed of commercial success.⁴⁵

In another case, in support of the finding that the necessary degree of "invention" was present, the court in summation of its finding stated that the need had long existed; competent investigators had tried to fill it; they had hit the target but not the bull's eye; the art accepted and practiced the disclosure with success.⁴⁶ In retrospect it now seems inevitable, perhaps it was in time. Chemists were bound in the end to learn how to electroplate chromium; it was another species of an art well known. But if this is to be the test, there will be few inventions, or none. The patent law need look only to the *last step* which conquered what had so far balked advance. Those decisions which emphasize the implications of existing knowledge are speaking of smaller gains within the compass of the routine chemist, electrician, or artisan; that is not a severe test. But while the law grants its patent only to those whose originality is out of the common, *it does not demand genius*.

An "invention" is a new display of ingenuity beyond the compass of the one of average skill, and in the end that is all that can be said about it. Courts cannot avoid the duty of divining as best they can what the day-to-day capacity of the ordinary artisan will produce. This they attempt by looking at the history of the art, the occasion for the "invention", its success, its independent repetition at about the same time, and the state of the underlying art, which was a condition upon its appearance at all. As said by Judge Learned Hand, "Yet, when all is said, there will remain cases when we can only fall back upon such good sense as we may have, and in these we cannot help exposing the inventor to the hazard inherent in hypothesizing such modifications in the existing arts as are within the

45. See note 23 *supra*.

46. United Chromium, Inc. v. International Silver Co., 60 F. 2d 913 (2nd Cir. 1932).

limited imagination of the journeyman. There comes a point when the question must be reached by a subjective opinion as to what seems an easy step and what does not."⁴⁷

In administering the patent law, the court first looks into the art, to find what the real merit of the alleged discovery or invention is, and whether it has advanced the art substantially. If it has done so, then the court is liberal in its construction of the patent, to secure to the inventor the reward he deserves. If what he has done works only a slight step forward, and that which he says is a discovery is on the border line between mere mechanical change and real invention, then his patent, if sustained, will be given a narrow scope, and infringement will be found only in approximate copies of the new device. It is this differing attitude of the courts toward genuine discoveries and slight improvements that reconciles the sometimes apparently conflicting instances of construing specifications and the finding of equivalents in alleged infringements.⁴⁸

Yet any conclusion as to possible "patentable invention" is based not only upon a study of the prior art—most of which is before the court—but also upon the testimony of witnesses, lay and expert, including the inventor, about the problem which the invention sought to solve. And in determining whether there is invention, there must not be too much reliance on admissions which the inventor may have made in courts as to the meaning of the invention, but on what the patent discloses in its relation to the prior art as that art would be viewed, not by a layman, but by one skilled in the art to which it relates.⁴⁹

Somewhere within this galaxy of verbiage lies the answer to the "degree of invention" necessary to sustain a patent. To say that the courts have encrusted their decisions with superficialities; to say that they have reached a lack of harmony or reciprocal unsuitability, often verging on absurdity, would not only be an understatement but at this point repetitious. The obvious inconsistencies must and do become apparent, suggesting, perhaps, positive opposition or contrariety. Though it is a temptation, still it would not be entirely accurate to say that the courts have embarked upon a course of complete abandonment of even attempts to protect patent rights and inventors' rights.

47. *Kirsch Mfg. Co. v. Gould Mersereau Co.*, 6 F. 2d 793 (2nd Cir. 1925).

48. *Eibel Process Co. v. Minnesota and Ontario Paper Co.*, 261 U. S. 45 (1923).

49. *Pointer v. Six Wheel Corp.*, 177 F. 2d 153 (9th Cir. 1949).

The "Degree" of Invention

Whatever may be the effect of the new patent law shall ultimately rest with the courts. It most probably will not, as might be hoped, erase the existing blunders—yet it undeniably affords a certain “reculer pour mieux sauter”.⁵⁰ Assuming, therefore, that there is now the necessary equilibrant, the designation of “invention” could approach some semblance of reasonableness, rendering experience intelligible by bringing perceived particulars under appropriate concepts.

Little, if any, comment could be passed upon the efforts made by the United States Patent Office to give credulity to the applications for patents. Perhaps the attitude of this office and the measure used by it, compendiously stated, might best be shown by the 1948 words of the Patent Commissioner in answer to the following questions:

What, if any, effort is being made in the patent office to bring about a uniform attitude by the several hundred examiners on the question of what amounts to patentable invention or what rises to the dignity of invention? Does the patent office attempt to follow the decisions of the courts in infringement suits on this question?

To which he replied:

When I came into the patent office, I found that my predecessor had set up a system of instruction for senior examiners. Also, we conduct classes for the junior examiners. Those classes are an attempt to get over the idea with respect to what shall and what shall not, as a general matter, be considered patentable inventions. You will understand that this matter of invention is one that lies in the zone of the judgment of the individual, and is very difficult to set in a pattern. It is almost impossible to say, ‘This is an invention and that is not invention’ by any rule of thumb. The important thing is to instill in the minds of those gentlemen an attitude towards the question of invention. In addition we hold weekly policy meetings with the supervisors, and when an issue comes up and we find that there is a decision which is applying very strict rules on the question of invention, we attempt to define a policy that will be brought before the individual primary examiner.

As to this matter of invention, our feeling is that we can’t

50. [F] to go back in order to take a better leap.

take down the barrier because under the American system it is one of the elements in determining whether or not an application shall be allowed. It might be that some day this country would be better off if we did like England. There anticipation alone, not the question of invention in the sense that we treat it, is involved in granting patents. I personally feel that there should be a liberal feeling where the matter is really in doubt. I say that because when a patent issues, then the owner of that patent has a right to go into the court, and it may be at that time he will be able by objective tests to support the patent, whereas those objective tests would not be available to him in the Patent Office, particularly those that depend on the passage of time.

I am afraid if we attempted to follow all the courts on this question of invention, we would be lost. We don't go to the liberal court for our standards, and we don't go to the tough court, but try to go down the middle of the road.

In dealing with more basic considerations—the elements of utility, usefulness, and what is to be regarded as beneficial to society—the courts have reached, perhaps to a distinguishable degree, perceivable concord. Utility and usefulness might be combined thus defined as a power to satisfy human wants; human wants, in this instance, qualified to those “inventions” which are economically beneficial to society. Any elaborate qualification with respect to this would approach intellectual frivolity.

Permeating the entire problem is that which has already been “invented” and patented, referred to as the “prior art”. It is in lieu of this “prior art”, in terms of one ordinarily skilled in the art, whether or not the necessary novelty exists to carry it beyond that point already reached. Necessarily, it must depend almost entirely upon the factual situation, as in so many aspects of the law. In applying these facts, the factors already considered together with present considerations could spell out a working equation.

A prerequisite to “invention” is a thorough knowledge and understanding of the prior art, which is closely akin, similar to, or the forerunner of the subject matter to be patented. Space does not yield to an intricate blending, or an attempt thereof, of the sundry interpretations expressing that which constitutes “invention”. Perhaps the best, or more honestly the easiest, way to conclude to a degree what today constitutes the degree of “invention” necessary is to review a June, 1952 decision in which there is a strong dissenting

opinion,⁵¹ remembering that the new Patent Law was enacted in July, 1952.

The "invention" in question relates to shipping containers fabricated from multi-ply corrugated fibre board. The entire board is made as a continuous strip and then suitably cut and scored to provide a blank from which is made the finished container. It is alleged in the application that a container so made is lighter in weight and cheaper to make than other containers of the same size and that this result is obtained without loss of strength in the use of the containers. This was apparently accomplished by omitting two outside facing strips, ordinarily used as reinforcement, whereas in the application, when the flaps are folded they overlap in pairs on the top and bottom of the completed structure and when glued the flaps co-operate with each other, providing the equivalent of a 3-ply top and bottom with an additional ply of corrugated board as a padding at those points.

The court in its majority opinion held that omission of two outside facing strips did not result in any unobvious or unexpected advantage because such advantage would be inherent. Further it stated that if the omission of an element is attended by a corresponding omission of the function performed thereby, there is no invention if the elements retained perform the same functions as before, and, although the applicant had made an improvement over similar structures as shown by the prior art, that was not sufficient to warrant a granting of the patent if there be absence of invention. In the court's opinion, no invention was here involved, because it thought that, in view of the prior art, it would require no more than the skill of the ordinary mechanic to produce a structure such as is shown in the claims. The court also said that it would not involve invention if the applicant or anyone else discovered that the device of that patent is sufficiently strong without the re-enforcing parts, even if the omission of the inner facings from the container of applicant resulted in a saving of cost, material, and weight without loss in the strength of the container. All this, the court held, was not sufficient to bring the involved claims into the patentable category.

In a dissenting opinion, the view was expressed that it is true that, in the light of applicant's disclosure, it would not be difficult to modify the prior art devices of record to produce a device such as that disclosed, but that this would not necessarily negative the presence of patentable invention, because the conception of a new and useful improvement must be considered along with the actual means of

51. Application of Nelson, 198 F. 2d 837 [C. C. P. A. (Patents) 1952].

achieving it in order to determine the presence or absence of patentable invention. Although an ordinary person skilled in the art may construct the device claimed, claims may be allowed where there is no teaching in the prior art which would have led him to do so, providing, of course that the claimed device displays the exercise of invention. Quoting directly from the dissenting opinion:

"It seems to me that appellant by his simple changes has indeed produced what the majority refer to as an improvement—in my opinion, a marked improvement—and I fail to find in the prior art anything that suggests the simple changes appellant has made to achieve such improvement.

I am therefore of the opinion that the claimed device is not only new and useful, but involves invention over the art of record."

So, in this case, although the majority opinion admitted that invention would be cheaper, a saving of material and weight without loss of strength, patentability was denied. Under the present statute, it specifically states that "invention" must be determined with reference to one having ordinary skill in the art, and so, it appears, that should this case have been reviewed after July, 1952, the application would have been sustained.

It is plain that what may appear to be an over-simplification, might be an implemental determinate. Learn what the inventor has done, or is trying to do; study the applicable recorded art and its functions, purposes, and benefits; realize what new, improved functions can be alleged or become apparent—determined with reference to a person having ordinary skill in the art. Despite a degree of obviousness in the "invention", considering the "last step" decision together with a display of ordinary skill showing resultant economic benefits (cheaper, less bulk, saving of material, etc.), it would appear that there is "the degree of invention necessary" to sustain an application. Since the bulk of patent applications today are, to a large extent, an improvement over or modification in one form or another of prior art recorded, the importance of knowing accurately the appropriate category into which the application shall fall cannot be overemphasized. From this a knowledge and understanding of that which exists is gained. From this knowledge one can, with a degree of exactness, analyze and appraise a patent application, and determine whether "invention" exists. The strength of the "degree of invention" most necessarily resolves itself to the

factual situation. In any event, whether the facts be weak or strong — "invention" is the important issue, the strength of which should be the only legitimate subject of contest and determination by the courts. This strength could be, perhaps easily, determined in terms of: (1) a precise presentation of applicable prior record, (2) a precise presentation of the subject matter to be patented, (3) the distinctions between the two (if any), advances made, modifications made, improvements made, etc., (4) the increased economic benefits to the public.

With this before them, what need for the courts to become mired in a sea of muddy, useless qualifications? One of the premises upon which Patent Law is founded is that the public might benefit from the ingenuity or "invention" of the individual. If the public, or the country, could benefit in any way, why then could there not be at least a basic recognition of the fact that the necessary degree of "invention" is present? Any catalog of comparisons could be carried on into tedious detail. It is time the courts gave more active consideration to this initial concept and less time to what has been referred to as "devining as best they can what the day to day capacity of the ordinary artisan will produce".

Conclusion

No attempt has been made to pre-judge the issue nor has it been considered desirable. There are myriad problems, none easy. Much has been raised as a question, not an assertion.

Bad laws and hostile courts shackle progress by driving "inventions" underground. "Inventions" are valuable property whether owned by an individual or by a corporation, and every effort should be made to protect this property. The judiciary should neither be oblivious to the times nor a product of them; rather as bringing to the conflicts of the times the balancing effect of the law. The judge should not yield to the temptation of fragmentizing the law by judgments of expediency which shatter the integrity of the law in the interest of apparent social gain.

It is probable that the favorable attitude of Congress towards inventors will correct any tendency of courts to disregard patent rights. The fact that the 1952 Patent Act was passed by unanimous consent shows that Congress is in complete agreement with the conclusion that a strong patent system should be maintained in this country, and

that the best public policy on patents is the liberal policy originally expressed in the Constitution.⁵²

There is an inescapable relation between the truth without us and the truth within. The spirit of the age as it is revealed to each of us is too often the spirit of the group in which the accidents of birth or education or occupation or fellowship have given us a place. The eccentricities of judges balance one another. The same is true of juries. There are flaws in every human institution. There is no assurance that the rule of the majority will be the expression of perfect reason when embodied in constitution or in statute. We ought not to expect more of it when embodied in the judgment of the courts. But the sands of error crumble. We worry ourselves overmuch about the enduring consequences of our errors. They may work a little confusion for a time. In the end, they will be modified or corrected or ignored. The future takes care of such things.⁵³

ROGER G. PIERSON, JR.

52. 39 AM. BAR ASSOC. JOURNAL 212 (1953).

53. See note 13 *supra*.