PROPOSED MODIFICATIONS IN THE PATENT SYSTEM

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GENERAL CONSIDERATIONS

Patents for inventions in this country are Federal grants to the first inventor for seventeen years of the exclusive right to make, use, and sell the patented invention. They are based on the Constitutional provision[1] that to promote the progress of science and useful arts Congress shall have power to secure to an inventor for a limited time the exclusive right to his discovery.

The patent grant is an incentive essentially material in its nature, offered to induce the inventor to disclose his invention rather than keep it, or try to keep it, a trade secret. This purpose, to substitute disclosure for secrecy, has always been emphasized by the courts and by jurists as the prime purpose of the grant.

The grant has been regarded as a contract in which the price paid by the inventor is the disclosure of his invention and the price paid by the government on behalf of the public is the assurance that for seventeen years no one will be permitted to make use of the invention without the patentee's consent. This concept demands of the patentee a full and frank disclosure and from the representatives of the public it calls for good faith and diligence in all matters that affect the assurance to the inventor of the exclusive right to the thing he has truly invented and fully disclosed. Thus, that patents shall be granted only for things which the inventor has in fact originated and fully disclosed and that the protection of the patentee's exclusive right shall, in such cases, be prompt, sure, and reasonably inexpensive, are requirements inherent in the very nature of the system.

These broadly generalized considerations applicable to any system of patents for inventions afford criteria by which to judge the quality and the administration of patent laws at any particular moment. They serve as guiding principles in any inquiry as to the wisdom of suggested modifications of our patent system.

The effectiveness of an incentive, whether material or spiritual, depends not upon theoretical judgments of the offeror, however well intentioned, but upon acceptance by the individual to whom the incentive is offered. The offer must be brought home to the individual and the nature of the incentive needs to be such as to arouse in him some eagerness to accept it in preference to other alternatives. A material incentive particularly needs to be concrete and not too long deferred. It is well to bear these requirements in mind when giving consideration to the provisions and the practical administration of our patent laws.

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[1] U. S. CONST., Art. I, §8.

The basic provisions of our patent laws—the offer of a seventeen-year monopoly in exchange for full disclosure—and the basic Patent Office procedures have remained substantially unchanged for more than a century. By some this fact is put forward as evidence of virtue; by others as evidence that these principles and procedures now need to be reformed. Probably neither of these assumptions would withstand close examination or serve as a useful guide to sound conclusions. That within the century there have been significant changes in the character of our industrial society and particularly in the relation of the individual inventor to the progress of applied science and useful arts is clear. It is a commonplace remark that we have passed from a stable society to an adaptive one. It is within the memory of living practitioners of patent law that a principal burden of the inventor who sought to introduce into practice a substantial innovation in the useful arts was to get anyone to listen to him and to take the risk of changing from established practice to his proposed innovation; while today, particularly perhaps in the newer fields of industry, it is more probable that his innovation will be seized upon by everyone in that line of manufacture before he can get it patented or make any adequate arrangements to protect the exclusive right that the law offers him in consideration of his disclosure. Where, in the last century, the individual inventor was likely to have to develop his invention for market on his own account, or to cooperate in its development with his local employer with whom he was on terms of intimate association, today the inventor is more likely to be an employee who has agreed as a condition of employment to assign his invention to his employer, or he is one of an organized research group employed to invent and in eager competition with other organized groups to make the innovation and get it on the market.

To this outline of changed relationship there are, of course, exceptions, and in any event the individual inventor is still the ultimate source of the patentable invention, the mainstay of innovations and the recipient of the patent grant. But I think all those acquainted with inventions in modern industry will be inclined to elaborate upon this change rather than to question or minimize it. It reflects itself at every turn in the consideration of our patent system as of today, whether we are considering the fundamental provisions of the patent law in relation to its constitutional purpose or the everyday details of Patent Office practice and court procedures.

At this point acceptance by the reader of two basic thoughts well be assumed: (1) that in our modern industrial economy based on the principle of free enterprise it is important to assure a continuous flow of technological improvement, and (2) that the grant of a monopoly for a limited time in consideration of full disclosure is the best available method of assuring such a flow of technological improvement. Later on, in discussing the question of patent abuses and the conflict between the idea of a patent monopoly for invention and our general notions as to free competition, the broader question of the soundness of these assumptions will be considered.

When evaluating our patent system by any chosen criterion, we should never

forget that the patent monopoly is granted not for new ideas in general but only for new and useful inventions in the applied sciences and useful arts: an "art, machine, manufacture, or composition of matter," as the patent statute puts it; and then only when the idea has been embodied in operative form suitable for practical use. By the grant the patentee gets a right which the inventor does not naturally possess—the right to exclude others from the use of ideas which they have learned from him or discovered for themselves—and there is a corresponding encroachment upon the natural rights of others.

Such a system demands clarity of definition and avoidance of mistake in the grant, prompt action and simplicity of procedure in the granting, and surely available methods of enforcement. It needs to be free from "concealed liens and unknown liabilities to lawsuits and vexatious accountings for profits made in good faith," to use the apt expression of Mr. Justice Bradley.[2]

These requisites of a sound system of patents for inventions in an economy of free enterprise have been recognized from the beginning even in the early days of relative stability in our industrialized society. Their importance has increased in direct proportion to the increase in complexity of manufactures and in the tempo of technological innovation that has accompanied the transition to a vastly more adaptive mode of life. The change in the environment of the patent system has thus emphasized the importance of clear definition, simple and prompt procedure, and surety of enforcement.

Unfortunately, it has to be admitted that in fact we have moved in the opposite direction since the early years of the twentieth century. Instead of progress we have witnessed retrogression. This fact need not, however, give occasion for despair. On the contrary, it affords an opportunity for correction that could, at this critical moment in our industrial life, quite definitely and quite significantly promote the progress of science and useful arts.

PATENT PROCEDURES

The principal trouble afflicting our patent system today is obesity. The patent system is suffering from fatty degeneration. It needs to be thinned down and toughened up; streamlined is the appropriate word.

At a time when the increased tempo of technological innovation calls more and more insistently for a minimum of delay in the issuing of patents, the backlog of the Patent Office is greater than ever before, and is growing like a vigorous banyan tree. New patent applications are being filed in the Patent Office at a rate twice that of 1943, and more than 50 per cent higher than the average of the five years immediately preceding the war. The Patent Office is trying to meet this rapidly increasing load with a depleted force of patent examiners and is failing to do so. In the first five months of 1946 the Patent Office backlog climbed without interruption to more than two and one-half times what it was in 1942. There were over 100,000 applications and amendments awaiting action by the examiners, and the average de-

[2] Atlantic Works v. Brady, 107 U. S. 192, 200 (1882).

lay in reaching an application which was ready for examination was nearly one year. Since then things have not grown appreciably better.

The situation is one of critical emergency. It calls for prompt administrative action and for increased Patent Office appropriations. It cannot be permitted to continue very long without a breakdown. The emergency action required will no doubt be forthcoming, but the situation requires more than emergency action. It indicates the need of basic reforms in Patent Office equipment and procedure.

The fact is that only relatively small expenditures, as governmental administrative expenditures go, would be required to transform the Patent Office into a highly useful and significant repository of industrial technology, immediately and easily available to the general public and to those interested in opportunities for profitable investment. The Patent Office could be made a major factor in keeping up the supply of profitable investment opportunities which our industrialized economy demands if it is to be kept in good health and vigor. And there has never before been a time in our history when the health and vigor of our industrial system was so important.

In recent years some steps have been taken by Congress to aid the Patent Office by legislative changes in the Patent Office setup or procedure. The Act of 1927,[3] creating the Board of Appeals, and the Act of 1939,[4] cutting down the times allowed to applicants for taking action in the Patent Office and simplifying the interference procedure, and certain changes in the Patent Office rules governing interferences, introduced in 1934, have now had time to show what results can be expected of them. They did have some temporary effect in reducing the average time that it takes to get a patent application through the Patent Office, and they have had an important permanent effect in eliminating the very long pendency of particular patent applications which had existed in the past. But, nevertheless, the rapidly growing backlog of the Patent Office confronts us. It is clear that more far-reaching reforms are required.

One legislative reform that has been proposed and has met with pretty general approval is the so-called "Twenty-year Bill," which would provide that no patent shall in any event have a term longer than seventeen years and all patents shall expire at a date not more than twenty years from the date when the application was filed, with limited discretion in the Commissioner of Patents to make allowance of not more than two years from the filing date for unavoidable delays not chargeable to the applicant. The enactment of this bill could be expected to put pressure on the applicant and the Patent Office, and even on the appropriations committees of the Congress, to exert themselves to speed up the issuance of patents.

A more direct attack, aimed at a reduction of the load on the Patent Office, has been proposed. It is well known that a great many patent applications are filed, particularly by industrial corporations but not only by them, in cases where the

[3] 44 STAT. 1335, 1336 (1927), 35 U. S. C. §7 (1940).
[4] 53 STAT. 1212-1213 (1939), 35 U. S. C. §§52, 57, 59(a), 63 (1940).

owner of the innovation does not really want or expect to exercise a monopoly. These are the so-called "defensive" patent applications. The idea is to preempt the field not for the purpose of exercising a monopoly but for the purpose of preventing the issuance to someone else of a "nuisance" patent on the innovation. Unfortunately, the mere filing of such an application does not give the applicant the defensive protection he wants. Because of certain evidentiary rules built up by the courts over a long period of years, the applicant does not get the defensive protection unless the application issues as a patent. The result is that industry and the Patent Office are burdened with prosecution of these applications to final allowance, even though no one expects that the issued patent will, or intends that it shall, perform the normal function of a patent; that is, secure to the patentee a monopoly of the manufacture, use, and sale of the innovation. Applications of this type tend from their very nature to lie in the vague and misty borderland between patentable invention and unpatentable application of mere mechanical skill, so that the patents issued on these applications are peculiarly likely to be of the type that never should be issued by the Patent Office at all. Although it is impossible to get accurate figures, it has been estimated that these so-called "defensive" applications amount to a very large percentage, perhaps as much as one-third, of all patent applications. It has been proposed that this burden be lifted from the Patent Office and from industry by authorizing the applicant to abandon the application after a first action by the Patent Office and after complying with requirements of the Commissioner as to form, and that an application so abandoned would be published and would have the same evidentiary effect now attributed to the filing of a patent application which eventually results in an issued patent. This suggestion is worth very careful consideration. It may be a feasible way to reduce very substantially the load on the Patent Office.

A great deal of thought and discussion has been devoted to numerous suggestions for further simplifying interference procedure in the Patent Office. This is a difficult and technical subject and there seems to be no clear consensus about it within the patent bar or among industrialists particularly interested in the ownership and exploitation of patented inventions. Interferences arise out of the provision of our law that the patent monopoly must be granted only to the first inventor. In the required definition of the claimed invention, interference proceedings need the specialized administrative knowledge of the Patent Office and, at the same time, in ascertaining which of two or more applicants first invented the thing, they involve the trial of peculiarly difficult questions of fact. Perhaps eternal vigilance, adequate personnel, and wise administrative practices are the only things that will achieve success in this field.

One bottleneck in the Patent Office as it is now functioning is the Board of Appeals, which got so far behind in its work that hearings were not set for more than a year after filing of the appeal, and which finally suspended the setting of hearings on appeal altogether until it could clear away its accumulated business. This situation may perhaps, be ameliorated by recent legislation which temporarily

augments the personnel of the Board, but it cannot be cured in that way. Its existence reflects more fundamental trouble than mere shortage of personnel. It evidences too great a gap of understanding and too much inconsistency between the Board of Appeals and the primary examiners.

The position of the primary examiner in the Patent Office is a key position from the administrative point of view. Everything should be done to make it possible for the primary examiners to administer their respective divisions effectively, to relieve them of unnecessary detail, and to support their actions. They are the line commanders in the battle for efficiency and effectiveness in the Patent Office. They should have the trust and confidence of their superiors, they would seem to be entitled to clear and definite orders from higher up, and they should be supported by a staff adequate to enable them to concentrate their attention on their primary function—the correct determination of the novelty and patentability of the patent applications acted upon by the assistant examiners in their divisions.

It seems quite clear that the present congestion in the Patent Office Board of Appeals, the long delay in its review of the decisions of the examiners, and the fact that today the decisions of the Board of Appeals are not adequately published, all tend to reduce the authority and responsibility of the primary examiners.

It is an anomaly in our patent system that appeals from the decision of the Board of Appeals of the Patent Office may follow either one of two courses, as the dissatisfied applicant may choose. He may either appeal to the Court of Customs and Patent Appeals, on the record made in the Patent Office, or bring a bill in equity in a Federal district court.[5] It has been suggested that the appeal to the Court of Customs and Patent Appeals, an administrative procedure, should be eliminated. Statistical studies and informed opinion indicate that such change could be expected to result in a significant reduction in the number of appeals and that it would also contribute to clarity and uniformity in the actions of the Patent Office examiners and the Patent Office Board of Appeals.

Finally, a basic deficiency in the operation of the Patent Office, which is all the more deplorable because if it were remedied the Patent Office could do a service to American industry of really tremendous value, is that the Office grants too many invalid patents. The two main functions of the Patent Office are to serve as (1) a publicly accessible general repository of industrial technology, and (2) an effective check upon the granting of improper patents. These two things go together. The examiners cannot serve as an effective check upon the granting of improper patents unless they are equipped with an up-to-date and easily accessible record of the state of applied science and useful arts. In this respect the Patent Office is markedly deficient. And yet without very great additional expense it would be possible to equip the examiners with that access to the knowledge of the art which is an indispensable tool for efficient and effective discharge of their duties. In these days, when so much emphasis is being put upon research and when it becomes more and

[5] REV. STAT. §4915 (1875), as amended, 35 U. S. C. §63 (1940).

more difficult every day for an interested person to keep up with current knowledge in any special field, it seems clear that the Patent Office, which deals with the practical application of scientific knowledge and useful arts, should be equipped with a repository of information about the applied sciences to which not only the Patent Office examiners but the general public could resort with full assurance that it is complete and up to date. It is possible to create and to maintain such a collected body of knowledge in the Patent Office if the job is undertaken diligently, with adequate appropriations, and with the determination to make use of all the modern conveniences for creating and for making easily available such a collection. The present equipment in the Patent Office falls very far short of that ideal.

In the field of judicial interpretation and administration of the patent laws by the Federal Courts, considerable thought has been given to the delays, uncertainties, and costliness of patent litigation and to the very considerable gap that seems to exist between the Patent Office and the courts as to what is patentable subject matter. The principal suggestion now current in this field is the creation of a single court of patent appeals to take over, subject to review by the Supreme Court on certiorari, the final jurisdiction in patent litigation that is now divided among the ten Circuit Courts of Appeals and the Court of Appeals of the District of Columbia.

This suggestion has been under discussion for many years. There are two schools of thought. One regards the suggestion as a wise and necessary thing to eliminate the conflicts, uncertainties, and multiplication of litigation on particular patents that now prevail. The other fears that separation of the judicial process in patent cases from the general body of our Federal system would tend to isolate the court from those contacts with human and commercial problems which keep the judicial vision broad, and would lead to technical and narrow attitudes and judgments destructive of what should be a living and dynamic system, capable of adjusting itself to the current requirements of a free enterprise economy.

Among many suggestions that have been made as to how these two points of view might be reconciled, perhaps the most carefully considered one is that the proposed single court of patent appeals should have not more than two permanent judges, one of whom would be chief judge, and that the other judges should be designated from time to time, for temporary service, by the Chief Justice of the United States from the Federal judiciary, the temporary judges being in the majority in every case. In this way it is hoped to secure the uniformity, finality, and reduction of litigation sought for, and at the same time to retain the beneficent effects of the broader judicial experience to which the whole body of Federal judges is continuously exposed.

DOES THE PATENT LAW CONFLICT WITH THE ANTITRUST LAWS?

A great deal has been said and written about the question whether, and to what extent, and how and why, the monopoly granted under patents for inventions is in conflict with the antitrust laws Yet it can hardly be doubted that if a poll were

taken of public opinion in this country on the two questions, "Do you think the patent laws ought to be repealed?" and "Do you think the antitrust laws ought to be repealed?" there would be an overwhelming negative answer to both questions. The American people have always liked the idea of inventions and patents for inventions, and at the same time they have always liked the idea of free competition and unrestrained trade. Nevertheless, for many years, and in great volume, we have had, without much reconciliation, and with little conclusive result, a rather violent discussion of the alleged encroachment of the patent laws upon the purpose and effect of the antitrust laws—the so-called "patent abuses." To review this discussion would require a volume in itself, and it will not be undertaken here. The point of view from which this article is written is that there is no necessary conflict between these two long-established concepts of American life; that, on the contrary, if properly administered, they complement and support one another. Yet it cannot be denied that patents have been made use of as elements in the building up of combinations and conspiracies in restraint of trade which have violated the antitrust laws, and that the patent privilege has sometimes been projected beyond its legitimate scope to interfere with the free flow of commerce in unpatented articles and materials.

There can hardly be any doubt that the possibility of such abuse or misuse of patent rights is very substantially increased by the current obesity of our system of issuing patents and of interpreting and enforcing patent rights. The possibility of abuse might be quite different if we had a patent system in which patents were promptly issued only for patentable inventions and could be adjudicated and enforced quickly and at minimum expense. As a practical matter, we shall doubtless always have to deal with a system that is far from perfect, although we are entitled to look forward to a substantial improvement over present conditions if public opinion can be aroused to a point where that improvement is unequivocally demanded.

In the meantime, we can and we should segregate in our thinking abuses which may arise out of defects in our system of issuing and enforcing patents or out of defects in the patent grant itself from those abuses which result from license agreements, contracts, and combinations entered into by patent owners.

It is as true of owners of patents as it is true of the owners of other property, that they are forbidden by the antitrust laws to enter into any contract, combination, or conspiracy in restraint of trade, or to monopolize or attempt to monopolize any part of trade or commerce beyond that limited monopoly secured to them by existing patents. Within this area of combination encroaching upon the territory forbidden by the antitrust laws, the patent laws afford no protection. Such conduct can be prevented by enforcement of the antitrust laws, and calls for no change either in the antitrust laws or in the patent law, unless Congress, having regard to the constantly growing body of judicial application of the antitrust laws to such situations, should conclude that for the sake of certainty and clarity, and as a mat-

ter of administrative efficiency, it would be desirable at one point or another to define more specifically items of conduct involving patents which are or are not within the prohibition of the antitrust laws.

If, with whatever risk of over-simplification may be involved, it should be assumed that the antitrust laws are an adequate safeguard against all bilateral contracts, combinations, or conspiracies in restraint of trade where patents are involved, yet the fact would remain that a patent monopoly may give the owner a unilateral power, either without any specific contract or by means of patent licenses which are in substantial effect unilateral, to interfere with the free flow of commerce in things which lie outside of the patent monopoly.

It has, of course, always been the function of the Federal courts to restrict the monopolistic activities of the patent owner to an area which does not go beyond the proper limits of a patent grant. It is for this purpose that the statute requires that the scope of the monopoly should be particularly pointed out and distinctly claimed in the patent, and that the courts have been called upon to pass upon the validity of patents and upon questions of infringement. And throughout the history of the administration of the patent law, specific questions have repeatedly arisen as to whether and to what extent the patent owner may make use of his monopoly to restrict a licensee or purchaser in the manufacture, use, or sale of unpatented things. The result has been to build up a large body of judicial interpretation. Particularly in recent years the Supreme Court has developed a line of cases condemning unilateral uses of patent monopolies to restrain or interfere with the free flow of commerce in unpatentable articles, materials, or industrial practices; and as part of this more recent development the Court has evolved the judge-made rule that a patentee who has so abused or misused his monopolistic rights is debarred from exercising those rights until the patent owner can show that he has "fully abandoned" the improper use and "that the consequences of that practice have been fully dissipated."[6]

This case-by-case judicial evolution of restrictions upon the activities of patent owners has been contemporaneous with growing concern about our patent system from two opposed points of view. At the one extreme are those who conclude that free competition calls for abolition of the patent laws, and at the other extreme are those who regard these restrictions with terrified alarm as destructive encroachments upon the patent monopoly.

So far as the more reasonable body of opinion is concerned, it would perhaps be possible to find agreement on at least two principles: (1) that it is desirable, and consonant with the mores of the nation, to foster competition in the production of and among patentable inventions, and (2) that any restriction upon the exclusive right to make, use, and sell that characterizes the patent monopoly reduces the incentive of the grant and so tends to discourage disclosure and reduction to practice of technological innovations and to encourage secret trade practices in prefer-

[6] Carbice Corp. of America v. American Patents Corp., 283 U. S. 27 (1931).

ence to disclosure, so that all excessive or unnecessary restrictions are dangerous in themselves.

It is clear that dividing lines in this field cannot accurately be drawn merely on legal considerations. Their location depends rather on the answers to practical economic questions in our complex and vigorous industrial structure. Unfortunately, there is a marked deficiency of real knowledge of the factors that determine the answers to these practical questions. The tendency has been rather to resort to emotionally inspired guesses, or even dogmatic assertions, both in and out of court.

Out of this situation arises a very serious question whether we should continue to rely upon the gradual, step-by-step development of these lines of demarcation by judicial process or make a carefully studied legislative attempt to define more explicitly and with more assurance of stability those activities of patent owners in the borderland of dispute that are acceptable and those that are forbidden. It would, of course, be possible to conduct this sort of rule making partly by legislative action and partly by a duly authorized and instructed administrative tribunal. The Clayton Act and the Federal Trade Commission Act are suggestive precedents.

COMPULSORY LICENSING

As a cure-all for the abuses of the patent system, general compulsory licensing, with royalties to be fixed by the Federal courts if necessary, has been suggested. It seems clear, however, that the suggestion is inappropriate in an industrial system that rests, as ours does, on private enterprise. General compulsory licensing, on final analysis, is seen to be in fact a bounty system, not one based upon a grant of exclusive rights. Where the government owns and finances in any industry the creation and use of productive facilities, a system of compulsory licensing, or even the elimination of all patent rights with adequate provision for compensation by awards or bounties, is appropriate. It is in effect the policy which has been adopted by our Government under the Act of 1910[7] and under the Atomic Energy Act[8] with respect to manufacture by or for the Government.

But it seems quite clear that such a plan is wholly inappropriate to a system of private enterprise and investment. It needs but little knowledge of the magnitude, complexity, and dynamic character of technological innovation in our industrial life and of the limitations of democratic government to convince anyone that the administrative difficulties of a bounty system, substituted for the patent law, are insuperable; and a system of general compulsory license is essentially a bounty system.

This does not mean, however, that compulsory license under patent grants is never desirable. We already have it in more areas than one. Compulsory licensing has existed since 1910 with respect to use for or by the government. It is recognized by the Supreme Court as an appropriate means to correct an unlawful

[7] 36 STAT. 851 (1910), 35 U. S. C. §68 (1940).
[8] 60 STAT. 755, 42 U. S. C. A. §1801 (Supp. 1946).

monopolistic situation that has been built up in violation of the antitrust laws. The Federal courts have always had, and have often exercised, the discretion to withhold an injunction, even under a favorably adjudicated patent, where public health or safety is involved or where very special circumstances make the issuance of an injunction an excessive hardship for the defendant without just or substantial benefit to the plaintiff.

Nor have we yet heard the last word on the much-discussed subject of compulsory license in cases of continued and unjustified failure or refusal of the patent owner to use or license the patented invention. William C. Robinson, in his *The Law of Patents for Useful Inventions*—perhaps the most profound study of our patent system ever made—very justly pointed out as long ago as 1890,[9] in criticism of the rule which then prevailed and still prevails, that the inventor does not fulfill the spirit of his contract or conform to one great object of the patent privilege unless he introduces his invention into actual use and puts its benefits within the reach of others. From that time to this, discussion of the question of compulsory license as a remedy for non-use has continued. The question, on close examination, presents many difficulties and calls for a careful balance of good and evil. Yet the basic considerations mentioned by Mr. Robinson seem to have kept the discussion alive, and it seems probable that this question of compulsory license for non-use will never be settled until it is settled right. Perhaps a solution could be found in a statutory definition of the circumstances under which non-use would or would not be regarded as an abuse of the patent privilege and a ground for compulsory license.

[9] 1 ROBINSON ON PATENTS 64-65 (1890).