

applying "industrial jurisprudence," as seems likely, the Board and courts could well follow the arbitrators in this respect. And it is suggested that one way the Board might achieve this result is to give more weight to the conclusions of its trial examiners, who may approximate arbitrators in "industrial jurisprudence."⁵⁵ (The trial examiner's report was rejected in the *Communication Workers* case.)

The National Labor Relations Board and the courts, however, need not wait for the complete answer to these problems before acting. This examination of the *Communication Workers* decision suggests the undesirability of the present approach (enhanced in the court of appeals by dubious fears of helping the union at the bargaining table) to the solution of one industrial relations problem.⁵⁶ The remarks concerning "industrial jurisprudence" could indicate a more meaningful approach in rapport with the needs of the industrial community.

of the limits to judicial exercise of equitable discretion in the enforcement of arbitration contracts.

⁵⁵ Trial examiners are selected by members of the Board from Civil Service registers and serve subject to Civil Service regulations and the Administrative Procedure Act. Field examiners are also important. Although they do not actually "arbitrate," the field examiners were responsible in 1953 for closing 5100 of 5800 unfair-labor-practice cases without the necessity of formal action. Eighteenth Annual Report, NLRB 99, Table 7 (1953). The present standard for the scope of judicial review of Board decisions and the weight to be accorded to trial examiners' reports is set forth in *Universal Camera Corp. v. NLRB*, 340 U.S. 474 (1951).

⁵⁶ And it bears repeating that if the Board and court had but applied the most "legal" of analyses—the Hohfeldian analysis—they would not have erred.

THE CONSTITUTIONALITY OF THE PATENT PROVISIONS OF THE 1954 ATOMIC ENERGY ACT

The Constitution provides that:

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.¹

During the past half-century it has often been suggested that our patent law, founded on this provision of the Constitution, should include a compulsory licensing provision.² Since the expressed constitutional purpose is to promote the progress of science and the useful arts, it has been argued that compulsory licensing should be employed at least where patents have been suppressed or

¹ U.S. Const. Art. 1, § 8.

² The first bill of significance was the "Oldfield Revision," H.R. 23417, 62d Cong. 2d Sess. (1912). See Hearings before the Committee on Patents, 62d Cong. 2d Sess. (1913); subsequent hearings on other bills are listed in Wyss and Brainard, *Compulsory Licensing of Patents*, 6 Geo. Wash. L. Rev. 499, 500 (1938).

"misused." The Atomic Energy Act of 1954³ permits the Atomic Energy Commission to order the sharing of patents in the field of atomic energy.⁴ This comment will deal with the constitutionality of this provision.⁵

The Constitution authorizes Congress to give to inventors a "right" to their inventions. The provision states the aim of patents—to promote the useful arts; the thing to be given inventors—exclusive right; and the one condition—for limited times. The theory underlying the provision is that inventors have no obligation to reveal their inventions to the public. They can develop inventions in secret, use them in secret, and destroy them in secret. To prevent scientific knowledge from being lost to the public, the framers gave to Congress⁶ the power to bargain with the inventor. In exchange for his knowledge, he was to be given the exclusive right to the invention for a limited time. This assured the public of having the invention for general use after a specified time.⁷ Anything less than such an exclusive right can therefore be argued to be unconstitutional.

There is some support for this argument in English and American history. The patent concept was derived from royal protection granted to traders and workers who came to England from foreign lands. The first of such grants, as they came to be known, dates from the time of Edward III.⁸ They were merely exceptions from guild and statutory prohibitions against foreigners. Their purpose was to introduce into England new and useful trades; there could be

³ 68 Stat. 921 (1954), 42 U.S.C.A. § 2011 (1954).

⁴ 68 Stat. 945 (1954), 42 U.S.C.A. § 2183(e) (1954).

⁵ One of the more outspoken doubters of the constitutionality of the provision last spring during the hearings, and last summer during the congressional debates, was Congressman Sterling Cole (Rep., N.Y.), chairman of the Joint Committee on Atomic Energy. See particularly his remarks during the hearings, 2 Hearings before the Joint Committee on Atomic Energy, 83d Cong. 2d Sess., 658 (1954), when the bill was reported out of committee, 2 U.S. Code Congressional and Administrative News 3487 (1954), and on the floor of the House, 100 Cong. Rec. A5356, A5358 (July 23, 1954).

⁶ "[T]he convention . . . enumerate[d] certain . . . powers as belonging to the new Congress which . . . were, or were feared to be, 'executive' powers under the standing law, but . . . had not been possessed previously by the old Continental Congress." 1 Crosskey, *Politics and the Constitution* 413 (1953).

⁷ In the words of Chief Justice Marshall: "[I]t cannot be doubted, that the settled purpose of the United States has ever been and continues to be, to confer on the authors of useful inventions an exclusive right in their inventions, for the time mentioned in their patent. It is the reward stipulated for the advantages derived by the public for the exertions of the individual, and is intended as a stimulus to those exertions." *Grant v. Raymond*, 6 Pet. (U.S.) 218, 241 (1832).

⁸ 5 Edw. III pt. 2, 161 (Patent Rolls) is cited in Inlow, *The Patent Grant* 16 (1950). 11 Edw. III, Cap. V, (1337), reads as follows: "Item, it is accorded, That all the cloth-workers of strange lands, of whatsoever country they be, which will come into England, Ireland, Wales, and Scotland, within the King's power, shall come safely and surely, and shall be in the King's protection and safe-conduct, to dwell in the same lands, chusing where they will. (2) And to the intent the said cloth-workers shall have the greater will to come and dwell here, our sovereign lord the King will grant them franchises as many and such as may suffice them."

no competition, of course, until Englishmen learned the new trades and made the knowledge common. In such a situation no one at first required any "exclusive right" to ply the new trades. The first "patents" which hinted at exclusiveness were the letters given to various explorers permitting excursions into unknown waters.⁹ In a grant to a group of explorers in 1502, Henry VIII expressly prohibited other traders from entering the outlined area.¹⁰

The concept of an exclusive right of an inventor to his invention evolved during the seventeenth century. Elizabeth invited a Venetian glassworker to England to spread knowledge of his art. He insisted upon, and received, a grant giving him the exclusive right to manufacture his wares for a period of twenty years.¹¹ This set the pattern, and the royal prerogative was the basis of a number of similar grants in the years which followed. Numerous exclusive privileges for the conduct of domestic commerce were granted. But the status of monopolies under the common law was uncertain;¹² moreover, the Crown was not without opposition from the courts and Parliament. In the *Playing Cards Case* in 1602,¹³ the plaintiff held a royal grant to import playing cards. The defendant, the plaintiff argued, was infringing upon this trade without license. The court held that such a monopoly was contrary to the Common Law and void. This case indicated that the courts were not limited by what the royal grant purported to give.

In 1615 the courts again held that such monopolies were void, but an important exception was indicated:¹⁴ the Crown might give to an inventor—one who either imports a new trade or conceives a new invention—"in recompense of his costs and travail" a charter allowing him the exclusive right to ply the trade or work the invention for a limited time. The Crown, however, did not discontinue issuing grants for "illegal monopolies" during these years. Parliament threatened to put the anti-monopoly concepts into statute as early as 1601, but Elizabeth's promise to allow the courts to uphold their own doctrine delayed any action.¹⁵ It was not until 1623 that Parliament finally decided to settle the law into statute.¹⁶ This statute, known as the Statute of Monopolies, again drew the line between mere monopolistic franchises granted to whoever paid the price, and the royal charter given to the novel importer or worthy

⁹ Inlow, *The Patent Grant* 16 (1950).

¹⁰ *Ibid.*

¹¹ *Ibid.*, at 18.

¹² It is frequently asserted that monopolies were always in derogation of the Common Law. 1 Walker on Patents 11 (1937). *Darcey v. Allein*, Coke Reports Part XI, 84b (6 Fraser's Notes 159) (1602), was decided on the basis that the plaintiff's monopoly was void by the Common Law. But see Letwin, *The English Common Law Concerning Monopolies*, 21 U. of Chi. L. Rev. 355 (1954).

¹³ *Darcey v. Allein*, Coke Reports Part XI, 84b (6 Fraser's Notes 159) (1602).

¹⁴ *Clothworkers of Ipswich*, Godbolt's Reports 252 (1615).

¹⁵ Inlow, *The Patent Grant* 24, 25 (1950).

¹⁶ 21 James I c. 3, in *Statutes at Large* VII, 255 (1623).

inventor to preserve for him an exclusive right to the importation or invention for a limited length of time. The right given by the charter, described as "the sole working or making of any manner of new manufactures," and limited to fourteen years, was recognized by the courts.¹⁷

In the American colonies, colonial governors, legislatures, and the Crown might all have granted patents. But the colonists indulged in little patent activity; the colonies were agricultural communities, with little manufacturing. Until the Constitutional Convention, the individual colonies and states had issued the few patents requested. The typical patent was for "the sole right, privilege, benefit and advantage of making and vending or selling" the particular product for a limited time, usually ten, twelve, or fourteen years.¹⁸ At the same time, there were colonial statutes prohibiting monopolies. The prohibiting statutes in Massachusetts and Connecticut expressly excepted new inventions.¹⁹ Both New York and Connecticut provided for authors' exclusive rights in their works.²⁰

¹⁷ *Edgeberry v. Stephans* (undated), *Davies, Patent Cases* 36 (1816); *Dollond v. —* (1766), *Webster, Patent Cases* 43 (1844) [also in 1 *Carpmael, Patent Cases*, 1602-1835, at 28 (1843)]. "All monopolies, except those which are allowed by [the Statute of Monopolies], are declared to be illegal and void. They were so at common law, and the sixth section [of the Statute] excepts only those of the sole working or making of any manner of new manufacturer. . . ." *Mr. Justice Buller, in Boulton and Watt v. Bull* (*Common Pleas*, 1795), 1 *Carpmael, Patent Cases*, 1602-1835, at 140 (1843).

¹⁸ "[T]he whole privilege and benefit of making salt within this province . . . during the space of fourteen years. . . ." 1 *Massachusetts Acts and Resolves of the Province of Massachusetts Bay*, 1692-1714, at 230 (1869); "[T]he sole right, privilege, benefit and advantage of making and vending or selling the invention. . . ." 2 *Massachusetts Acts and Resolves of the Province of Massachusetts Bay*, 1715-1742, at 788 (1874); "[T]he sole privilege and benefit of making paper . . . for ten years. . . ." *Ibid.*, at 518; "[T]he sole use, privilege and advantage of making linseed oyl[e] . . . for . . . ten years. . . ." *Ibid.*, at 920; "[T]he sole and exclusive right of making and using or granting to others the right of making and using . . . for fourteen years. . . ." III *Laws of New York*, 1789-96, at 71 (1887). The original patent which eventually came to Fulton was granted in 1787 to John Fitch: "Whereas John Fitch of Bucks county . . . hath represented . . . that he hath constructed an easy and expeditious method of impelling boats through the water by the force of steam, praying that an act may pass, granting to him . . . the sole and exclusive right of making, employing and navigating [such boats] . . . for a limited time, wherefore . . . Be it enacted . . . That the said John Fitch . . . shall be . . . vested with the sole and exclusive right and privilege of constructing, making, using, employing, and navigating [such boats] for . . . fourteen years. . . ." II *Laws of New York*, 1785-88, at 472 (1886). "[T]he sole and exclusive right of making and selling within this commonwealth. . . ." *Laws of the Commonwealth of Pennsylvania*, 1785-90, at 206 (1803); "[T]he sole and exclusive privilege of making and vending. . . ." *Ibid.*, at 209.

¹⁹ "There shall be no monopolies granted or allowed amongst us, but of such new inventions as are profitable to the Country, and that for a short time." *Massachusetts, Colonial Laws* 182 (1889). "[T]here shall be no Monopolies granted or allowed within this Colony, but of such new Inventions as shall be judged profitable for the Country, and that for such time as the General Court shall judge meet." *Connecticut Acts and Laws* 84 (1702).

²⁰ "[T]he Author of any Book or Pamphlet not yet printed . . . shall have the sole liberty of printing, publishing and vending the same within this State for the Term of fourteen Years. . . ." *Connecticut Acts and Laws* 617 (1783); "[T]he author of any book

The delegates at the Constitutional Convention wished to place this granting power in Congress.²¹ Among the reasons for the enumeration was the desire to clear up existing ambiguities in the law, to make it clear the power was in Congress as opposed to the executive branch,²² and to place the power in the federal government as opposed to the individual states. Madison, commenting on the provision, said:

The copyright of authors has been solemnly adjudged, in Great Britain, to be a right of common law. The right to useful inventions seems with equal reason to belong to the inventors.²³

The word "exclusive" was not defined in either Madison's or Charles Pinckney's drafts of the provision.²⁴ There was no debate, and the provision was adopted the day it was reported, without comment, out of committee.²⁵ The statutes enacted in 1790 and in 1793 both defined the right, following the wording of the colonial patent grants, as "the sole and exclusive right and liberty of making, constructing, using, and vending to others to be used" any original discovery.²⁶ No statute since, with a few exceptions, has given the inventor anything less than such an exclusive right.²⁷

Investigation of the history and the contemporary concept of "patents," to ascertain the meaning of the constitutional phrase, indicates that the constitutional "right" may be defined as that of "making, using, and vending" the inventor's property. This was the "patent right" in England as opposed to monopolies issued for pre-existing trades; this was the "patent right" in the American colonies granted as reward and encouragement for inventors; this, the conclusion follows, was the "patent right" which defines "exclusive right" in the Constitution. A law which purports to give patents must, therefore, give such an "exclusive right" and nothing less. Compulsory licensing is decidedly less.

or pamphlet . . . shall have the sole liberty of printing, publishing and vending the same within this State for the term of fourteen years. . . ." II Laws of New York, 1785-88, at 298 (1886).

²¹ Consult Crosskey, *op. cit. supra* note 6.

²² Consult Crosskey, *op. cit. supra* note 6, particularly Chapter XVII.

²³ The Federalist, No. XLIII, 186 (Beard's ed., 1948).

²⁴ Madison proposed: "To secure to literary authors their copyrights for a limited time," and "To encourage by premiums and provisions, the advancement of useful knowledge and discoveries." Pinckney proposed: "To grant patents for useful inventions," and "To secure to authors exclusive rights for a certain time." Farrand, II Records of the Federal Convention of 1787, 325 (1937); Prescott, *Drafting the Federal Constitution* 529 (1941); Federico, *The Constitutional Provision*, 18 J. Pat. Off. Soc. 55, 56 (Centennial Number, July 1936).

²⁵ September 5, 1787. Farrand, II Records of the Federal Convention of 1787, 509, 510 (1937).

²⁶ Annals Cong. 2300-2301 (1790). In the 1793 version, "the full and exclusive right" was substituted for "the sole and exclusive right." Annals Cong. 1431-35 (1793).

²⁷ With exceptions mentioned *infra*.

The Constitution does not, however, use any such words, whatever the contemporaneous statutes said. It merely speaks of the "exclusive right" without defining that right. Further, Congress is not directed to do anything at all in respect to inventors. The language is permissive: Congress is given the "power."²⁸

Both Congress and the courts *have* in the past given inventors less than the exclusive right to make, use, and vend. For four years during the nineteenth century the patent law provided for forfeiture of unused patents owned by aliens.²⁹ The present statute concerning copyrights provides for compulsory licensing of certain musical copyrights.³⁰ In addition, the government has always had the power to infringe a patent, and only since 1910 has payment of compensation been provided for by statute.³¹ There are a small number of cases, aside from antitrust suits, in which a court has interfered with a patent owner's right to bring an infringement suit. These cases involved possible jeopardy to the general "public health and safety" if the injunction sought were to be granted. In one such case, the City of Milwaukee was found to be infringing on patents for sewage purification.³² The patentee recovered damages, but the city was not enjoined, since closing the sewage plant would have meant sending sewage into Lake Michigan, endangering the health of the citizens. The result was compulsory licensing.

Likewise, courts in antitrust cases have taken the attitude that patent rights can be interfered with when the patent owner has been violating antitrust laws, whether the particular patent was being so used³³ or not.³⁴ They have echoed the sentiment that,

²⁸ "[T]he powers of Congress to legislate upon the subject of patents is plenary . . . and as there are no restraints on its exercise, there can be no limitation of their right to modify them at their pleasure. . . ." *McClurg v. Kingsland*, 42 U.S. 202, 206 (1843); "The power is general to grant to inventors; and it rests in the sound discretion of Congress to say, when and for what length of time and under what circumstances the Patent for an invention shall be granted." Story, in *Blanchard v. Sprague*, 2 Story's Reports 164, 171 (Mass. Cir. Ct., 1839).

²⁹ 4 Stat. L. 577 (1832), repealed by 5 Stat. L. 117 (1836).

³⁰ 61 Stat. 652 (1947), 17 U.S.C.A. § 1(e) (1952). Section 101(e) refers to this as "the compulsory license provision of this title."

³¹ 62 Stat. 942 (1948), as amended, 28 U.S.C.A. § 1498 (1954). The T.V.A. has had, since 1933, express authority to infringe upon payment of compensation. 48 Stat. 68 (1933), 16 U.S.C.A. § 831(r) (1941). During the war the government had the power to determine whether or not royalties being paid by government contractors were too high, and if determined to be so, to fix the royalty fee. The aggrieved owner could get the difference between that fee and "reasonable compensation" (if there was any difference) in the Court of Claims. 56 Stat. 1013 (1942) expired six months after the war by its own provisions.

³² *City of Milwaukee v. Activated Sludge, Inc.*, 69 F. 2d 577 (C.A. 7th, 1934); other cases are *Bliss v. City of Brooklyn*, 3 Fed. Cas. 706, No. 1,545 (E.D. N.Y., 1871), and *Nervey v. New York, N. H. & H. R. Co.*, 83 F. 2d 409 (C.A. 2d, 1936).

³³ *Morton Salt Co. v. Suppiger Co.*, 314 U.S. 488 (1942); *B.B. Chemical Co. v. Ellis*, 314 U.S. 495 (1942).

³⁴ *United States v. National Lead*, 332 U.S. 319 (1947).

It is a principle of general application that the courts, and especially courts of equity, may appropriately withhold their aid where the plaintiff is using the right asserted [ownership of the patent] contrary to the public interest.³⁵

Where the defendant has been convicted of an antitrust violation, dedication of patents to the public without any compensation has been ordered.³⁶

It can be argued that so long as the inventor is assured full economic return on his invention, whatever the use or whoever the user, the "exclusive right" requirement is fully satisfied. An inventor has, in this sense, an "exclusive right" by having the "exclusive economic benefit."

It is also true that since Congress has the choice of legislating pursuant to the patent clause, it can ignore the requirements of that clause and legislate pursuant to some other clause; it may deal with inventions by words other than "patents" or "inventions" and thus need not grant an "exclusive right." For example, Congress could prohibit all private "patents" in any area over which there is proper federal jurisdiction, and declare the government to be the owner, and private organizations licensees.³⁷

The Atomic Energy Act of 1954 is milder in language and narrower in scope than both the "public health and safety" and the antitrust decisions. It contains a high standard, requiring that the patent, the licensing of it, and its ultimate use by the would-be licensee, all be "of primary importance."³⁸ Only if it meets these requirements can the patent be declared "affected with the public interest" and ordered licensed. The whole field of atomic energy is still of vast and vital public significance, justifying extraordinary measures. The prior act, of 1946, prohibited all patents, and only licensed private persons and groups to use inventions; its constitutionality was never passed upon.

In addition, the compulsory licensing provisions of the new act evidence concern for fairness at each step. First, the patentee and the would-be licensee should attempt to work out their own arrangement. Failing that, the would-be licensee applies to the Commission for a hearing, at which the patent owner can defend his actions.³⁹ The Commission is allowed to set the terms of the sharing, if there is to be any, including the royalty, the patentee being assured by the Act of getting a "reasonable royalty fee."⁴⁰ The Commission is directed to take into account not only the advice of a Patent Compensation Board, but also the extent of federal help the patentee received, the "degree of util-

³⁵ Morton Salt Co. v. Suppiger Co., 314 U.S. 488, 492 (1942).

³⁶ United States v. General Electric Co., 115 F. Supp. 835 (D. N.J., 1953).

³⁷ For example, Congress could provide that all businesses involved in interstate commerce must share patents on a compulsory licensing basis.

³⁸ 68 Stat. 945 (1954), 42 U.S.C.A. § 2183(e) (1954). This phrase, "of primary importance," is not defined in the Act, nor is the context—important to *what?*—indicated.

³⁹ *Ibid.*, § 2183(a).

⁴⁰ *Ibid.*, § 2183(e) and (g).

ity, novelty, and importance" of the patented invention, and, if it cares to, the cost to the patentee in developing the patent.⁴¹

Of course, there is some difficulty in determining the exact meaning of these terms. The phrases "affected with the public interest" and "of primary importance" are nowhere defined. The purpose of the Act itself is so broad that the public interest becomes an all-inclusive phrase:

[T]o encourage widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security and with the health and safety of the public.⁴²

Under such a broad description, few things are *not* in the public interest. Under the Act of 1946, the area of possible patents was smaller than at present; and since the Commission never used its compulsory sharing powers,⁴³ the standard was not defined.

The fact that the activity of the Commission seems to assure fairness at each step makes the invasion of any exclusive right to make, use, and vend seem less alarming.⁴⁴ In addition, the whole area of atomic energy is still a matter of national concern, and the effects of possible misuse and advantage-seizing are terrifying. Also, by slight change in the wording, any such constitutional questions could be swept away. As pointed out earlier, the Act could simply declare the government owner of all such patents—continuing the patent prohibitions of the 1946 Act—and then provide liberal federal licensing methods, any inventor being granted either an award or a fixed, federally determined royalty rate. Or the Act could declare all patents within the area to fall under the "public health and safety" doctrine of the courts.⁴⁵

Historically, then, an argument can be made that Congress can grant only an exclusive right to an inventor. Yet the permissive wording of the constitutional provision militates against this view. And our law is not free from instances in which an inventor's right has been less than an exclusive one. Even if such an exclusive right were to exist, the problem would remain whether the invasion of the right is permissible in view of the importance of the particular field, the time limitation, the careful protection of the patentee's rights, and the other safeguards present in the new act.

⁴¹ 68 Stat. 947 (1954), 42 U.S.C.A. § 2187(c) (1954).

⁴² 68 Stat. 922 (1954), 42 U.S.C.A. § 2013(d) (1954).

⁴³ Statement of Bennett Boskey, 1 Hearings before the Joint Committee on Atomic Energy, 83d Cong. 2d Sess., 126 (1954).

⁴⁴ The compulsory sharing provisions affect only patents which are applied for before September 1, 1959. 68 Stat. 945 (1954), 42 U.S.C.A. § 2183(h) (1954).

⁴⁵ "The provision permits Congress to issue letters patent; it does not forbid it to decree a bounty, to purchase the invention, or to contrive some other arrangement to attain the objective." Hamilton, TNEC Monograph No. 31, Patents and Free Enterprise 2 (1941).