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Engineering Patent Agreements

Donald F. Harrington*

ENGINEERS, RESEARCH AND DEVELOPMENT SCIENTISTS, and even cost accountants and engineering secretaries often enter into employee patent and confidential information agreements. Naturally, the overwhelming majority of these employees have entered into these agreements as a condition of employment. Most project engineers, methods men and manufacturing supervisors look upon the patent agreement as a slap in the face, and some large corporations have found that the patent assignment agreement, far from protecting the corporation has actually created a general condition of apathy on the part of the engineer or scientist with the creative mind necessary for invention.

The power to grant exclusive monopolies in the form of patents was given to Congress in Art. I, Sec. 8, Clause 8 of the Federal Constitution, "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 Although the authority for the issuing of patents is found in the Federal Constitution, the mere fact that litigation involves a patent does not confer jurisdiction on the federal court.²

Employer's Right to Inventions

Generally, parties employing the services of an inventor under an agreement that he shall devote his ingenuity to perfecting a machine for their benefit can lay no claim to a patent for improvements conceived by him after the expiration of such agreements.³

However, a question arises as to the ownership of a patent where the employee has used the employer's goods and time to invent some item and the employee has not signed a patent assignment agreement. In *Hapgood v. Hewitt*⁴ an employee had entered into a contract to devise and make improvements in plows for his employer, a manufacturer of plows. While engaged in that work and at his employer's expense and with his material

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¹ *United States v. Dubilier Condenser Corp.*, 289 U. S. 178, 186, 53 S. Ct. 554, 77 L. Ed. 1114 (1933).

² *Littlefield v. Perry*, 88 U. S. (21 Wall.) 205, 22 L. Ed. 577 (1875).

³ *Appleton v. Bacon*, 67 U. S. (2 Black) 699, 17 L. Ed. 338 (1863).

⁴ *Hapgood v. Hewitt*, 119 U. S. 226, 7 S. Ct. 193, 30 L. Ed. 369 (1886).

and the aid of his workmen, the employee conceived a plow which his employer thereupon manufactured. After the employee left his position, he took out a patent on his invention. The employer sued for an assignment, claiming the employee was a trustee for the employer. The court held that the employee was not a trustee of the title of the patent for his employer, but that the employer had, at most, a mere license to manufacture.

In a similar case, where one of the parties disclosed his concept of a device to the other, and employed him to construct one, the court held that the relation of employer and employee existed, and any improvement on the general idea, made by the employee, especially where it did not involve invention, belonged to the employer.⁵

It should be noted that where the relation of employer and employee is shown to exist, the burden is on the employee to show that the employment was not to give practical form to a conception of his employer, but merely to provide means to answer a general purpose, and that in so doing he had an independent conception of the way to accomplish that purpose.⁶ Thus, if the contract of employment is general, it shall not be construed so broadly as to require the assignment to the employer of a specific invention.⁷

It is only where the employee is specifically employed to make a particular invention, and successfully accomplishes the task for which he was employed, that the resulting invention may be considered the subject of the contract of employment and the employee may be required to assign the invention to his employer.⁸

Assignment of Future Inventions

Perhaps the leading case supporting the rule that a contract to assign future inventions is valid is *Aspinwall Mfg. Co. v. Gill*.⁹ In this case where the patentee assigned his patent for \$12,000 "together with the improvements I may hereafter make, and without further cost," the assignee was allowed to make and sell the original inventions *as improved* after his assignment. The court in this case followed the reasoning in *Littlefield v. Perry*,^{9a} where it was held that assignment of future improvements on a particular patent was valid; but in the *Aspinwall* case the court also stated that "a naked assignment or agreement to assign, in gross, a man's future labors as an author or inventor,—in other words, a mortgage on a man's brain, to bind

⁵ *Gallagher v. Hastings*, 21 App. D. C. 88 (1903).

⁶ *Id.*

⁷ *Hapgood v. Hewitt*, *supra* note 4.

⁸ *Standard Parts Co. v. Peck*, 264 U. S. 52, 44 S. Ct. 239, 68 L. Ed. 560 (1924).

⁹ *Aspinwall Mfg. Co. v. Gill*, 32 F. 697 (C. C. D. N. J. 1887).

^{9a} *Supra*, note 2.

all its future products, constitutes an unreasonable restraint contrary to public policy."¹⁰

Where the relation of employer and employee does not exist and the express contract of assignment does not include any provision for assignment of future improvements, an implied contract to assign such improvements does not arise.¹¹ If the parties intend to contract for future inventions, language plainly expressive of such purpose must appear.¹²

Generally, it can be seen that the guiding rules concerning contracts for the assignment of future inventions follow ordinary contract law. In a broad sense, if the contract is unreasonable, it is unenforceable. If clearly inequitable, contracts to assign future inventions will not be enforced.¹³

Generally speaking, contracts requiring the employee to assign all inventions that may be useful in the employer's business are valid.¹⁴ This is based in part on the theory that if the engineer has contracted to assign all future inventions, and actually envisions a new device or method, he always can withdraw from employment and work on the device independently, using his own tools and facilities. Of course, he must actually leave the employ of the corporation before the concept of the invention is complete and a model actually made.¹⁵ If he remains in the employ, and uses the employer's facilities, then the agreement to assign future inventions is valid and specifically enforceable as long as it is reasonably limited in time and scope.¹⁶

Scope of the Employer's Business

In *Guth v. Minnesota Mining*¹⁷ the problem of the scope of the employer's business in relation to a contract to assign all future inventions was before the court. Guth was a chemical engineer and in his employment contract it stated that he was employed to engage in research work. There was a provision in the contract requiring, in substance, an assignment to the employer of all inventions discovered by him, which the employee had made or conceived or might at anytime thereafter make or conceive related to abrasives or to any other business with which the employer or its predecessor or successor in business was or might be concerned. The court held that the provision was valid as to the inventions made during the employment period in the

¹⁰ *Aspinwall Mfg. Co. v. Gill*, supra note 9, at 700.

¹¹ *General Time Corp. v. Padua Alarm Systems & Parissi*, 199 F. 2d 351 (2d Cir. 1952), 94 P. Q. 350.

¹² *Monsanto Chemical Works v. Jaeger*, 31 F. 2d 188 (W. D. Pa. 1929).

¹³ *Hartz v. Cleveland Block Co.*, 95 F. 681 (6th Cir. 1899).

¹⁴ *Goodyear Tire & Rubber Co. v. Miller*, 22 F. 2d 353 (9th Cir. 1927).

¹⁵ *Wege v. Safe-Cabinet Co.*, 249 F. 696 (6th Cir. 1918).

¹⁶ *Goodyear Tire & Rubber Co. v. Miller*, supra note 14.

¹⁷ *Guth v. Minnesota Mining & Mfg. Co.*, 72 F. 2d 385 (7th Cir. 1934), 22 P. Q. 89.

business in which the employer might be engaged during the period of employment only. If they were to enforce the provision to cover any and all business lines past, present and future, it would be limitless in the extent of time and in subject matter of invention, and thus against public policy. It can be clearly seen that such a contract would effectively close the doors of employment to a research and development engineer since any future employer could never be sure of a valid assignment. In general, assignments in gross of future inventions are not favored.¹⁸

An interesting situation arose in the *Colgate-Palmolive-Peet Case*.¹⁹ The plaintiff occupied a position in the company that gave him complete access to the research and development plans of the entire company. He was a highly paid executive in the corporation. He was in charge of expanding and organizing the research and development plans in connection with products already part of the company production. The plaintiff was not only aware of the company policy of receiving assignment of inventions from employees, but he was instrumental in drafting a patent assignment form. All the subordinates in his own department were required to execute assignment agreements. In the past he had made several inventions and subsequently assigned his rights to the defendant corporation. He brought an action in which he sought to have the entire right, title and interest in three inventions developed by him during his employment declared to be his, on the basis that he was an executive engaged in general employment and that he had executed no patent agreement at the time he commenced the employment. The court found that the three inventions were the property of the company. The court stated that the circumstances surrounding the case clearly indicated that this was a situation that is the exception to the general rule that title to an invention made by an employee in the course of his general employment remains in the employee unless he has agreed expressly to transfer ownership to his employer. The court found an implied agreement to assign and ruled for the corporation.

Other courts have ruled that changes or improvements belong to the employer, but if the invention can be described as a "flash of genius" it rightfully belongs to the employee in the absence of an express agreement to the contrary.²⁰ It has sometimes been held that an executive in general employment must assign when the patent rights are very important to the welfare of the corporation.²¹ This doctrine is not the majority rule however, and where it is clearly shown that the employee performed

¹⁸ *Lion Tractor Co. v. Bull Tractor Co.*, 231 F. 156 (8th Cir. 1916).

¹⁹ *Marshall v. Colgate-Palmolive-Peet Co.*, 76 F. Supp. 378 (D. Del. 1948), *affd.*, 175 F. 2d 215 (3d Cir. 1949).

²⁰ *Barlow & Seelig Mfg. Co. v. Patch*, 232 Wis. 220, 286 N. W. 577, 42 P. Q. 211 (1939).

²¹ *Dowse v. Federal Rubber Co.*, 254 F. 308 (N. D. Ill. 1918).

all the work away from the place of employment with no monetary or material assistance by the employer, the employer has no interest in the invention or patent even though the employer suggested that a specific device required perfecting.²²

An agreement is not invalid as to subject matter if it embraces processes, apparatus, etc., as well as products or machines.²³ In the case of the *White Heat Products Co. v. Thomas*,²⁴ the defendant Thomas had entered into a contract to assign to the plaintiff any invention or interest he might acquire relating to the manufacture of bricks or earthenware products or any collateral products he might hereafter make or acquire during his term of employment. He had been hired as an expert in the research and development department. During his employment with the plaintiff, Thomas developed and invented an abrasive wheel for grinding iron and other metals. The court held that the plaintiff corporation had no equitable interest in the grinding wheel patent, because a grinding wheel for use on metal did not relate to the manufacture of bricks and earthenware products.

It would seem that the area encompassing the relation of the invention to the employer's business must be strictly construed,²⁵ although if the contract to assign specifically excludes inventions outside of the employer's business, the burden of proof that the invention lies within the scope of the business rests with the employer.²⁶

In the *United Aircraft Products* case,²⁷ an employee entered into an oral agreement to assign all his rights, title and interest to any inventions he might make during his employment. This oral agreement was later reduced to writing, but before the reduction, the engineer in combination with another, filed for a patent. The plaintiff corporation in an action for specific performance of the contract asked the court that the employee be required to transfer his rights in the patent to the corporation. The court construed the contract of assignment very broadly and held that the expression "is or may be engaged" connotes "present activity which is prior to execution of the contract and logically must include knowledge acquired in the past."²⁸

Consideration as an Element

Several methods have been devised in an attempt to have an assignment agreement set aside. For the most part none of

²² *The Gemco Engineering & Mfg. Co. v. Henderson*, 151 Ohio St. 95, 84 N. E. 2d 596, 80 P. Q. 529 (1949).

²³ *Dry Ice Corp. of America v. Josephson*, 43 F. 2d 408 (E. D. N. Y. 1930).

²⁴ *White Heat Products Co. v. Thomas*, 266 Pa. 551, 109 A. 685 (1920).

²⁵ *Joliet Mfg. Co. v. Dice*, 105 Ill. 649 (1883).

²⁶ *Triumph Electric Co. v. Thullen*, 235 F. 74 (3d Cir. 1916).

²⁷ *United Aircraft Products, Inc. v. Warrick*, 79 Ohio App. 165, 72 N. E. 2d 669 (1945).

²⁸ *Id.*, 79 Ohio App. at 174.

these attempts has been successful as long as the agreement was reasonable in time and scope.²⁹ Such agreement must be supported by a valuable consideration³⁰ but in the absence of a provision for further payment the salary paid the employee is sufficient.³¹ Failure of the employer to make or tender performance will not in itself defeat his right to seek specific performance,³² even though specific performance of a contract valid in law is not an *absolute* right but in a measure rests in the discretion of the court.³³

In the *Hebbard* case,³⁴ the contract to assign future inventions contained the recital of consideration of employment and the sum of one dollar, "and other valuable consideration." Hebbard claimed that the "other valuable consideration" referred to additional compensation at the time he would assign any inventions to his employer. Hebbard claimed that there was no mutuality of contract. The court held that the contract was clear on its face and that an attempt to treat the agreement as merely an option for the employer to purchase was clearly not the intent of the parties.

In *Bowen v. B. F. Goodrich Company*,³⁵ Bowen brought an action to have an assignment set aside on the ground of fraud. Besides his regular compensation for employment, he received \$500 for the assignment of his invention. Bowen claimed that the invention had saved his employer over 100 times that amount each year. The court refused to set aside the assignment on the grounds of fraud, stating that the courts had no right or power to set aside the contract to assign because of the inadequacy of the consideration.

In general, it may be said that an inventor who enters into an agreement to assign his future inventions has little chance of repudiating the assignment agreement, if the invention is made during his term of employment. Inventions conceived after the employment has terminated stand on a much better footing. In the cases involving the right of an employer to the assignment of the patent to an invention, made and conceived after the employment terminated, the courts have repeatedly ruled that unless the contract to assign specifically provides for the assignment of patents obtained after the employment has ceased, the court will not imply such an intention.³⁶ If a contract to assign

²⁹ Goodyear Tire & Rubber Co. v. Miller, *supra* note 14.

³⁰ Lion Tractor Co. v. Bull Tractor Co., *supra* note 18.

³¹ Westinghouse Electric & Mfg. Co. v. Formica Insulator Co., 266 U. S. 342, 45 S. Ct. 117, 69 L. Ed. 316 (1924), affg. 288 F. 330 (6th Cir. 1923).

³² Conway v. White, 9 F. 2d 863 (2d Cir. 1925).

³³ Marks v. Gates, 154 F. 481 (9th Cir. 1907).

³⁴ Hebbard v. American Zinc, Lead & Smelting Co., 169 F. 2d 339 (8th Cir. 1947), 73 P. Q. 312.

³⁵ Bowen v. B. F. Goodrich Co., 36 F. 2d 306 (6th Cir. 1929).

³⁶ Standard Plunger Elevator Co. v. Stokes, 212 F. 893 (2d Cir. 1914).

uses the word "hereafter," it does not necessarily mean for all time; it covers only the period of employment. Similarly, where the terms of a contract to assign future inventions are ambiguous, the court generally restricts the time element to the inventions made during employment.³⁷

Assignment After Employment Has Terminated

If the agreement to assign future inventions contains a provision to assign future inventions after the employment has been terminated, the provision will be strictly construed and the provision must be fair, reasonable and just.³⁸ To secure for the employer the rights to inventions made on his time and with his money and material, an agreement for the assignment of future invention is valid, and no one will question his right to the inventions made by the assignor during the period of employment.³⁹

Since it may be expected that an inventor cannot open and close his mind like a book, a provision extending the contract beyond the period of employment for a certain length of time is valid,⁴⁰ provided that the length of time is not limitless⁴¹ or offensive.⁴² But an agreement to assign 10 years after the termination of employment ceased is in restraint of trade. It extends so far beyond the employment period covered by wages that the inventor's usefulness to any competitor would be extinguished by its enforcement.⁴³

Federal Employees as Inventors

The United States Government has had its own problems in the field of patents and their administration. Research and Development expenditures by the Federal Government are on the increase, and in 1957 the United States spent 46 per cent of the total money expended on Research and Development in the United States.⁴⁴ (See Table Number 1.) With the great number of government employees engaged in research it was inevitable that some type of conflict would arise between Government scientists and engineers and the Federal Government, involving inventions made during the course of employment.

³⁷ *Strauss v. Borg*, 172 Ill. App. 466 (1912).

³⁸ *Gas Tool Patents Corp. v. Mould*, 133 F. 2d 815 (7th Cir. 1943), 56 P. Q. 357.

³⁹ *Thibodeau v. Hildreth*, 124 F. 892 (1st Cir. 1903), affg. 117 F. 146 (D. Mass. 1902).

⁴⁰ *Guth v. Minnesota Mining & Smelting Co.*, supra note 17.

⁴¹ *Goodyear Tire & Rubber Co. v. Miller*, supra note 14.

⁴² *National Cash Register Co. v. Remington Arms Co.*, 242 N. Y. 99, 151 N. E. 144 (1926).

⁴³ *United Shoe Machinery Co. v. La Chapelle*, 212 Mass. 467, 99 N. E. 289 (1912).

TABLE NO. 1.
RESEARCH & DEVELOPMENT EXPENDITURES 1945 to 1957⁴⁴

YEAR	TOTAL	SOURCE OF FUNDS			USE OF FUNDS BY		
		Government	Industry	University	Government	Industry	University
Expenditures (1,000,000)							
1945	1,520	1,070	430	20	430	990	100
1950	2,870	1,610	1,180	80	570	1,980	320
1951	3,360	1,980	1,300	80	700	2,300	360
1952	3,750	2,240	1,430	80	800	2,530	420
1953	4,000	2,490	1,430	80	770	2,810	420
1954	4,140	2,460	1,600	80	700	3,020	420
1955	5,400	2,720	2,600	80	1,000	3,950	450
1956	6,500	3,170	3,250	80	1,110	4,920	470
1957	8,200	3,750	4,300	150	1,370	6,280	550
Percent of Total							
1945	100	70	28	2	28	65	7
1950	100	56	41	3	20	69	11
1951	100	59	39	2	21	68	11
1952	100	60	38	2	21	68	11
1953	100	62	36	2	19	70	11
1954	100	59	39	2	17	73	10
1955	100	50	48	2	19	73	8
1956	100	49	50	1	17	76	7
1957	100	46	52	2	17	76	7

⁴⁴ Source data from the Department of Defense, Office of the Secretary. Reported in the Statistical Abstract of the United States, 79th Annual Edition 1958, p. 500 (1958).

The most celebrated case, and perhaps the most frequently cited case in patent law, is *United States v. Dubilier Condenser Corporation*.⁴⁵ In this case the inventors were employees of the United States Bureau of Standards. The invention in question was a successful alternating current receiving set for home and other use, and at the time of the inventing, both inventors were government employees. The two were assigned to do research on the subject of the "airplane radio." The subject of "radio receiving sets" had been assigned to a different group. After their discovery became known, the chief of the bureau permitted the inventors to pursue their work at the bureau and to perfect their device. The inventors sought a patent and were issued one on the basis of their discovery, but the United States asked the Supreme Court for an assignment of the patent. In the interim the inventors assigned the patent to the Dubilier Condenser Corporation. The Supreme Court held that under these facts the United States was entitled to no more than a shop right in the invention and that, as to anyone but the United States, the Defendant Dubilier was the owner of the patent.

In deciding *Dubilier*, the Supreme Court relied heavily on the *M'Clurg* case⁴⁶ and the decision handed down by the *Solomons* case.⁴⁷ In the latter, a revenue stamp was the invention in controversy. In his official capacity, the Chief of the Government Bureau of Engraving and Printing was called into consultation with the Commissioner of Internal Revenue for the purpose of deciding upon the type of stamp to be used. Upon several consultations, the project of devising a suitable stamp and the method for developing the dies were left to the Chief. A stamp was conceived by the Chief and the dies were constructed under his direction, using Government employees and Government materials and money. The Chief filed for a patent, and subsequently assigned any and all rights in the patent to the assignee, Solomons. The patent was issued to the assignee and he sought compensation from the United States for the use of the invention assigned to him by the Chief. The court held that an employee performing the duties assigned to him may exercise his inventive faculties, but if he invents a device while in the employ and at the employer's expense, and allows the employer to use the device and makes no demand for compensation, the employer has a license, a special privilege, or a grant to use the invention.

Perhaps it was these cases and others which held that an employee not employed to make inventions has no duty to assign to the employer any inventions he does make,⁴⁸ as well as those

⁴⁵ *United States v. Dubilier Condenser Corp.*, supra note 1.

⁴⁶ *M'Clurg v. Kingland*, 42 U. S. (1 How.) 202, 11 L. Ed. 102 (1843).

⁴⁷ *Solomons v. United States*, 137 U. S. 342, 11 S. Ct. 88, 34 L. Ed. 667 (1890).

⁴⁸ *Dovel v. Sloss-Sheffield Steel & Iron Co.*, 139 F. 2d 36 (5th Cir. 1943), cert. den. 322 U. S. 625 (1928).

which held that an employee employed to make one invention, who made another owned the latter,⁴⁹ which forced the Government to take action. In 1958, the government held hearings to formulate a suitable plan for dealing with government employees who may make inventions in the course of their employment.⁵⁰ The declared purpose of the hearings was "to establish a policy for the determination of the right of the government and its employees in inventions made by such employees and to set forth criteria to be used in making such determination." After hearing expert testimony the subcommittee decided in general that "under the present law, an employee of the Government has a legal right to file for and obtain a patent in his own name. If the Government concludes that the Government is entitled to own the patent, it is up to the Government, through the Attorney General, to take appropriate action to have the assignment of the invention decreed."⁵¹ They also concluded that there may be employees in the Government who have no connection with research activities and whose inventions under no possible consideration belong to the Government.⁵²

Conclusions

An analysis of recent cases⁵³ indicates that no major changes have taken place in the interpretation of patent law since the earlier decisions. The underlying philosophy of the courts seems to be that an employer has an almost absolute right in the inventions of its employees if it is in the scope of their employment, if they are hired to invent, or if an express assignment agreement for future inventions exists. In most of the other cases outside this area, the great majority of the courts have at least held that the employer was entitled to the shop right. There has been

⁴⁹ *Texas Co. v. Gulf Refining Co.*, 26 F. 2d 394 (5th Cir.), cert. den. 278 U. S. 625 (1928).

⁵⁰ Hearings Before Subcommittee No. 3 on the Right of the Government and its Employees in Inventions Made by Such Employees (H. J. Res. 454) of the House Committee on the Judiciary, 85th Cong., 2d Sess. (1958).

⁵¹ *Id.* at 48.

⁵² For an excellent article on the general field of Federal Employees Invention Rights, see Finnegan and Pogue, *Federal Employee's Invention Rights—Time to Legislate*, 55 Mich. L. R. 7 (1957).

⁵³ (a) *Oliver v. Lockport Mills, Inc.*, 6 Misc. 2d 356, 163 N. Y. S. 2d 317, appeal dism. 3 App. Div. 2d 971 (1956). In this case a chemist assigned to a research project calling for inventive experimentation, invented a product and had not executed an agreement to assign. It was held that he impliedly agreed to his employer's ownership of the resulting invention. (b) *Muenzer v. W. F. & John Barnes Co.*, 9 Ill. App. 2d 391, 133 N. E. 2d 312 (1956). In this case it was held that a specific contract providing that the inventions discovered by an employee belong to him, is required where the employee was hired to invent and develop a specific process which he succeeded in doing. (c) *Aerial Products, Inc., v. Anzalone*, 6 Misc. 2d 349, 163 N. Y. S. 2d 287 (1957). In this case it was held that a patent improving an original invention was the property of the employer under an agreement, and was specifically enforceable against the employee's widow.

much discussion and many articles written concerning the individual inventor vs. the large corporation. Unless an inventor can afford to invest a great deal of money in litigation to protect his patent right, he may just as well allow the corporation to take an assignment. Industry has been accused on many occasions of trying to catalogue an inventor. "Free Thinking and creative minds are by their nature uninhibited and disorganized. In fact the disorganization is almost a precondition to creative thinking; new combinations of ideas arise almost at random from the hodgepodge in the creative mind. Industry can not reduce originality to a formula."⁵⁴ It must also be remembered that the patent law is full of technicalities that can easily render the patent invalid. Expert advice is costly and necessary. All these facts work a hardship on the lone inventor.

The plight of the lone inventor may be pathetic, but industry and the Federal Government also have a large stake in research and development. (See Table Number 2.) The Federal Government today is the nation's largest single employer of scientists and engineers. In 1954, the government employed one out of every fifteen engineers in the country. Many people feel that a totally new patent law should be established. "The government

TABLE NO 2.⁵⁵

Calendar Year or Period	Patent Applications	Total Patents Issued
1921-1925	428,591	217,525
1926-1930	459,904	234,857
1931-1935	342,861	256,219
1936-1940	359,544	229,514
1941-1945	294,273	184,573
1946-1950	400,342	163,122
1951-1955	379,053	209,215
1950	74,295	48,009
1951	64,949	48,719
1952	68,384	46,890
1953	79,486	43,459
1954	82,968	36,664
1955	83,266	33,483
1956	80,035	50,085
1957	79,242	45,446

⁵⁴ Von Ludwig, *The Little Man Can't Protect his Patents*, *Prod. Engineering* 29 (July 28, 1958).

⁵⁵ Source data from the Department of Commerce, United States Patent Office. Reported in the *Statistical Abstract of the United States*, 79th Annual Edition, p. 499 (1958).

must grant patents that are properties, not just potential rights before a civil magistrate, and the Attorney General's Office must protect those rights."⁵⁶ A careful analysis of the number of patents issued (Table Number 2) will show at a glance the extra work this would throw on the patent office. The dilemma is indeed a great one.

"The growing pace of research means a growing crisis in the United States Patent Office. This crisis, bred of old policies and overwork, is bound to cause trouble for industry in the future. Patent claims of research developments are infringing on one another every other day. Harassed Patent Office officials are issuing more and more joint patents. This spreads research knowledge through industrial labs. But it also spreads the reward of a company's increasingly costly research effort. While research draws more on a company's time and money, the potential rewards become less."⁵⁷

⁵⁶ Von Ludwig, *op. cit.* supra note 54.

⁵⁷ Article, Special Report, *Business Week*, p. 41 (Dec. 27, 1958).