From Benevolent Administration to Government Employee Inventions, Human Genomes, and Exclusive Licensing: Is Governmental Ownership of Patents Constitutional?

Thomas Lizzi

Follow this and additional works at: https://dsc.duq.edu/dlr

Part of the Law Commons

Recommended Citation
Available at: https://dsc.duq.edu/dlr/vol34/iss2/5

This Comment is brought to you for free and open access by Duquesne Scholarship Collection. It has been accepted for inclusion in Duquesne Law Review by an authorized editor of Duquesne Scholarship Collection.
From Benevolent Administration to Government Employee Inventions, Human Genomes, and Exclusive Licensing: Is Governmental Ownership of Patents Constitutional?

Throughout its history, the use by the United States Government of its large patent estate has been benignly public oriented. This policy has rendered almost invisible any constitutional objections that exist with respect to the ownership by the United States Government of patents of its own issue. This invisibility has been so complete that over the years, judicial, legisla-
tive, and executive actions and decisions dealing with the subject of federal governmental ownership of United States patents have always been made with the implicit assumption that no constitutional infirmity exists. In fact, the issue has never been decided by any court. Likewise, relatively few commentators have made mention of even the possibility of a problem. Most commentators who have raised the issue have dismissed it either by stating that the issue has been decided by prolonged practice or by confining its dimensions to that of legislative authorization.

Until the latter half of the twentieth century, the benign character of the federal government's policy in administration of its patent estate has been evidenced by its general practice of issuing unconditional, royalty-free licenses to any person on request. Additionally, the federal government has made no effort to police the unlicensed use of its patents. The lack of enforcement has been so complete that the only occasion in which the federal government asserted its patent rights against an alleged infringer was by way of counterclaim; and in that case the court dismissed the counterclaim on the ground that the historical lack of patent enforcement resulted in an implied patent ownership may be counter to the purpose of the Constitution, the focus on the possibility of an advantage to the federal government of patent ownership obfuscates the fact that there is something fundamentally wrong with the practice.

5. Effective Use of Government-Owned Rights, supra note 2, at 1089.

6. A thorough search of the West's AMERICAN DIGEST SYSTEM, which covers the period of 1658 to the present, revealed no decision on the issue. See also Frank J. Wille, Government Ownership of Patents, 25 J. PAT. & TRADEMARK OFF. SOCY 729, 730 (1943).

It has been suggested that the reason the federal government has been reluctant to enforce its patent rights is to avoid testing in court the constitutionality of governmental ownership of patents of its own issue. Effective Use of Government-Owned Rights, supra note 2, at 1088-89.

7. One commentator simply stated that, "aside from the question of constitutionality, there appears to be no logical reason why ... [the federal government] cannot hold or own the [patent] grant outright." Simon Broder, Government Ownership of Patents, 18 J. PAT. OFF. SOCY 697, 699 (1936).

8. See, e.g., Effective Use of Government-Owned Rights, supra note 2, at 1089. But see Bernstein, supra note 2, at 517-19 (bolstering the conclusion of justification through custom, but defending against arguments contra with the argument that governmental ownership is permissible because the federal government has not enforced the exclusivity embodied in the patent rights). The argument by Bernstein overlooks the fact that although the federal government's patent policy so far has been benign, it may become repressive tomorrow and, in any case, good intentions alone do not make a governmental practice constitutional.


10. See Effective Use of Government-Owned Rights, supra note 2, at 1091.

11. Id.
license to the alleged infringer. This lack of active use of patent rights by the federal government was consistent with its primary purpose of acquiring patents for defensive purposes. That is, the federal government acquired patents for the purpose of preventing others from obtaining patent rights to the subject invention and thereby protected itself from claims of infringement. As will be discussed later, other means exist for acquiring this protection at a lower cost and without the constitutional problems of the federal government owning self-issued patents.

Recently, two actions of the federal government have begun to raise the specter of the dangers inherent in governmental ownership of patents of its own issue. The first is the adoption by the federal government of a policy of granting exclusive licenses to its patents. The second is the federal government's efforts to patent the mapping of human DNA, sometimes referred to as the "human genome." Though these topics will not be further discussed in this comment, they are mentioned to illustrate the fact that governmental patent ownership has the potential of dangerous abuse. For example, the granting of exclusive licenses opens the door to the practice of bestowing favors at the grace of the federal government as a sovereign. Cornering the patent rights on the human genome illustrates how the federal government can employ its huge scientific and legal resources to potentially stifle a nascent industry of tremendous potential for humanitarian and commercial benefit. Considering these two governmental actions together, it is evident that the danger exists for the federal government to first acquire the exclusive rights to a vital technology and then to dispense those rights to persons or entities which are in its favor. In short, it is possible for the federal government to create the sort of monopoly by "royal

14. See 35 U.S.C. § 209(c) (1988). Admittedly, at this point in history, the exclusive licensing has the benign objective of promoting the transfer of governmental inventions to the private sector. Christopher J. Harnett, The Human Genome Project and the Downside of Federal Technology Transfer, 5 RISK: HEALTH, SAFETY & ENV'T 151, 159-60 (1994). However, as the U.S. Supreme Court has stated: "It may be that it is the obnoxious thing in its mildest and least repulsive form; but illegitimate and unconstitutional practices get their first footing in that way; namely by silent approaches and slight deviations from legal modes of procedure." Boyd v. United States, 116 U.S. 616, 635 (1885) (holding unconstitutional a statutory provision allowing the federal government, in internal revenue matters, a presumption of proof regarding the alleged contents of books which a party failed to produce under subpoena).
prerogative" which the Framers of the Constitution found to be so abhorrent.\textsuperscript{16}

After a brief description in Section I of what patents are and how the federal government obtains them, this comment presents in Section II arguments as to why it is unconstitutional for the United States Government to acquire patents of its own issue. Section III presents non-constitutionally based arguments as to why it is also improper for the federal government to hold its own patents. Section IV explains why it is unnecessary for the federal government to acquire patents. Finally, Section V concludes that the weight of the arguments points to the result that governmental ownership of patents of its own issue is both unconstitutional and improper.

I. HOW THE FEDERAL GOVERNMENT ACQUIRES OWNERSHIP OF PATENTS

A. The Definition of "Patent"

A patent is the grant to an inventor by a government of a limited monopoly on an invention.\textsuperscript{17} A patent is purely statutory in nature.\textsuperscript{18} Being a grant by a sovereign, it is operative only within the territory controlled by the sovereign.\textsuperscript{19} A patent is also a collection of rights\textsuperscript{20} given to an inventor by a government\textsuperscript{21} in exchange for the publication by the inventor of a description of the invention that is detailed enough to allow one skilled in the art to reproduce the invention.\textsuperscript{22} Thus, a patent is a contract between a government and an inventor.\textsuperscript{23} The unify-

\textsuperscript{16} See infra Section II for a discussion of the disdain of the Framers for monopolies by royal prerogative.
\textsuperscript{17} PETER D. ROSENBERG, PATENT LAW BASICS § 1.03 (1993).
\textsuperscript{18} Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 229 n.3 (1964) (citing Wheaton v. Peters, 33 U.S. (8 Pet.) 591 (1834)).
\textsuperscript{19} ROSENBERG, supra note 17, § 19.02.
\textsuperscript{20} JAMES E. HAWES, PATENT APPLICATION PRACTICE § 2.01 (2d ed. 1993).
\textsuperscript{21} In the United States, only the federal government may grant patents. See Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 152 (1989) ("[S]tate regulation of intellectual property must yield to the extent that it clashes with the balance struck by Congress in our patent laws.").
\textsuperscript{23} See Grant v. Raymond, 31 U.S. (6 Pet.) 218, 241-42 (1832) (Marshall, C.J.); National Hollow-Brake-Beam Co. v. Interchangeable Brake Beam Co., 106 F. 693, 701 (8th Cir. 1901); see also Bonito Boats, 489 U.S. at 150-51 ("The federal patent system thus embodies a carefully crafted bargain for the creation and disclosure of . . . advances in technology . . . in return for the exclusive right to practice the invention for a period of years.") (emphasis added). Contra In re Breslow, 616 F.2d 516, 518 n.3 (C.C.P.A. 1980) (Rich, J.) (rejecting as inapt the description of a patent as a contract and instead characterizing a patent as a statutory right).
ing characteristic of patent rights is the authority granted by the federal government to the inventor to exclude others from making, selling, or using the invention within the country issuing the patent for a fixed period of time. No similar grant of authority existed at common law. Paradoxically, a patent does not give the inventor the right to make, sell, or use the patented invention, a right which exists at common law. At the conclusion of the statutory period, the patent expires and the invention passes into the public domain. At that time, any person may freely make use of the invention.

During the limited period of its enforceability, a patent creates a monopoly in its owner. The purpose of the monopoly is to provide incentive to the inventor to create and bring forth new knowledge. By statute, pursuant to constitutional restrictions, a patent may only be granted to an inventor or the inventor's assignees.

In order to be patentable, an invention must meet the requirements set forth by statute. The statutory prerequisites to obtaining a patent are strictly enforced. The subject matter of an invention must be within one of four specified classes of patentable subject matter. The classes are: new and useful processes, machines, manufactures, and compositions of matter. New and useful improvements of subjects within these classes are also patentable. Abstract ideas are not within the statutory classes and therefore are not patentable. Further, an inven-

26. ROSENBERG, supra note 17, § 1.03.
27. Id.
28. Id.
31. See ROSENBERG, supra note 17, § 1.03.
33. The statutory requirements for the assignment of an invention are given in 35 U.S.C. §§ 151, 152 (1988). These statutes were enacted pursuant to constitutional authority: "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." U.S. CONST. art. I, § 8, cl. 8.
34. Sears, 376 U.S. at 230.
36. Sears, 376 U.S. at 230.
37. ROSENBERG, supra note 17, § 1.03.
tion must be novel. This means that the invention could not have been known or used in the United States by others prior to its invention by the person applying for the patent as the inventor. It also means that there can be no printed publication or public use of the invention a year or more prior to the submission of the patent application. An invention must also be non-obvious. The non-obviousness requirement means that in light of the prior art in the field of the invention, the invention as a whole would not have been obvious to a person skilled in the art at the time the invention was made.

A patent has, by statute, the attributes of personal property. Ownership of a patent, as with any property, carries with it the right to exclusive enjoyment. The ownership interest in a patent may be assigned or licensed either exclusively or non-exclusively. Inventors often assign their rights to an invention by way of an employment contract. An assignment to an employer may also be inferred from the circumstances of employment. Even absent such an express or implied assignment, an employer may gain the right to use an employee's invention as a "shop right" under certain circumstances.

The remedy for the infringement of a patent by a private party is an award of damages sufficient to compensate the patent owner for the infringement. At a minimum, the compensation is equal to the value of a reasonable royalty and costs and interest fixed by a court. Treble damages may be awarded for

39. Id. § 102(a).
40. Id. § 102(b).
41. Id. § 103.
42. Id. Prior art "includes any relevant knowledge, acts, descriptions, and patents which pertain to, but predate, [the] invention in question." BLACK'S LAW DICTIONARY 1193 (6th ed. 1990).
44. ROSENBERG, supra note 17, § 1.03.
46. ROSENBERG, supra note 17, § 12.02[2]. A license is non-exclusive if it does not expressly preclude the licensor from licensing to others. Id.
49. The term "shop right" refers to the right that an employer receives to practice an invention in a business or shop when the employee used the employer's resources to make or develop the invention. See ROSENBERG, supra note 17, § 12.06.
50. Dubilier Condensor, 289 U.S. at 188-89. See also ROSENBERG, supra note 17, § 12.06.
52. Id.
willful infringement. The patent owner also has available the remedy of an injunction against an infringing private party to prevent future acts of infringement.

In contrast, the remedies of a patent owner against the federal government for its unlicensed use of a patent are more limited. This is because the federal government has the statutory right to make unlicensed use of any patent it issues. However, a patent owner has the remedy of suing the federal government in the United States Court of Claims for an amount equal to a reasonable royalty. Injunctive relief is not available against the federal government.

B. How the United States Government Obtains Patents

The United States Government owns many of the patents it issues. Presently, the most important method of patent acquisition by the federal government is the acquisition of rights to inventions made by its employees. The Supreme Court, in United States v. Dubilier Condensor Corp., ruled that in the absence of statutory authority, the federal government, like any employer, has a common law right to inventions created by its employees. Therefore, if an employee is employed to improve processes or to invent, the resulting invention belongs to the federal government as the employer. However, the Court stated that if an employee is not employed for these purposes, the rights to the invention remain in the employee. In such a

53. ROSENBERG, supra note 17, § 18.02[2].
57. McGrath, supra note 56, at 352. McGrath points out that a suit for unauthorized use of a patent does not sound in tort, as it would for a suit for infringement against a private party, but rather is based upon the Eminent Domain theory. Id. The Eminent Domain theory is based on the Fifth Amendment to the Constitution, which states: "Nor shall private property be taken for public use, without just compensation." U.S. CONST. amend. V. The provision for an action by a patent owner against the federal government under 28 U.S.C. § 1498 amounts to a waiver of sovereign immunity which would otherwise protect the federal government from suits. McGrath, supra note 56, at 351.
59. See Schneider, supra note 1, at 383.
60. Id.
61. 289 U.S. 178 (1933).
63. Id.
64. Id.
case, the Court opined, if the employee had made use of the employer's time or other resources in making or perfecting the invention, the employer is entitled to a "shop right" in the invention. Therefore, the employer effectively receives an implicit non-exclusive license to use the invention.

In 1950, President Truman issued Executive Order Number 10,096, which directed all federal agencies to acquire rights to inventions produced by their employees. The directive required each agency to make a determination of whether the rights to an invention should remain in the employee or should be taken over by the federal government. Executive Order 10,096 created rebuttable presumptions patterned after the Dubilier common law rule as to whether the invention belongs to the federal government or the employee. An additional consideration in the creation of a presumption in favor of the federal government is the level of governmental interest in patenting the invention.

The constitutionality of Executive Order 10,096 was attacked twice on the grounds that the President lacked the authority to order the acquisition of a federal government employee's invention and that such an acquisition amounted to a taking without due process. The Seventh Circuit Court of Appeals, in Kaplin v. Corcoran, held that legislative authority existed for the executive order. Ten years later, the Court of Appeals for the Federal Circuit, in Heinemann v. United States, held that the administrative process for determining the ownership of the invention accompanied by its optional court review satisfied the Due Process Clause. The issue of whether it was constitutional for the federal government to own patents was not raised.

The federal government has several lesser sources of patent acquisition. One source is the acquisition of patents from its contractors and grantees. Another source is by the seizure of

---

65. Id.
67. Id.
68. Id.
69. Id.
70. 545 F.2d 1073 (7th Cir. 1976).
71. Kaplin, 545 F.2d at 1077.
72. 796 F.2d 451 (Fed. Cir. 1986).
73. Heinemann, 796 F.2d at 455-56.
74. See generally Edward C. Walterscheid, The Need for a Uniform Government Patent Policy: The D.O.E. Example, 3 HABV. J.L. & TECH. 103 (1990) (reviewing the federal government patent policy using the Department of Energy as an example and discussing the difficulty of establishing policy uniformity throughout the
patent rights held by enemies as a wartime defensive measure. Some patent acquisition methods of minor importance are the outright donation by the inventor or his assignee of a patent to the federal government, the purchase of a patent by the federal government, and the acquisition of a patent through an international agreement.

II. CONSTITUTIONAL ISSUES OF FEDERAL GOVERNMENTAL OWNERSHIP OF PATENTS

The United States Government is a government of enumerated powers. Thus, the federal government has only those powers expressly granted to it by the Constitution along with those powers which are implicitly necessary for carrying out the enumerated powers. The constitutional authority for the federal government to issue patents is found in Article I, Section 8, Clause 8, which 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.

This Clause, referred to as the "Intellectual Property Clause," grants Congress the authority to issue both patents and copyrights. The Intellectual Property Clause authorizes the granting of patents by the federal government, but there is no power, either expressed or implied, in the Constitution that grants the federal government the authority to acquire its own patents. Not only is there no constitutional authorization, but governmental ownership of the patents it issues obstructs the very purposes of the Intellectual Property Clause and thus is in diametrical opposition to the intentions of the Framers.

It is important to understand that the Intellectual Property Clause...
Clause contains the only grant of power to Congress in the Constitution which was made with the particular means of exercise specified.\textsuperscript{84} Thus, not only did the Drafters of the Constitution state the objects for which the Intellectual Property Clause was to be used, but they also specified the only means by which the power could be exercised.\textsuperscript{85} The United States Supreme Court plainly recognized this fact in \textit{Graham v. John Deere Co.}.\textsuperscript{86}

The clause is both a grant of power and a limitation. This qualified authority, unlike the power often exercised in the sixteenth and seventeenth centuries by the English Crown, is limited to the promotion of advances in the "useful arts." It was written against the backdrop of the practices—eventually curtailed by the Statute of Monopolies—of the Crown in granting monopolies to court favorites in goods or businesses which had long before been enjoyed by the public. ... The Congress in the exercise of the patent power may not overreach the restraints imposed by the stated constitutional purpose. Nor may it enlarge the patent monopoly without regard to the innovation, advancement or social benefit gained thereby. Moreover, Congress may not authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available.\textsuperscript{87}

There are several important points to observe in the above quoted passage. First, the historical backdrop—that is the practice of patents and monopolies in general at the time of the writing of the Constitution—is a very important consideration in the interpretation of the Intellectual Property Clause as both a grant and a limitation of power. Second, within the limited scope of the power, Congress may take no action which contravenes the purposes of the power. Thus, Congress' actions pursuant to the Intellectual Property Clause power must work only to promote the useful arts. This implies that Congress is not permitted to employ the Intellectual Property Clause power to grant patents in a manner which retards the advancement of the useful arts. Lastly, Congress may not take knowledge which already belongs to the public and place restrictions on it by the issuance of a patent.

As will be seen, the ownership of patents by the federal government runs counter to all of these limitations which the Su-

\begin{itemize}
\item 84. Walterscheid, \textit{supra} note 80, at 32.
\item 85. The inclusion of a specific means of execution in the Intellectual Property Clause takes on added importance when it is considered that the Committee of Detail, which was responsible for preparing the working draft from which the delegates crafted the Constitution, deliberately avoided putting such detail into the clauses so as to make it more likely that the Constitution's provisions would be adaptable to times and events. Walterscheid, \textit{supra} note 80, at 32.
\item 86. 383 U.S. 1 (1966).
\item 87. \textit{Graham}, 383 U.S. at 5-6.
\end{itemize}
The Supreme Court has found to be contained within the Intellectual Property Clause. Further, the Intellectual Property Clause's implicit prohibition of governmental ownership of patents of its own issue is not overridden by any other constitutional provision.

A. The "Intentions of the Framers" Argument Against Federal Governmental Ownership of Patents

At the time of the writing and adoption of the Constitution, Americans had an instinctive aversion to monopolies. Indeed, it was a monopoly on tea that sparked the American Revolution. George Mason, a Virginia delegate to the Constitutional Convention, refused to sign the Constitution because he perceived that it left open the possibility that Congress could interpret the general clause at the end of the enumerated powers to grant monopolies in trade and commerce. The ratifying conventions of four states requested or recommended that amendments be made with specific prohibitions against Congress granting monopolies in commerce. Thomas Jefferson initially opposed the inclusion of the Intellectual Property Clause in the Constitution. Jefferson understood that even this limited authorization of monopolies could be subject to abuse and, therefore, he thought it not worth the risk to "meddle with it." Thomas Jefferson, after learning that the Constitution had been ratified, wrote to James Madison calling for a Bill of Rights which would restrict monopolies. Later, as Secretary of State overseeing the issuance of patents, Jefferson noted the difficulty in granting patents of "drawing a line between the things which are worth to the public the embarrassment of an exclusive patent."

A century and a half prior to the writing of the United States Constitution, abuses of the royal prerogative in England in granting monopolies had been curbed by the adoption by Parliament of the Statute of Monopolies of 1623. The Statute of Monopolies

88. Id. at 7.
89. Id.
90. Walterscheid, supra note 80, at 55.
91. Id. at 55-56. The states were Massachusetts, New Hampshire, New York, and North Carolina. Id.
92. Id. at 54-55.
93. Id. at 54 (quoting a letter from Thomas Jefferson to Monsier L'Hommande (Aug. 9, 1787), cited in Paul E. Holbrook, Science vs. Gadgets, 33 J. PAT. OFF. SOCY 87, 91-92 (1951)).
94. Id. See also Graham v. John Deere Co., 383 U.S. 1, 7-8 (1966).
95. Graham, 383 U.S. at 9 (emphasis added).
96. Walterscheid, supra note 80, at 12.
outlawed “all monopolies, grants, licenses, and letters patent ... for the sole buying, selling, making, working, or using of any-thing within the realm.” 97 One of the narrow group of exceptions to the general prohibition of monopolies was the grant of a patent to an inventor allowing the sole use of the invention for a period of fourteen years from the grant of the patent. 98

Notwithstanding the general animosity toward monopolies, the granting of patents to inventors under the exception to the Stat-ute of Monopolies was perceived in the eighteenth century as having played an important role in the industrial development of Great Britain. 99 In a number of American colonies prior to the American Revolution, a patent custom existed that conveyed through private legislative acts exclusive grants of privilege to inventions and importation. 100 Thus, the power to grant patents to inventors was included in the Constitution but only with due caution. The effect of the Statute of Monopolies on the Framers of the Constitution and their concrete perception of the possibility of abuse of the patent power is aptly described by legal historian Edward C. Walterscheid:

[I]t is precisely because the delegates were familiar with the Statute of Monopolies either on legal or political terms that they were not about to give the Congress any general power to create monopolies. A broad power to create monopolies was too reminiscent of the power of the royal pre-rogative which was the last thing anyone ... wanted to grant to either the executive or legislative branches contemplated by the proposed Con-stitution. While the Framers were cognizant that the patent grant consti-tuted an express exception to the general ban on monopolies that had existed in England for more than one hundred and fifty years, they also perceived patents to be monopolies, albeit of a limited and acceptable type. Therefore, if the Framers were to give power to Congress to secure exclusive rights for limited times to inventors in their discoveries, it was necessary to do so expressly. 101

It is clear that the majority of the Framers thought they had prohibited Congress from being able to dispense monopolies ex-cept by the narrow provision of a patent monopoly to an inventor for the equally narrow purpose of providing incentive for the development of industry. It necessarily follows that the Framers did not intend for the federal government to have the ability to acquire monopolies, which it could then dispense at its preroga-

97. Id.
99. Walterscheid, supra note 80, at 14.
100. Id. at 14-17.
101. Id. at 37-38 (footnotes omitted).
tive and grace, through the use of an artifice that would take the patent granted to an inventor back into the hands of the federal government. In short, it was not the intention of the Framers to enable the federal government to acquire the ability to deal in monopolies merely by having assigned to itself patents it issued under the Intellectual Property Clause.

B. Obstruction of the Purpose of the Intellectual Property Clause by Federal Governmental Patent Ownership

The Intellectual Property Clause, which grants to Congress its patent and copyright powers, was written as a balanced sentence, a form in common usage at the time of the writing of the Constitution. "The Clause begins by stating two objects to be promoted, then names two types of persons to be encouraged, and concludes with two types of subject matter to be protected." Separating out the provisions of the patent power, the Clause reads as follows:

The Congress shall have Power . . . To promote the Progress of . . . useful Arts, by securing for limited Times to . . . Inventors the exclusive Right to their . . . Discoveries.104

The "useful Arts" at the time of the writing of the Constitution meant "helpful or valuable trades." "Promote" at the time of the writing of the Constitution had the meaning (similar to that of today) of "to advance, to improve, to better." Thus, "[t]o promote the Progress of . . . useful Arts" presupposed an intention to advance the helpful or valuable trades.

As mentioned above, the United States Supreme Court in Graham held that the power of Congress under the Intellectual Property Clause is limited to the promotion of advances in the useful arts.105 The Graham Court also held that "Congress in the exercise of the patent power may not overreach the restraints imposed by the stated constitutional purpose." Thus, it is clear

105. Walterscheid, supra note 80, at 52.
107. Walterscheid, supra note 80, at 52.
108. See supra notes 86-87 and accompanying text.
that an act by Congress which restrains the advancement of the useful arts would be both contrary to the Intellectual Property Clause and outside of the power delegated by the Clause. But governmental ownership of patents does just that by restraining the progress of the useful arts in five significant ways.

First, by its very nature, a patent impedes, by the threat of penalty of law, all but the patent owner and licensees from using the invention or discovery that is the subject of the patent. The Framers envisioned this detrimental restriction inherent in a patent to be sufficiently counterbalanced by the incentive to invent provided by the patent monopoly. The United States Supreme Court has held that patents are statutory monopolies awarded to inventors for the purpose of encouraging invention by rewarding the inventor with the right to exclude others from the making, using, and selling of the subject invention for a fixed number of years. However, when the federal government obtains a patent, the countervailing benefit of incentive to invent is absent. The federal government is already required under the Constitution to make expenditures for the public good. Thus, absent the incentive, the public must suffer the "embarrassment of an exclusive patent" without obtaining any countervailing benefit.

Second, under the patent statutes, a patent may not be issued for an invention or discovery that has been published or non-confidentially revealed to others prior to the filing of a patent application. Therefore, information developed under publicly funded research programs necessarily must be kept from public use while the federal government prepares its patent application. This withholding of publicly procured information further retards the advancement of the useful arts.

Third, the huge resources at the disposal of the federal government may intimidate all but the largest of corporations from competing in a race with the federal government to acquire a patent. Not only are the research and development resources of the federal government of gargantuan proportions, but the

112. JERRE S. WILLIAMS, CONSTITUTIONAL ANALYSIS IN A NUTSHELL 174-75 (1979). All expenditures of the federal government must either be for the general welfare or on behalf of a specific constitutional power. Id.
114. See Walterscheid, supra note 74, at 104-05.
legal and financial resources available to the federal government to procure and defend a patent are relatively infinite. The threat of such an overwhelming competitor can stifle the development of an otherwise useful art. This is especially true when it is considered that in many cases private individuals and businesses need to recoup their research investment by acquiring patent rights to the commercialization of the fruits of their research.\(^\text{115}\) As the chances of winning the race for a patent decrease, the incentive of private parties for making investments in research and development decreases. Thus, progress in the useful arts is retarded by governmental patent ownership.

Fourth, the high level of government patent application activity\(^\text{116}\) contributes to the backlog of the patent office.\(^\text{117}\) This lengthens the amount of time it takes all patent applications to be processed, both government and private. This delay has the effect of retarding the progress of the useful arts. As long as an invention or discovery is not the subject of an existing valid patent held by another, there is a common law right for one to privately practice one's own invention either openly or in secret as a trade secret. However, because there is no common law right to exclude others from practicing the invention once it is made public, private inventors are reluctant to reveal the method of practicing their inventions until their patent applications are processed by the patent office and patents are issued. Thus, the longer the patent application process takes, the longer the public is deprived of the information which would have been revealed in the private applicant's patent disclosure.

Fifth, governmental ownership of patents unconstitutionally removes information from the public domain. The *Graham* Court held that in the exercise of the Intellectual Property Clause, "[C]ongress may not authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available."\(^\text{118}\) When the federal government obtains a patent based on work which was done with public funds, it is basing its patent on information which the federal government is holding as the corporate agent for the American public.\(^\text{119}\) Federal governmental patent-

\(^{115}\) See Berger, *supra* note 2, at 455-56.

\(^{116}\) See Schneider, *supra* note 1, at 383.

\(^{117}\) As of July 4, 1995, the average backlog of the Patent Office examining group as measured by the new case date was 1.4 years. 1176 OFF. GAZ. PAT. OFFICE 32 (1995). The new case dates ranged from 0.9 to 2.3 years. *Id.*

\(^{118}\) *Graham*, 383 U.S. at 6.

\(^{119}\) See Broder, *supra* note 7, at 698.
ing of such publicly-owned information has the effect of taking the information out of the public domain. The patenting restricts free access to the information because it limits the use of the information for the life of the patent to the federal government and its licensees. Thus, the patenting by the federal government produces results which are counter to the federal government's constitutional authorization under the Intellectual Property Clause. Furthermore, the federal government's relatively recent adoption of a policy of granting exclusive licenses to patents\textsuperscript{120} brings us to exactly the situation which the Framers knew the Statute of Monopolies was designed to prevent—the granting by the sovereign of monopolies over what otherwise would had been in the public domain.

C. No Constitutional Power Exists for Federal Governmental Ownership of Patents

Some argue that the source of power for the federal government to own self-issued patents arises under constitutional provisions other than the Intellectual Property Clause. These suggested alternative sources of power include the Commerce Clause,\textsuperscript{121} the War Powers Clause,\textsuperscript{122} the Property Clause,\textsuperscript{123} the General Welfare Clause,\textsuperscript{124} the Revenue Clause,\textsuperscript{125} and the Necessary and Proper Clause.\textsuperscript{126} However, none of these powers

\textsuperscript{120} See \textit{supra} note 14 and accompanying text.


\textsuperscript{122} U.S. Const. art. I, § 8, cl. 1. The War Powers Clause states: "The Congress shall have Power To . . . provide for the common Defence . . . of the United States." \textit{Id.} See Burk, \textit{supra} note 121, at 615; Wille, \textit{supra} note 6, at 740-41.

\textsuperscript{123} U.S. Const. art. IV, § 3, cl. 2. The Property Clause states: "The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting . . . Property belonging to the United States." \textit{Id.} See Burk, \textit{supra} note 121, at 615; Wille, \textit{supra} note 6, at 736-40.

\textsuperscript{124} U.S. Const. art. I, § 8, cl. 1. The General Welfare Clause states: "The Congress shall have Power To . . . provide for the . . . general Welfare of the United States." \textit{Id.} See Wille, \textit{supra} note 6, at 740-44.

\textsuperscript{125} U.S. Const. art. I, § 8, cl. 1. The Revenue Clause states: "The Congress shall have Power To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts . . . . (B)ut all Duties, Imposts and Excises shall be uniform throughout the United States." \textit{Id.} See Wille, \textit{supra} note 6, at 740-45.

\textsuperscript{126} U.S. Const. art. I, § 8, cl. 18. The Necessary and Proper Clause states: "The Congress shall have Power . . . To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any De-
provides the necessary authority for the federal government to own patents. Application of the standard rule of construction, *generalia specialibus non derogant*, which means that a special provision as to a particular subject-matter is to be preferred to general language, defeats these Clauses as possible sources of authority for governmental ownership of patents. The Intellectual Property Clause is undeniably the most specific constitutional clause with respect to patents. In light of the above discussion regarding the intention of the Framers to restrict patent monopolies and the ways in which governmental ownership of patents conflicts with the Clause, it is clear that the Intellectual Property Clause does not provide the federal government with the power to own patents and prohibits it altogether. Thus, the broader clauses cannot be found to authorize powers which the more specific clause prohibits.

Consideration of the constitutional aspects of the governmental ownership of patents of its own issue has demonstrated that such ownership is unconstitutional. Not only is the requisite constitutional authorization absent, but the practice is contrary to the very limited grant of power which authorizes the federal government to issue patents. The next section will make clear that, constitutional issues aside, it is also improper for the federal government to own patents of its own issue.

III. COLLATERAL ARGUMENTS AGAINST FEDERAL GOVERNMENTAL OWNERSHIP OF PATENTS

There are a number of non-constitutional arguments which have been raised by commentators against governmental ownership of patents. These include the sovereign grant merger doctrine, several contract doctrines, and the argument that patent ownership is inconsistent with other governmental du-

127. *See Rodgers v. United States*, 185 U.S. 83, 87-90 (1902). The *Rodgers* Court noted that where two provisions or acts cover the same matter and conflict, the more special one must be taken to govern, especially when the provisions or acts are contemporaneous. *Rodgers*, 185 U.S. at 90. *See also Busic v. United States*, 446 U.S. 398, 406 (1980) (giving a more specific statute preference over a more general one, regardless of order of enactment); *Fourco Glass Co. v. Transmirra Prods. Corp.*, 353 U.S. 222, 228-29 (1957) (holding that specific terms prevail over general terms in the same or another statute which otherwise might be controlling); *Stonite Products v. Melvin Lloyd Co.*, 315 U.S. 561, 561-67 (1942) (holding that specific venue statutes for patent suits prevail over general venue statutes); *Gerber*, supra note 121, at 127.


129. *See Wille*, supra note 6, at 745-46.
ties. To these may be added a fourth argument countering a line of Supreme Court cases which has found that the federal government has a common law right as an employer to patent certain inventions created by its employees. The argument in this last instance is that the Court has overlooked the fact that as a sovereign, the federal government is not like any other employer. The federal government has powers and potentials for abuse of patent rights that make the federal government sui generis. Therefore, the federal government should be treated differently with respect to patent ownership than any other employer.

A. Sovereign Grant Merger Doctrine

Thomas Ewing, a former Commissioner of Patents, has argued that the federal government cannot confer rights upon itself by its own grant. He based this argument on the doctrine of sovereign grant merger. Ewing attributes this doctrine to Thomas Paine. The essence of the doctrine is that when a patent or other grant of right issued by a sovereign returns to the hands of the sovereign, its existence is extinguished. The concept is that because the patent grant is a specific issue of authority flowing from the sovereign's general authority, the specific authority merges back with the general authority and ceases to exist as a separately identifiable parcel of authority when returned to the sovereign. Applying this doctrine to governmental ownership of patents of its own issue, when a patent returns to the hands of the sovereign which issued it, the specific grant of sovereign authority contained in the patent to exclude others from using the subject invention merges with the general sovereign authority of the government and thus becomes extinguished as a separate grant of authority. In effect, the patent becomes a nullity by the very incidence of governmental ownership.

B. Contract Doctrines

As described above, a patent is a contract between the United...
States Government and an inventor. The federal government, for its consideration to support the contract, provides the inventor with the statutory right to exclude others from making, selling, or using the subject invention for a set number of years. The inventor's consideration is disclosure to the public, by way of the publication of the patent, of a detailed description of the invention.

Contract doctrine provides five fundamental reasons why the federal government cannot properly own patents of its own issue. The first of these is that it is a tenet of the law of contracts that there must be at least two parties to a contract. Thus, a party cannot contract with itself. In acquiring a patent of its own issue, either directly or through the inventor on its own behalf, the federal government is in effect contracting with itself and, thus, no valid contract can result.

The second contract law-based reason is provided by the contract merger doctrine. The contract merger doctrine holds that where a contractual promise returns to the hand of the promisor, the promise disappears and the contract is extinguished. In acquiring a patent of its own issue, the federal government is receiving back its own promise to give the patent holder exclusive use of the patented invention. Under the contract merger theory, this promise, and the patent contract which embodies it, is extinguished by the merger of the promise back into the federal government as promisor of the exclusive rights.

The third reason is that the federal government lacks the capacity to enter into a patent contract to acquire patents of its own issue. The lack of capacity results from the fact that the federal government can only act within its constitutional authorization and, as discussed above, no such authority exists. An act by the federal government for which it has no authority is ultra vires. Therefore, when the federal government attempts

136. See supra note 23 and accompanying text.
137. See Rosenberg, supra note 17, § 1.02.
138. Id.
140. Murray, supra note 139, § 28 n.4.
141. See Wille, supra note 6, at 746.
142. Id. at 747.
143. Id. (citing Persky v. Bank of Am. Nat'l Ass'n, 185 N.E. 77 (N.Y. 1933)).
145. An essential element for contract formation is that the parties must have the legal capacity to contract. Murray, supra note 139, § 29.
to enter into a patent contract to obtain a patent of its own issue, it is acting *ultra vires* and lacks the capacity to make a valid patent contract.

The fourth reason involves the unenforceability of a contract made for an illegal purpose. Because the Intellectual Property Clause disallows the federal government to own patents, the patent is for an illegal purpose when governmental ownership of the patent is involved. In such a case, the patent becomes a contract facilitating an illegal purpose and therefore becomes unenforceable.

Lastly, as a consequence of the sovereign grant merger doctrine, any contract by the federal government with regard to a patent of its own issue is void for lack of consideration on the part of the federal government as the promisor of the patent right. It is void because the patent rights are extinguished upon their return to the hands of the sovereign which issued them and cannot constitute the valuable consideration necessary to sustain a valid contract.

C. Inconsistency with Other Duties of the Federal Government

The ownership of patents is inconsistent with other duties of the federal government. Former Commissioner of Patents Ewing lists several of the inconsistencies. Primary among these are the federal government's duties regarding patents. Under statute, the federal government alone has the capacity to bring suit to have a patent invalidated for fraudulent procurement. Therefore, there is no party to bring an action against the federal government should it engage in fraud to acquire a patent.

Another inconsistency arises with regard to the governmental duty under the patent laws to protect patent applications in secrecy during the time of their prosecution. The very real danger exists for the federal government to breach this confidentiality to promote its own patent acquisition efforts over those of other applicants.

---

147. Contracts facilitating illegal purposes are unenforceable. Murray, *supra* note 139, §§ 98a, k.
D. The Federal Government is not "Like Any Other Employer"

As noted above, the primary source of government owned patents is inventions made by its employees. In a series of United States Supreme Court cases beginning with McClurg v. Kingsland and ending with United States v. Dubilier Condenser Corp., the Court developed a common law doctrine which recognized the federal government's right under certain circumstances to acquire patents to inventions made by its employees. The basis of the doctrine was that the federal government was like any other employer and was therefore entitled to the rights enjoyed by other employers. Thus, the Court reasoned that the common law rights of an employer with regards to the inventions of its employees should apply to the federal government.

However, what the Court failed to consider is that the federal government has one paramount distinction pertinent to patent ownership that sets it apart from all other employers. That distinction is that the federal government is a sovereign. Unlike other employers, the federal government is limited to the rights it can have by the United States Constitution. As already demonstrated, there is no constitutional authority for the federal government to hold patents. Also, the federal government, due to its sovereign status, has the potential to abuse patent rights in ways in which no other employer could. Therefore, the federal government is unlike any other employer with regard to the ability to enjoy patent rights. The Supreme Court, like Congress, may not grant the federal government the power to hold patents where the Constitution denies the power.

---

152. 42 U.S. (1 How.) 202 (1843) (establishing that an employer is entitled to a shop right in inventions made by employees which utilized the employer's material and time).

153. 289 U.S. 178 (1933) (stating that the federal government is entitled to common law rights as an employer to inventions made by its employees). In addition, the line of cases includes the following: United States v. Burns, 79 U.S. (12 Wall.) 246 (1870) (holding that the federal government must compensate a government employee patent holder, not specially employed for inventing, for the use of the invention), James v. Campbell, 104 U.S. 356 (1881) (holding that the Constitution evinces no policy requiring the holder of a patent to cede the use or benefit of the invention to the United States), United States v. Palmer, 128 U.S. 262 (1888) (reaffirming Burns), Solomons v. United States, 137 U.S. 342 (1890) (holding that the federal government has no more power than any other employer to acquire the patent rights to an invention made by its employees) and Gill v. United States, 160 U.S. 426 (1896) (holding that the federal government is entitled to a shop right in a government employee invention which was perfected using government resources).


155. See Marbury v. Madison, 5 U.S. (1 Cranch) 137, 180 (1803) (Marshall,
In sum, governmental ownership of patents of its own issue is unconstitutional. In addition, several collateral legal theories have elucidated the impropriety of such ownership. The next section demonstrates that such ownership is also unnecessary because there are other means available to fulfill the federal government's primary objective of patent ownership—protecting the federal government against unwarranted claims of unlicensed use of inventions.

IV. THE LACK OF NEED FOR THE FEDERAL GOVERNMENT TO OWN PATENTS

The great irony is that as long as the federal government intends to use its patents without the abuse of conferring privileges of any sort, there is no need for it to own patents. Many of the public funds that have been expended over the years in a good faith effort by the federal government to protect the fruits of publicly funded research by acquiring and administering a vast number of patents could have been saved. The contribution to the backlog at the Patent and Trademark Office by the large volume of government patent applications and the restraints on the progress of the useful arts by governmental ownership of patents were also unnecessary. This is because other means are available for accomplishing what the federal government seeks to achieve by obtaining patents.

First, it should be noted that the federal government, under its Eminent Domain Power, has the ability to use any patented invention as long as it compensates the owner for the use of the invention. Thus, the federal government can make unlicensed use of any patented invention. A patent owner has the statutory right to collect compensation in the amount of a reasonable royalty by bringing suit against the federal government in the Court of Claims. The patent owner cannot obtain an injunction against the federal government to stop the federal government from using a patent. Thus, the federal government can make

C.J.) (holding that the judiciary, as well as all branches of government may act only according to the Constitution).
156. U.S. Const. amend. V.
159. Id. The patent owner's remedy under § 1498 of an action against the United States for recovery of compensation has been judicially interpreted as excluding the availability of an injunction against the federal government to stop the government from using a patent. DeGraffenried v. United States, 29 Fed. Cl. 384, 391 (Cl. Ct. 1993).
uninterruptable use of the invention described within any patent of its issue as long as it pays a reasonable amount for its use if the owner brings suit to collect such payment.

However, when the subject invention has been developed with public funds, it is prudent for the federal government to defend against the possibility of being sued to pay patent royalties for use of the invention. Historically, such a defensive purpose has been the goal behind governmental efforts to obtain patents. But another means is available to the federal government to obtain the desired protection. The filing of a Statutory Invention Registration ("SIR") provides all the defensive benefits of a patent while avoiding the constitutional infirmities associated with governmental ownership of patents of its own issue.

An SIR, in essence, is a disclosure of an invention made to the Patent and Trademark Office (the "PTO") without the acquisition of the exclusive rights characteristic of a patent. To obtain an SIR, a submission must be made to the PTO of a description of the invention with the same level of detail that is required for obtaining a patent. The PTO publishes the disclosure without

162. Id. The pertinent parts of § 157 read as follows:

Statutory Invention Registration
(a) Notwithstanding any other provision of this title, the Commissioner is authorized to publish a statutory invention registration containing the specification and drawings of a regularly filed application for a patent without examination if the applicant—

(1) meets the requirements of section 112 of this title [dealing with the level of detail of the description of the invention];
(2) has complied with the requirements for printing; as set forth in regulations of the Commissioner;
(3) waives the right to receive a patent on the invention within such period as may be prescribed by the Commissioner; and
(4) pays application, publication and other processing fees established by the Commissioner.

If an interference is declared with respect to such an application, a statutory invention registration may not be published unless the issue of priority of invention is finally determined in favor of the applicant.

(b) The waiver under section (a)(3) of this section by an applicant shall take effect upon publication of the statutory invention registration.

(c) A statutory invention registration published pursuant to this statute shall have all the attributes specified for patents in this title except those specified in section 183 [right to compensation of use by the government] and sections 271 through 289 [dealing with rights to exclusive use and remedies for infringement] of this title. A statutory invention registration shall not have any of the attributes specified for patents in any other provision of law other than this title.

Id.

163. See supra note 162. See also supra note 22 and accompanying text for a description of the level of detail required in a patent disclosure.
the governmental expense or delay of the examination for statutory classification, novelty, or non-obviousness it would give a patent application.\textsuperscript{164} An SIR has all the attributes of a patent under the patent codes except for the right to exclusive use of the invention.\textsuperscript{165} An SIR may also be used in the PTO administrative adjudicatory process for determining priority of invention, known as an interference proceeding.\textsuperscript{166} Further, an SIR has the advantage of providing for a more rapid publication than does a patent because the time consuming examination process is absent. Also, an SIR is not compromised by prior publication as a patent application would be. This is because an SIR's only function is as a defensive publication against a later inventor obtaining a patent on the disclosed invention.\textsuperscript{167} Finally, an SIR may serve as the basis for a priority claim in filing a foreign patent application in the same manner as a patent.\textsuperscript{168}

Thus, by obtaining an SIR instead of a patent on an invention, the federal government can obtain all the defensive protection that it requires. Because the monopoly aspect of a patent is absent, ownership of an SIR does not present the problems of unconstitutionality that patent ownership does for the government. Also, because an SIR is not a grant of a parcel of sovereign authority embodying a promise to provide for exclusive use of the subject invention, the collateral legal problems related to the sovereign grant merger doctrine and contract doctrines are absent with ownership of an SIR. Further, the danger of inconsistency with other governmental duties is much more remote with governmental ownership of an SIR than it is with a patent of its own issue.

Finally, the cost of an SIR is less than that of a patent. The fee for an SIR is lower due to the fact that no examination by the PTO for novelty is required.\textsuperscript{169} The expedited PTO processing route for an SIR in comparison to a patent also means that the legal costs of preparing and obtaining an SIR are lower. Finally, the lifetime cost of an SIR is lowered further because there are


\textsuperscript{166} Id. § 157(a).


\textsuperscript{168} Id.

\textsuperscript{169} At present, the fee for obtaining an SIR is $840. 37 C.F.R. § 1.17(n) (1995). In comparison, the minimum fee for acquiring a patent is $1,940 (§ 1.16(a), 1.18(a).
no maintenance fees for an SIR as there are for a patent. Thus, from the viewpoint of cost and constitutionality and propriety, it would be advantageous for the federal government to acquire SIR's rather than patents to defend its rights to inventions.

V. CONCLUSION

Though the matter has almost completely escaped attention, a close look reveals that it is unconstitutional for the federal government to own patents of its own issue. Not only is there neither express nor implied power in the Constitution for such ownership, but the practice in several ways contravenes the Intellectual Property Clause's narrow grant of authority to the federal government to issue patents. First, governmental ownership of patents amounts to an artifice that puts into the hands of the federal government the ability to grant monopolies at will and by favor, a practice that runs counter to the Framers' clear abhorrence of the dispensation of monopolies by the sovereign. Second, governmental ownership of patents runs counter to the express purpose of the Intellectual Property Clause. Whereas the Intellectual Property Clause allows the issuance of patents only for the promotion of progress in the useful arts, governmental patent ownership restrains such progress. Third, governmental patenting restricts access to knowledge which is already owned by the public, an effect which the Supreme Court in other contexts has found to be counter to the Intellectual Property Clause.

In addition to being unconstitutional, governmental ownership of patents is improper for a variety of reasons. Analyses of the sovereign merger doctrine, contract principles, and the inconsistencies of the practice with other governmental duties clearly indicate that it is improper for the federal government to own patents of its own issuance. Further, the primary argument justifying governmental acquisition of patents from its largest source of patents—its rights as an employer to the inventions by government employees—was based on an oversight. What was overlooked is the fact that the federal government, as a sovereign, is distinct from all other employers in that it alone is subject to

170. Maintenance fees are required to be paid every four years during the statutory patent period to keep the patent in force. See supra note 25 for a description of the patent period. The maintenance fees increase as the patent matures: $960 at four years, $1,930 at eight years, and $2,900 at twelve years. 37 C.F.R. § 1.20(e), (g) (1995). Thus, the maintenance fees total $5,790 for a patent kept in force for the entire statutory period. Combining the maintenance fees with the issuance fees yields the lifetime cost in terms of governmental fees as $840 for an SIR and $7,730 for a patent.
constitutional provisions which prohibit its ownership of patents. Finally, there is no need for the federal government to acquire patents. The federal government has the ability to use the invention described in any patent it issues, though it may have to pay a reasonable royalty in cases where the patent owner brings suit for such payment. Further, Statutory Invention Registrations could be used by the federal government to gain all the defensive benefits of a patent without offending the Constitution and without a large portion of the cost involved in obtaining and maintaining a patent.

The time of blissful ignorance of a constitutionally infirm practice should be ended. The needless spending and the restraint on the progress of the useful arts should be curtailed. The embarrassment of exclusive patent ownership by the federal government should be suffered no longer.

Thomas Lizzi