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Article

PATENT SECRECY ORDERS: FAIRNESS ISSUES IN APPLICATION OF INVENTION OF SECRECY ACT

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*472 I. Introduction

Patent applications are screened upon receipt in the United States Patent and Trademark Office (USPTO) for subject matter that, if disclosed, might impact national security.[1] The Invention Secrecy Act of 1951[2] provides that whenever "the publication or disclosure of the invention by . . . the granting of a patent therefore would be detrimental to national security . . . the Commissioner of Patents shall order that the invention be kept secret."[3] This order prevents the patent from being issued until the secrecy order is lifted, and prohibits the inventor from publishing or disclosing any material information related to the invention.[4] According to government statistics obtained through the Freedom of Information Act, at the end of the 2010 fiscal year, more than 5,100 United States patents were subject to at least one secrecy order.[5] That represents a 1% increase from the previous year and a 5% rise since 2004.[6]

Analysis of the applicable statutes and judicial history reveals several issues regarding the administration of secrecy orders by the government. First, in resolving an administrative claim for imposition of secrecy orders, the statute requires that the federal agency compensate the inventor only 75% of what that agency evaluates the invention to be worth.[7] Inventors and some legal scholars may consider this a government taking of 25% of the invention's worth.[8] Another barrier for the inventor is that judicial interpretation of the Invention Secrecy Act requires the inventor to prove actual damages in order to receive compensation by the government.[9] Actual damages may be difficult or impossible to prove when an inventor is barred from disclosing the invention to the public. In addition, the government may delay responding to an inventor's administrative claim; if the inventor does sue for compensation, the government may contend that the inventor has failed to exhaust his or her administrative claim with the government prior to filing suit. Finally, after the changes to the U.S. patent system under the General Agreement on Tariffs and Trade (GATT) that changed the U.S. patent term from 17 years ***473** from date of issue to 20 years from date of filing, inventors may lose patent term for secrecy orders that last longer than five years.

Invention secrecy orders serve to protect the vital interest of national security. They accomplish this by preventing the disclosure of technology which may be harmful to our government, armed forces, or to the public in general. An essential element of the United States patent system is that the inventor publically discloses how to make or use an invention. Through publication of patent applications and issued patents this information becomes available worldwide to allies and foes alike. Information disclosed can be used against the United States to threaten our armed forces, critical infrastructure, and economic system. The governmental benefit of secrecy orders restricting information disclosure must be weighed against the value of the inventor's exclusive right, as defined in the Patent Act, to make and use the invention. This Comment does not suggest that patent secrecy orders are entirely without merit, but rather that administrative changes can be made that both maintain the benefit to the government and compensate the inventor for the loss of those rights.

The costs for the patent secrecy orders may be difficult to measure. These costs include the loss of commercial market for the inventor for some period of time and the loss of ability to recapture development costs through non-government sales. The cost to the government is the compensation to the inventor, especially when the damages may be considered speculative. The cost to society is the restriction of the knowledge of how to make and use the technology outside the government. When secrecy orders are placed on inventions with minimal utility outside government use, the cost to society and the inventor is low: the greater the utility of the invention to the commercial market, the greater the cost of secrecy orders to the inventor and to society. A balance must be maintained between compensating the inventor for the losses sustained by imposition of secrecy orders and over-compensating inventors whose damages are entirely speculative. If this balance is not maintained, the inventor may chose not to patent his invention and keep the knowledge a trade secret, denying the government and society of benefit to be gained from his disclosure.

To maintain proper incentive for U.S. inventors to continue to patent their ideas, the following changes are proposed: First, the "75%" language should be removed from the statute, allowing the inventor to be compensated the full amount that the federal agency believes the invention is worth. Second, the requirement for actual damages should be eliminated and a Patent Compensation Board should be created. This measure would provide an impartial method to determine the value of an invention and the losses sustained by the inventor due to the government imposition of secrecy orders. Third, 35 U.S.C. §183 should be amended to require federal agencies to resolve administrative claims within two years of filing an administrative claim by the inventor. Finally, the Patent Act should be amended to allow extensions for longer than five years to enable patent owners to use the full terms of their patents. These changes to the Patent Act and the Invention Secrecy Act are ***474** justified by concerns surrounding fairness to the inventor and promotion of the utilitarian view of the U.S. intellectual

property law system.

This Comment will discuss fairness issues in the imposition of invention secrecy orders. Part II will briefly discuss the government's interest in promoting patent rights. Part III will discuss governmental procedures for the imposition of secrecy orders. Part IV discusses the current remedies available to the inventor for the government's imposition of secrecy orders. Part V proposes changes to the current system and discusses the cost of these changes. Although recognizing the difficulties inherent in addressing this problem, this Comment will suggest changes that would balance the benefits of secrecy orders with their costs to the inventor, the government, and society.

II. The Government's Interest in Promoting Patent Rights

Aside from the basic issue of fairness, the government maintains an interest in promoting patent rights that exist under U.S. intellectual property law. If inventors perceive that they will not be adequately compensated for the imposition of secrecy orders, they may choose to keep their inventions as trade secrets as opposed to disclosing them in patent applications. Under the utilitarian view of patent law, society may give an exclusive right to the profits arising from inventions as an encouragement for people to pursue ideas that may produce utility.[10] The economic philosophy behind the clause empowering Congress to grant patents and copyrights is "the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents and authors and inventors in Science and Useful Arts."[11] If the government fails to maintain this privilege, inventors may become disinclined to patent their inventions and society would lose the benefits of fostering innovation and the public knowledge gained by the inventor disclosing how to make and use the technology.

III. Governmental Procedures for Secrecy Orders

The procedures for implementing secrecy orders depend on whether or not the government holds a property interest in the invention. Government property interests include inventions "made by government employees either as part of their normal duties or on their own behalf, on which patent applications have been filed by the government, and inventions made by government contractors during performance of their contractual duties."[12] All government-owned or government-controlled interests in patent applications are required to be registered in the Patent ***475** Office's Government Register.[13] One can simply refer to the register to determine if a government property interest exists.[14] If an appropriate government interest is found, the issuance of a secrecy order is governed by the first paragraph of section 181 of the statute.[15] In cases where the government has no such property interest, secrecy orders are issued pursuant to paragraphs two and three of section 181.[16]

A. Procedures when the Government has Property Interest in the Invention

The government agency having an interest in the invention determines whether to issue a secrecy order. The statute's only limitation on this discretion is that the agency must find that publication or disclosure of a patent "might" create a threat to national security.[17] If the government has a property interest and in the opinion of the head of the interested government agency disclosure would be detrimental to national security, the Commissioner of Patents shall order that the invention be kept secret and shall withhold the publication of the application or the grant of a patent until conditions permit.[18]

The classification of the information contained in the application in part determines if disclosure would create a national security threat. In cases where the government agency files an application for in-house research, a secrecy order may issue only if the application is properly classified under the provisions of the Executive Order delineating National Security classification.[19] Applications classified under the provisions discussed previously are those that can reasonably be expected to cause identifiable damage to national security.[20] The government agency would file a classified application with the appropriate security markings, thereby notifying the Patent Office to handle the application in accordance with the appropriate security requirements.[21] The Patent Office then waits for the filing agency to request imposition of the secrecy order.[22]

Once the government agency decides to issue a secrecy order, it requests the Commissioner of Patents to impose the order.[23] For the Department of Defense, the ***476** request is made by the Armed Service Patent Advisory Board (ASPAB), which acts as a clearinghouse for military patent applications.[24] The Commissioner of Patents must issue a secrecy order when it is requested by the ASPAB.[25] Secrecy orders on patent applications in which the government has an interest do not create the

fairness and disincentive issues discussed in this article.

B. Procedures when the Government does not have a Property Interest in the Invention

Congress has determined separate procedures for inventions in which the government does not have a property interest. All provisional and non-provisional patent applications are reviewed upon receipt at the patent office for subject matter that, if disclosed, might be detrimental to national security.[26] When an application contains such material, even if the U.S. Government does not have a property interest, the Commissioner of Patents will issue a secrecy order in accordance with the Invention Secrecy Act and publication and grant of patent will be withheld for such period as national security requires.[27]

The ASPAB uses the Patent Security Category Review List to aid in screening applications.[28] This list contains twenty-two categories of inventions that are currently of security interest to different defense agencies.[29] Items on the list include military devices as well as items with commercial applications that would not normally be associated with the defense industry.[30] Gyroscopes, batteries, efficient solar voltaic generators and titanium alloys are all on the list.[31] The unsuspecting inventor may find out that his invention is subject to secrecy orders, even if he was not planning to market the invention to the Department of Defense. If the subject matter of the application corresponds to an item on the list, the USPTO informs the agency, which can then review the application.[32]

Patents identified as containing subject matter deemed a possible national security threat are forwarded to interested defense agencies.[33] The defense agency then conducts a review of the application to decide whether to impose secrecy orders. ***477** The inspection of the application must be performed "only by responsible representatives authorized by the agency to review applications."[34] In its decision whether to recommend secrecy orders, the agency must determine if "the publication or disclosure of the invention by the publication of an application or by the granting of a patent . . . would be detrimental to the national security."[35] After making its decision, the agency informs the ASPAB that it wants a secrecy order, and the ASPAB instructs the Commissioner of Patents to issue the order.[36] Non-Defense Department agencies requesting a secrecy order notify the Commissioner directly.[37]

C. Secrecy Order Effects

"A secrecy order restricts disclosure of the invention or dissemination of information in the patent application."[38] As a result of the secrecy order, the Commissioner orders that the invention be kept secret by sending the inventor a notice of the order.[39] The notice instructs the inventor that "the subject matter or any material information relevant to this application, including unpublished details of the invention, shall not be published or disclosed to any person not aware of the invention prior to the date of this order, including any employee of the principals."[40]

A peacetime secrecy order lasts only for one year.[41] The government agency sponsoring the order may petition the Commissioner to renew the order for additional periods of up to one year upon notice to the USPTO "that an affirmative determination has been made that the national interest continues so to require."[42] Thus, a secrecy order may continue indefinitely. Some secrecy orders have lasted over 20 years, and, although rare occurrences, some have lasted over 40 years.[43] A secrecy order ends when it is not renewed or when the Commissioner is notified by the sponsoring agency that the publication or disclosure of the invention is no longer deemed "detrimental to the national security".[44] Secrecy orders authorized by the ASPAB in particular, must be reviewed by its members prior to the order being ***478** rescinded.[45] Once a secrecy order is rescinded, the USPTO issues a notice of allowance.[46]

All patent applications with secrecy orders are examined for patentability like any other application.[47] Once the application meets the conditions for allowance, the USPTO issues a notice of allowability.[48] The patent will not issue until the government rescinds the secrecy order.[49] An interference will not be declared if one or more of the conflicting cases is classified or under secrecy orders.[50] In the case of a final rejection, an appeal before the Board of Patent Appeals and Interferences will not be heard until the secrecy order is lifted, unless otherwise specifically ordered by the Commissioner.[51]

There are stiff penalties for violations of a secrecy order. Should the inventor publish or disclose the invention subject to the secrecy order, or file for a patent on that invention in a foreign country without the consent of the Commissioner, the invention may be held abandoned.[52] An inventor who, without due authorization willfully publishes or discloses the invention, or who willfully files a foreign patent application, "shall, upon conviction, be fined not more than $10,000 or

imprisoned for not more than two years, or both."[53]

D. Contesting Orders of Secrecy

An inventor may contest that a secrecy order is either erroneous or overly broad.[54] The Manual of Patent Examining Procedures (MPEP) recommends that the applicant directly contact the agency sponsoring the secrecy order to discuss changes that would render it unnecessary.[55] Alternatively, the application can petition the Commissioner of Patents for rescission.[56] Such a petition "must recite any and all facts that purport to render the order ineffectual or futile if this is the basis of the petition."[57] Finally, the applicant may appeal to the Secretary of Commerce to rescind the secrecy order.[58] An appeal to the Secretary of Commerce cannot be ***479** made until a petition for rescission has been denied by the Commissioner, and must be made within sixty days of the denial.[59]

IV. Remedies for the Imposition of Secrecy Orders

Compensation is the remedy provided for an inventor whose invention is subject to secrecy orders. The Invention Secrecy Act gives an inventor the right to "compensation for the damage caused by the order of secrecy and/or for the use of the invention by the Government, resulting from his disclosure."[60] The inventor has two avenues to pursue compensation: the administrative claim or judicial remedy in federal court.

A. Administrative Claim

A claimant may submit an application for a settlement agreement to the ordering agency after the inventor is notified that the application is "in condition for allowance."[61] The statute is silent and there is no case law on point as to how "just compensation" should be calculated for an administrative claim, but the statute implies that such a determination is made solely by the department or agency that was responsible for the secrecy orders in the first place.[62]

Administrative claims must be filed after the date of first use of the invention by the government.[63] One typical way that an inventor will become suspicious that the government is using his invention is through ties to the industry where the invention is being used. Technical fields can be fairly small and people often learn information about who is using what through their contacts within this industry. Also, an inventor may become aware that the government is using his invention based on a government publication, such as the details of a government request for proposals for a certain technology. When an invention is subject to a secrecy order, government use is more difficult to detect since it is unlikely that the government will publish anything related to that technology, even within government circles. The inventor may have to wait until documents become unclassified or something is revealed later--perhaps through contacts with competitors with government contracts or at defense or government trade shows--to get any idea as to whether the government is utilizing his invention.

Once the administrative claim is filed, the head of the agency that requested the secrecy order may enter into a settlement agreement with the inventor to resolve all claims for damages and for government use of the invention.[64] A settlement ***480** agreement is "conclusive for all purposes."[65] After the agreed upon amount is paid, the inventor will not be allowed to renegotiate a settlement even if he or she later learns that the invention was worth a great deal more than previously believed.[66]

If a settlement agreement cannot be reached, the head of the agency may award the applicant a sum "not exceeding 75 per centum of the sum which the head of the department or agency considers just compensation for the damage and/or use."[67] The claimant then has the right to bring suit against the United States in the United States Court of Federal Claims or in the district court in which the claimant resides for an amount that when added to the settlement award results in "just compensation."[68] However, even if no settlement is reached, the claimant may still bring suit.[69]

Several publications address whether the issuance of secrecy orders violates the Fifth Amendment.[70] While some courts and scholars suggest that the imposition of secrecy orders alone does not cause a taking, several provisions of the Invention Secrecy Act arguably rise to such a result. That type of taking would be in direct violation of the Fifth Amendment to the United States Constitution--"[N]or shall private property be taken for public use, without just compensation."[71]

The bar to filing a foreign patent application and the loss of commercial gain from the invention due to the secrecy order can

be considered losses to the inventor.[72]
Notwithstanding the method for determining what constitutes "just compensation" . . .and assuming that the compensation owed [to the] Inventor as determined by the department or agency is just, § 183 authorizes the agency to pay "a sum not exceeding 75 per centum," i.e., to withhold 25 per centum of the figure. Not only is this taking possible, it is mandated by the statute! Without reading any further, 35 U.S.C. § 183, on its face, allows for a taking of personal property without just compensation in direct violation of the Fifth Amendment. Congress worked around this by allowing a dissatisfied claimant to "bring [a post-deprivation] suit against the United States. . .for an amount which when added to the award shall constitute just compensation."[73]

***481** Filing a suit forces the claimant, in pursuing the balance of what is statutorily recognized as just compensation, to spend a considerable amount of time and money in the courts.

The administrative claim approach may seem advantageous to the inventor since the inventor does not have to wait until the patent issues to seek compensation.[74] But only when the inventor has exhausted his administrative remedies--accepting an award from the government agency, receiving no answer from it, or being told that there will be no settlement offered by the agency--may he file a claim to obtain just compensation.[75] Inventors have fared poorly as plaintiffs in pursuing judicial review of administrative handling of compensation claims filed under this approach, often meeting dismissal under Fed. R. Civ. P. 12(b)(6) for failure to state a claim for which relief could be granted or under Fed. R. Civ. P. 12(b)(1) for lack of subject-matter jurisdiction.[76] In Hornback v. United States[77] the government denied the inventors' claims for compensation for the imposition of secrecy orders after the courts determined that the inventors did not exhaust administrative remedies prior to filing suit. A delay or failure to negotiate in good faith for compensation by the federal agency responsible for the secrecy orders resulted in the claims being dismissed by the federal courts.[78]

B. Judicial Remedy

The second method by which an inventor can obtain compensation is to wait until the secrecy order expires and the patent issues.[79] Provided that the inventor did not apply for compensation under an administrative claim, the inventor can bring suit in the United States Court of Federal Claims for infringement by the government.[80] An inventor seeking compensation under this approach risks that the secrecy orders will be in place for an extended period of time[81], or even indefinitely.[82] Furthermore, the applicant has only six years after a patent issues to apply for compensation.[83]

***482** Under either method of remedy, section 183 specifies that the inventor shall be entitled to "just compensation."[84] Courts have found that compensation must be supported by "real concrete evidence of damage."[85] For claims based on use by the government, courts have awarded compensation on a reasonable royalty basis.[86] Thus, in situations when damages are claimed only for the orders of secrecy, compensation for the use by the government is based on a wide variety of factors.[87] Both remedies provide claimants the potential to recover substantial compensation awards. However, if damages are too speculative, the courts may not grant any compensation at all.[88]

C. Damages

In the Court of Federal Claims, 28 U.S.C. § 1498 authorizes a cause of action for government infringement on an inventor's patent.[89] Section 1498 "is essentially an Act to authorize the eminent domain taking of a patent license, and to provide just compensation for the patentee."[90] In these cases, recovery should be "reasonable and entire compensation" for the use and manufacture of the invention.[91] Farrand Optical v. United States was one of the first court cases to establish compensation damages under the Invention Secrecy Act. The Farrand court considered several factors to determine damages:

> In the determination of a reasonable royalty rate for the computation of a fair award of damages, such factors as the limited marketability of the product (thus requiring that the entire compensation be obtained from the Government) must be equated with assumption of risk in providing capital for the production of the invention and other similar variables (which factors would tend to depress the allowable royalty rate).[92]

Farrand[93] involved the development of a bombsight during World War II. Development of the sight was initiated after an

Army Air Corps employee explained the bombsight problem to a Farrand Optical employee named Tripp.[94] After presenting Tripp's mock up to various Air Corps officials during 1943, Farrand ***483** Optical received a contract to develop the sight.[95] In 1949 the government learned that Tripp had applied for a patent on the bombsight; Farrand Optical cooperated in obtaining a secrecy order on the Tripp invention by sending a letter to the patent office.[96] The secrecy order was issued in 1949, and immediately thereafter, Farrand Optical made a claim for compensation from the U.S. government.[97] The secrecy order was removed in 1954, and the patent issued.[98] Farrand Optical sought unsuccessfully, since March 1949, via negotiation with the Department of the Army and the Department of Defense, to obtain compensation under the provisions of section 183.[99] On March 2, 1954, the Department of Defense offered $30,000 "in full settlement," but this offer was rejected by the plaintiff as "grossly inadequate;" thereafter, negotiations continued without result and without any award being made to the plaintiff or any payment on account of such award being made to the plaintiff.[100] Shortly before the patent issued, Farrand Optical filed suit in district court under the Invention Security Act's resolution of administrative claim provision.[101] The Government moved to dismiss the claim contending that Farrand Optical had failed to exhaust its administrative remedies.[102] In effect, the Government suggested that no claimant could bring a suit for additional compensation until some award had been made to him or her by the department or agency of the government to which the claim was made. However, this would give that department or agency a means to deny a claimant his day in court.[103] "Such a holding would deprive a claimant of his constitutional right to apply to the court for just compensation for property taken from him."[104] The U.S. District Court for the Southern District of New York held that Farrand Optical had exhausted their administrative claims and was entitled to receive royalties as compensation for use of the invention until the date the patent was issued.[105]

1. The Requirement for Actual Damages

In Constant v. United States, the ASPAB recommended a secrecy order on the plaintiff's patent application concerning an automatic vehicle identification ***484** (AVI) system.[106] The secrecy order remained in effect for 15 months, from May 1970 until August 1971.[107] Upon rescission of the secrecy order, prosecution of the patent application continued and a patent ('557) was ultimately issued.[108]

The plaintiff filed a petition in the Court of Claims (now the U.S. Court of Federal Claims) under 35 U.S.C. § 183 seeking compensation for damages allegedly caused by the imposition of the secrecy order.[109] According to the plaintiff's theory of the case, the time period during which the secrecy order was in force was a critical time in the development of AVI systems.[110] The plaintiff contended that the secrecy order put him at a competitive disadvantage relative to other AVI developers.[111]

The plaintiff sought damages for: (1) lost profits as a result of interference with business opportunities; (2) expenses incurred in attempts to obtain rescission of the secrecy order; (3) interference with his right to compete in the AVI market; and (4) resultant delays in filing foreign patent applications.[112]

The government moved to dismiss, contending that the plaintiff had failed to prove "actual damages" required for recovery under section 183.[113] The plaintiff argued that he had submitted a number of unsolicited proposals to various companies, even though no contracts resulted from his efforts.[114] Judge Seto determined that factors other than the imposition of the secrecy order were responsible for the plaintiff's failure to find buyers for the '557 invention.[115] The court noted that no market for AVI systems ever developed in this country and that the plaintiff had never constructed nor tested the actual system prior to rescission of the secrecy order.[116]

The Constant court concluded that the plaintiff failed to demonstrate "actual damages" or to present the concrete evidence of damages required under section 183.[117] Judge Seto also found that the plaintiff's compensation for the expenses incurred in obtaining rescission of the secrecy order should not be allowed since "attorney's ***485** fees and other expenses incurred in contesting the imposition of the secrecy order are not recoverable under section 183."[118] He noted that "this court has repeatedly held that litigation expenses, regardless of allocation, may not be awarded against the United States in absence of specific statutory authorization."[119] Section 183 does not provide for such reimbursement of expenses in contesting secrecy orders.[120]

The plaintiff received patents from his British and French applications, and his West German application was expressly abandoned. His Japanese application was still pending at the time of the trial.[121] Therefore, he was not entitled to damages for the delay caused by the secrecy order in the filing of foreign patent applications.[122] The vast commercial market for AVI technology never materialized and this fact alone rendered the plaintiffs' emphases upon the timing of the secrecy order irrelevant.[123] On the basis of a credible and competent evidence of record, the court concluded that the plaintiff failed to prove

the "actual damages" required for recovery under 35 U.S.C. § 183.[124]

In order to receive compensation under 35 U.S.C. § 183 courts have required that the patentee must establish "actual damages" or "concrete evidence of damages."[125] The U.S. Patent Act's text concerning right to compensation only requires "compensation for the damage caused by the order of secrecy and/or for the use of the invention by the government, resulting from this disclosure."[126] The term "actual damages" is not contained within the text of the statute.

Some concern was expressed at the House of Representatives committee hearings on the Invention Secrecy Act of 1951 (the predecessor of section 183) as to the proper proof of damages under the statute.[127] The Constant court believed that the consensus at the hearings was that neither the courts nor the administrative agencies would permit purely speculative damages, but that there would have to be 'real concrete evidence of damage,'[128] 'actual damages,'[129] proven damages,[130] or ***486** 'perhaps a greater degree of proof or ability to prove damages.'[131] Several subsequent cases have relied on the Constant decision, specifically, the requirement to prove actual damages to deny inventors compensation for the imposition of secrecy orders.[132]

Compensation damages are divided into two categories: (1) termination of efforts to market an invention, and (2) losses associated with the loss of future markets.[133] Termination damages can be easier to prove than actual damages, since expenditures made, costs incurred, and the cost of terminating the activity can be predicted.[134] Loss of future market damages are much more difficult to define and prove in court.[135] How can the size and duration of the market be predicted when the inventor has not been allowed to establish whether the market exists or not?[136] Expert testimony may be used, but accurate data to define a market is difficult while secrecy orders are in force.[137] Therefore, testimony as to the size of the lost market borders on speculation.[138]

In Weiss v. United States the inventor sued the United States for damages caused by application of secrecy orders on "smart wing skins" that can provide real-time information about the forces on the airplane wing without impeding its normal use.[139] In Hayes v. United States the inventor sued for damages caused by implementation of secrecy orders covering a stealth bow thruster.[140] In each case the Constant requirement for actual damages was cited and the inventor's claims for compensation were dismissed.

The requirement for actual damages continues to pose a major barrier to compensating inventors for imposition of secrecy orders. The plaintiff in Constant maintained that this requirement would "have a 'chilling effect' upon inventorship in this country, and further, would render section 183 meaningless by making it a cause of action without a remedy."[141] The inherent difficulty in determining the ***487** market value of an invention that is maintained in secret inclines federal agencies to minimize compensation awarded to an inventor for a secrecy order.[142]

In cases where the inventor is not able to prove actual damages, the government cannot claim that the invention is without value; such a claim effectively states that it was inappropriate to implement the secrecy orders. A method to determine adequate compensation is required; one that is fair to the public and the inventor. One such method could be based on guidance from the Internal Revenue Service's engineering and valuation branch that appraises patents and other property for gift and income tax purposes.[143] A better approach, which would maintain the secrecy required, might be to establish a Patent Compensation Board to determine proper compensation for a patent. This Board can be established at the USPTO in coordination with the ASPAB. It should adopt the standards used by the Atomic Energy Act of 1954 for compensation on nuclear material, atomic energy, or atomic weapons inventions.[144] This board would determine inventor compensation on a reasonable royalty fee based on the degree of utility, novelty, and importance of the invention or discovery. Additionally, the board would consider the costs to the owner of the patent for developing, discovering, or acquiring such an invention or patent. These costs would be paid regardless of use of the invention by the government. At minimum, the inventor needs to be compensated for the patent application filing fees to the USPTO and any attorney's fees paid for the preparation and prosecution of the application.

2. The Government's Use of Delay to Deny Compensation

In Linick v. United States, the court examined the issue of how long the federal agency responsible should have to make a determination of compensation for imposition of secrecy orders.[145] Mr. Linick developed an improvement to his Trajectory Correctable Munitions technology and filed patent application serial number 10/071,215 on February 11, 2002. Pursuant to 35 U.S.C. §181, the USPTO issued a secrecy order on August 14, 2002 covering Mr. Linick's patent application.[146] The U.S. Army Armament Research Development and Engineering Command (ARDEC) sponsored the secrecy order.[147] On December

11, 2007, the USPTO issued a Notice of Allowability on Mr. Linick's patent application, but indicated that the patent would be withheld pursuant to the secrecy order so long as national interests required.[148] The patent remains under secrecy orders today. Despite Mr. ***488** Linick's periodic requests to the Army for a final disposition on his application for compensation, Mr. Linick did not receive any substantive response from the Army for nearly three years.[149]

The government argued that Mr. Linick failed to exhaust his administrative remedy as required by Constant. Here, the agency failed for nearly three years to make any determination on Mr. Linick's claim.[150] As the Court suggested in Constant, it takes two parties to make a settlement as contemplated by the administrative remedy in section 183.[151] Because it was the agency that refused to act on the claim, the court found that Mr. Linick had exhausted his administrative remedies and that jurisdiction in the court was proper.[152] It defies logic to hold that an agency can block any judicial review simply by refusing to act upon an administrative claim.[153]

Section 183 places no time limit on the agency to act.[154] However, the court was equally mindful that section 183 also places no time limit on how long a claimant must wait for the agency to act. Few judicial decisions have addressed this issue, but a common theme appearing in the case law is a standard of reasonableness. In Farrand Optical, the claimant filed his judicial action after more than five years of failed negotiations with the agency.[155] The government argued that, because a final settlement had not been reached, the Court lacked jurisdiction and the case should be dismissed.[156] The Court in Farrand Optical denied the Government's motion to dismiss.[157]

In Stein v. United States, the claimant waited nine months before filing a judicial action.[158] The Court found it plausible that the Army simply had insufficient time to assess the claim, and ruled that the claimant had failed to exhaust his administrative remedies.[159] The Court in Stein distinguished the facts of that case from Farrand Optical, noting that the defendant only had a fraction of the time to adjudicate the claim and that 'given the vast number of government uses alleged in ***489** Stein's complaint, nine months [was] hardly an unreasonable amount of time for the Army to investigate the claim.'[160]

The questions in Linick were whether the Army had a reasonable amount of time to act on Mr. Linick's claim, and whether Mr. Linick could have been said to have exhausted his administrative remedies.[161] Both Farrand Optical and Stein provide guidance in answering these questions and both rulings dictate the same answers.[162] The Linick Court found the facts of Farrand Optical to be more analogous, and that Mr. Linick had complied with the requirements of 35 U.S.C. § 183 to avail himself of the Court's jurisdiction over his application for just compensation.[163] The Linick Court dismissed the government's motion to dismiss and remanded to the United States Army pursuant to the Rules of the United States Court of Federal Claims 52.2 for a period of 60 days.[164] During the remand period, the parties were encouraged to engage in the process contemplated by section 183.[165] The Army, through Defendant's counsel, was due to furnish its proposed disposition to the Court on or before March 8, 2011.[166]

These cases clarify that the time period for the federal agency to adjudicate a claim needs to be defined in 35 U.S.C. § 183. Failure to do so will lead to inconsistent results on what different federal district courts believe is a reasonable timeline for agencies to respond to inventors' administrative claims for relief. A proposed two year time limitation is consistent with the Farrand, Stein, and Linick cases.[167] If the federal agency fails to respond to claims by an inventor within two years from request for compensation, that inventor is free to seek compensation via litigation in a federal district court without the limitation of his or her claim being dismissed for failure to exhaust administrative remedies.

D. Patent Term Issue

One major effect of GATT and NAFTA on U.S. patent practice is that the term of a patent is twenty years from the filing date of the patent application.[168] This is the same term provided to patents issued by most countries of the world.[169] Before GATT, once a secrecy order was removed from an otherwise allowable patent application, a patent would issue with a seventeen-year term from date of issue. ***490** [170] After GATT, inventors were limited to the same length of their patent term (20 years from date of filing), even though patent issuance was delayed while the secrecy order was in effect.[171] This creates the problem that secrecy orders effectively shorten the length of the patent term.[172]

Congress attempted to resolve this issue by permitting an extension of patent term for the period of the delay, but in not for more than five years.[173] In effect, for any patent application with secrecy orders in force for more than five years, the inventor loses time to exploit their patent. Congress has not justified limiting this extension to a five year period.[174] Additionally, Congress has not addressed secrecy orders that extend beyond the twenty year life of the patent application.[175]

V. Proposed Changes to Patent Secrecy Orders

A. Eliminate "75 per centum" language from 35 U.S.C. §183

This change would allow the inventor to recover one hundred percent of the damages incurred without having to resort to litigation to recover the remaining twenty-five percent. The benefit of this change is that it would eliminate the claim by an inventor that the mere imposition of secrecy orders results in a per se taking of at least twenty-five percent of the value of the invention. An additional benefit is that this change should greatly reduce the number of lawsuits filed promoting the public policy goal of reducing case loads in the federal district courts.

This change may initially result in higher monetary costs for federal agencies responsible for compensating inventors during settlement of administrative claims. However, this burden may be offset by saving the government time and money in litigating the case in federal court. The 1980 Report from the House hearings on the Invention Secrecy Act stated that between 1945 and 1979, only twenty- nine administrative claims for compensation were filed with the Department of Defense.[176] Of these twenty-nine, only nine claims led to receipt of any amount of compensation.[177] Therefore, the number of inventors who receive administrative claim compensation is few, and it is unlikely that the twenty-five percent increased compensation will significantly burden federal agencies which currently compensate inventors. This change would not significantly increase the number of administrative claims filed, but would possibly reduce the number of lawsuits filed for full compensation.

***491** This change will not, however, correct the problem that the federal agency responsible for payment to the inventor is the same agency calculating the value of the invention. Third party validation of the damages would be the preferred.

B. Eliminate the requirement for proof of actual damages.

The USPTO should create a Patent Compensation Board and adopt the standards used by the Atomic Energy Act of 1954 for compensation of nuclear material, atomic energy or atomic weapons inventions.[178] This board would determine inventor compensation with a reasonable royalty fee based on the degree of utility, novelty, and importance of the invention or discovery. The Board would also assess the costs to the owner of the patent of developing and discovering the invention or acquiring the patent. This additional value should be paid regardless of use of the invention by the government. At minimum, the inventor needs to be compensated for the patent application filing fees to the USPTO and any attorney's fees paid for the preparation and prosecution of the application. The inventor would benefit through the recovery of costs expended to prosecute an application which he is not able to recover through commercial sales or licensing while secrecy orders are in effect. The government and society at large would benefit from the public disclosure of the technology when patented, and the government use while secrecy orders are in effect.

Although removing the requirement for actual damages would increase costs to the government, the promotion of public disclosure under the patent system would benefit society as a whole. As discussed previously, claims for compensation are rare, and therefore would not substantially increase the burden on the federal government by requiring proof of actual damages. There would also be administrative costs for establishing a Patent Compensation Board. It is likely that the number of claims may increase, but this may be offset by the social good of promoting innovation and public disclosure. The Patent Compensation Board could be established as part of the USPTO. If the USPTO were allowed to keep all of the fees it collected, the office could afford to manage a board of examiners, attorneys, and economists to determine the worth of the few patents kept secret for national security reasons. The relatively few secrecy orders imposed on the more than 500,000 applications annually received by the USPTO would not require a full-time organization. Creation of a compensation board would result in a more accurate compensation determination and encourage inventors to disclose their inventions through the patent process as opposed to keeping them trade secrets.

*492 C. Amend 35 U.S.C §183 to Require Federal Agencies Imposing Secrecy Orders to Respond to Requests from Inventors within Two Years of the Date of Request.

This change would force federal agencies to expedite the adjudication of administrative claims made by inventors. If the

federal agency fails to respond, the inventor will be cleared to file suit in federal court for compensation without having the suit dismissed for failure to exhaust administrative remedies.

Currently, no timeline exists for the deadline government agencies to respond to claims by the inventors. This forces inventors into federal courts, wasting valuable judicial resources in attempts to obtain compensation. The benefit of this change is that it would give the federal agencies sufficient time to analyze the technology and determine the appropriate compensation to the inventor or remove the secrecy orders. Delay by the government in adjudicating administrative claims can have catastrophic consequences for small inventors looking to recoup expenses from the development of an invention. This solution would benefit inventors and force the government to make a timely decision. Further, this change would only result in direct cost to the government and would provide guidance to courts in federal cases for compensation when the courts are forced to determine if the federal agency had "sufficient time" to resolve a federal claim. The solution proposed would also be in alignment with previous court decisions in the Farrand, Stein, and Linick cases.

D. Amend the Patent Act to Allow an Extension Period Longer than Five Years

This change would enable patent owners to use the full term of patent protection. Because secrecy orders have no special review required for extension beyond five years, continuation of secrecy orders beyond this time result in loss of some patent-term life, without adequate remedy.

Amending the Patent Act to extend patent terms beyond five years, if required, would not add additional cost to the government. The social burden would be minimal as well, since the monopoly period awarded to the inventors affected by secrecy orders would not exceed those for other patented inventions. In effect, amending the Patent Act would make its administration consistent with the pre-GATT terms. The inventor would not lose any patent term due to imposition of secrecy orders lasting longer than five years.

VI. Conclusion

Secrecy orders may be considered a taking for the twenty-five per centum not recoverable through administrative claims, or the loss of enforceable time of some patent-term life if secrecy orders are in effect for more than five years. Further, the government may delay responses to administrative claims, frustrating attempts by inventors to receive just compensation. Finally, if an inventor chooses to initiate litigation to recover for damages incurred by the imposition of secrecy orders, a high bar is set, requiring the inventor to prove actual concrete damages ***493** when secrecy orders prevent the inventor from disclosing the invention. Hence, he or she will be unable to negotiate contracts or licensing agreements.

While the imposition of secrecy orders is rare, they may significantly affect the rights of the inventor and current remedies do not provide a method for rapid, equitable relief. The proposed changes outlined in this comment may be imperfect, but they should make the law more equitable to both the inventor and the public, and should maintain the utilitarian purpose of the U.S. patent system.

Footnotes

a1 James Maune, University of San Diego School of Law, JD 2013; University of Tennessee, MSAviation Systems Engineering 2001; Rensselaer Polytechnic Institute, Troy NY, BS Physics 1992; Retired from active duty on July 31, 2012 (20 years commissioned serviceas Naval Aviator); Registered Patent Agent with United States Patent and Trademark Office.

1 35 U.S.C. § 181 (2006).

2 See 35 U.S.C. §§ 181-88 (2006).

3 Id. § 181.

[4] Id. § 186.

[5] Steven Aftergood, Invention Secrecy Still Going Strong, Federation of American Scientists, (March 25, 2011), http://www.fas.org/blog/secrecy/2010/10/invention_secrecy_2010.html.

[6] Letter from Traci Alexander, FOIA Specialist, to Steven Aftergood, Federation of American Scientists (Oct. 17, 2011) (on file with author).

[7] 35 U.S.C. § 183 (2006).

[8] Adam J. Citrin, Are the Secrecy Order Compensation Provisions of the Patent Act Constitutional Under the Fifth Amendment?, 1 Akron Intell. Prop. J. 275, 284-85 (2007).

[9] Constant v. United States, 617 F.2d 239, 244 (Ct. Cl. 1980) [[hereinafter Constant I].

[10] Robert P. Merges & Jane C. Ginsburg, Foundations of Intellectual Property 21 (2004).

[11] Mazer v. Stein, 347 U.S. 201, 219 (1954) (internal quotation marks omitted).

[12] Sabing H. Lee, Protecting the Private Inventor under the Peacetime Provisions of the Invention Secrecy Act, 12 Berkeley Tech. L.J. 345, 359 (1997) (quoting The Government's Classification of Private Ideas: Hearings before a Subcommittee of the House Committee on Government Operations, 96th Cong., 2d. Sess. (1980) (prepared statement of the Armed Services Patent Advisory Board, Department of Defense)) (internal quotation marks omitted).

[13] 37 C.F.R. § 3.58 (West 2012).

[14] See 37 C.F.R. § 1.12 (West 2012) ("The records are open to public inspection").

[15] 35 U.S.C. § 181 (2006).

[16] Id.

[17] Id.

[18] Id.

[19] Exec. Order No. 12958, 3 C.F.R. 19825 (1995), as amended by Exec. Order No. 13292 (2003).

[20] Id.

[21] 37 C.F.R. § 5.1 (2005).

[22] Id.

[23] U.S. Pat. & Trademark Office, U.S. Dept. Of Commerce, Manual For Patent Examining Procedure §115 (8th ed. 2010) [hereinafter MPEP].

[24] Lee, supra note 12, at 361.

[25] 37 C.F.R. § 5.2 (2005).

[26] 35 U.S.C. § 181 (2006).

[27] Id.

[28] Armed Services Patent Advisory Board, Patent Security CategoryReview List (1971). This list was declassified in 1994 under the Freedom of Information Act request of Michael Ravnitzky.

[29] Id.

[30] Id.

[31] Id.

[32] Lee, supra note 12, at 362.

[33] Id. at 363.

[34] Id.

[35] 35 U.S.C. § 181 (2006) (emphasis added).

[36] Lee, supra note 12, at 363.

[37] MPEP, supra note 23, at § 115.

[38] Lee, supra note 12, at 364.

[39] 35 U.S.C. § 181.

[40] Lee, supra note 12, at 364.

[41] 35 U.S.C. § 181 (2006).

[42] Id.

[43] Lee, supra note 12, at 371; Citrin, supra note 8, at 279.

[44] Lee, supra note 12, at 371.

[45] Id. at 365.

[46] 37 C.F.R. § 5.3(c) (2004).

[47] MPEP, supra note 23, at § 130.

[48] Id.

[49] Id.

[50] Id.

[51] Id.

[52] 35 U.S.C. § 182 (2006).

[53] 35 U.S.C. § 186 (2006).

[54] Lee, supra note 12, at 366.

[55] MPEP, supra note 23, at § 120.

[56] 37 C.F.R. § 5.4 (1997).

[57] Id.

[58] Id.

[59] Id.

[60] Lee, supra note 12, at 367.

[61] 35 U.S.C. § 183 (2006).

[62] Citrin, supra note 8, at 285.

[63] 35 U.S.C. § 183.

[64] Id.

[65] Id.

[66] Id.

[67] Id.

[68] 35 U.S.C. § 183 (2006).

[69] Id.

[70] Citrin, supra note 8, at 283-91; Lee Ann Gilbert, Patent Secrecy Orders: The Unconstitutionality of Interference in Civilian Cryptography Under Present Procedures, 22 Santa Clara L. Rev. 325, 346-47 (1982); Gary Hausken, The Value of a Secret: Compensation for Imposition of Se-crecy Orders under the Invention Secrecy Act, 119 Mil. L. Rev. 201, 240-43 (1988); Lee, supra note 12, at 399.

[71] Citrin, supra note 8, at 284.

[72] Id. at 291.

[73] Citrin, supra note 8, at 292-93.

[74] Id.

[75] Id. at 283.

[76] Id.

[77] Hornback v. United States, 40 Fed. Cl. 524, 527-28 (Fed. Cl. 1998).

[78] Stein v. United States, 41 F. Supp. 2d 68 (1999).

[79] 35 U.S.C. § 183 (2006).

[80] Id. § 183. Third-party infringement would be pursued in a normal district court.

[81] Id. § 181.

[82] See also Stein v. United States, 135 F. Supp. 2d 265, 276 (D. Mass. 2001) (involving a patent application under secrecy orders for over twenty-seven years); Citrin, supra note 8, at 283.

[83] 35 U.S.C. § 183 (2006).

[84] Id.

[85] Constant I, 617 F.2d at 239-44.

[86] Farrand Optical Co. v. United States, 197 F. Supp. 756, 773 (S.D.N.Y. 1961) [hereinafter Farrand I].

[87] Lee, supra note 12, at 368.

[88] Id.

[89] 28 U.S.C. § 1498 (2006).

[90] Leesona Corp. v. United States, 599 F.2d 958, 966 (Ct. Cl. 1979).

[91] 28 U.S.C. § 1498.

[92] Farrand I, 197 F. Supp. at 758 n.2.

[93] Farrand Optical Co. vs. United States, 133 F. Supp. 555 (S.D.N.Y. 1955), aff'd on reh'g en banc by an equally divided court, 317 F.2d 875 (2d Cir. 1962) (motion to dismiss for lack of jurisdic-tion denied) [hereinafter Farrand II].

[94] Hausken, supra note 70, at 236.

[95] Id. at 237.

[96] Id.

[97] Id.

[98] Id.

[99] Farrand II, 133 F. Supp. at 557.

[100] Id. Hausken, supra note 70, at 236.

[101] Hausken, supra note 70, at 237.

[102] Id.

[103] Farrand II, 133 F. Supp. at 559.

[104] Id.

[105] Farrand II, 133 F. Supp. at 560.

[106] Constant v. United States, 1 Cl. Ct. 600, 601-02 (Cl. Ct. 1982) [[hereinafter Constant II].

[107] Id. at 602.

[108] Id.

[109] Id.

[110] Id.

[111] Constant II, 1 Cl. Ct. at 602.

[112] Id.

[113] Constant I, 617 F.2d at 244.

[114] Constant II, 1 Cl. Ct. at 604.

[115] Id. at 607.

[116] Id.

[117] Id.

[118] Id. at 608.

[119] Constant II, 1 Cl. Ct. at 608.

[120] 35 U.S.C. § 183 (2006).

[121] Constant II, 1 Cl. Ct. at 609.

[122] Id.

[123] Id.

[124] Id.

[125] Constant I, 617 F.2d at 244.

[126] 35 U.S.C. § 183 (2006).

[127] See Hearings on H.R. 4687 Before Subcommittee No. 3, Committee on the Judiciary, 82d Cong., 1st Sess. 17, 18, 21, 22-23, 28, 32 (August 21, 1951).

[128] Id. at 32 (statement of P.J. Federico, Examiner-in-Chief, U.S. Patent Office).

[129] Id. at 28 (statement of H. Brown, Chief, Patent Section, Dep't of Justice).

[130] Id. at 18, 21, 23 (statement of P.A. Rose, representative of the American Patent Law Association).

[131] Id. at 21 (statement of Congressman Willis).

[132] See Weiss v. United States, 146 F. Supp. 2d 113 (D. Mass. 2001), aff'd 37 F. App'x 518 (Fed. Cir. 2002); see also Hayes v. United States, 335 F. App'x 45 (Fed. Cir. 2009).

[133] Hausken, supra note 70, at 250.

[134] Id.

[135] Id.

[136] Id.

[137] Id.

[138] Id. at 251.

[139] Weiss v. United States, 146 F. Supp. 2d 113, 115 (D. Mass. 2001), aff'd 37 F. App'x 518 (Fed. Cir. 2002).

[140] Hayes v. United States, 335 F. App'x 45 (Fed. Cir. 2009).

[141] Lee, supra note 12, at 375.

[142] Id.

[143] Id. at 376.

[144] Id.

[145] Linick v. United States, 96 Fed. Cl. 78, 83 (Fed. Cl. 2011).

[146] Id. at 80.

[147] Id.

[148] Id.

[149] Id.

[150] Linick v. United States, 96 Fed. Cl. 78, 83 (Fed. Cl. 2011).

[151] Constant v. United States, 16 Cl. Ct. 629, 633 (Fed. Cir. 1989).

[152] Linick, 96 Fed. Cl. at 83.

[153] Id.

[154] 35 U.S.C. § 183 (2006).

[155] Farrand II, 133 F. Supp. at 557.

[156] Id. at 559.

[157] Id. at 560.

[158] Stein, 41 F. Supp. 2d. at 69.

[159] Id. at 70.

[160] Id.

[161] Linick, 96 Fed. Cl. at 83.

[162] Id.

[163] Id.

[164] Id.

[165] Id.

[166] Id.

[167] Farrand II, 133 F. Supp. 2d at 557; Linick, 96 Fed. Cl. at 83; Stein, 41 F. Supp. 2d at 70.

[168] 35 U.S.C. § 154(a)(2) (2006).

[169] Lee, supra note 12, at 372.

[170] Id.

[171] Id.

[172] Id.

[173] Id.

[174] S. Rep. No. 103-412 (1994).

[175] Id.

[176] Lee, supra note 12, at 375.

[177] Id.

[178] 42 U.S.C. § 2221 (2006).