The Case For Reviving A Statutory Invention Registration System

Max Stul Oppenheimer
University of Baltimore School of Law/ The Johns Hopkins University, moppenheimer@ubalt.edu

Follow this and additional works at: http://scholarworks.law.ubalt.edu/all_fac

Part of the Law Commons

Recommended Citation
Available at: http://scholarworks.law.ubalt.edu/all_fac/886
THE CASE FOR REVIVING A STATUTORY INVENTION REGISTRATION SYSTEM

Max Stul Oppenheimer

I. INTRODUCTION

When Congress overhauled U.S. patent law in 2011,1 the main debate focused on the merits (and constitutionality) of converting from the incumbent first-to-invent system, in effect since 1790, to a first-to-file system.2 With little attention or analysis, the statutory overhaul also did away with what was perceived as a rarely used relic of the pre-Internet era: the Statutory Invention Registration system. Concluding that the Statutory Invention Registration system was essentially useless under the outgoing law, Congress eliminated a system with potentially significant uses under the new law, including uses that would help redress the disadvantage imposed on U.S. inventors by the America Invents Act ("AIA").3 The system should be restored, with modifications that will make it especially useful to universities, startup ventures and other underfunded inventors.

This Article traces the brief history of the Statutory Invention Registration system, from its introduction in 1984 through its repeal in 2011, analyzing the possible reasons Congress might have thought the system obsolete. It then demonstrates how each of those reasons, while rational under the then-existing law, would not apply under the revised statute. It then shows how a modified Statutory Invention Registration System would be valuable to society in general under the new statute, but particularly so to independent inventors, non-profit organizations, and universities. Finally, it describes the outline of a proposed system that meets the needs of those groups and furthers the Constitutional goal of promoting the progress of science and the useful arts.

II. THE JOY OF DISCLOSURE

It is a fundamental article of faith in the intellectual property world that patents are preferable to trade secrets from society’s perspective because they produce disclosure.4 Accepting this tenet, it follows that policies that promote

---

3 A U.S. citizen is required by law to obtain a license before filing a patent application outside of the U.S. 35 U.S.C. §§ 184-85 (2014). Therefore, while foreign inventors can avoid many of the dilemmas created by the AIA, U.S. inventors cannot.
4 "[T]he primary purpose of our patent laws is not the creation of private fortunes for the owners of patents, but is 'to promote the progress of science and useful arts.'" Motion Picture Patents Co. v.
disclosure should be favored. It then follows that policies that obtain the disclosure without having to pay the price of granting a patent monopoly (described by Thomas Jefferson as a necessary “embarrassment”) are obviously even more favorable.

The Statutory Invention Registration System was an effort to provide a government-sanctioned program to encourage this cost-free disclosure. The system existed for nearly thirty years, with little demonstrable benefit. Then, just when changed circumstances might have vindicated the investment in the system, it was gone.

III. THE BRIEF, INGLORIOUS HISTORY OF THE STATUTORY INVENTION REGISTRATION SYSTEM

The Statutory Invention Registration System was created with the enactment of 35 U.S.C. § 157 in 1984. The system was designed to provide a comparatively inexpensive way for an inventor to create prior art against a potential competitor’s patent rather than employ the patent system to establish

---

Universal Film Mfg. Co., 243 U.S. 502, 511 (1917). The importance of disclosure in the intellectual property system is evident in the statute itself (for example, the 35 U.S.C. § 112 requirement of an enabling disclosure) and features in Justice Breyer’s dissent to the dismissal of certiorari in Lab. Corp. of Am. v. Metabolite Labs: “patents do not only encourage research by providing monetary incentives for invention. Sometimes their presence can discourage research by impeding the free exchange of information . . . .” 548 U.S. 124, 127 (2006) (Breyer, J., dissenting).

This assumption might be questioned as a general proposition of intellectual property policy. While both patents and federal trademarks explicitly require public disclosure as a condition for creation of the right, in the copyright field, Congress has eliminated the publication requirement for federal protection. 17 U.S.C. § 408 (2005). Since 1968, registration has not been required, except as a prerequisite to litigation. Id. However, as a practical matter, economic considerations tie publication to revenue for most copyrightable works, while many patentable inventions can be commercialized without disclosure by maintaining them as trade secrets.


Patent Law Amendments of 1984, Pub. L. 98-622, 98 Stat. 3383. The Statutory Invention Registration system superseded a similar, but less effective, system created administratively by the Patent Office and known as the Defensive Publication Program. 37 C.F.R. § 1.139 (2013) (available from April 1968 through May 8, 1985. MPEP §§ 608.01(m), 901.06(b). “The program was ended in view of the applicant’s ability to obtain a Statutory Invention Registration.” U. S. PATENT & TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE (9th ed.) (“MPEP”) § 711.06. Although the Patent Office regulations provided that Defensive Publications would have prior art effect as of the date of filing, the PTO Board of Appeals ruled that Defensive Publications did not have prior art effect until they were actually published. Ex parte Osmond, Smith and Waite, 191 U.S.P.Q. (BNA) 340 (B.P.A.I 1976). As a statutory, rather than administrative creation, the Statutory Invention Registration program’s similar provision giving prior art effect as of the date of filing, presumably would have been enforced by the Board of Appeals. See infra note 10. There are no decisions on the point.
exclusive rights against competitors. The system was administered by the U.S. Patent and Trademark Office and was activated by an inventor's election to allow the Patent Office to publish the application instead of examining it for patentability, thus disclosing the invention without the cost to both the applicant and the Patent Office of examination. The only substantive requirement for obtaining a statutory invention registration was satisfying the 35 U.S.C. § 112 requirement that an application disclose how to make and use the invention and the 35 U.S.C. § 113 requirement that the application include drawings if necessary to understand the invention. The additional patentability requirements of novelty and non-obviousness did not apply to statutory invention registrations, consistent with the limited objective of creating prior art, not exclusivity.

The rationale for creating such a system was to provide a solution to the dilemma faced by certain types of inventive entities: whether to pay the expense of obtaining a patent the entity had no interest in enforcing (or no ability to

8 A statutory invention registration creates "the same rights that a patent provides to prevent others from patenting the invention," but foregoes the right to exclude others [from making, using, selling or importing the patented invention under 35 U.S.C. § 283] which would be obtained by successfully prosecuting a patent application. 130 Cong. Rec. H10526 (Oct. 1, 1984).

9 The relevant portion of 35 U.S.C. § 112, as it existed when Pub. L. 98-622 was enacted, provided: "The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention." 35 U.S.C. § 112(a) (Pre-AIA) (2014).

10 Although it does not explicitly refer to 35 U.S.C. § 113, as it does to 35 U.S.C. § 112, 35 U.S.C. § 157(a) authorizes the Director "to publish a statutory invention registration containing the specification and drawings of a regularly filed application." (emphasis added). While never litigated, presumably the drawings would be those required by 35 U.S.C. § 113, which (as it existed when Pub. L. 98-622 was enacted) provided: "The applicant shall furnish a drawing where necessary for the understanding of the subject matter sought to be patented."


12 At the time of enactment of 35 U.S.C. § 157 (1984) it was thought that "governmental agencies, large corporations, and universities" would benefit from the availability of the defensive mechanism provided by the Statutory Invention Registration system. Wendell Ray Guffey, Statutory Invention Registration: Defensive Patentability, 16 GOLDEN GATE U. L. REV. 291, 292 (1986). The supposition that governmental agencies would be principle beneficiaries of the system is supported by the reporting requirement of 35 U.S.C. § 157(d) (2012). "The Director shall report to the Congress annually on the use of statutory invention registrations. Such report shall include an assessment of the degree to which agencies of the federal government are making use of the statutory invention registration system, the degree to which it aids the management of federally developed technology, and an assessment of the cost savings to the Federal Government of the uses of such procedures." 35 U.S.C. § 157(d) (2012).
enforce) or take the risk that another (later)\textsuperscript{13} inventor of the same invention might obtain a patent on it, forcing them to pay royalties in order to avoid being sued for patent infringement for the use\textsuperscript{14} of their own invention.\textsuperscript{15}

An inventor can avoid this dilemma by creating “prior art,” which includes publications that place the invention in the public domain.\textsuperscript{16} This makes it impossible for a later applicant to meet the requirement that to be patentable an invention must be novel\textsuperscript{17} and must not be obvious to individuals of ordinary skill in the field.\textsuperscript{18} The Statutory Invention Registration system provided a government-administered program for publishing disclosures which created this defensive prior art, with the added benefit that the publications were treated as though they had been published on the date they were submitted to the Patent Office, rather than the date on which they were actually published—an advantage in the pre-Internet world when traditional publication took time.\textsuperscript{19}

\textsuperscript{13} Under the pre-AIA statute, an earlier inventor could not be defeated by publication unless the earlier inventor waited more than a year after the publication to file an application. 35 U.S.C. § 102(b) (Pre-AIA) (2014). Under the post-AIA statute, filing even a day after publication jeopardizes patentability. 35 U.S.C. § 102(a)(1) (2014). Thus, the defensive value of a publication (and therefore a Statutory Invention Registration) is greater under the AIA than before.

\textsuperscript{14} Among the rights of a patent owner are the rights to stop all others from making, using, selling, or importing the patented invention. 35 U.S.C. § 283 (2014). These rights are subject to equitable rules relating to injunctions, eBay, Inc. v. MercExchange, LLC, 547 U.S. 388 (2006), or obtaining damages, 35 U.S.C. § 284 (2014).

\textsuperscript{15} The situation could occur because 35 U.S.C. § 102 permitted a later inventor to obtain a patent if the earlier inventor had suppressed or abandoned the invention. Publication (or registering under the Statutory Invention Registration system) would negate this possibility since a published invention, by definition, could not be “suppressed.” One inventor might choose to pursue a patent while another might not because of different perceptions of the value of the invention or because of different financial circumstances. In particular, in 1984, few universities had budgets for commercializing inventions, and federal agencies were constrained by a statute which required them to grant no-cost or low-cost licenses to inventions they funded.


\textsuperscript{17} A fundamental principle of the patent system is that, “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.” Graham v. John Deere Co., 383 U.S. 1, 6 (1966). 35 U.S.C. § 102 as it existed while the Statutory Invention Registration program was in effect satisfied this principle by barring patentability if the invention was described in a printed publication prior to the applicant's date of invention, 35 U.S.C. § 102(a), or if the invention was described in a printed publication more than one year prior to the applicant's filing a patent application, 35 U.S.C. § 102(b), provided that the publication was sufficiently detailed to enable others to practice the invention. Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631-32 (Fed. Cir. 1987). The 35 U.S.C. § 157 requirement that a Statutory Invention Registration must comply with 35 U.S.C. § 112 ensures that the published Statutory Invention Registration will be sufficiently detailed to meet the Verdegaal standard. If a patent application is enabling, it is a constructive reduction to practice, so the date of invention is the date of filing at the latest. Alexander Milburn, v. Davis-Bournemouth, 270 U.S. 390, 392 (1925).

\textsuperscript{18} 35 U.S.C. § 103 (2014). These hypothetical individuals are presumed to be aware of all of the relevant prior art. In re Winslow, 365 F.2d 1017 (C.C.P.A. 1965).

\textsuperscript{19} 35 U.S.C. § 102(d) (2014).
The enactment called for the Secretary of Commerce\textsuperscript{20} to submit annual reports to Congress providing an "assessment of the degree to which agencies of the Federal Government are making use of the Statutory Invention Registration system, the degree to which it aids the management of federally developed technology, and an assessment of the cost savings to the federal government of the use of such procedures."\textsuperscript{21} At the time, it must have seemed a foregone conclusion that the system would be successful.

A. A Solution Without a Problem?

The solution provided by the creation of the Statutory Invention Registration would certainly accomplish the objective of providing a mechanism for the creation of prior art. However, having a solution does not indicate that there was a problem that needed solving. The Statutory Invention Registration system does not appear to have been extensively used. The Patent Office report for 2012 indicates that only seven domestic and one foreign (India) statutory invention registrations were issued that year. To place these numbers in context, 253,155 utility patents were issued that year.\textsuperscript{22} The report for 2011 indicates that only fourteen domestic and one foreign (Canada) Statutory Invention Registrations were issued, as compared to 224,505 patents.\textsuperscript{23} The report for 2010 indicates that only fifteen domestic and two foreign (both Canada) Statutory Invention Registrations were issued, as compared to 219,614 patents.\textsuperscript{24} The report for 2009 indicates that only five domestic and one foreign (Malaysia) Statutory Invention Registrations were issued, as compared to 167,349 patents.\textsuperscript{25} The report for 2008 indicates that only twenty domestic and no foreign Statutory Invention Registrations were issued, as compared to 157,772 patents.\textsuperscript{26}

Thus, in the last five years of the program, it was used only sixty-six times as compared to more than 1,000,000 utility patents issued.\textsuperscript{27}

\textsuperscript{20} 35 U.S.C. § 157(d) (2012). As originally enacted, the reporting was the duty of the Secretary of Commerce; the duty was transferred to the Commissioner of Patents when that office was created in 1997, then in 1999, as part of a restructuring, this duty was transferred to the newly-created Under Secretary of Commerce for Intellectual Property and Director of the USPTO.


\textsuperscript{23} Id. at http://www.uspto.gov/web/offices/ac/ido/oeip/taf/st_co_11.htm.

\textsuperscript{24} Id. at http://www.uspto.gov/web/offices/ac/ido/oeip/taf/st_co_10.htm.

\textsuperscript{25} Id. at http://www.uspto.gov/web/offices/ac/ido/oeip/taf/st_co_09.htm.

\textsuperscript{26} Id. at http://www.uspto.gov/web/offices/ac/ido/oeip/taf/st_co_08.htm.

\textsuperscript{27} In the five-year period, sixty-six statutory invention registrations and 1,022,395 utility patents were issued. Statutory invention registrations are also available for design and plant patents, so using total patents issued would show an even lower overall usage of the Statutory Invention Registration system. In a different report (organized by fiscal rather than calendar year) the Patent
Of course, the raw numbers may not tell the story. If the sixty-six uses produced dramatic results, established important rights, or provided some indirect benefit to the Patent Office or to society as a whole, the system might be justified.

The 2012 edition of the U.S. Code Annotated lists no cases as annotations to 35 U.S.C. § 157. A Westlaw search, including the string "Statutory Invention Registration," produced only five cases. Of the five, one did no more than cite one of the other four cases as articulating a rationale that applied equally to patents and statutory invention registrations. Another held that there was no need to rule on patentability where the applicant had converted the application to a statutory invention registration. While tangentially interesting for the tactic of converting a patent application to a Statutory Invention Registration in order to overcome a double-patenting rejection, the case is not really a "statutory invention registration case"—the holding does not turn on the fact that a statutory invention registration was involved. The third case was an unpublished decision on a Freedom of Information request, which did no more than note that the Patent Office made all papers relating to issued patents and statutory invention registrations available to the public and therefore

---

Office reported that twenty-one statutory invention registrations were published in 2008, three of which were assigned to the Air Force, six to the Navy, and twelve to non-governmental applicants. In 2009, there were nine published statutory invention registrations: two to the Air Force, three to the Navy and four to non-governmental applicants. In 2010, there were seventeen published statutory invention registrations: five to the Navy and twelve to non-governmental applicants. In 2011, there were fifteen published statutory invention registrations: one to the Air Force, seven to the Navy, one to the Veterans Administration, and six to non-governmental applicants. In 2012, there were seven published statutory invention registrations: three to the Navy and four to non-governmental applicants. The USPTO, Performance and Accountability Report, 186 tbl. 12 (2012) http://www.uspto.gov/about/stratplan/ar/USPTOFY2012PAR.pdf. Although the numbers differ slightly, they support the same conclusion.

---


30 Rexam Ind. Corp. v. Eastman Kodak Co., 182 F.3d 1366, 1369 (Fed. Cir. 1999) (citing Hyatt v. Boone, 146 F. 3d 1348, 1356-57 (Fed. Cir. 1998) (holding that the Board of Patent Appeals and Interferences "was required to decide priority issue even though applicant had requested conversion of his application to a statutory invention registration during interference."). It then held that the same rationale applied to the pending case, where the issue was whether loss of an earlier interference contest precluded contesting priority among patent applicants.

31 35 U.S.C. § 157(c) (2012) ("A statutory invention registration published pursuant to this section shall have all of the attributes specified for patents" except those relating to infringement, so a priority contest between two patent applicants logically follows the same rationale as a priority contest between a patent application and a statutory invention registration).

fell within the FOIA exemption from disclosure in response to a request. The fourth case, also unpublished, only uses the words "statutory invention registration" in noting (in the context of a holding on the applicability of the statute of limitations to an allegation that a patent application should have been assigned to the plaintiff) that published applications, patents and statutory invention registrations are open to public inspection. As the case involved an issued patent, the statement as to statutory invention registrations is dictum. The fifth case involved an interpretation of claims at the Markman hearing stage of an infringement case and simply noted, in dictum, that during prosecution one of the claims had initially been rejected by the examiner as un-patentable over two references, one being a statutory invention registration.

Only one law review article discussing the system was published during the tenure of the Statutory Invention Registration system, and that article was published shortly after enactment as a summary of the new statute and cited no cases involving statutory invention registrations.

One possible interpretation of the paucity of cases and commentary on the statutory invention registration system is that Congressional drafting was so clear and the use of the system by practitioners was so perfect that no one had enough nerve to raise an issue in litigation (or carry it to a reported case).

A more likely interpretation is that three developments—the introduction of publication of pending patent applications eighteen months after filing, the delay in the time taken by the Patent Office to process patent applications and produce a first office action, and the rise of the Internet—provided simpler, less expensive ways of accomplishing the goal of creating prior art which would defeat a later inventor’s patent application in cases where there was no desire to

36 A Markman hearing is a hearing conducted by the judge in a patent infringement trial for the purpose of construing the language of the allegedly infringed claims, so named for the case in which the Supreme Court held that claim language interpretation was a question of law, while determining whether the claims (as construed by the judge) cover the defendant’s product is a question of fact. Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996).
37 Kimberly-Clark Worldwide, Inc., 431 Fed. Appx. at 889. The applicant successfully argued that the claim was distinguishable from the references, and the court held that there was no prosecution history disclaimer as there had not been a “clear and unmistakable” limitation of the meaning of the claim during prosecution. Id.
38 Guffey, supra note 12.
obtain a patent. Therefore, the theoretical justification for a statutory invention registration system did not translate into a real-world demand.

B. Publication of Pending Applications

At the time the Statutory Invention Registration system was created, patent applications were maintained in confidence until issued. If the Patent Office determined that the application was not patentable, the application was never made public. A 1999 amendment to the patent statute provided that patent applications would be published eighteen months after filing, even if the patent had not yet been issued. This publication offered an alternative method for creating prior art which would prevent a competitor from patenting the same invention. In 2011, the Patent Office thought that this was a reason for declining use of the Statutory Invention Registration system:

A published Statutory Invention Registration is not a patent. It has the defensive attributes of a patent, e.g., it is usable as a reference as of its filing date in the same manner as a patent, but does not have the enforceable attributes of a patent. Historically, applicants have requested that the U.S. Patent Office publish their patent applications as Statutory Invention Registrations in certain instances when, for any of a variety of reasons, applicants no longer wanted to go through the effort and expense of obtaining patents on the inventions claimed in the applications. However, given that 37 C.F.R. § 1.211 requires the publication of most nonprovisional applications filed on or after November 29, 2000, applicants have increasingly found 1.211 publication of an application to be a desirable alternative to requesting a Statutory Invention Registration, particularly since 1.211 publication of the application is achieved without any waiver of patent rights.

40 The pre-AIA patent statute mandated rejection of a patent application if a printed publication established that someone else had made the same invention (or an obvious variation) prior to the applicant's date of invention, 35 U.S.C. § 102(a), 103, or had published the same invention (or an obvious variation) more than a year before the applicant's filing date. 35 U.S.C. § 102(b), 103. A Statutory Invention Registration had one benefit over private publication: it was deemed public as of the date of filing rather than the date of publication. With the ability to publish on the Internet almost instantaneously, this benefit disappeared. On the issue of internet postings as printed publications, see Max Stul Oppenheimer, In Vento Scribere: the Intersection of Cyberspace and Patent Law, 51 FLA. L. REV. 229, 257 (1999).
42 Id.
43 In general, patent applications are confidential. 35 U.S.C. § 122 (2013). However, the 1999 American Inventors Protection Act added 35 U.S.C. § 122(b) to the statute, providing that (subject to certain exceptions) "each application for a patent shall be published, in accordance with procedures determined by the Director, promptly after the expiration of a period of 18 months from the earliest filing date for which a benefit is sought under this title." 35 U.S.C. § 122(b) (2013).
During the period that the Statutory Invention Registration system existed, a published application was treated as if it had been publicly available as of the date the application was filed, not the date eighteen months later when it was published. Thus, there was no disadvantage to filing a non-provisional patent application and allowing it to be published vis-a-vis filing a statutory invention registration application as long as the Patent Office continued to take more than eighteen months to issue the first substantive action on the application.

A published application offered an advantage over traditional paper publication, for example in a journal (and an even greater advantage over a peer-reviewed journal). While both journal publication and pending application publication involved delays between submission and publication (and additional delay if peer review were involved), a published patent application was treated as if it had become publicly available on the date it was submitted, while journals were treated as if they had become publicly available on the date the first member of the general public had access to a copy.

C. Delays in the Patent Office

If the Patent Office acted on applications promptly, pre-grant publication would not provide an attractive alternative to the Statutory Invention Registration system. Once the patent examiner issues a decision on the patentability of a claimed invention (an "action") the applicant has six months to respond or the application becomes abandoned and would not be published. Fortunately, from the perspective of applicants wishing to use pre-grant publication as a fallback method for creating invalidating prior art against competitors, the average pendency of a patent application before the Patent Office takes substantive action requiring an applicant to respond was well over eighteen months during the entire time that the Statutory Invention Registration system was in effect.

---

47 35 U.S.C. §133. “Upon failure of the applicant to prosecute the application within six months after any action therein . . . or within such shorter time . . . as fixed by the Director in such action, the application shall be regarded as abandoned . . . .” The Patent Office usually sets an administrative deadline of less than six months, but its administrative rules provide that such deadlines can be extended by paying late fees. The six month deadline is set by statute and, therefore, cannot be extended administratively. “If an applicant is required to reply within a nonstatutory or shortened statutory time period, applicant may extend the time period for reply up to the earlier of the expiration of any maximum period set by statute or five months after the time period set for reply, if a petition for an extension of time and the fee set in § 1.17(a) are filed.” 37 C.F.R. § 1.136(1) (2013); MPEP § 710.02(e) (2014).
49 In its 2011 Annual Report, the USPTO reported the average time between filing and first substantive response as 25.3 months in 2007, 25.6 months in 2008, 25.8 months in 2009, 25.7
The pendency period measures the time from an applicant's filing of a complete patent application until the time a patent examiner substantively reviews the application and issues an action regarding the patentability of the claimed invention. This span is important because the first Patent Office action is the applicant's first opportunity to learn how the Patent Office views the application and therefore the applicant's best opportunity to make an informed evaluation of the chances of obtaining a patent. Since patent applications are maintained in confidence until the earlier of grant or pre-grant publication, an applicant has the option of abandoning the application and preserving a trade secret in the invention up to that point. In an ideal world, an applicant would like to know the odds of obtaining a patent before deciding whether to pursue the application or maintain the invention as a trade secret, then, in the event that the odds did not favor patentability, make a second decision whether to maintain the trade secret (and under the new first-to-file system risk that a second inventor might obtain a patent), or keep the application pending long enough for it to be published thereby surrendering the trade secret, but precluding competitors from obtaining patent protection.

The addition of Patent Office delay into the picture provided the opportunity to keep options open and also, in effect, the opportunity to create the disabling prior art equivalent of a submarine patent.


51 It might be questioned why an inventor, having been informed that the invention is not patentable, would fear a second inventor's obtaining a patent on the invention. One answer is that patentability turns on factors other than the merits, such as persistence and the amount of money the applicant is willing to spend to overcome the patent examiner's initial conclusion against patentability. The most recently available data (FYE 9/30/12) indicates that applicants were successful in obtaining at least some claims rejected by patent examiners roughly 50% of the time. The USPTO, Performance and Accountability Report, tbl. 33 (2012), http://www.uspto.gov/about/stratplan/ar/USPTOFY2012PAR.pdf. This may imply that examiners are "correct" more than half the time, since most applicants do not file appeals and presumably at least some of the time the reason is that the applicant concedes the correctness of the examiner's position on patentability. Id. However, it may be that some applicants do not appeal simply because they cannot afford the cost of an appeal, or tolerate the delay involved in the appeal process. Id.

52 A submarine patent is a patent which issues from an application that has been kept pending for a long period of time, during which technology progresses and competitors have spent large sums to commercialize the technology. The owner of a submarine patent is then in a stronger position to demand a licensing fee than if the competitor had known of the cost before making a significant investment in developing the technology. Dramatic abuse of the system was one of the motivations for pre-grant publication and for the switch to a patent term of twenty years from the date of filing, in place of the term of seventeen years from the date the patent issued. 35 U.S.C. § 154 (2014). The term may be shortened if the owner fails to pay periodic maintenance fees, 35 U.S.C. § 41(b), and may be extended for various reasons including excessive delay in processing by the Patent Office. See 35 U.S.C. § 154(b). By tying the patent term to the date of filing rather than the date of issue, it
D. The Rise of the Internet

The key to creating a defensive publication is publication. To qualify, a publication must be sufficiently permanent and sufficiently indexed so that those with an interest in its contents can find it. In the early development of the Internet, the lack of indexing precluded web pages’ prior art status. The subsequent development of search engines, indexing technology and permanent archives (such as deja news) have made Internet publication suitable for creating invalidating prior art. While no case appears to have decided the issue directly, the Patent Office currently treats documents available electronically on the Internet as suitable prior art.

This provides a significant advantage over traditional print publications, which entail delays in the acceptance, editing, printing and distribution process. The general rule is that printed publications become prior art references when they first become available to the public. In the case of a journal, it is the date a first subscriber receives the journal. An inventor can upload a disclosure to a website in a matter of minutes. However, it is not without risk and societal cost. Simply posting a disclosure may present proof issues (the date of posting may require proof, for example) and, from a societal perspective, does not guarantee practical public access. While theoretically accessible, a site which is not accurately indexed may be difficult to find. Such a posting would fail to satisfy the goal of making the technology available and arguably would also fail to create an anticipatory publication for 35 U.S.C. § 102 purposes.
E. The Rationale for Repeal

The actual reason for the decision to eliminate the Statutory Invention Registration system is open to speculation. The Senate Judiciary Committee reports on both the Patent Reform Act of 2007\textsuperscript{60} and on the Patent Reform Act of 2009\textsuperscript{61} proposed deleting the Statutory Invention Registration, but the only explanation given in either report is "Subsection (e)—Repeals § 157 (Statutory Invention Registration)."\textsuperscript{62} The House Judiciary Committee report on the bill which finally repealed the Statutory Invention Registration system is no more enlightening:

\begin{verbatim}
REPEAL OF STATUTORY INVENTION REGISTRATION.—
(1) IN GENERAL.—Section 157 of title 35, United States Code, and the item relating to that section in the table of sections for chapter 14 of title 35, United States Code, are repealed.
(2) REMOVAL OF CROSS REFERENCES.—Section 111(b)(8) of title 35, United States Code, is amended by striking "sections 115, 131, 135, and 157" and inserting "sections 131 and 135".
(3) EFFECTIVE DATE.—The amendments made by this subsection shall take effect upon the expiration of the 18-month period beginning on the date of the enactment of this Act, and shall apply to any request for a statutory invention registration filed on or after that effective date.\textsuperscript{63}
\end{verbatim}

Perhaps the data spoke for itself and required no formal argument or explanation. With respect to the pre-AIA framework, the decision certainly made sense. The only arguable advantage of a Statutory Invention Registration over publication -- that Statutory Invention Registration's are treated as published as of the date of filing rather than the date of publication\textsuperscript{64} -- had been made trivial by the speed of modern publication technology. While the relation-back characteristic of statutory invention registrations may have been a significant advantage in the context of having to find a journal willing to publish the details of an invention\textsuperscript{65} and the attendant delay, the Internet provided avenues for almost instantaneous publication and dissemination.

\textsuperscript{62} Id.
\textsuperscript{64} A statutory invention registration has "all of the attributes specified for patents in this title," except those relating to enforceability of exclusionary rights. 35 U.S.C. § 157(c) (2014).
\textsuperscript{65} One challenge in the era of paper publication, especially by peer-reviewed journals, was the time taken to approve an article for publication and schedule it for printing. A second challenge was whether the journal's interests and policies coincided with the patent law's goal of enabling disclosure. A print journal might be interested in experimental results, but unwilling to devote the space to publishing the details of how to make and use an invention.
It would certainly be a reasonable speculation that the rationale for deleting the Statutory Invention Registration system was the rise of alternatives and the comparative lack of use of the system. Regardless of the explanation for the lack of use, it is easy to understand why Congress may have been convinced that the value of the Statutory Invention Registration system no longer existed (if it ever did) and 35 U.S.C. § 157 could be deleted as part of the AIA revision of the patent statute. It was a system that almost no one used, and those who did use it could not be shown to have benefitted from its use.

Thus, Congress’ approach would have been flawless, except for one thing.

IV. THE DAY EVERYTHING CHANGED

On March 15, 2013, Congress’ 2011 decision to upend U.S. patent law went into full effect.

A. New System, New Strategies

Under the AIA, a Statutory Invention Registration system would still provide benefits in situations where an inventor does not desire patent protection, but rather wants protection against potential competitors gaining patent protection. Nothing in the AIA changes that rule.

However, the AIA made changes significantly increasing the value of the system for a wider audience.

What Congress certainly knew, but failed to appreciate, was that the change from first-to-invent to first-to-file would dramatically change the practice of patent law and strategies for protecting inventions. In particular, the shift to first-to-file, plus the exception created for disclosures by the applicant, created a new rationale for an official forum for disclosing inventions.

Under the pre-AIA law, a public disclosure did offer a potential defensive benefit (for the same reason that under 35 U.S.C. § 102-03, the publication of the details of an invention triggered the one-year grace period for everyone, not just the inventor who authored the publication).

66 "(e) REPEAL OF STATUTORY INVENTION REGISTRATION. (1) IN GENERAL. Section 157 of title 35, United States Code, and the item relating to that section in the table of sections for chapter 14 of title 35, United States Code, are repealed. (2) REMOVAL OF CROSS REFERENCES. Section 111(b)(8) of title 35, United States Code, is amended by striking 'sections 115, 131, 135, and 157' and inserting 'sections 131 and 135.'" H.R. REP. No. 112-98, pt. 1, at 4 (2011).


69 Id.
However, under the pre-AIA law an inventor’s public disclosure of the invention was never beneficial from a patent perspective. It triggered the one-year “grace” period under 35 U.S.C. § 102-03 and therefore created the risk, without any offsetting benefit, of loss of the right to a patent if the inventor did not file a patent application in time.

The AIA completely reversed the situation by creating a benefit to publishing an invention prior to filing a patent application. While the most conservative approach would be to file an application prior to any public disclosure, preparing a patent application takes time. This creates the risk that a competitor inventor may file an application claiming the same invention in the interim. This would not have posed a problem under the pre-AIA statute, which awarded the patent to the first inventor. However, the post-AIA statute awards the patent to the first to reach the Patent Office. Thus, one strategy for reducing this risk would be to make a disclosure (protected for a year by the self-disclosure exception of 35 U.S.C. § 102(b)(1)) to establish priority against other possible inventors, then filing within one year of the disclosure to fall within the protection of the 35 U. S. C. § 102(b)(1) exception. A problem arises with this strategy because most countries do not have an equivalent to the U.S. statute’s one-year “Own Publication” exception. Thus, U.S. inventors with aspirations to international patent protection face a new dilemma created by the America Invents Act ("AIA"): publish to obtain U.S. priority or withhold publication to protect foreign rights. This change places U.S. inventors at a disadvantage vis-a-vis their foreign competitors because it forces a choice between losing U.S. priority rights and losing patent rights entirely in many other countries. Moreover, U.S. citizens (but not foreign citizens) are required by law either to file their patent application in the U.S. before filing anywhere else or to obtain a license before filing a patent application outside the U.S. This dilemma can be avoided by reinstating a Statutory Invention Registration system.

---

70 Prior to the AIA, the statute denied patentability if “the invention was patented or described in a printed publication in this or a foreign country . . . more than one year prior to the date of the application for patent in the United States.” Id.
71 Id. at (a)(2).
72 Id.
There is no precise way to categorize inventors. From 1790 through 2012, all patent applications had to be filed in the name of the inventor (although they could then be assigned, for example to an employer). The patent statute does, however, provide a rough surrogate for “small” or “independent” inventors through its “small entity” discount program, and the more recent discount program for “micro entities” (which are a subcategory of “small entities”).

The shift to first-to-file rewards prompt filing and, it has been argued, therefore, incentivizes filing early and often. While the cost, in dollars and in diversion of scientific and management resources required to adapt to the new system might be inconsequential to large companies, small companies would logically be forced to make difficult decisions if not forego patent protection. Congress made a half-hearted attempt to mitigate the impact on very small entities by creating a “micro” filing status, which provided a discount of 75% on certain fees for up to five patent applications for certain applicants. While clearly evidencing a concern for the impact of first-to-file on small entities, it falls far short of eliminating the concern. First, it only applies to certain fees and to applicants who are either institutions of higher learning (or their employees) or who are individuals with earnings below a “Maximum Qualifying Gross Income.” The Patent Office fees for filing a standard patent application total

---

75 35 U.S.C. § 41(h) (2014). Small entities (independent inventors, non-profit organizations, and those companies defined as “small” by the SBA) received a 50% reduction for certain fees. Id.
76 As the change only went into effect on March 15, 2013, it is too early for empirical confirmation, but the logic seems compelling.
79 Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284-341 (2011). The Patent Office’s regulatory impact analysis of the new fee structure under the AIA notes that, “applicants who meet the new micro entity definition will receive a 75 percent discount on fees . . . [and] small entities will receive a 50 percent discount on more fees than they do under the current fee schedule. This fee schedule . . . fosters innovation in society.” Regulatory Impact Analysis, USPTO 39 (Jan. 18, 2013), www.uspto.gov/aia_implementation/AC54_Final_Regulatory_Impact_Analysis.pdf. The new fee structure “sets many fees either below or above cost consistent with the key policy considerations of fostering innovation, facilitating effective administration of the patent system, and offering patent prosecution options for applicants.” Id. at 59.
80 35 U. S. C. § 123(a)(2). The “Maximum Qualifying Gross Income” is currently $153,051. USPTO, Micro Entity Status Gross Income Limit (Mar. 19, 2013), http://www.uspto.gov/patents/law/micro_entity.jsp. While $153,051 may seem like a large sum, it pales in comparison to the revenue available to large corporations, and is not even large in comparison to the total cost of filing five patent applications. Several surveys place the average cost of filing a patent application between $5,000 and $20,000 (with certain more complex technologies running well above these figures). See Bridget Botelho, Patents can be costly but
$1,090; the micro entity discount would reduce these fees to $475, a savings of only $615. Additionally, it only applies to a total of five patent applications, under a system which encourages, if not necessitates, filing several applications per finished invention in order to avoid the risk of losing the race to the Patent Office during the development and perfection of an invention. Thus, the five-filing discount might not even be enough to cover one carefully-protected invention. Finally, the discount is not a significant number in the context of starting a business or even in the context of the overall cost of a patent application. This might be written off as an unfortunate consequence for an individual company in the "some-win, some-lose" trade-offs that go into any legislative enactment. However, if the overall consequence is reduced disclosure then it runs afoul of the Constitutional mandate to "promote [] Progress" and should be minimized if possible.

Effective March 19, 2013, the AIA created a new sub-class of small entity applicants known as "micro entities," who are entitled to a 75% reduction

81 At the time of filing a non-provisional patent application, at least three fees are due: a basic filing fee ($330), a search fee ($540), and an examination fee ($220). Other fees may be due depending on the details of the application and filing documents. USPTO Fees and Payment of Money, 37 § 1.16 (2013).

82 This result is part from the uncertainty as to when an invention is complete and ready for patenting. Under the first-to-invent system, an inventor could wait for up to a year before filing an application and be confident that the application would not be rejected on the basis of a later-conceived invention. 35 U.S.C. § 102(b)(pre-AIA) (2014). Under the AIA, the inventor is at risk until the day of filing. Therefore, a prudent inventor will file applications as each incremental advance is made, for fear that the latest incremental advance will turn out to be the last advance and that another inventor might file first.

83 See Oversight Hearing on the United States Patent and Trademark Office: Hearing Before the H. Comm. on the Judiciary, 110th Cong. 7 (2008) (statement of Alan J. Kasper, Vice President of American Intellectual Property Law Institute). On behalf of the American Intellectual Property Law Association (AIPLA), Alan Kasper, testified before the House Judiciary Committee that, on the basis of a 2007 AIPLA survey typical patenting costs for filing a new application ranged from $8,548 for "cases of minimal complexity and with 10 pages and 10 claims" to $13,684 for "complex biotechnology or chemical cases." Id. Filing is only the first step in obtaining a patent. The same survey found that preparing an amendment in response to an Office Action ranged from $2,244 in the "minimal complexity" case to $4,448 in the complex case. Id. These costs do not include the additional costs of the inventor's time required to disclose the invention and review the application and of management time required to oversee the process.

84 U.S. CONST. art. I § 8, cl. 8.
for certain fees. Employees of institutions of higher education and applicants who have assigned (or are obligated to assign) the invention to an institution of higher education qualify. Individuals (other than employees of institutions of higher education) can qualify for the discount for up to five applications provided they meet an earnings test and have not assigned (and are not obligated to assign) a license or other ownership interest in the application to an entity that had gross income exceeding the individual earning limit in the preceding year.

These preferred rates are designed to mitigate the disparate impact of the new first-to-file system on small entities, in particular the increased incentive to “file early, file often.” Well-funded entities can afford to file incremental applications as progress is made and inventions are perfected, thereby eliminating the need to decide when exactly a patentable and commercially valuable advance has been made. A cash-strapped startup venture does not have this ability and must ration its filings. Guessing incorrectly on the point where a patentable and commercially valuable advance has been made risks losing the race to the Patent Office and, therefore, losing patent protection.

While well-intentioned, the discounts in the filing fees (and limiting the discounts to only five applications, in a system which rewards multiple applications) is an inadequate solution to the problem which the AIA created for small entities.

C. Do “Small” Inventors Deserve Protection?

It is clear that small entities were disadvantaged by the AIA, but that does not mean that society in general was. Small entities may simply be the losers in the “some win, some lose” consequence of any statutory change. The Constitution authorizes creation of a patent system as a means of promoting progress. The patent grant is an incentive to give up what many inventors could

87 Id. at (a)(2). Applications filed in another country, provisional applications under section 111(b), and international applications for which the basic national fee was not paid, do not count toward the limit. Id.
88 Id. at (a)(3). The applicant must not, “in the calendar year preceding the calendar year in which the application fee is being paid, have a gross income, as defined in section 61(a) of the Internal Revenue Code of 1986, exceeding three times the median household income for that preceding calendar year, as most recently reported by the Bureau of the Census.” Id. The current income limit is $153,051. The USPTO: Micro Entity Status Gross Income Limit (Mar. 19, 2013), http://www.uspto.gov/patents/law/micro_entity.jsp.
90 See Campbell, supra note 77.
91 U.S. Const. art. I, § 8, cl. 8.
otherwise maintain as a trade secret, and therefore an incentive to disclose rather than an incentive simply to invent.92 "[T]he primary purpose of our patent laws is not the creation of private fortunes for the owners of patents, but is to promote the progress of science and useful arts."93 Therefore, the patent laws are not directly concerned with how small inventors (or any other inventors for that matter) fare financially. However, as the promise of a limited term monopoly and its attendant rewards is the incentive that the patent system provides for public disclosure, the patent system is concerned with providing an adequate incentive to those with something of value to disclose.94 The question becomes whether small entities as a class have something of value to disclose, and whether something must be done to rebalance the equation to the point where they will choose to do so.

The mere creation of the small and micro entity discounts may be seen as evidence that Congress thought that small entities deserved additional incentives. This would be consistent with the theoretical constitutional aims of the patent system. Included within the definition of small entities are universities and other institutions of higher learning, historically leaders in innovation and the advancement of scientific progress.95 It would also be supported by the available data on how the patent system has been used.

Beyond the historical role of universities, contemporary statistics also indicate the significant role of small entities in the patent system. For fiscal years 2008 through 2012, roughly 20% of all utility patents issued were issued to small entities.96 While there is no way to determine whether this translates into 20% of the "value" of all patents, the number is high enough to suggest that small entities make significant contributions to the "progress of science and the useful arts" and therefore their interests must be considered in designing a patent system.

92 There are "four possible 1780s meanings of 'progress' in the Progress Clause: quality improvement in the knowledge base, quantity improvement in the knowledge base (judged numerically), quantity improvement in the knowledge base (judged economically), and spread (distribution to the population)" and concluded that "[s]pread has the highest support." Malla Pollock, What is Congress Supposed to Promote?: Defining "Progress" in Article I, Section 8, Clause 8 of the United States Constitution, or Introducing the Progress Clause, 80 Neb. L. Rev. 754, 756 (2002). This linguistic conclusion is consistent with the policy goal of dissemination rather than mere invention. Society benefits more from disclosed inventions than from inventions maintained as trade secrets, since disclosure provides the additional benefit of allowing others to build on the disclosed information.
94 See supra note 4.
96 See The USPTO, supra note 49, at tbl. 11.
V. REVIVING A MODIFIED STATUTORY INVENTION REGISTRATION SYSTEM

A. The Special Opportunity Presented by the AIA

The AIA moved the U.S. from a first-to-invent to a first-to-file system and also created an almost absolute novelty test. However, while the AIA eliminated most protection from pre-filing disclosures, it did preserve an exception for an inventor's own disclosures (or inventions derived from such disclosures) made less than a year prior to filing.

The new system accords special treatment to an inventor's public disclosures in two respects: it does not treat them as anticipatory prior art against the discloser during a one-year grace period, and it allows them to act as quasi-priority documents. As revised by the AIA, certain disclosures by an inventor are not considered prior art. The revised statute provides:

A disclosure made 1 year or less before the effective filing date of a claimed invention shall not be prior art to the claimed invention under subsection (a)(1) if (A) the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or (B) the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.

Consequently, a disclosure by the inventor can be used to insulate the application against a possible later invention by someone else, without jeopardizing the inventor's patent application (provided the application is filed within a year after the disclosure).

This combination can be used to mitigate some of the effect of the switch to first-to-file, essentially allowing an inventor to add an additional year to the term of a patent and serving, in effect, as a pre-provisional application.

97 An "absolute novelty" rule would bar patentability if anyone anywhere had public knowledge of the invention at any time before the patent application was filed. The AIA rule is not quite absolute, as it exempts the applicant's own disclosures, in certain circumstances, for a limited time. 35 U.S.C. § 102(b)(1) (2014).
98 Id.
99 Id.
B. The Goals, Constitutional Basis and Outline of a Statutory Invention Registration System

Article I, Section 8 of the Constitution provides the basis for the U.S. patent system, providing that “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.”

Accordingly, a proposal to create a Statutory Invention Registration should further the objective of promoting this progress.

A fundamental goal of the patent system is to motivate innovators to disclose trade secrets. In theory, disclosure of a trade secret benefits society by permitting more people to make use of the information as a starting point for further innovation, thereby fostering progress in the field as well as opening the door to competition. The patent system motivates certain innovators to exchange trade secrets for patents because trade secrets only protect against misappropriation, not independent invention. The holder of a trade secret is always at risk that a second “inventor” will develop the same trade secret and be at liberty to use or disclose it. The patent statute grants the successful applicant rights against all, including those who develop the same invention completely independently. But, this occurs only if the applicant provides a description of how to make and use the invention so that once the patent expires the public has the information necessary to make and use the invention. This is ensured by 35 U.S.C. § 112, which requires that the application for a patent “contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same . . . .” The patent statute, therefore, promotes technological progress by offering a broader, but limited-term monopoly in exchange for disclosure of what could otherwise be maintained as a trade secret. The constitutional objective is met if the applicant provides an enabling description of how to make and use a previously unknown (and non-obvious) invention in exchange for the limited term monopoly provided by a patent (what Thomas

100 U.S. CONST. art. I, § 8, cl. 8.
101 The Uniform Trade Secrets Act defines a “trade secret” as: “[I]nformation . . . that: (i) derives independent economic value . . . from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.” UNIF. TRADE SECRETS ACT § 1(4) (1985). Issued patents (and many pre-grant applications for patents) are available at the Patent Office and online at its website. THE USPTO, www.usPatentOffice.gov. Therefore, a patent destroys the associated trade secrets because it makes them generally known and it reflects the trade secret owner’s failure to make reasonable efforts to maintain secrecy.
Jefferson described as "the embarrassment of an exclusive patent."

The objective is met at lower cost to society if the applicant elects a Statutory Invention Registration rather than a patent and therefore does not even demand a patent monopoly in return.

Therefore, there should be a Statutory Invention Registration system, with the following characteristics:

1. The system should give inventors the option to decline patent protection without thereby risking giving the patent to a later inventor.

   The purpose of the patent statute is to motivate disclosure of inventions so that others may use the information to promote progress. Disclosure without demanding a patent in return accomplishes the purpose at lower cost to society than does disclosure in exchange for a patent. Forcing a choice between an unaffordable expense and having to pay royalties on one’s own invention might motivate non-disclosure, precisely contrary to what the patent laws are designed to do. The system should not force an inventor to make that choice.

2. The system should be simple from the perspective of an inventor wishing to register an invention, from the perspective of the Patent Office looking for prior art in evaluating patentability of applications, and from the perspective of researchers looking for information on state-of-the-art technology.

   Since the primary "consumers" of the system are inventors who do not want patents, but also do not want to pay royalties on their own inventions, imposing additional costs (whether financial or time) will be a disincentive and should be avoided. The purpose of the system ultimately is to provide accessible disclosures, for use as a technology resource and for use by the Patent Office to deny patents (and the resulting monopoly and cost to society) to applications claiming "advances" which are already available to the public by virtue of the disclosure. The Patent Office already maintains such a collection and already has the technology to disseminate it, and is therefore the logical repository.

---

104 See Campbell, supra note 77.
3. **The system should not penalize inventors or force them to make a premature decision on whether to pursue patent protection or elect registration.**

The original Statutory Invention Registration system allowed an inventor to file an application for a patent and, at any point in the examination process to elect instead to waive patent rights and have the application published for its defensive prior art value. There was, however, an incentive to make the choice at the outset or before the Patent Office had examined the application for patentability—the filing fees were lower at the outset, and went up after the Patent Office completed its first review and action.\(^{106}\) The justification was rational—making the choice before a first Patent Office action saved the Patent Office time and money and so was to be encouraged.\(^{107}\) This analysis is, however, incomplete in that it ignores the patent applicant’s absolute right to request, at no additional cost, a second review by the Patent Office.\(^{108}\) Therefore, the supposed cost savings are overstated. Moreover, the analysis is tunnel-visioned, focusing only on the cost to the Patent Office, when the focus should be on total cost to society. With that focus, the cost of imposing a monopoly should be added to the equation and the balance clearly favors absorbing the small cost of examination in order to encourage surrender of patent protection.\(^{109}\) Because of the structure of the AIA, the need for an eighteen-month delay in publication is reduced,\(^{110}\) and an option for earlier publication could be provided.

4. **The system should be cost-free to those who elect it.\(^{111}\)**

Building on the argument against imposing penalties on those who use the system, a “fully-costed” analysis suggests providing a positive incentive for its use. At a minimum,\(^{112}\) use of the system should be cost-free as an incentive to use the system, and to help mitigate the impact of the first-to-file system on small

---

\(^{106}\) See 37 C.F.R. § 1.16 (2013).

\(^{107}\) See Guffey, supra note 12, at 292.


\(^{109}\) The applicant can still obtain a patent even if the Patent Office initially rejects an application. Patent Office statistics suggest that applicants have roughly a 50/50 chance of obtaining a patent, notwithstanding an initial rejection. THE USPTO: tbl 15 (2012), http://www.uspto.gov/about/stratplan/ar/2011/oai_05_wlt_15.html.

\(^{110}\) Patent Law Amendments, supra note 7. The AIA provides that a disclosure by the inventor is not prior art against an application filed within a year of disclosure. 35 U.S.C. § 102(b)(1) (2014). Therefore, publishing immediately would not adversely affect the inventor’s patent rights.

\(^{111}\) Applicants who enter the system by filing a patent application should pay the application fees. However, they should not pay additional fees for, in effect, abandoning the request for a patent and agreeing instead to disclosing the invention under the Statutory Invention Registration system.

\(^{112}\) Congress could not pay inventors to use the system under the Intellectual Property Clause, as that clause only authorizes rewards in the form of limited term monopolies. U.S. CONST. art. I, § 8, cl. 8. It might, however, find constitutional support in other clauses (for example, the Commerce Clause), or by providing tax incentives.
inventors and start-up companies.\textsuperscript{113} This would go a long way toward leveling the playing field between well-funded entities (which would still enjoy an advantage at the patent application filing stage) in preserving the option to seek patent protection or to at least preclude facing the prospect of infringing a patent on the entity’s own invention, and to removing an impediment to entrepreneurial fundraising, and could be justified from a funding perspective as furthering the constitutional mandate of furthering progress by making disclosure safer and easier.\textsuperscript{114}

The governmental cost could be further reduced (without adversely affecting the value of the system to inventors or the public) by dispensing with examination of the filings. As the objective of the system is to provide a central, verifiable, searchable venue for disclosures, examination is unnecessary. Contests of content and date of disclosure do not arise at this stage and can be deferred until examination of a non-provisional application (if one is filed). With this approach, there is no additional cost of the system, other than the minor cost of additional electronic storage space and the electronic processing required to produce digital images and full-text indexing of the filings.\textsuperscript{115}

Applicants who seek a patent and then decide to elect Statutory Invention Registration instead (or who file a Statutory Invention Registration and then seek to convert it to a patent application) need not receive a refund of the patent filing fees, but they should not pay more to convert the patent application to a Statutory

\textsuperscript{113} As with the pre-repeal 35 U. S. C. § 157, an applicant could decide to seek patent protection instead of a defensive disclosure at any time up until publication, but would need to file a “continuing application” in order to do so. This would trigger the obligation to pay filing fees, so the inventor would only get free registration for those inventions that were being dedicated to the public. In analyzing the 1985 Statutory Invention Registration system, Guffey justifies the statute’s tiered fee system, which charged more for electing Statutory Invention Registration after the Patent Office had begun examining the application than for electing Statutory Invention Registration at the outset, noting that earlier election saves the Patent Office resources and speeds the process. Guffey, supra note 12, at 299-300. While correct, this analysis does not take account of the fact that an applicant is entitled to at least two reviews of an application and pays a fixed filing fee regardless of whether it is reviewed once or twice. Thus, encouraging an applicant to agree to publication without patenting after the first examination and action would be a cost-saving for the Patent Office and could result in publication earlier than if the applicant requested a second review.\textsuperscript{114} One common problem encountered by startup companies seeking funding is how to provide potential investors with enough information to make an informed investment decision, while preventing disclosures which might jeopardize patent protection. Confidentiality agreements provide one solution, but these may be difficult to negotiate. Filing a provisional patent application prior to any disclosure is another option, but funds may not be available and the filing may be premature and place unachievable time constraints on development of the technology. Once a provisional application is filed, there is an un-extendable twelve-month deadline for filing non-provisional and foreign or Patent Cooperation Treaty applications (which are more costly than provisional applications). 35 U.S.C. § 119(e)(1) (2014).\textsuperscript{115} These costs could be minimized by requiring that statutory invention registration filings be submitted electronically, or assessing a paper surcharge to cover the processing costs of digitizing paper filings. The Patent Office already employs such incentives for both provisional and non-provisional applications. See, 37 C.F.R. § 1.16(a) (2013).
Invention Registration. Those who seek a Statutory Invention Registration from the outset should pay no filing fees.

5. The system should be administered by the Patent Office.

Once it is decided to reinstate a Statutory Invention Registration, the choice of location and administrative authority is obvious. The Patent Office previously administered the system and has in place the systems and personnel to manage indexing and publication.\(^{116}\) The Patent Office is also the nation’s preeminent repository of inventive heritage and the logical place for consumers to look for information on existing technology; the Patent Office likely would be the largest consumer of the information collected in a Statutory Invention Registration system.

While in certain circumstances a statutory invention registration would have advantages over a provisional application,\(^ {117}\) should the inventor believe there is a benefit to maintaining secrecy for eighteen months, the option of filing a provisional patent application would still be available\(^ {118}\) and the transition from patent application to statutory invention registration (or vice versa) could take place seamlessly within the Patent Office.

Advantages of a Patent Office administered system over a posting on the Internet or publication in a journal (both of which would continue to constitute prior art) would include the centralization of the publications and the absolute certainty of their availability dates. A Patent Office managed site would provide independently verifiable proof of the date and content of disclosure.\(^ {119}\) Although it is possible to include the upload date with an Internet posting, and some websites include verification, not all websites publish that data and a potential factual issue is presented. Especially if the website on which the publication is posted is under the control of the inventor, the actual date of publication may present an issue which requires proof. A government-operated site would

---

\(^{116}\) The Patent Office also typically runs a surplus (which it turns over to the Treasury) and could probably fund the system internally.

\(^{117}\) In effect, it would provide an additional year of patent protection. An inventor could file a statutory invention registration, which would be treated as a disclosure. The inventor would then have a year within which to file a U.S. provisional patent application. In turn, this would provide an additional year within which to file a U.S. non-provisional patent application.

\(^{118}\) If the inventor only wanted U.S. rights, filing a request for non-publication would delay disclosure until the patent issued. 35 U.S.C. § 122(b)(2)(B) (2014). Other techniques for minimizing disclosures helpful to competitors (such as dividing a disclosure into multiple filings) have been created by other sections of the AIA, but are beyond the scope of this article.

\(^{119}\) Adopting the “mailbox” rules accorded filings of provisional and non-provisional applications could provide further benefits and place statutory invention registration filings on a par with Internet postings in terms of timing. Documents mailed to the Patent Office using express mail are treated as though filed on the date they were deposited with the post office. 37 C.F.R. § 1.10(a)(1) (2014); MPEP § 505 (2014). Thus, a disclosure could be made effective as prior art against other inventors on a same-day basis.
provide an independent, verifiable date of publication. From an applicant’s perspective, this would make most priority contests easy to resolve.120 Except in the highly unlikely event of filings on the same day, it would be easy to determine the “first inventor to file” since the date of filing would be in official records. Should additional incentives be necessary, publication of a disclosure as a Statutory Invention Registration could be deemed constructive notice and any subsequent application could be deemed derived from the Statutory Invention Registration.

From the public interest perspective, this furthers the goal of disclosure as a means to prevent the issuance of patents which duplicate the disclosure, thereby placing information in the public domain rather than under the monopoly control of an applicant for a patent. While a print publication or a posting on a website would, if proven, accomplish the same result, the cost of proof would be higher as would the risk of issuing a patent later found to be invalid (with the attendant costs of proceedings to invalidate the patent after-the-fact.)

V. CONCLUSION

In sum, what emerges is the likelihood that the Statutory Invention Registration system was eliminated based on admittedly compelling evidence of non-use, but without considering how contemporaneous changes in the law might make the system much more useful. The absolute bar feature of the new first-to-file system and the exemption for an inventor’s own disclosures change filing strategies, particularly for underfunded inventors.

Universities, startup ventures and early stage companies need a low cost alternative to the sequential-filing strategy which well-funded companies can employ to take advantage of the new law. The general public benefits more from disclosures than from patents, as disclosures provide the benefit of disseminating knowledge without the detriment of creating a limited term monopoly around the new knowledge. A reinstated Statutory Invention Registration system, modified as described above, is a low cost method for providing both benefits.

120 One of the arguments in favor of the shift from first-to-invent to first-to-file was the elimination of priority contests known as “interferences.” “As part of the transition to a simpler, more efficient first-inventor-to-file system, this section eliminates costly, complex interference proceedings, because priority will be based on the first application. A new administrative proceeding—called a “derivation” proceeding—is created to ensure that the first person to file the application is actually a true inventor.” S. Rep. No. 111-18, at 5-6 (2009). Whether interferences were a serious problem to begin with, and whether the change will actually accomplish the goal of eliminating them, is open to debate. See Oppenheimer, supra note 2. It is quite possible that many situations that could have previously led to interferences will instead present derivation issues. 35 U.S.C. § 135 (2014). These will be decided by the same Board that previously handled interferences. Id.