

# **Deferred Examination of Patent Applications: Implications for Innovation Policy**

John R. Thomas Visiting Scholar

May 27, 2010

**Congressional Research Service** 7-5700 www.crs.gov R41261

## Summary

Recent congressional interest in the patent system has in part focused upon the capabilities of the U.S. Patent and Trademark Office (USPTO). Many experts have expressed concern that the USPTO lacks the capacity to process the large number of patent applications that it receives. The USPTO's growing inventory of filed, but unexamined applications could potentially lead to longer delays in the USPTO patent-granting process.

Under current law, a USPTO examiner automatically reviews each patent application that is filed. Some observers have suggested that the USPTO instead adopt a system of "deferred examination" in order to alleviate its growing backlog. Under this system, the USPTO would not automatically review each application. Applicants would instead be required to submit a specific request for examination. Failure to file such a request within a specified time period—typically ranging from three to five years—would result in the abandonment of the application.

Deferred examination may hold potential benefits. For example, some inventors who file a patent application may subsequently decide ultimately not to expend further resources in obtaining a patent on that technology due to marketplace developments or other reasons. The USPTO then does not need to review those applications, allowing others to move through the agency more quickly. Deferred examination may be particularly suitable for enterprises that sell products, including pharmaceuticals and medical devices, that may have a long development cycle and be subject to regulatory approval. Proponents of deferred examination observe that numerous foreign patent offices have used this system for many years. They further explain that given increasingly lengthy delays, the USPTO effectively operates under a *de facto* deferral regime today.

On the other hand, some experts believe that deferred examination holds negative consequences. Deferred examination may cause many years to pass between the time an application was filed and the date a patent issues. Other firms may not know for some time whether their new products will infringe a patent that resulted from deferred examination. It is also possible that applicants could use the system strategically. They may choose to defer examination, monitor the industry, and then amend their applications in order to obtain patents that cover the successful products of their competitors. Opponents of deferred examination are also skeptical that a significant number of applications will "drop out" of the USPTO if this system were adopted. They also explain that the USPTO currently allows applicants to delay prosecution for up to three years, but that this procedure is rarely used.

Designers of a deferred examination system may potentially manipulate a number of parameters in an attempt to maximize potential benefits while minimizing perceived disadvantages. Among these parameters are the maximum length of the deferral period, the ability of third parties to request examination of a deferred application, the framing of the system as an "opt-in" or "optout" procedure for applicants, pre-grant publication of deferred applications, the fee structure, the impact of deferred examination upon patent term, and the availability of third party "intervening rights" for patents that issue from deferred applications. Options for implementing deferred examination include both legislation and USPTO rulemaking.

# Contents

Introduction	1
Fundamentals of Patent Acquisition	2
Contemporary Challenges for the USPTO	4
The Concept of Deferred Examination	6
Innovation Issues	8
Potential Benefits of Deferred Examination	8
Potential Drawbacks of Deferred Examination	9
Deferred Examination Design Parameters	10
Concluding Observations	13

### Contacts

Author Contact Information	14	ŀ
Acknowledgments	14	ł

# Introduction

Growing recognition of the crucial role that technological innovation plays in the U.S economy has led to increased congressional activity with respect to the intellectual property laws. As evidenced by provisions within several patent reform bills pending before the 111<sup>th</sup> Congress,<sup>1</sup> the operation of the U.S. Patent and Trademark Office (USPTO) is among the subjects of legislative interest. Many knowledgeable observers have expressed concern that the USPTO does not possess the capability to process the large number of patent applications that it receives.<sup>2</sup> The growing backlog of filed, but unexamined applications could potentially lead to long delays in the time the USPTO requires to grant patents.<sup>3</sup>

Some experts believe that the concept of "deferred examination" may assist in alleviating the growing USPTO inventory of applications that have yet to be reviewed.<sup>4</sup> Under current law, a USPTO examiner reviews each patent application that is filed.<sup>5</sup> In contrast, the patent offices of many foreign nations, including Canada, Germany, Japan, and the United Kingdom, do not automatically examine every application. In these offices, an examiner will not consider the application unless the applicant submits a request for examination, including an additional fee. Failure to file such a request within a specified time period—usually from three to five years—results in the abandonment of the application.<sup>6</sup>

Deferred examination may hold potential benefits. Some inventors who file patent applications may subsequently decide not to expend the additional resources needed to obtain patents. If, for example, an invention proves less promising than it initially appeared due to technical or marketplace developments, or government approval to market the technology cannot be obtained, a patent applicant may rationally decide not to pursue the matter further. The USPTO then does not need to review those applications, allowing others to move through the agency more quickly.<sup>7</sup> On the other hand, some experts believe that deferred examination holds negative consequences, such as marketplace uncertainty. Firms may not know for many years whether their new products will infringe a patent that resulted from deferred examination.<sup>8</sup>

This report provides an overview of deferred patent examination. It begins by offering a brief review of patent acquisition proceedings as well as challenges faced by the USPTO. The report

<sup>&</sup>lt;sup>1</sup> See CRS Report R40481, Patent Reform in the 111<sup>th</sup> Congress: Innovation Issues, by Wendy H. Schacht and John R. Thomas.

<sup>&</sup>lt;sup>2</sup> See, e.g., Michael J. Meurer, "Patent Examination Priorities," 51 William and Mary Law Review (Nov. 2009), 675.

<sup>&</sup>lt;sup>3</sup> See Patrick A. Doody, "How to Eliminate the Backlog at the Patent Office," 37 American Intellectual Property Law Association Quarterly Journal (2009), 395.

<sup>&</sup>lt;sup>4</sup> See, e.g., Jason D. Grier, "Chasing Its Own Tail? An Analysis of the USPTO's Efforts to Reduce the Patent Backlog," 31 *Houston Journal of International Law* (Summer 2009), 617.

<sup>&</sup>lt;sup>5</sup> 35 U.S.C. § 131.

<sup>&</sup>lt;sup>6</sup> See generally Nancy J. Linck, et al., "A New Patent Examination System for the New Millennium," 35 Houston Law Review (1998), 305.

<sup>&</sup>lt;sup>7</sup> See Michael Abramowicz & John F. Duffy, "Ending the Patenting Monopoly," 157 University of Pennsylvania Law Review (2009), 1541.

<sup>&</sup>lt;sup>8</sup> See "Franklin Pierce Law Center's Eighth Intellectual Property System Major Issues Conference," 47 *IDEA: The Intellectual Property Law Review* (2006), 1 (comments of Herb Wamsley, Executive Director, Intellectual Property Owners Association).

then introduces the concept of deferred examination. The potential positive and negative consequences of deferred examination upon the environment for innovation within the United States are then explored. The report closes by identifying salient design parameters for deferred examination systems and reviewing congressional options.

# **Fundamentals of Patent Acquisition**

The U.S. Constitution provides Congress with the power "To promote the Progress of Science and useful Arts, by securing for limited Times to ... Inventors the exclusive Right to their ... Discoveries."<sup>9</sup> In accordance with the Patent Act of 1952 (the "Patent Act"),<sup>10</sup> an inventor may seek the grant of a patent by preparing and submitting an application to the USPTO.<sup>11</sup> Under current law, each application is then placed into queue for eventual review by officials known as examiners.<sup>12</sup>

The USPTO publishes most, but not all, pending patent applications "promptly after the expiration of a period of 18 months" from the filing date.<sup>13</sup> Among the applications that are not published prior to grant are those that the applicant represents will not be the subject of patent protection abroad. In particular, if an applicant certifies that the invention disclosed in the U.S. application will not be the subject of a patent application in another country that requires publication of applications 18 months after filing, then the USPTO will not publish the application.

USPTO officials known as examiners then determine whether the invention disclosed in the application merits the award of a patent. The USPTO examiner will consider a number of legal requirements, including whether the submitted application fully explains and distinctly claims the invention.<sup>14</sup> In particular, the application must enable persons skilled in the art to make and use the invention without undue experimentation.<sup>15</sup> In addition, the application must provide the "best mode," or preferred way, that the applicant knows to practice the invention.<sup>16</sup>

The examiner will also determine whether the invention itself fulfills certain substantive standards set by the patent statute. To be patentable, an invention must meet four primary requirements. First, the invention must fall within at least one category of patentable subject matter.<sup>17</sup> According to the Patent Act, an invention which is a "process, machine, manufacture, or composition of matter" is eligible for patenting.<sup>18</sup> Second, the invention must be useful,<sup>19</sup> a

<sup>&</sup>lt;sup>9</sup> Article I, Section 8, Clause 8.

<sup>&</sup>lt;sup>10</sup> P.L. 82-593, 66 Stat. 792 (codified at Title 35 United States Code).

<sup>&</sup>lt;sup>11</sup> 35 U.S.C. § 111.

<sup>12 35</sup> U.S.C. § 131.

<sup>&</sup>lt;sup>13</sup> 35 U.S.C. § 122(b).

<sup>&</sup>lt;sup>14</sup> 35 U.S.C. § 112.

<sup>&</sup>lt;sup>15</sup> See Martek Biosciences Corp. v. Nutrinova, Inc., 579 F.3d 1363 (Fed. Cir. 2009).

<sup>&</sup>lt;sup>16</sup> 35 U.S.C. § 112.

<sup>&</sup>lt;sup>17</sup> See Bilski v. Kappos, \_\_\_\_ U.S. \_\_\_\_ (2010).

<sup>&</sup>lt;sup>18</sup> 35 U.S.C. § 101.

<sup>&</sup>lt;sup>19</sup> Id.

requirement that is satisfied if the invention is operable and provides a tangible benefit.<sup>20</sup> Third, the invention must be novel, or different, from subject matter disclosed by an earlier patent, publication, or other state-of-the-art knowledge.<sup>21</sup> Finally, an invention is not patentable if "the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."<sup>22</sup> This requirement of "nonobviousness" prevents the issuance of patents claiming subject matter that a skilled artisan would have been able to implement in view of the knowledge of the state of the art.<sup>23</sup>

If the USPTO allows the patent to issue, its owner obtains the right to exclude others from making, using, selling, offering to sell, or importing into the United States the patented invention.<sup>24</sup> Those who engage in those acts without the permission of the patentee during the term of the patent can be held liable for infringement. Adjudicated infringers may be enjoined from further infringing acts.<sup>25</sup> The patent statute also provides for an award of damages "adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer."<sup>26</sup>

The maximum term of patent protection is ordinarily set at 20 years from the date the application is filed.<sup>27</sup> At the end of that period, others may employ that invention without regard to the expired patent. Although patent term is based upon the filing date, the patentee gains no enforceable legal rights until the USPTO allows the application to issue as a granted patent. A number of Patent Act provisions may modify the basic 20-year term, including examination delays at the USPTO<sup>28</sup> and delays in obtaining marketing approval for the patented invention from other federal agencies.<sup>29</sup>

Like most rights, those provided by a patent are not self-enforcing. Patent owners who wish to compel others to respect their proprietary interests must commence enforcement proceedings, which most commonly consist of litigation in the federal courts.<sup>30</sup> Although issued patents enjoy a presumption of validity, accused infringers may assert that a patent is invalid or unenforceable on a number of grounds.<sup>31</sup> The Court of Appeals for the Federal Circuit (Federal Circuit) possesses nationwide jurisdiction over most patent appeals from the district courts.<sup>32</sup> The Supreme Court enjoys discretionary authority to review cases decided by the Federal Circuit.<sup>33</sup>

- <sup>22</sup> 35 U.S.C. § 103.
- <sup>23</sup>See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007).
- <sup>24</sup> 35 U.S.C. § 271.

- <sup>29</sup> 35 U.S.C. § 156.
- <sup>30</sup> 35 U.S.C. § 281.
- <sup>31</sup> 35 U.S.C. § 282.
- <sup>32</sup> 28 U.S.C. § 1295(a)(1).

<sup>&</sup>lt;sup>20</sup> See In re '318 Patent Infringement Litigation, 583 F.3d 1317 (Fed. Cir. 2009).

<sup>&</sup>lt;sup>21</sup> 35 U.S.C. § 102.

<sup>&</sup>lt;sup>25</sup> 35 U.S.C. § 283.

<sup>&</sup>lt;sup>26</sup> 35 U.S.C. § 284.

<sup>&</sup>lt;sup>27</sup> 35 U.S.C. § 154(a)(2).

<sup>&</sup>lt;sup>28</sup> 35 U.S.C. § 154(b).

<sup>33 28</sup> U.S.C. § 1254(1).

### **Contemporary Challenges for the USPTO**

The growing popularity of the patent system has placed strains upon the resources of the USPTO. During 2009,<sup>34</sup> the USPTO received 485,500 applications—a decrease of 2.3% from the 496,886 applications it received during the 2008 fiscal year.<sup>35</sup> The number of applications filed in 2009 was still greater than the 468,330 filed in 2007,<sup>36</sup> however. In turn, this figure was substantially larger than the annual filings achieved just a few years ago. In 2000, for example, 293,244 applications were filed at the USPTO.<sup>37</sup>

The USPTO has candidly admitted that "the volume of patent applications continues to outpace our capacity to examine them."<sup>38</sup> As a consequence, the USPTO reportedly holds an inventory in excess of 1.2 million patent applications that have yet to be reviewed by an examiner.<sup>39</sup> In addition, a USPTO examiner in 2009 would not review a patent application until, on average, 25.8 months after it was filed.<sup>40</sup> The "first action pendency" during 2000 was 13.6 months.<sup>41</sup> Many observers believe that if current conditions continue, the backlog and delay are likely to grow at the USPTO in coming years.<sup>42</sup>

Long delays for patent approvals may negatively impact high technology industries by increasing uncertainty about the availability and scope of patent rights. For market segments that feature a rapid pace of innovation and short product cycles, such as consumer electronics, lengthy USPTO delays may also significantly devalue the patent right. Put simply, by the time a patent issues, the entire industry might have moved on to more advanced technologies.<sup>43</sup> Commerce Secretary Gary Locke reportedly described the length of time the USPTO requires to issue patents as "unacceptable," explaining that "[t]his delay causes uncertainty for inventors and entrepreneurs and impedes our economic recovery." USPTO Director David Kappos recently opined that "[e]very quality patent application that sits on the shelf represents jobs not created."<sup>44</sup>

<sup>&</sup>lt;sup>34</sup> References to particular years in this discussion refer to the USPTO fiscal year, which extends from October 1<sup>st</sup> to September 30<sup>th</sup> of each calendar year.

<sup>&</sup>lt;sup>35</sup>See David Goldman, "Recession's Latest Victim: U.S. Innovation," (Dec. 11, 2009) (available at http://money.cnn.com).

<sup>&</sup>lt;sup>36</sup> See "Patent Applications" (available at http://uspatentstatistics.com/).

<sup>&</sup>lt;sup>37</sup> USPTO, A New Organization for a New Millennium: Performance and Accountability Report Fiscal Year 2000 (available at http://www.uspto.gov/about/stratplan/ar).

<sup>&</sup>lt;sup>38</sup> USPTO, 2007–2012 Strategic Plan, at 6 (available at http://patents.uspto.gov/web/offices/com/strat2007/ stratplan2007-2012.pdf)

<sup>&</sup>lt;sup>39</sup> See John Schmid & Ben Poston, "Patent Delays Harmful to U.S. Economy, Commerce Secretary Says," *Milwaukee Journal Sentinel* (Aug. 23, 2009) (available at http://www.jsonline.com/business/54199852.html).

<sup>&</sup>lt;sup>40</sup> USPTO, *Performance and Accountability Report Fiscal Year 2009* (available at http://www.uspto.gov/web/ offices/com/ annual/2009/mda\_02\_02.html).

<sup>&</sup>lt;sup>41</sup>USPTO, *2003 Performance and Accountability Report* (available at http://www.uspto.gov/about/ stratplan/ar/2003/040201\_patentperform.jsp).

<sup>&</sup>lt;sup>42</sup> See, e.g., Jon Dudas et al., "Let the PTO Pay Its Own Way," 198 New Jersey Law Journal no. 12 (Dec. 21, 2009), 975; Steven Andersen, "Out of Balance," *Inside Counsel* (Nov. 1, 2009).

<sup>&</sup>lt;sup>43</sup> See Goldman, supra.

<sup>&</sup>lt;sup>44</sup>Intellectual Property Office (UK), *UK and US Announce Action Plan to Reduce Global Patent Backlogs* (March 10, 2010) (available at http://www.ipo.gov.uk/about/press/press-release/press-release-2010/press-release-20100310.htm).

In addition, under current law, USPTO delays may qualify certain patents for an extension of term.<sup>45</sup> For example, if the USPTO does not respond to an application within 14 months of the day it is filed, the term of a patent that results from that application is extended by one day for each day of delay. Given that the average first action pendency is now almost 26 months, this rule of "Patent Term Adjustment" may cause many U.S. patents to have a term that exceeds 20 years.<sup>46</sup> A patent with a longer term may be of greater value to its proprietor, but also may impact the ability of others to develop competing products.<sup>47</sup>

The USPTO has developed a number of initiatives in order to address its backlog of unexamined patent applications. The agency has hired many new examiners, including 1,193 in 2006; 1,215 in 2007; and 1,211 in 2008.<sup>48</sup> The significance of this hiring rate should be assessed in view of the fact that in 2009, the total size of the patent examining corps was 6,242.<sup>49</sup> The recent economic downturn has caused the USPTO to limit new hiring, however.<sup>50</sup> As the title of recent congressional testimony by the Government Accountability Office—"Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog"<sup>51</sup>—indicates, many observers are of the view that "[d]ue to both monetary and infrastructure constraints, the USPTO cannot simply hire examiners to stem the tide of applications."<sup>52</sup>

In 2007, the USPTO also proposed rules with respect to claims and so-called continued applications that were designed to reduce its examination burdens. These rules would have limited the number of claims that could be filed in a particular patent application, unless the applicant supplied the USPTO with an "Examination Support Document" in furtherance of that application.<sup>53</sup> They would have also limited the number of continued applications that could be filed, absent a petition and showing by the patent applicant of the need for such applications.<sup>54</sup> These rules never came into effect due to a temporary court ruling enjoining their implementation.<sup>55</sup> In the face of considerable opposition to these rules by many members of the patent bar and innovative firms, the USPTO announced on October 8, 2009, that it was rescinding the rules package entirely.<sup>56</sup>

<sup>&</sup>lt;sup>45</sup> 35 U.S.C. § 154(b).

<sup>&</sup>lt;sup>46</sup> See PatentlyO, Patent Term Adjustment Statistics (Jan. 13, 2010) (available at http://www.patentlyo.com/patent/2010/01/patent-term-adjustment-statistics.html).

<sup>&</sup>lt;sup>47</sup> See generally Scott E. Kamholz, "Patent Term Adjustment for Fun and Profit," *Intellectual Property Today* (Aug. 2006), 24.

<sup>&</sup>lt;sup>48</sup> USPTO, A New Organization for a New Millennium: Performance and Accountability Report Fiscal Year 2008 (available at http://www.uspto.gov/web/offices/com/annual/2008/mda\_02\_02.html).

<sup>&</sup>lt;sup>49</sup> USPTO, A New Organization for a New Millennium: Performance and Accountability Report Fiscal Year 2009 (available at http://www.uspto.gov/about/stratplan/ar/2009/2009annualreport.pdf).

<sup>&</sup>lt;sup>50</sup> Id.

<sup>&</sup>lt;sup>51</sup>Government Accountability Office, U.S. Patent and Trademark Office: Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog (Feb. 27, 2008) (available at http://www.gao.gov/new.items/d08527t.pdf).

<sup>&</sup>lt;sup>52</sup> See Kevin Myhre, "Tafas v. Dudas and Tafas v. Doll: The Problem of Efficient Innovation," 16 Boston University Journal of Science and Technology Law (2010), 157.

<sup>&</sup>lt;sup>53</sup> See Dept. of Commerce, USPTO, Final Rule, "Change to Practice for Continued Examination Filings, Patent Applications Containing Patentably Indistinct Claims, and Examination of Claims in Patent Applications," 72 Federal Register (August 21, 2007), 46716.

<sup>&</sup>lt;sup>54</sup> Id.

<sup>55</sup> See Tafas v. Doll, 559 F.3d 1345 (Fed. Cir.), vacated, 328 Fed. Appx. 658 (Fed. Cir. 2009).

<sup>&</sup>lt;sup>56</sup> USPTO, Press Release, USPTO Rescinds Controversial Patent Regulations Package Proposed by Previous Administration (Oct. 8, 2009) (available at http://www.uspto.gov/news/09\_21.jsp).

More recently, the USPTO announced a "Patent Application Backlog Reduction Stimulus Plan."<sup>57</sup> Under that program, an individual, small firm, or other enterprise that qualifies as a "small entity" may choose to abandon a previously filed application. If the applicant does so, he may select another application to be examined on an expedited basis. According to the USPTO, "[t]his procedure allows a small entity applicant who has multiple applications currently pending before the USPTO to have one of the applications accorded special status for examination if the applicant is willing to expressly abandon an application that has not been examined."<sup>58</sup> The Patent Application Backlog Reduction Stimulus Plan has reportedly been the subject of only limited participation.<sup>59</sup>

As record-setting patent filing rates continue to strain agency resources, the USPTO has actively considered new concepts for administering the patent examination system. Explaining that it "frequently receives suggestions that the USPTO adopt a deferral of examination procedure,"<sup>60</sup> the USPTO held a roundtable on February 12, 2009, in order to obtain input on the possibility of adopting this system. The remainder of this report reviews the concept of deferred examination.

### The Concept of Deferred Examination

The Patent Act currently requires the USPTO to review each patent application to determine whether it should issue into a patent or not.<sup>61</sup> Inventors pay for this service upon filing their applications. The USPTO has established an optional deferral procedure through regulation.<sup>62</sup> In order to defer, the applicant must pay an additional \$130 processing fee and, at the outset, choose the number of months of deferral.<sup>63</sup> The maximum period of deferral is 36 months. However, applicants have reportedly used this procedure infrequently.<sup>64</sup>

An alternative regime employed by certain other patent-granting nations is termed "deferred examination," or, more rarely, "examination on request."<sup>65</sup> Under this procedure, patent applications are not automatically placed into queue to be examined. Rather, the applicant must make an additional, affirmative request for examination, and pay an additional fee. This request must be made within a stipulated period of time—for example, three, five, or seven years—or the application is deemed to have been abandoned.<sup>66</sup>

<sup>64</sup> USPTO Roundtable Notice, *supra*.

<sup>&</sup>lt;sup>57</sup> Dept. of Commerce, USTPO, "Patent Application Backlog Reduction Stimulus Plan," 74 *Federal Register* 62285 (Nov. 27, 2009).

<sup>&</sup>lt;sup>58</sup> *Id.* at 62286.

<sup>&</sup>lt;sup>59</sup>See Perry E. Van Over, "A New Pilot Program: Patent Application Backlog Reduction Stimulus Plan," *Orthopreneur* (March/April 2010), 36.

<sup>&</sup>lt;sup>60</sup> Dept. of Commerce, USPTO, "Request for Comments and Notice of Roundtable on Deferred Examination for Patent Applications," 74 *Federal Register* (Jan. 28, 2009), 4946 ("USPTO Roundtable Notice").

<sup>&</sup>lt;sup>61</sup> 35 U.S.C. § 131.

<sup>&</sup>lt;sup>62</sup> See Changes to Implement Eighteen-Month Publication of Patent Applications, 65 Federal Register (Sept. 20, 2000), 57023.

<sup>&</sup>lt;sup>63</sup> See 37 CFR 1.103(d).

<sup>&</sup>lt;sup>65</sup> *See, e.g.*, Letter from Tom DiLenge, General Counsel, Biotechnology Industry Organization, to the Honorable John J. Doll, Acting Director of the USPTO (May 29, 2009) (available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/deferredcomments/bio.pdf) ("BIO Letter").

<sup>&</sup>lt;sup>66</sup> See Sean A. Pager, "Patents on a Shoestring: Making Patent Protection Work for Developing Countries," 23 Georgia (continued...)

Deferred examination is reportedly employed by many patent-granting nations, including each of the top 10 U.S. trading partners with the exception of Mexico.<sup>67</sup> Jurisdictions that have adopted deferred examination report that many applicants never request a substantive examination. Further, the number of applications that are never examined appears to increase as the period of deferral is lengthened. For example, the European Patent Office (EPO) requires that a request for examination be made within six months of the EPO's publication of the so-called European Search Report. Because the EPO typically takes about one year to publish its search report, examination must be requested within approximately 18 months. In 2008, the EPO reported that requests for examination were received with respect to 93.5% of all applications.<sup>68</sup>

In contrast, the Japan Patent Office (JPO) currently operates under a longer, three-year period of deferral. In 2008, the JPO reported that only 65.6% of all applications proceeded to examination.<sup>69</sup> Prior to 2001, when the JPO allowed an even lengthier seven-year period of deferral, the dropout rate was correspondingly greater. According to one estimate, as many as 65% of JPO applications were never examined.<sup>70</sup> The experience of the Canadian Intellectual Property Office (CIPO) is similar. Canadian law allows for a five-year period of deferral that reportedly results in a "dropout rate" of about 35% of filed applications.<sup>71</sup> Other patent offices have also reported substantial dropout rates as well.<sup>72</sup>

Applicants may choose not to pursue their filed applications further for a number of reasons. They may determine that marketplace, regulatory, or technical developments have made further prosecution of that application not worthwhile. Some inventors may also determine that the inventions disclosed in their filed applications do not meet the legal standards of patentability. In particular, the EPO and certain other patent offices provide all applicants with a "Search Report" that lists other patents, journal articles, and other references that document the state of the art.<sup>73</sup> Upon reviewing this information, some applicants may determine that it is unlikely their inventions would be considered patentable, and therefore decline to request examination. Other applicants may no longer be in business or lack funding to continue to advance their applications.<sup>74</sup>

The possibility of U.S. adoption of deferred examination has proven to be a controversial topic. While some patent professionals believe that the possibility of "examination upon request" would

<sup>(...</sup>continued)

State University Law Review (2007), 755.

<sup>&</sup>lt;sup>67</sup> See Letter from Alan Hammond, Chief Intellectual Property Officer, Life Technologies, to to the Honorable John J. Doll, Acting Director of the USPTO (Feb. 26, 2009) (available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/lifetechcorp.pdf).

 <sup>&</sup>lt;sup>68</sup> The Trilateral Offices, *Four Offices Statistical Report* (2008) (available at http://www.trilateral.net).
<sup>69</sup> Id.

<sup>&</sup>lt;sup>70</sup> See Robert A. Clarke, "U.S. Continuity Law and its Impact on the Comparative Patenting Rates of the U.S., Japan and the European Patent Office," 85 Journal of the Patent and Trademark Office Society (2003), 335.

<sup>&</sup>lt;sup>71</sup> See James Rogan, Director, USPTO, Keynote Remarks at the ABA/Intellectual Property Law Section IPL Summer Conference (June 27, 2002).

<sup>&</sup>lt;sup>72</sup> See Paul F. Prestia and Brian A. Cocca, *Deferred Patent Examination: De Facto or De Jure?* (Nov. 8, 2008) (available at http://www.ratnerprestia.com/143?article=213).

<sup>&</sup>lt;sup>73</sup> See Marco T. Connor & Lin Yasong, "How to Get Patent Protection in Europe?," 90 Journal of the Patent and Trademark Office Society (2008), 169.

<sup>&</sup>lt;sup>74</sup> See generally Steve Seidenberg, "Novel Ideas: PTO Proposes a New Suite of Patent Products to Streamline Applications," *Inside Counsel* (Jan. 1, 2007), at 22.

advantage both patent applicants and the USPTO, others believe that this system has too many negative aspects to be worthy of adoption. This report next considers some of the possible benefits and drawbacks of deferred examination.

### **Innovation Issues**

#### **Potential Benefits of Deferred Examination**

Supporters of deferred examination assert that U.S. adoption would result in a reduction of workload for the USPTO.<sup>75</sup> Under this view, many inventors who file applications at the USPTO might subsequently choose not to pursue them further. This set of applications need not receive any review whatsoever by agency examiners. This application dropout would in turn provide more resources for the USPTO to examine undeferred applications. Although the potential application dropout rate in the United States may be difficult to predict, some observers believe that the experience of foreign patent offices suggests that the reduction of USPTO workload could potentially be significant.<sup>76</sup> Others note that even a small decrease in applications that require examination would nonetheless assist the USPTO.<sup>77</sup>

Proponents of a deferred examination system also contend that with increasing application pendency rates at the USPTO, the United States effectively operates under a *de facto* deferral regime today.<sup>78</sup> As a result, any potential negative consequences of deferred examination have to some extent already been realized, while the advantages of a formal "examination upon request" system have yet to be obtained.

Some firms within the life sciences industry also explain that deferred examination provides a good match for products that are subject to lengthy regulatory approval delays. For example, drugs and certain medical devices require the approval of the Food and Drug Administration (FDA) prior to being sold to the public. Innovators of those products may need to file a patent application earlier in their development cycle in order to attract venture capital. However, the final design of the product is not certain until later in the development cycle. A delay during examination may allow the applicant to more closely tailor the claims of the patent to the final design of the product.<sup>79</sup>

In addition, some products submitted for regulatory review do not obtain FDA approval. The FDA may determine that some drugs and medical devices are not safe and effective within the meaning of the Federal Food Drug & Cosmetic Act.<sup>80</sup> In such cases, as journalist Steve

<sup>&</sup>lt;sup>75</sup> See Grier, supra.

<sup>&</sup>lt;sup>76</sup> See David P. Irimies, "Why the USPTO Should Adopt a Deferred Patent Examination System," 20 DePaul Journal of Art, Technology, and Intellectual Property (March 2010).

<sup>&</sup>lt;sup>77</sup> See Letter from Jimmy Jackson, Vice President of Public Policy & Communications, BIOCOM to Commissioner for Patents (May 29, 2009) (available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/deferredcomments/ biocom.pdf) ("BIOCOM Letter").

<sup>&</sup>lt;sup>78</sup> See Prestia & Cocca, supra.

<sup>&</sup>lt;sup>79</sup> Letter from Christopher L. White, Executive Vice President, AdvaMed, to the Hon. David Kappos, Director of the USPTO (Aug. 31, 2009) (available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/deferredcomments/ advamed.pdf).

<sup>&</sup>lt;sup>80</sup> Pub. L. No. 75-717, 52, Stat 1040 (1938).

Seidenberg describes the matter, sponsors of rejected products "wind up with patents they can't use."<sup>81</sup> Deferred patent examination may also make better use of government resources with respect to products that may never receive regulatory approval.

Other advocates of deferred examination observe that this system has been used by leading patent offices for many years. As explained by Robert J. Yarbrough, chairman of the Pennsylvania Intellectual Property Forum, the "benefits and pitfalls of deferred examination should be well known."<sup>82</sup> Mr. Yarbrough asserts that the United States could potentially draw upon this experience in designing its own system.

#### Potential Drawbacks of Deferred Examination

Although some experts believe that adoption of a deferred examination would work to the advantage of the patent community, others believe that this approach might fail to realize its purported benefits and also involves additional detriments. Many observers have suggested the possibility that deferred examination might increase uncertainty in the marketplace.<sup>83</sup> As explained by David M. Simon, chief patent counsel of Intel Corporation

[D]eferred examination that results in patents not issuing until perhaps ten years after filing could result in substantial claw back from the public domain when those deferred applications issue. Businesses will be surprised with patents suddenly issuing to preclude successful products.<sup>84</sup>

Other observers go further, suggesting that some patent applicants may attempt to manipulate the deferral system strategically. Some applicants may elect not to pursue allowance of their patents while monitoring the activities of their competitors. They might then attempt to amend their patent applications in an effort to obtain patent coverage of a competitor's product.<sup>85</sup> Although this possibility exists under current law,<sup>86</sup> deferred examination may provide another mechanism for creating so-called "submarine patents"—patents that remain submerged within the USPTO for many years, only to surface and surprise the marketplace.<sup>87</sup>

Skeptics of deferred examination recognize that the USPTO currently houses a significant inventory of unexamined applications and experiences long examination pendencies, trends that may lead both to marketplace uncertainty and strategic behavior by applicants. But they are concerned that adoption of deferred examination may exaggerate these unwelcome trends. Writing for the American Intellectual Property Law Association (AIPLA), Executive Director Q.

<sup>&</sup>lt;sup>81</sup> Seidenberg, *supra*.

<sup>&</sup>lt;sup>82</sup> Letter from Robert J. Yarbrough, Chairman, Pennsylvania Intellectual Property Law Forum, to Commissioner of Patents (Feb. 25, 2009) (available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/ deferredcomments/paipforum.pdf) ("PIPLF Letter").

<sup>&</sup>lt;sup>83</sup> See Seidenberg, supra.

<sup>&</sup>lt;sup>84</sup> Letter from David M. Simon, Chief Patent Counsel, Intel Corporation, to Commissioner for Patents (Feb. 24, 2009) (available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/deferredcomments/intel.pdf).

<sup>&</sup>lt;sup>85</sup> See BIO Letter, supra.

<sup>&</sup>lt;sup>86</sup> See Michael Meehan, "Increasing Certainty and Harnessing Private Information in the U.S. Patent System: A Proposal for Reform," 2010 *Stanford Technology Law Review* (Feb. 18, 2010), 1.

<sup>&</sup>lt;sup>87</sup> See Brian J. Love, "The Misuse of Reasonable Royalty Damages as a Patent Infringement Deterrent," 74 *Missouri Law Review* (2009), 909.

Todd Dickinson asserts that "although inventories tend to rise and fall over time, the creation of a deferred examination system would institutionalize a delay option in examination and may create further uncertainty in the system."<sup>88</sup>

Others believe that the relatively high dropout rates associated with foreign deferred examination systems will not be realized in the United States. According to these accounts, elements that contribute to the abandonment of applications abroad may not exist to the same extent domestically. In particular, the United States is a large market that has a long tradition of enforcing patents. Under this view, a U.S. patent might be more valuable to firms than patents granted by other nations. In turn, applicants may be less willing to abandon a U.S. application than an application filed elsewhere.<sup>89</sup>

Seemingly supporting this argument is the fact that the current USPTO rule allowing for deferred examination is little used.<sup>90</sup> The USPTO reported on January 28, 2009, that since the deferral alternative commenced on November 29, 2000, fewer than 200 applications have been deferred.<sup>91</sup> The reason for this low usage rate may be due to a variety of factors, potentially including lack of widespread knowledge of the provision and long application pendency rates even absent an express deferral. Given the potential complexity of each individual decision to abandon an application, a precise estimate of dropout rates within a proposed U.S. deferred examination system is likely unachievable.

Other commentators have expressed concern that a deferred examination system may have a negative impact upon the revenue that the USPTO receives through the fees it charges. AIPLA Executive Director Q. Todd Dickinson observes that the potential risk to USPTO income "will largely depend on the fees established for participating in deferred examination, on the assumed drop-out rate and loss of income from other fees."<sup>92</sup>

On the other hand, to the extent deferred examination leads to a decrease in initial filing fees, this system could potentially increase patent filing rates. This step could cause inventors to decrease the care with which they prepare applications, however, out of the recognition that they may not request examination for all of them. As Tom DiLenge, general counsel and vice president of the Biotechnology Industry Organization (BIO) writes, "some BIO members are concerned that a deferred examination system with a low threshold for initial application filings would lead to an increase in poor-quality filings, thereby triggering more public criticism of the patent system."<sup>93</sup>

### **Deferred Examination Design Parameters**

This brief discussion suggests that a deferred patent examination system potentially holds both positive and negative aspects. It also indicates a number of system parameters that the designers

<sup>&</sup>lt;sup>88</sup> Letter from Q. Todd Dickinson, Executive Director, AIPLA, to the Honorable John Doll, Acting Director, USPTO (Feb. 26, 2009) (available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/deferredcomments/aipla.pdf) ("AIPLA Letter").

<sup>&</sup>lt;sup>89</sup> AIPLA Letter, *supra*.

<sup>90</sup> See 37 C.F.R. § 1.103.

<sup>&</sup>lt;sup>91</sup> USPTO Roundtable Notice, supra.

<sup>&</sup>lt;sup>92</sup> AIPLA Letter, *supra*.

<sup>93</sup> BIO Letter, supra.

of a deferred examination system for the United States could potentially manipulate in an attempt to maximize its perceived advantages while minimizing its perceived disadvantages. Perhaps the most obvious of these parameters is the period of possible deferral. Leading foreign patent offices offer maximum periods of deferral ranging from approximately two years (at the European Patent Office)<sup>94</sup> to seven years (at the German Patent and Trademark Office),<sup>95</sup> with other patent offices providing intermediate periods of deferral. Experience suggests that the longer the period of maximum deferral, the greater the number of applications for which examination will never be requested. However, longer periods of deferral may also increase marketplace uncertainty about the availability and scope of patent rights.<sup>96</sup>

In deferral systems, the party who requests examination is usually the applicant. However, some deferral systems allow third parties to request examination as well. Upon receiving notice that a third party has exercised its "activation right," the applicant must either enter examination or abandon the application.<sup>97</sup> The activation right is intended to allow competitors of the patent applicant and other interested members of the public to obtain earlier certainty regarding the existence and extent of patent rights. Some commentators have expressed concern that liberal use of activation rights may burden patent applicants, however, and propose that the USPTO impose a fee in order to prevent abuses.<sup>98</sup>

Designers of a deferred examination system must also decide whether it applies to all patent applications, or instead to a more limited number based upon a particular field of technology or other factor.<sup>99</sup> In addition, the system could require deferral to be affirmatively elected, or alternatively apply deferral as a default. The current USPTO regulation allowing for deferral of application operates on an "opt-in" basis. As typically framed abroad, however, deferral is an "opt-out" system that obliges applicants to request examination.<sup>100</sup>

Whether deferred applications should be subject to different rules with respect to the pre-grant publication of applications has also been discussed. Under current law, not all applications are published "promptly after the expiration of a period of 18 months" from the filing date. Notably, if an applicant certifies that the invention disclosed in the U.S. application will not be the subject of a patent application in another country that requires publication of applications 18 months after filing, then the USPTO will not publish the application.<sup>101</sup>

Many commentators have suggested that all deferred applications should be published, regardless of whether the applicant will pursue foreign patents or not. Under this position, the policy goal of alerting the public about pending patent applications is of particular significance when a deferred

<sup>&</sup>lt;sup>94</sup> See IP Federation, *Deferred Examination of European Patent Applications* (July 2009) (available at http://www.ipfederation.com/document\_download.php?id=92).

<sup>&</sup>lt;sup>95</sup> See Joachim Henkel & Florian Jell, Alternative Motives to File for Patents: Profiting from Pendency and Publication (April 2009) (available at http://www.ssrn.com).

<sup>&</sup>lt;sup>96</sup> See AIPLA Letter, supra.

<sup>&</sup>lt;sup>97</sup> See Irimies, supra.

<sup>&</sup>lt;sup>98</sup> See Letter from Kathleen A. Asher, Intellectual Property Counsel, Philips Intellectual Property & Standards, to Commissioner for Patents (Feb. 25, 2009) (available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/ deferredcomments/philips.pdf).

<sup>&</sup>lt;sup>99</sup> See AIPLA Letter, supra.

<sup>&</sup>lt;sup>100</sup> See BIOCOM Letter, supra.

<sup>&</sup>lt;sup>101</sup> 35 U.S.C. § 122(b).

application may not issue for many years after it is filed. As a result, the exception for domesticonly applications would be eliminated if the application is deferred.<sup>102</sup>

The fee structure with respect to deferred applications may also be adjusted in view of the policy goals and fiscal needs of the USPTO. As one possibility, patent attorney Robert J. Yarbrough, who generally supports a deferred examination system, writes that the deferred "applicant should pay no higher fees than any other applicant and, preferably, should be given a discount."<sup>103</sup> For example, the USPTO currently assesses a \$220 examination fee that could be waived until the applicant requests that the USPTO perform this service.<sup>104</sup>

Another issue for consideration is the impact of deferred examination upon the term of a patent. Under current law, the maximum term of a patent is 20 years from the date the application was filed.<sup>105</sup> Because the applicant obtains no enforceable rights until the USPTO allows the patent to issue, each day the application spends at the USPTO effectively reduces the period during which the patent owner enjoys propriety rights.<sup>106</sup> Deferred examination implies that the effective term of patent would be reduced by the period measured from the filing date until the date the patent owner requests examination.<sup>107</sup>

At least one commentator has proposed that deferred examination be "term neutral."<sup>108</sup> Under this proposal, each day that an application is deferred would result in one day of term extension for any patent that results from that application. As an example, if a period of three years elapses between the date of filing and the date that examination is requested, then the maximum term of the patent would be 23 years from the date of filing. No current system of deferred examination is believed to provide for patent term extension in this manner.

Some observers have also proposed that patents that result from deferred applications be subject to "intervening rights."<sup>109</sup> Intervening rights allows a specific enterprise to engage in activities that would otherwise infringe an issued patent. The Patent Act currently allows third parties to enjoy intervening rights when a patent is amended by either reissue or reexamination,<sup>110</sup> or where a patent is revived after failure to pay a maintenance fee.<sup>111</sup> Some commentators have suggested that intervening rights should also apply to patents that issued from deferred applications,

<sup>&</sup>lt;sup>102</sup> See Steven Bennett & David Kappos, "Inside Views: Deferred Examination: A Solution Whose Time Has Come," *Intellectual Property Watch* (Mar. 12, 2009) (available at http://www.ip-watch.org/weblog/2009/03/12/inside-views-deferred-examination-a-solution-whose-time-has-come/).

<sup>&</sup>lt;sup>103</sup> PIPLF Letter, *supra*.

<sup>104 37</sup> C.F.R. § 1.

<sup>&</sup>lt;sup>105</sup> 35 U.S.C. § 154(a)(2).

<sup>&</sup>lt;sup>106</sup> See Patricia Montalvo, "How Will the New Twenty-Year Patent Term Affect You? A Look at the TRIPS Agreement and the Adoption of a Twenty-Year Patent Term," 12 Santa Clara Computer & High Technology Law Journal (Feb. 1996), 139.

<sup>&</sup>lt;sup>107</sup> See Irimes, supra.

<sup>&</sup>lt;sup>108</sup> Letter from Duane J. Roth, CEO, CONNECT, to the Honorable John J. Doll, Acting Director of the USPTO (Feb. 26, 2009) (available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/deferredcomments/connect.pdf).

<sup>&</sup>lt;sup>109</sup> Irimes, *supra*.

<sup>110 35</sup> U.S.C. §§ 251, 307.

<sup>&</sup>lt;sup>111</sup> 35 U.S.C. §41(c)(2).

provided that an enterprise commercialized a product during the deferral period that subsequently became subject to a patent.<sup>112</sup>

# **Concluding Observations**

A variety of options are available for Congress with respect to deferred examination. If the current situation is deemed appropriate, then no action need be taken. Alternatively, Congress could introduce a statutory deferred examination regime into the U.S. patent system via legislation. A third congressional option is to allow or encourage the USPTO to enact regulations that would encourage, or perhaps mandate, deferred examination of patent applications.

Whether deferred examination may be achieved by the USPTO through rulemaking, or whether congressional intervention would be required, is not entirely certain. The Patent Act currently requires the USPTO to examine each filed application.<sup>113</sup> However, Congress has also granted to the USPTO the power to "establish regulations, not inconsistent with law, which ... shall govern the conduct of proceedings in the Office."<sup>114</sup> The USPTO apparently relied upon this procedural rulemaking authority in order to enact its current regulation regarding deferred examination.<sup>115</sup> Assuming that the USPTO reasoned correctly, this regulation could potentially be expanded in order to develop a more full-fledged deferred examination system. As explained by Arti Rai, administrator for external affairs at the USPTO, "an improved system of deferred examination could in all likelihood be implemented through PTO regulation, so long as the PTO's procedural-rulemaking authority is not interpreted in an unduly cramped fashion."<sup>116</sup>

On the other hand, uncertainty over the precise extent of USPTO procedural rulemaking authority may prevent or limit further adaption of a deferred examination system absent congressional intervention.<sup>117</sup> Because this proposal potentially requires many changes to existing law with respect to such matters as fees, pre-grant publication of applications, intervening rights, and patent term, a court could potentially consider expanded deferred examination regulations to be substantive in nature and therefore beyond the ability of the USPTO to promulgate.<sup>118</sup> A legislative rather than regulatory response may therefore provide the most appropriate mechanism for adopting a deferred examination system.

The growing value of intellectual property within the world economy has placed increased demands upon the USPTO to process accurately a quantity of patent applications that was nearly unimaginable a generation ago. The USPTO has in part responded by encouraging policy discussion regarding new procedures for managing its increasingly strained resources. The possibility of U.S. adoption of deferred examination—a patent office practice that is accepted

<sup>&</sup>lt;sup>112</sup> Irimes, *supra*.

<sup>&</sup>lt;sup>113</sup> 35 U.S.C. § 131.

<sup>&</sup>lt;sup>114</sup>35 U.S.C. § 2(b)(2).

<sup>&</sup>lt;sup>115</sup> 35 C.F.R. § 1.103(d).

<sup>&</sup>lt;sup>116</sup> Arti Rai, "Growing Pains in the Administrative State: The Patent Office's Troubled Quest for Managerial Control," 157 University of Pennsylvania Law Review (2009), 2051, 2061 n.45

<sup>&</sup>lt;sup>117</sup> See Tafas v. Doll, 559 F.3d 1345, 1356 (Fed. Cir.), *vacated*, 328 Fed. Appx. 658 (Fed. Cir. 2009) (acknowledging difficulties in distinguishing between substantive and procedural rulemaking by the USPTO and concluding that "we do not purport to set forth a definitive rule for distinguishing between substance and procedure in this case....").

<sup>&</sup>lt;sup>118</sup> See Irimies, supra.

globally but controversial domestically—has once more become part of the discussion regarding patent reform. Ultimately, whether or not a deferred patent examination system would benefit the environment for innovation in the United States remains an open question.

#### **Author Contact Information**

John R. Thomas Visiting Scholar jrthomas@crs.loc.gov, 7-0975

#### Acknowledgments

This report was funded in part by a grant from the John D. and Catherine T. MacArthur Foundation.