

# Alternatives to Prompt, High-Quality Examination of All Patent Applications

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## I. Introduction

Deferred examination, multi-track examination, and multi-tiered patent systems have been proposed as systemic approaches to alleviate the backlog problem in Patent Offices around the world. This paper discusses some of these proposals and evaluates their potential viability for the United States patent system. The authors conclude that none of these suggestions offers an acceptable backlog-mitigation solution for the United States. Instead, structural approaches including those under consideration by the United States Patent & Trademark Office (USPTO), such as significant increases in examiner hiring and retention, rules reforms, and efficiency gains through employment practices and infrastructure upgrades, provide a more realistic path toward eliminating the backlog problem.

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The Intellectual Property Owners Association, established in 1972, is a trade association for owners of patents, trademarks, copyrights and trade secrets in the United States and throughout the world. IPO is the only association in the United States serving all intellectual property owners in all industries and all fields of technology. IPO’s membership includes more than 250 companies and 10,000 individuals involved in IPO through their companies or as inventors, authors, executives, universities, law firms or individual attorney members.

## II. Deferred Examination

The Patent Offices of many nations, including major trading partners of the United States, offer deferred examination or some form of delayed examination request. Offices with such systems include Argentina, Australia, Canada, China, Germany, India, Japan, Korea, Romania, Russia and Thailand, among others.<sup>2</sup> Deferred examination systems typically separate the search and examination functions of patent offices and permit applicants to defer examination, and payment of certain fees for examination, for several years after filing. Proponents of adopting deferred examination in the United States argue that it will reduce the backlog of unexamined applications because a significant percentage of applications will never have to be examined, as some applicants will ultimately decide not to pursue a patent.<sup>3</sup> Estimates of the workload savings vary widely,<sup>4</sup> however, suggesting the net effect of a deferred examination system is difficult to project in advance. Magnitude aside, it is further argued that fewer examination requests will improve USPTO examination quality because the office will be able to concentrate more of its resources on the applications that are examined.<sup>5</sup> In addition, it is said that deferred examination will save resources for applicants because they will be able to postpone decision-making until an invention's commercial value is understood.<sup>6</sup>

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<sup>2</sup>See generally Brian P. Barrett, *Deferred Examination – A Sensible Solution to USPTO Troubles?*, in *Aligning Your Patent Strategy With Your Global Corporate Business Plan* (Intellectual Property Owners Association, ed., 2009). *Related slides available at* <http://www.ipo.org/AM/Template.cfm?Section=Search&section=Papers18&template=/CM/ContentDisplay.cfm&ContentFileID=61192>.

<sup>3</sup> US Chamber of Commerce, *Recommendations for Consideration by the Incoming Administration Regarding the U.S. Patent & Trademark Office 20* (2008) (hereinafter “US Chamber Recommendations”).

<sup>4</sup> See, e.g., David P. Irimies, *Why the USPTO Should Adopt a Deferred Patent Examination System*, 20 DePaul J. Art, Tech., & Intell. Prop. (forthcoming 2010), available at [http://works.bepress.com/cgi/viewcontent.cgi?article=1000&context=david\\_irimies](http://works.bepress.com/cgi/viewcontent.cgi?article=1000&context=david_irimies).

<sup>5</sup> US Chamber Recommendations, *supra* note 3, at 20.

<sup>6</sup> *Id.*

### ***A. Deferred Examination and the “Dropout” Effect***

“Dropout” in the deferred examination context refers to those patent applications that are abandoned during the deferral period – they “drop out” of the examination queue. In Japan, which offers three-year deferral, the dropout rate is 35%, and in the European Patent Office, which offers a deferral of about twenty-four months, the dropout rate is 10%.<sup>7</sup> Some evidence indicates the dropout rate increases as the deferral period increases. Prior to 2001, when Japan offered a seven-year deferral, the dropout rate was 45-50%.<sup>8</sup> Several factors have been proposed to explain dropouts:<sup>9</sup>

- applicants learn over time that the invention lacks commercial viability
- applicants learn over time that the patentability prospects are not favorable
- the markets in many countries with deferred examination are small relative to the United States
- low filing fees and no translation fees encourage a larger number of domestic-only filings

As for this last factor, Barrett reports that domestic-only filing rates are 85% in Japan, 80% in Germany, and 76% in Korea, compared with about 50% in the European Patent Office and the United States.<sup>10</sup> Barrett suggests that cheaply-filed, domestic-only patent applications may allow companies to preempt inventors’ personal rights to their inventions in those countries.<sup>11</sup>

Despite the significant dropout rate in major jurisdictions offering deferred examination, backlog remains a problem. Countries that have deferred examination commonly still have

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<sup>7</sup> Barrett, *supra* note 2, at 3.

<sup>8</sup> *Id.*

<sup>9</sup> *Id.* at 4.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

pendency to first action of two years or more.<sup>12</sup> Furthermore, even if dropouts could reduce pendency somewhat, potentially significant commercial differences between other jurisdictions and the United States may make it difficult to project whether the higher abandonment rates seen in smaller markets would ever occur in the larger United States market.

### ***B. Concerns Regarding the Adoption of a Deferred Examination System***

Deferred examination does not necessarily mean high quality examination. Several of the United States' trading partners with deferred examination are on the United States Trade Representative's watch lists.<sup>13</sup> Barrett asked outside counsel from twelve countries "whether there is any evidence that deferred examination has improved patent quality."<sup>14</sup> None of the outside counsel believed there was any evidence that deferred examination affected patent quality.<sup>15</sup>

Further, beyond quality and pendency as broad metrics, adoption of a deferred examination system in the United States could have significant disadvantages, including:

- encouragement to file on minor innovations
- loss of fee income from fewer issue fees and maintenance fees, resulting from fewer patents being granted
- inefficiency resulting from separation of the searching and examination functions
- uncertainty over legal rights in inventions
- expenses for competitors to determine patentability of deferred claims themselves in "freedom to operate" investigations

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<sup>12</sup> *Id.* at 5.

<sup>13</sup> See generally Office of the United States Trade Representative, *2010 Special 301 Report* (Apr. 2010), available at [http://www.ustr.gov/webfm\\_send/1906](http://www.ustr.gov/webfm_send/1906).

<sup>14</sup> Barrett, *supra* note 2, at 8.

<sup>15</sup> *Id.*

The potential systemic costs of the deferment itself are also important to recognize. Under a deferred examination system, examination results, claim amendments and prosecution statements that help define a patent's scope can be delayed for years, negatively impacting the economy by creating uncertainty for the public, inventors and innovators. Expenses and burdens for determining claim scope are shifted from the patent applicant and patent offices to commercial competitors who conduct third party examinations and independent freedom to operate evaluations. This could deter some competitors who cannot afford freedom to operate opinions from introducing new products or services. Also, lower filing expenses under a deferred examination system could result in some applicants filing low-quality, broad patent applications without pre-filing searches, merely for use as a bargaining chip or to threaten competitors. Deferred examination could also result in more "submarine" patents, requiring innovators to redesign products and processes or face late licensing demands and litigation once the patent surfaces. These considerations are particularly important in the United States, which has the most patent litigation of any country.

The United States would thus need to estimate and weigh these and other possible effects of deferred examination in terms of costs to private companies (including competitors and patent owners) and the effects, positive or negative, on the incentives provided by the patent system for research, development, and commercialization of inventions. In addition, the effects of deferred examination on research and development need further study. The patent system provides research and development-related incentives including incentives to:

- invent
- disclose inventions
- develop and commercialize new products and services

- design around and improve on inventions patented by others

This last incentive is often forgotten, but critical. George Frost, former IP counsel for General Motors Corporation, explained the benefits of the “design around and improve” incentive in his book *Patents in Action From Watt to the Internet*.<sup>16</sup> He detailed the patenting of primitive airplane wing warping by Orville and Wilbur Wright within three years after their first successful flight.<sup>17</sup> The Wright patent gave an incentive to entrepreneur Glenn H. Curtiss to make repeated efforts to design around the patent. After his first design-around attempt was found to infringe the Wright patent, Curtiss continued his design-around efforts and developed wing ailerons similar to those used on airplanes today that were held not to infringe.<sup>18</sup> Query: would ailerons have been invented by Curtiss if the Wright patent had been deferred and the scope of its coverage was unknown for many years? In their 2008 book, *Patent Failure*, James Bessen and Michael Meurer asserted that the United States patent system has failed many industries because patent owners hide the scope of patent rights for years and legal rights in patents have indefinite boundaries.<sup>19</sup> But deferred examination would encourage applicants to hide the scope of patent rights and defer the rejection of indefinite claims.

Patent Offices worldwide are responding to backlog problems by hiring more examiners, outsourcing more work, increasing fees to promote “best practices,” and forming work-sharing arrangements. These responses are far more likely to solve the backlog without the unintended consequences that would likely accompany a deferred examination system.

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<sup>16</sup> See generally George Frost, *Patents in Action from Watt to the Internet* (Riverby Books 2004) (2002).

<sup>17</sup> *Id.* at 85-96.

<sup>18</sup> *Id.*

<sup>19</sup> See generally James Bessen & Michael J. Meurer, *Patent Failure* (Princeton University Press 2004).

### **III. Multi-Track Examination**

Proposals have been made for “multi-track examination,” systems in which not all applications and all claims would be examined in the same way. These proposals, like deferred examination, are intended to reduce backlogs and increase quality by improving efficiency and concentrating scarce resources on certain categories of applications. Suggestions include, for example, (1) “gold plated” patents that would receive more thorough examination by a patent office on payment of a higher than normal fee, (2) accelerated examination in response to payment of a higher than normal fee, and (3) accelerated examination for applications in particular fields of technology, such as “green” technologies.

#### ***A. USPTO Five-Track Proposal***

The USPTO published a more complex proposal in connection with its 2003 strategic plan that had five tracks.<sup>20</sup> The five tracks were:

1. USPTO Conducts In-House Search of the Application
2. USPTO Acquires Search Report from Contractor Search Services
3. Applicant Provides Search Report from an IPO having a bilateral agreement with the USPTO or prior application at USPTO can be relied upon
4. USPTO Acting as an ISA and/or IPEA Provides Search Report and/or Examination Report for a PCT Application
5. National Stage Entry under PCT with the ISR and IPER (if any) done by either USPTO or EPO or other IPO with which the U.S. has a bilateral search exchange agreement

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<sup>20</sup> USPTO, *Multi-Track Patent Examination Process*, in *The 21<sup>st</sup> Century Strategic Plan (2003)*, available at <http://www.uspto.gov/web/offices/com/strat21/action/p2p01.htm>.

The five-track proposal was never implemented by the USPTO, although portions of it appear to resemble work-sharing arrangements. As of this writing, the USPTO has indicated that it may soon publish a new three-track plan for examination.<sup>21</sup>

### ***B. Questions about Multi-Track Examination Systems***

Multiple-track examination processes have disadvantages for some applications that may offset the obvious advantages for those applications that receive better or faster examination. Tracks that separate the search and examination functions of the USPTO suffer from the same loss of efficiency inherent in deferred examination systems. Higher fees may discriminate against applicants with fewer resources. Can an applicant discern at an early stage which inventions are most valuable and would warrant more expensive examination? Also, multiple levels of thoroughness would complicate infringement and validity litigation by creating first-class and second-class patents in the eyes of the courts. Would the same scope of doctrine of equivalents and same presumption of validity apply to gold-plated and regular patents? Generally speaking, accelerated examination of patent applications in selected technologies would cause longer delays in examination of patent applications for other technologies. If acceleration of examination of applications in selected fields is deemed to be in the national interest for stimulating development of commercially important inventions, for example, should any applicant in that field be permitted to opt out of accelerated examination and cause uncertainty for competitors over the scope of patent protection?

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<sup>21</sup> Statement by Marc Adler, member of the Patent Public Advisory Committee, at public roundtable discussion on patent quality, Alexandria, Virginia, May 18, 2010.

These questions show the need for caution in adopting multiple-track examination systems. If adequate resources are available, the fairest and most effect system is prompt, high-quality examination of every patent application.

#### IV. Utility Models and Other Second-Tier Patent Rights

Utility models are a lower-level version of patent protection available in many countries throughout the world, and are loosely synonymous with petty patents, short-term patents, and simple patents. Recognized in the Paris Convention as a type of industrial right,<sup>22</sup> utility models are widely used in Germany, Japan, China, and Korea.<sup>23</sup> In the late 1980s and 1990s, twenty-five countries adopted some form of utility model protection that previously had none.<sup>24</sup> In 2001, Australia jettisoned its petty patent system for a revised second-tier form of patent protection, the innovation patent.<sup>25</sup> The United States does not have any equivalent system.

Institution or expansion of utility model systems present at least a superficially attractive strategy for backlog reduction, as obtaining a utility model is generally much faster and cheaper than a utility patent. But with the patent system, “you get what you pay for.”<sup>26</sup> First, the ability to obtain utility model protection in weeks or months is thanks to cursory examination (or merely registration without examination) and premised on a lower inventiveness threshold, which

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<sup>22</sup> See Paris Convention for the Protection of Industrial Property (1883, *as revised and amended*), Art. 4.

<sup>23</sup> See Jeremy Philips, *A Spanner in the Works – Or the Spanner that Works? Patents and the Intellectual Property System*, in *Patent Law & Theory: A Handbook of Contemporary Research*, 132, 147 (Toshiko Takenaka ed., 2008).

<sup>24</sup> John Richards, *Utility Model Protection Throughout the World*, 2010 IPO Articles & Repts., Pats. Sec. No. 4, 6 (2010), available at <http://www.ipo.org/AM/Template.cfm?Template=/CM/ContentDisplay.cfm&ContentID=25244>.

<sup>25</sup> Andrew F. Christie & Sarah L. Moritz, Intellectual Property Research Institute of Australia, *Australia’s Second-Tier Patent System: A Preliminary Review 1* (Report No. 02/04, revised 2005), available at [http://www.ipria.org/publications/reports/AU\\_2nd-tier\\_Report-revised.pdf](http://www.ipria.org/publications/reports/AU_2nd-tier_Report-revised.pdf).

<sup>26</sup> Steven J. Wallich & Wayne A. Slater, *Patents Lite: Aussies Pioneer a Cheap and Easy Way to Protect Inventions*, *IEEE Spectrum* (Nov. 2004), available at <http://spectrum.ieee.org/at-work/innovation/patents-lite>.

unsurprisingly may lead to a “chillier reception” for utility models in courts.<sup>27</sup> Plus, compared to a utility patent, term is shorter for utility models, usually fewer claims are permitted, and both scope and eligible subject matter may be constrained, as discussed further below.

### A. *Origins of Utility Models*

Utility models have been available in Germany since 1891.<sup>28</sup> Originally, the German utility model (*Gebrauchsmuster*) was limited to three-dimensional, moveable, concrete objects.<sup>29</sup> The *Gebrauchsmuster* system filled a gap in German patent law, providing protection for minor inventions that could not satisfy the more stringent patentability requirements for a regular patent.<sup>30</sup> The *Gebrauchsmuster* system has been updated over time – notably in 1990, the concreteness limitation was lifted, allowing protection for chemicals, electrical circuits, immovable products, etc. (basically any product), but still excluding methods and processes.<sup>31</sup> Also, originally the term of a *Gebrauchsmuster* was three years, renewable once, for a total of six years,<sup>32</sup> but now protection is available for up to ten years.<sup>33</sup>

Japan was an early adopter of a German-style utility model system, implementing a similar (though not identical) regime within fifteen years of the *Gebrauchsmuster*'s debut.<sup>34</sup> Many of the nations that instituted utility model protection in the 1990s likewise used the German system as a model.<sup>35</sup>

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<sup>27</sup> *Id.*

<sup>28</sup> Roland Liesegang, *German Utility Models after the 1990 Reform Act*, 20 AIPLA Q.J. 1, 2 (1992).

<sup>29</sup> *Id.*

<sup>30</sup> Richards, *supra* note 24, at 3.

<sup>31</sup> Liesegang, *supra* note 28, at 3-4.

<sup>32</sup> John N. Adams, *History of the Patent System*, in *Patent Law & Theory: A Handbook of Contemporary Research*, 101, 129 (Toshiko Takenaka ed., 2008).

<sup>33</sup> Richards, *supra* note 24, at 6.

<sup>34</sup> Richards, *supra* note 24, at 3.

<sup>35</sup> *Id.* at 4.

## ***B. Features of the German Gebrauchsmuster System***

As discussed above, utility models offer advantages and disadvantages. Taking the *Gebrauchsmuster* system as an example, traditionally inventors have been drawn to several features, presenting a relatively stark contrast with standard patents:<sup>36</sup>

- effectively immediate enforcement (compared to long prosecution horizon for patents)
- markedly lower procurement costs
- flexibility: available as a *supplement* to a German or European patent application
- lower inventive step/obviousness threshold
- six-month grace period for inventor's own publications
- prior public use *outside* Germany not a bar to novelty

Because there is no pan-European utility model system, Germany's *Gebrauchsmuster* system retains certain features, like the grace period, that were previously part of its patent law.<sup>37</sup> The possibility of obtaining *both* a utility model and a patent for the same invention in Germany is also an unusual feature.<sup>38</sup> In most countries, including Australia and Japan, it is one or the other, though in both these jurisdictions, a patent application can be converted to a utility model application and vice-versa.<sup>39</sup> Enforcement of a *Gebrauchsmuster* in Germany also differs both from enforcement of utility models in other nations and enforcement of patents in Germany. Although no examination is required before a utility model infringement action can proceed in

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<sup>36</sup> See Liesgang, *supra* note 28, at 2, 4-5; Richards, *supra* note 24, at 4.

<sup>37</sup> Richards, *supra* note 24, at 4.

<sup>38</sup> *Id.* at 5.

<sup>39</sup> IP Australia, *Patents and Utility Models*, 2 (2009), available at [http://www.ipaustralia.gov.au/pdfs/factsheets/japan\\_patents\\_utility\\_models.pdf](http://www.ipaustralia.gov.au/pdfs/factsheets/japan_patents_utility_models.pdf).

Germany, the alleged infringer can present prior art to argue that the claims are invalid and/or that the scope of the claims requires modification.<sup>40</sup>

### ***C. Innovation Patents in Australia***

Australia began its foray into second-tier patent protection in 1979, with a “petty patent” system. After extensive review, Australia replaced the petty patent with the “innovation patent” in 2001.<sup>41</sup> The goal for both systems was to offer cheaper, simpler, faster protection, to encourage minor or incremental innovations,<sup>42</sup> especially among domestic and individual inventors.<sup>43</sup> Under the petty patent system, there was no substantive examination required by statute (though as a practical matter, all petty patents underwent a full examination prior to grant), no opposition prior to grant, and an initial term of one year (extendable for a total maximum term of six years).<sup>44</sup> The validity threshold was initially the same as for (regular) patents, though altered in 1990 with respect to novelty and obviousness.<sup>45</sup> Also in 1990, the number of claims permissible in a petty patent was raised from one to three.<sup>46</sup> Despite these modifications, studies found there was still a “gap” in protection for incremental functional innovations, with too high an inventiveness requirement.<sup>47</sup>

The innovation patent differs in several important respects from the petty patent. Although there is still no substantive examination prior to grant, examination is required prior to any attempt to enforce the innovation patent.<sup>48</sup> Also, post-grant opposition is available, after

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<sup>40</sup> Richards, *supra* note 24, at 4-5.

<sup>41</sup> Christie & Moritz, *supra* note 25, at 1.

<sup>42</sup> *Id.* at 18.

<sup>43</sup> *Id.* at 3.

<sup>44</sup> *Id.* at 1, 11 (discussion of *de facto* examination hurdle for petty patents).

<sup>45</sup> *Id.* at 1-2.

<sup>46</sup> *Id.*

<sup>47</sup> *Id.* at 12-15.

<sup>48</sup> Wallich & Slater, *supra* note 26.

examination and certification.<sup>49</sup> An innovation patent can have up to five claims, all of which may be independent.<sup>50</sup> In contrast, of the maximum three claims for a petty patent, only one could be independent.<sup>51</sup> Like petty patents, innovation patents have an initial one year term, but innovation patents can be extended longer, for a total possible term of eight years.<sup>52</sup> The universe of available prior art for innovation patents is the same as for regular patents, whereas for petty patents, prior art was limited to that available domestically.<sup>53</sup>

Perhaps most critically, while the novelty requirement for an innovation patent is the same as for a regular patent, the obviousness requirement is significantly lower, compared to petty patents and especially regular patents. An “innovative step” (instead of an “inventive step” as required for a regular patent) is the threshold for innovation patents, and is satisfied if the invention varies from the prior art in a way that makes a substantial contribution to the working of the invention.<sup>54</sup> As for application pendency, the innovation patent system is similar to the prior petty patent system, with applications generally granted within two or three months of filing.<sup>55</sup> In contrast, regular patent applications can take two to four years to issue.<sup>56</sup>

So far, while Australia’s innovation patent system has met some of the goals set forth for it, there are certain issues worth serious further study in evaluating the system as a whole. Utilization remains a concern. While second-tier (petty or innovation patents, depending on the year) applications have always constituted a small percentage of total (regular patent plus

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<sup>49</sup> Christie & Moritz, *supra* note 25, at 20.

<sup>50</sup> Barry Eagar, *Australian Patent Prosecution for Enforcement Success*, 4, Conference Paper for American Bar Association Section of Intellectual Property Law 25<sup>th</sup> Annual Conference, April 7-10, 2010, Arlington, Virginia.

<sup>51</sup> Christie & Moritz, *supra* note 25, at 19.

<sup>52</sup> *Id.* at 21.

<sup>53</sup> *Id.* at 18. Christie & Moritz note that the domestic limitation on prior art for petty patents made “no real difference” for publications.

<sup>54</sup> Eagar, *supra* note 50, at 3-4.

<sup>55</sup> Christie & Moritz, *supra* note 25, at 20. Eagar reports that time to grant may be “as little as a month.” *Supra* note 50, at 4.

<sup>56</sup> Christie & Moritz, *supra* note 25, at 20.

innovation patent) applications filed, this percentage has risen over time, from 2.7% in 1992 to 4.6% in 2004.<sup>57</sup> But when only resident applications are considered, the picture looks considerably different: in 2004, resident innovation patent applications made up 27.2% of total resident application filings.<sup>58</sup> This extensive use by residents is encouraging given the innovation patent system's goal of promoting domestic innovation. However, there is evidence that "a significant proportion of innovation patents are being used to obtain a form of quick protection for higher-level inventions while a standard patent is being pursued," instead of for lower-level inventions for which the system was designed.<sup>59</sup> Unfortunately, there has also been significant confusion about the nature of the rights conferred (or the enforceability thereof), leading to accidental or purposeful misrepresentation by some innovation patent holders.<sup>60</sup> This problem was anticipated when innovation patents were introduced, but was considered to be outweighed by the projected efficiency gains from avoiding the costs of full examination of all second-tier applications.<sup>61</sup> Although the misrepresentation problem is difficult to quantify (but amenable to correction over time as innovation patents become better-known), the predicted efficiency advantage over the petty patent system has been borne out, as examination has been requested only for 22% of innovation patent applications.<sup>62</sup> But, opposition may be requested (by an applicant or a third party) at any time during the life of the innovation patent,<sup>63</sup> so this percentage would naturally rise over time for any given group of innovation patents. At any rate, this relatively low percentage may suggest that examination resources are being focused on more

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<sup>57</sup> *Id.* at 25.

<sup>58</sup> Compiled from World Intellectual Property Organization, *WIPO Industrial Property Statistics* (Dec. 2009), available at <http://www.wipo.int/ipstats/en/statistics> (hereinafter *WIPO Statistics*).

<sup>59</sup> IP Australia, *Review of the Innovation Patent: Final Report*, 4 (July 2006), available at <http://www.ipaustralia.gov.au/media/resources/ReviewInnoPatentFinalReport.pdf>.

<sup>60</sup> *Id.* at 5.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> Eagar, *supra* note 50, at 4.

commercially-viable innovations, as it could be expected that rights holders would wish to have examined those innovation patents that they plan to enforce.<sup>64</sup>

#### ***D. Current Trends in Utility Model Systems***

According to data from the World Intellectual Property Organization,<sup>65</sup> the top ten nations by number of utility model applications filed in 2007 (the most recent composite data available) were:

1. China
2. Korea
3. Germany
4. Japan
5. Russia
6. Ukraine
7. Turkey
8. Brazil
9. Spain
10. Australia

China's filings (181,324) were dramatically higher than those of Korea (21,084) and Germany (18,083). Japan, Russia, and Ukraine made up the next plateau (between about 8,000 and 10,000 applications), followed by a steep drop-off for the rest of the list (ranging 3,011 (Turkey) down to 1,299 (Australia)).<sup>66</sup> In most cases, non-resident applicants represented a smaller share of

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<sup>64</sup> IP Australia, *supra* note 59, at 10.

<sup>65</sup> World Intellectual Property Organization, *World Intellectual Property Indicators*, 47 (2009) (hereinafter *WIPO Indicators*). Data for Ukraine and Brazil are from 2006, not 2007.

<sup>66</sup> *Id.*

total utility model filings in comparison to patents.<sup>67</sup> This difference was particularly pronounced for China, where non-residents represented only 0.7% of utility model filings, compared to 37.6% for patents.<sup>68</sup> In contrast, non-residents filed 18.0% of utility models in Germany in 2007, compared to 21.5% for patents.<sup>69</sup>

Interestingly, the list of top ten countries for utility model *grants* in 2007 was somewhat different from utility model applications filed, though again China was the far-and-away numerical leader (150,036):<sup>70</sup>

1. China
2. Germany
3. Japan
4. Russia
5. Korea
6. Spain
7. Czech Republic
8. Austria
9. Poland
10. Finland

The top utility model granting nations also diverged with regard to year-over-year changes between 2006 and 2007. While Chinese utility model issuances spiked 39.4%, Germany and

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<sup>67</sup> *Id.* at 47.

<sup>68</sup> *Id.*

<sup>69</sup> *Id.* at 17, 47.

<sup>70</sup> *Id.* at 48. Data for Austria and Finland are from 2006, not 2007.

Japan saw 7.4% and 4.8% decreases, respectively, and Korea issued 90.6% fewer utility models between 2006 and 2007.<sup>71</sup>

Of the nations in the above lists, only Korea, Brazil, Poland, and Finland conduct substantive examinations of utility models, though Austria conducts a search.<sup>72</sup> In most countries (including China, Japan, and Korea, as well as France), a report on novelty is required before an infringement action can proceed, and in Germany one may be requested.<sup>73</sup> As noted above, Australian innovation patents are subject to post-grant examination upon request by the patentee or a third party, but the examination is a prerequisite for enforcement.<sup>74</sup>

### ***E. Potential Effects of a Utility Model System on Backlog and Considerations for United States Patent System***

In theory, the addition of a utility model system to an existing patent system should reduce patent backlog to the extent that significant numbers of applicants can be encouraged to opt for the utility model system. But the *raison d'être* of utility models is to afford protection for lower-level (*i.e.*, less inventive) innovations, not to provide an alternate or substitute set of rights for patentable inventions. Thus the viability of this theory turns on whether unpatentable applications that would be better-suited for utility model rights are a substantial contributor to the present backlog problems faced by the Patent Offices. But Japan<sup>75</sup> and Australia,<sup>76</sup> which unlike Germany do not allow an applicant to ultimately hold a utility model *and* a regular patent

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<sup>71</sup> *Id.* at 48.

<sup>72</sup> Richards, *supra* note 24, at 6-7; National Board of Patents & Registration of Finland, *Utility Models: Utility Model Application* (May 2010), <http://www.prh.fi/en/hyodyllisyysmallit/hakeminen/hakemus.html>.

<sup>73</sup> Richards, *supra* note 24, at 5. As previously noted, German courts may consider the validity of an issued utility model during enforcement proceedings.

<sup>74</sup> Christie & Moritz, *supra* note 25, at 16.

<sup>75</sup> WIPO *Indicators*, *supra* note 65, at 45.

<sup>76</sup> Christie & Moritz, *supra* note 25, at 20.

for the same invention, both face significant backlog problems.<sup>77</sup> The conversion allowed between utility model and patent applications may be one culprit, but preserves important flexibility in the system. Moreover, the number of utility model applications pales in comparison to those of regular patent applications in both countries:

**Utility Model and Patent Applications Filed  
Australia and Japan (2007)<sup>78</sup>**

Nation	Utility Models	(Regular) Patents
<b>Australia</b>	1,229 (Innovation Patents)	26,840
<b>Japan</b>	10,315	396,291

As such, it seems unlikely that a utility model system could put much of a dent in the patent backlog even if somehow designed with such a goal in mind.

In the United States, utility models are not part of the current patent reform proposals in Congress.<sup>79</sup> Political considerations aside, however, implementing a utility model system alongside the present patent system cannot be justified as a measure to significantly reduce the patent backlog given the data discussed above. While there may be some advantages to a utility model system,<sup>80</sup> backlog reduction does not appear to be one of them. Instead, depending on the particular features implemented, creating a dual-tiered system risks increased litigation, a more byzantine intellectual property rights landscape for innovators and manufacturers, further

<sup>77</sup> See WIPO *Indicators*, *supra* note 65, at 44.

<sup>78</sup> Compiled from WIPO *Statistics*, *supra* note 58.

<sup>79</sup> See S. 515, 111<sup>th</sup> Cong. (2009); H.R. 1260, 111<sup>th</sup> Cong. (2009).

<sup>80</sup> See discussion of Australian and German systems, §§ IV.A-B *supra*; see also Karl F. Jorda, *Utility Models: The Panacea for our Broken Patent System*, Germeshausen Center Newsl. (2007), available at <http://www.ipo.org/AM/Template.cfm?Template=/CM/ContentDisplay.cfm&ContentID=22902> (advocating adoption of a utility model system in the United States).

administrative burdens through strategic concurrent use of both systems for a single invention, and potential misrepresentation of rights. Despite the overall success of many countries with dual-tier patent protection, controlling these potential problems in a prospective new system in the United States could be as challenging as taming the backlog.

## **V. Other Alternatives to the Current Patent System**

Although deferred examination and multi-track examination are probably the most widely-discussed alternatives to standard examination practices for systemic backlog reduction, and utility models are part of many intellectual property regimes worldwide, other systemic proposals have been floated, some of which are briefly addressed below. Unfortunately none provides a viable backlog solution for the United States.

### ***A. Unexamined Design Rights***

Although design patent applications are substantively examined in the United States, this is not the case in all jurisdictions by any means. Since 2003, a single Registered Community Design has been available to protect industrial designs throughout Europe.<sup>81</sup> The “examination” process is not substantive, except in the sense that it includes a cursory determination of whether the application is “plainly not a design” or immoral.<sup>82</sup> Unregistered design rights are also available; in both cases a design must exhibit both novelty and individual character to be eligible for protection.<sup>83</sup>

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<sup>81</sup> Christopher M. Aide, *The Community Design: European Union-Wide Protection for Your Design Portfolio*, 1 *Northwestern J. of Tech. & Intell. Prop.* 35, 37 (2003), available at <http://www.law.northwestern.edu/journals/njtip/v1/n1/2/aide.pdf>.

<sup>82</sup> *Id.* at 40.

<sup>83</sup> Orit Fischman Afori, *Reconceptualizing Property in Designs*, 25 *Cardozo Arts & Entertainment L.J.* 1105, 1131 (2008), available at <http://www.cardozoarlj.net/issues/08/Afori.pdf>.

Consideration of the merits of registration versus examination systems for protection of design rights is unnecessary, however, in the context of solving the backlog problem because substantive examination of design rights is not a cause of the backlog problem. According to the USPTO, pendency in 2009 stood at approximately 15 months for design patents,<sup>84</sup> compared to 34.6 months for utility patents.<sup>85</sup>

### ***B. Unexamined or Cursorily Examined Patents***

Dispensing with substantive examination altogether or even partially (perhaps in the context of a multi-track examination system as discussed above) would obviously solve the backlog problem. But the United States has been down this path before. The Patent Act of 1790 authorized a board of “Commissioners for the Promotion of the Useful Arts” to determine if “the invention or discovery [was] sufficiently useful and important” to merit a patent.<sup>86</sup> Thomas Jefferson, then the Secretary of State, was a member, along with Secretary of War Henry Knox and Attorney General Edmond Randolph.<sup>87</sup> But as this system proved too burdensome for the Commissioners, in 1793 Congress replaced the examination system with a registration system.<sup>88</sup> Perhaps predictably, complaints arose regarding the issuance of fraudulent and duplicative patents.<sup>89</sup> Patent applications rose rapidly, and the system inadvertently encouraged “rent seeking” behaviors.<sup>90</sup> Fortunately, substantive examination was reinstated, and

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<sup>84</sup> USPTO Patent Technology Monitoring Team, *Design Patents: January 1977 – December 2009*, 2 (2010), available at <http://www.uspto.gov/web/offices/ac/ido/oeip/taf/design.pdf>.

<sup>85</sup> USPTO, *Strategic Goal 1: Optimize Patent Quality & Timeliness*, in Performance & Accountability Report: Fiscal Year 2009 (2010), available at [http://www.uspto.gov/web/offices/com/annual/2009/mda\\_02\\_02.html](http://www.uspto.gov/web/offices/com/annual/2009/mda_02_02.html).

<sup>86</sup> Martin J. Adelman *et al.*, *Cases & Materials on Patent Law* 11 (West Group 2003) (1998).

<sup>87</sup> *Id.* at 11-12.

<sup>88</sup> *Id.* at 12.

<sup>89</sup> *Id.*

<sup>90</sup> John N. Adams, *History of the Patent System*, in *Patent Law & Theory: A Handbook of Contemporary Research*, 101, 127 (Toshiko Takenaka ed., 2008).

the Patent Office was created, with the Patent Act of 1836.<sup>91</sup> There is no apparent reason to suspect that unexamined patents would work any better now than they did then.

### ***C. Application Auctions***

One creative idea for backlog management is to cap the number of patent applications for a given year, auction off the examination slots, and offer lower-tier protection (*e.g.*, a utility model) to the rest.<sup>92</sup> The system could be designed to reserve a certain number of slots for small entities, universities, and individual inventors, so as to check against the inevitable fairness problem of pitting them against large corporations.<sup>93</sup> Ideally, this would allow applicants and examiners alike to focus on those patent applications deemed most valuable.<sup>94</sup>

In addition to the need to maintain fairness across inventor classes, the auction idea also has other problems. Fundamentally, it would be very difficult, if not impossible, to determine the appropriate level for the cap. Too low, and innovation could be constrained. Too high, and the backlog problem would reemerge. Moreover, such a system presumes that applicants could make accurate predictions early in the process as to which inventions were valuable enough to warrant bidding for an examination slot.

## **VI. Conclusion**

Patent application backlog is a serious problem, in the United States and throughout the world. Unnecessary delay in patent application processing hampers predictability regarding the scope of rights, and innovation itself. Unfortunately, the solutions are not easy, either. From the

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<sup>91</sup> Patent Act of 1836, Ch. 357, 5 Stat. 117 (1836).

<sup>92</sup> Chris J. Katopis, *Perfect Happiness?: Game Theory as a Tool for Enhancing Patent Quality*, 10 Yale J. L. & Tech. 360, 388-89 (2008).

<sup>93</sup> *Id.* at 399.

<sup>94</sup> *Id.* at 384-85.

United States' perspective, the evidence does not suggest deferred examination will reduce the USPTO examination backlog, reduce pendency, or improve examination quality. Deferred examination may also create additional uncertainty for the public, investors and innovators; unfairly shift expenses to competitors of patent applicants; result in more, poorer quality patent applications that hinder competition; result in more submarine patents and associated problems; and reduce USPTO fee collections because of fewer patent issue fees and maintenance fees. Creating a two-tiered patent rights model would be unlikely to reduce the backlog, and instead could lead to further administrative burden for the patent system to the extent applicants attempt to utilize utility models as an early-stage step on the pathway to a regular patent.

Ultimately, for the USPTO, the real solutions to the backlog problem are less creative and do not require retooling the nature or availability of the patent right – more funding, more examiners, better training, better infrastructure, more work-sharing, and rules reforms. Effectively and wisely implemented, these solutions offer the surest path toward achieving prompt, high-quality examination of all patent applications.