

**From:** Ted Sichelman [email redacted]  
**Sent:** Wednesday, May 06, 2015 4:41 PM  
**To:** WorldClassPatentQuality  
**Subject:** Patent Quality Comment Submission

Attached.

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May 6, 2015

The Hon. Michelle K. Lee  
Under Secretary of Commerce  
Director, U.S. Patent and Trademark Office  
Alexandria, VA

*via e-mail*

Re: Requests for Comments on Enhancing Patent Quality

Dear Director Lee:

I am a law professor at the University of San Diego School of Law, where I teach a variety of patent law courses, as well as other courses in intellectual property law. I write extensively in the area of patent law, particularly patent litigation and patent law policy. One of my articles has been cited by the U.S. Supreme Court and numerous other courts,<sup>1</sup> and three of my articles are among the top 20 most-cited patent law articles (including the top most-cited) published in the last five years.<sup>2</sup> Before becoming a law professor, I practiced patent litigation at the law firms of Heller Ehrman and Irell & Manella. Before practicing law, I founded and ran a venture-backed software company, Unified Dispatch. I designed the company's software and am a named inventor on several filed U.S. applications and an issued Canadian patent.

I write in my personal capacity to offer two proposals relating to patent quality that would neither require raising applicant fees nor would cost the USPTO any additional expenditures. The foundation of the proposals is that patent quality is more important for certain types of patents than others—namely, those that patents that if wrongly issued (or wrongly denied at the application stage) would have a substantial impact on the U.S. economy. These patents include those likely to be (1) litigated; (2) licensed for a fee; (3) challenged at the USPTO (e.g., in an inter partes review proceeding); and/or (4) covering a substantial product or service revenue stream. Although errors by the USPTO in examining other classes of patents certainly impose costs, they are of much less concern. Given that the USPTO has limited time and resources to conduct examination, it should reallocate its examination procedures in two ways.

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<sup>1</sup> Mark A. Lemley, Michael Risch, Ted Sichelman & R. Polk Wagner, *Life After Bilski*, 63 STAN. L. REV. 1315 (2011).

<sup>2</sup> Most Cited IP Law Articles over the Last 10 Years, [http://writtendescription.blogspot.com/2014/09/most-cited-ip-law-articles-over-last-10\\_24.html](http://writtendescription.blogspot.com/2014/09/most-cited-ip-law-articles-over-last-10_24.html).

### (1) Adjusting Time for Examination Based on Likely Impact on the U.S. Economy

The first proposal is to adjust the amount of time an examiner spends on a given application based on whether a patent issuing from the application meets one of the four above categories (likely litigation, licensing, challenge, or covering a large revenue stream). Scholars have identified a number of factors relevant to determining whether a patent is likely to be litigated—for instance, number of claims, number of backward citations, presence of foreign counterparts, continuation status, and technology class.<sup>3</sup> Similar factors likely apply to licensing for a fee, as well as those patents that are challenged in post-grant review (PGR), inter partes review (IPR), and similar proceedings. The USPTO’s Office of the Chief Economist (OCE)—especially in conjunction with academics—could undertake further analysis to determine those factors that point towards litigation, licensing, and challenges and incorporate those into a formula to determine allocated examination time per patent. The covered revenue stream for any given patent could similarly be assessed by the OCE by examining litigation outcomes, disclosed settlements, and disclosed licenses (e.g., to the SEC). For instance, one study determined that patent damage amounts could be predicted in part by factors such as number of claims number of forward citations.<sup>4</sup> Again, these findings could be further examined and by the OCE and incorporated into a suitable formula.

For instance, such a formula would likely counsel much greater attention to small molecule pharmaceutical patents and much less attention to simple mechanical inventions. The result would be higher patent quality for small molecule patents and lower quality for simple mechanical inventions. Yet, because small molecule patents are on average of much greater importance to the U.S. economy and are litigated much more frequently, the cost-benefit trade-off is likely to be quite substantial. “Gaming” of the time-allocation system could be largely prevented by keeping the allocation formula highly confidential—like the IRS’s audit formulas.

Adjusting the time allocation for examination would fall well within the PTO’s procedural rulemaking authority. The substantive requirements for patenting would not change, and the PTO—like other agencies, such as the IRS, SEC, and SSA—would merely be using its discretion to determine where best to allocate its resources in administering the applicable law.

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<sup>3</sup> See, e.g., Colleen V. Chien, *Predicting Patent Litigation*, 90 TEXAS L. REV. 283, 287 (2011); John R. Allison, Mark A. Lemley & Joshua Walker, *Extreme Value or Trolls on Top? The Characteristics of the Most Litigated Patents*, 158 U. PA. L. REV. 1 (2009).

<sup>4</sup> Michael Mazzeo, Jonathan Hillel, & Samantha Zyontz, *Explaining the “Unpredictable”*: An Empirical Analysis of Patent Infringement Awards, 35 INT’L REV. OF L. & ECON. 58 (2013).

## (2) Adopt a System of Deferred Examination with Two-Part Fees

Most industrialized countries now provide for deferred examination, whereby the applicant can choose to delay examination until a later time (sometimes, up to seven years from the application date).<sup>5</sup> In some systems, a third party may initiate examination if the applicant has not. In fact, of 35 industrialized patent systems reviewed by Harhoff, the only two with effective automatic examination were the United States and Mexico.<sup>6</sup>

Deferred examination systems been adopted precisely to deal with large backlogs and to focus on those applications that are most economically important. By imposing a low up-front fee to file, plus a substantial additional fee to trigger examination (“two-part” fees), applicants with inventions that are not yet of clear economic importance will tend to defer examination.<sup>7</sup> As Stoll and Rudyk have explained, “The possibility to defer the examination request for up to seven years allowed the patentees to abandon applications with no commercial value without any examination.”<sup>8</sup> According to Harhoff, roughly one-third of all applications are in fact never examined under deferred systems, instead going abandoned. Thus, long deferral periods coupled with sizable, additional fees for examination substantially reduce the numbers of applications needed to be examined, thereby increasing the average time spent examining each application. Indeed, according to Stoll and Rudyk, when Japan shortened its deferral period, “[t]he workload of examiners in Japan has been increased with low quality patents.”<sup>9</sup>

The arguments generally presented in favor of automatic (or speedy) examination are that it reduces uncertainty for applicants and potential infringers, in turn reducing economic distortions and deadweight losses in investments in infringing technology that could have

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<sup>5</sup> See Sebastian Stoll & Ilja Rudyk, *Deferred Patent Examination* (working paper, 2015), available at [http://druid8.sit.aau.dk/druid/acc\\_papers/2fyjug3lncb096violkn9tph33f.pdf](http://druid8.sit.aau.dk/druid/acc_papers/2fyjug3lncb096violkn9tph33f.pdf); Dietmar Harhoff, *Deferred Patent Examination* (working paper, 2011), available at [https://fd19b613-a-62cb3a1a-s-sites.googlegroups.com/site/workshopinnpat/papers-abstracts-slides/DEFER-Handout-201109225.pdf?attachauth=ANoY7cqRRZLlEh5dRRDYpPNe1KRc4farBPsmQwAmvaBro9zv3nWgKQ5a1C9pvhpEdF-ZS7-w\\_9Hs1ZpU\\_XGDbfOJnVWVFcNZt\\_cbMWGyZFjx7TxZ6Bn1ojefJla0cAx3Y1S2PkV0SS5ncxiXDmvp8zW7mNGnAzWEBDuiaIPx2wvFAhsG\\_9A9E\\_1EG9KAKBjOq1T8wx8akeMJsBaQrgqe6BlcuZBxx4ZzlMgAmclEkYdqr-PVxKYRLXkTiPNgNbpYxRzszDN30r0rcwMiFvunkjUunYSXwx0ww%3D%3D&attredirects=0](https://fd19b613-a-62cb3a1a-s-sites.googlegroups.com/site/workshopinnpat/papers-abstracts-slides/DEFER-Handout-201109225.pdf?attachauth=ANoY7cqRRZLlEh5dRRDYpPNe1KRc4farBPsmQwAmvaBro9zv3nWgKQ5a1C9pvhpEdF-ZS7-w_9Hs1ZpU_XGDbfOJnVWVFcNZt_cbMWGyZFjx7TxZ6Bn1ojefJla0cAx3Y1S2PkV0SS5ncxiXDmvp8zW7mNGnAzWEBDuiaIPx2wvFAhsG_9A9E_1EG9KAKBjOq1T8wx8akeMJsBaQrgqe6BlcuZBxx4ZzlMgAmclEkYdqr-PVxKYRLXkTiPNgNbpYxRzszDN30r0rcwMiFvunkjUunYSXwx0ww%3D%3D&attredirects=0).

<sup>6</sup> Harhoff, *supra* note 5.

<sup>7</sup> Although the United States nominally adopted a deferred examination option in 2000, unlike “true” deferred systems, applicants pay no additional fee for examination—rather, applicants must pay an additional fee to defer examination. 37 C.F.R. § 1.103. Thus, deferred examination has been little used in the United States—presumably not because of lack of interest, but because of the lack of an appropriate two-part fee structure. See generally John R. Thomas, *Deferred Examination of Patent Applications: Implications for Innovation Policy*, Congressional Research Service Report No. R41261, <http://fas.org/sgp/crs/misc/R41261.pdf>.

<sup>8</sup> Stoll & Rudyk, *supra* note 5.

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

been avoided. Such arguments carry little weight in the U.S. system, which essentially permits the applicant to introduce multiple delays in examination through continuation practice.

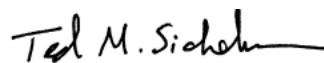
Despite the ability of an applicant to effectively defer examination at no additional cost in the U.S. and “true” deferral systems, there is a critical difference between them. In the U.S. system, all fees are paid up front. Thus, applicants who would have otherwise sought deferral if substantial further fees were required for examination have little to lose from introducing a set of broad claims in original and other early-filed applications. This strategy needlessly expends substantial time of the examiner. In contrast, in a deferred system with effective two-part pricing, the early application often lies dormant for a significant period of time and, as noted, a large share of applications expire for failure to trigger examination. Moreover, in those systems such as Japan’s, which allow third parties to trigger examination, potential infringers can also achieve certainty simply by forcing an application into examination.<sup>10</sup>

Effective deferred examination can be implemented by the USPTO today on the basis of its procedural and fee-setting rulemaking authority (though third-party triggers of examination would presumably require suitable legislation).<sup>11</sup>

### Summary

It is very unlikely that the USPTO can increase patent quality in any substantial fashion for *every* patent application without substantial budgetary expenditures. However, by focusing its efforts on economically important applications, the USPTO can increase patent quality for those patent applications that matter without any additional expenditures or aggregate applicant fees. The USPTO can achieve this goal by (1) adjusting examination time based on factors related to the economic importance of the application-at-issue; and (2) adopting a system of deferred examination that charges two-part fees for examination.

Sincerely,



Ted M. Sichelman  
Professor of Law

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<sup>10</sup> See Christina S. Wong, *Patent Reform in the Patent and Trademark Office: Deferred Examination*, 14 J. Eng’g Pub. Pol’y (2010), available at <http://www.wise-intern.org/journal/2010/christinawongwise2010.pdf>.

<sup>11</sup> 37 C.F.R. § 1.103, which allows for deferral for up to three years, could be amended to eliminate the payment of a fee for deferral as well as lengthened (e.g., to five years). Moreover, as in other effective deferred examination systems, initial application fees should be reduced considerably, with a separate, more sizable fee imposed for examination when requested. With these changes, the total fees collected by the USPTO could remain exactly the same as today. User fees would remain the same on average, with those electing examination paying a slightly higher fee to account for abandoned applications not subject to an additional examination fee.