

PREVENTING THE ISSUANCE OF “BAD” PATENTS: HOW THE PTO CAN SUPPLEMENT ITS PRACTICES AND PROCEDURES TO ASSURE QUALITY

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I. INTRODUCTION

A most glaring problem in the issuance of undeserving, “bad” patents is that patent examiners often lack access to critical public industry information during the examination process.¹ Although systemic inadequacies—such as the limited time examiners have to examine cases, the unfortunate misclassification of cases leading to examination by examiners unfamiliar with the relevant technology, and poor, careless examinations—undoubtedly play a role in the recent failures of the patent system, the paucity of communication between United States Patent and Trademark Office (PTO) officials and industry personnel, or those who are immersed in the PTO’s recent progression, has the potential to cause the system significant harm.

As such, it is necessary to strengthen that the bridge between industry and the PTO. To do so, the PTO would be well served to institute workgroup-specialized pre-grant panels composed of experienced and informed industry professionals and academics. Either a patent examiner or other supervisory PTO employee would convene such a panel. Alternatively, either as a supplement to or a replacement of such a panel, the PTO could implement a compensatory interactive online community to solicit opinions and information regarding controversial patent applications.

¹ This statement, like many of the views expressed in this paper, is based on professional experience [*hereinafter* Professional Experience] of the author while employed at the PTO from June 2006 to the present (May 2008).

II. BACKGROUND

Patents are very important to the United States’ economy.² They provide incentives for inventors to innovate by providing exclusive protection for inventions in exchange for availing the public of the contents of those inventions, thus promoting further technological improvements.³ The issuance of undeserving, “bad” patents undermines this patent bargain when an applicant is granted protection for something that is neither novel nor nonobvious, or was invented years prior to the applicant’s application.⁴ In addition to causing unjust cost to industry due to the invention’s preclusion of use, unworthy subject matter is unduly put on public display, which could mislead the uninformed public as to the source of the invention, and aggravate industry members and academics who know of the patent’s illegitimacy.⁵

A. *Recent Crop of “Bad” Patents*

According to critics, the issuance of “bad” patents is a real occurrence.⁶ A number of well-publicized instances of “bad” patents have surfaced in recent memory. First, there was the sealed crustless sandwich.⁷ During prosecution, the Examiner allegedly missed key prior art, namely a patented device for creating very similar kinds of sandwiches.⁸ If the Examiner had found the prior art, at least the first independent claim would have been rejected, thus forcing the

² Todd Dickinson, Comm’r of Patents & Trademarks, Prepared Remarks at the Intellectual Property Rights Symposium Panel Discussion, Part I (Nov. 16, 1999), *available at* http://www.jpo.go.jp/shiryou_e/toushin_e/kenkyukai_e/dickinson.htm.

³ *See id.*

⁴ Maureen O’Rourke & Joseph F. Brodley, *An Incentives Approach to Patent Settlements: A Commentary on Hovenkamp, Janis and Lemley*, 87 MINN. L. REV. 1767, 1769–70 (2003) (“Invalid patents impose costs on the public in the form of higher prices and restricted public output without the public’s receiving the benefit of the patent bargain—a new, useful, and nonobvious invention.”).

⁵ *See* EDWARD C. WALTERSCHEID, *THE NATURE OF THE INTELLECTUAL PROPERTY CLAUSE* 136 (2002).

⁶ *See, e.g.*, EFF: The Patent Busting Project, <http://www.eff.org/patent/wp.php> (last visited Dec. 20, 2007).

⁷ *See* U.S. Patent No. 6,004,596 (filed Dec. 8, 1997); *see also* ADAM B. JAFFE & JOSH LERNER, *INNOVATION AND ITS DISCONTENTS: HOW OUR BROKEN PATENT SYSTEM IS ENDANGERING INNOVATION AND PROGRESS, AND WHAT TO DO ABOUT IT* 32–34 (2004); Mark Lemley et al., *What to Do About Bad Patents*, REGULATION, Winter 2005–2006, at 10, *available at* <http://www.law.uchicago.edu/files/lichtman/bad-patents.pdf>.

⁸ JAFFE & LERNER, *supra* note 7, at 33.

applicant to amend the claims to incorporate further dependencies in order to secure allowable subject matter.⁹ The one truly innovative claim the applicant purported for a reservoir of jelly sealed within two layers of peanut butter, using the edges of peanut butter as a sealing mechanism, may have been allowable, but the examiner's oversight allowed for a much broader scope of protection than the claim should have received.¹⁰

Another so-called "bad" patent comprised claims for a method of swinging on a swing.¹¹ Invented by a five-year-old child whose father was a patent attorney, this invention should have been found trivially obvious.¹² The patent recently underwent re-examination and was eventually cancelled as a result.¹³

Additionally, there was the "one-click" patent granted to Amazon for an e-commerce method of purchasing an item online with a single click of the mouse after the purchaser had previously entered necessary credit card information to complete the transaction.¹⁴ Many public observers viewed the patent as non-novel or obvious, especially since many companies had already implemented similar systems at the time of Amazon's filing.¹⁵ Amazon would eventually settle a lawsuit over the patent with competitor Barnes & Noble in 2002.¹⁶

There is a prevalent school of thought that believes novel answers to old difficult problems should be patentable—such as key management in cryptography solved by Diffie, Hellman, and Merkle.¹⁷ But novel answers to new, not-so-difficult problems, such as reducing the existing few-click online shopping methods to one-click, deserve heavy scrutiny.¹⁸ As such, there is the view that if patent examiners inquire as to the age of the problem that an invention addresses, and postpone allowance when the problem is novel—or at least apply

⁹ See *id.*

¹⁰ *Id.*

¹¹ See *id.* at 34 & n.6; see also U.S. Patent No. 6,368,227 (filed Nov. 17, 2000).

¹² JAFFE & LERNER, *supra* note 7, at 34 n.6.

¹³ *Id.*; see also Lawrence B. Ebert, *Inadvertent Argument Against Peer-to-Patent*, IPFRONTLINE, June 28, 2007, <http://www.ipfrontline.com/printtemplate.asp?id=15505>.

¹⁴ See U.S. Patent No. 5,960,411 (filed Sept. 12, 1997); see also Andrew Kopelman, Note, *Addressing Questionable Business Method Patents Prior to Issuance: A Two-Part Proposal*, 27 CARDOZO L. REV. 2391, 2399–401 (2006); Brad Ideas, *Telling Good Patents From Bad*, <http://ideas.4brad.com/archives/000061.html> (Apr. 8, 2004, 17:47).

¹⁵ JAFFE & LERNER, *supra* note 7, at 74–76.

¹⁶ Kopelman, *supra* note 14, at 2401 n.55.

¹⁷ Brad Ideas, *supra* note 14.

¹⁸ *Id.*

more scrutiny in such a case—there would be markedly fewer problems with the patent system.¹⁹

Yet another example of a publicly perceived “bad” patent is a recent patent, granted to Blackboard, which induced an uproar among the e-learning community.²⁰ As was very evident in the Blackboard case, the issuance of a controversial patent brings out large numbers of bloggers who are ready to dissect the invention and show that it is not worthy of patent protection.²¹ Given the valuable service that these bloggers perform, it is a shame that their skills and perspectives are not available prior to the patent’s issuance. An interactive industrial community that offers input on select patent applications could stop potentially “bad” patents from eluding rejection.²²

In an attempt to tackle the problem of these purportedly “bad” patents, the Electronic Frontier Foundation (EFF) started the Patent Busting Project to file re-examinations on a number of patents recently issued by the PTO.²³ The project focuses on stamping out “illegitimate patent applications [that] make their way through the United States patent examination process without adequate review.”²⁴ Key objectives of the EFF include: “(1) Identifying the worst offending patents; (2) Documenting the prior art that shows their invalidity; and (3) Chronicling the negative impact they have had on online publishers and innovators.”²⁵ The EFF solicits public submissions identifying these purported illegitimate issuances, and compiles the results for display on its webpage.²⁶ One of the foundation’s most effective marketing ploys is its group of “most wanted” patents, posted front and center on its website—undoubtedly a bold attempt to involve Internet users in the fight against illegitimate patents.²⁷

¹⁹ *Id.*

²⁰ See U.S. Patent No. 6,988,138 (filed Jun. 30, 2000); see also Posting of Tim O’Reilly to O’Reilly Radar, *Blackboard E-Learning Patent*, http://radar.oreilly.com/archives/2006/08/blackboard_earning_patent.html (Aug. 13, 2006).

²¹ See Posting of Peter Schilling to Academic Commons, *US Patent Office Strikes Again: Awards Broad Patent to Blackboard*, <http://www.academiccommons.org/commons/announcement/us-patent-office-strikes-again-awards-broad-patent-to-blackboard> (July 26, 2006, 11:48).

²² JAFFE & LERNER, *supra* note 7, at 177.

²³ ELECTRONIC FRONTIER FOUNDATION, THE PATENT BUSTING PROJECT: AN EFF INITIATIVE TO PROTECT INNOVATION AND FREE EXPRESSION, http://w2.eff.org/patent/EFF_Patent_Busting_Project.pdf (last visited Dec. 20, 2007).

²⁴ *Id.*

²⁵ *Id.*

²⁶ EFF, *supra* note 6.

²⁷ *Id.*

B. Causes of “Bad” Patents

There are numerous causes of “bad” patents, the root of which involves the examination process itself. First, examiners lack sufficient examining time per patent.²⁸ On average, this amounts to only about twenty hours per application, which is alarmingly low in light of the numerous purported bad allowances identified on various Internet blogs.²⁹ A second factor is the lack of resources available to examiners.³⁰ Although examiners have access to a wide variety of patent and non-patent literature (NPL),³¹ severe limitations still exist, including a lack of contact with private sector inventors regarding business practices that were in public use, but not readily available via print media, at the time of the application at issue. Examiners are not encouraged to engage in third-party private sector communication and often go through an intermediary; for example, the government contracts with the Scientific and Technical Information Center (STIC) for prior art search requests when it is unable to obtain the information it seeks via the resources available at the PTO.³²

Another concern is misclassification of patents. The PTO’s classifying system is convoluted and subjective; if something is sent to the wrong art unit, an examiner unfamiliar with the particular subject matter may be forced to examine the application without fully understanding the invention, therefore lacking the experience to perform an intelligent search using proper search terms.³³

²⁸ Carl Shapiro, *Patent System Reform: Economic Analysis and Critique*, 19 BERKELEY TECH. L.J. 1017, 1027–28 (2004).

²⁹ See Slashdot | Patent Reviews Via Wiki, <http://yro.slashdot.org/yro/06/08/17/0143207.shtml> (Aug. 17, 2006, 5:10AM); see also discussion *infra* Part II.B.2.

³⁰ Shapiro, *supra* note 28, at 1036.

³¹ See discussion *infra* Part III.A.1.

³² See STEVEN J. SHUMAKER, WHITE PAPER OUTLINES USPTO’S STRATEGY FOR EXAMINING BUSINESS METHODS PATENTS 2 (Aug. 4, 2000), <http://www.ssiplaw.com/files/whitepaper.pdf>.

³³ Professional Experience, *supra* note 1. Often times applications are mistakenly examined in the wrong art unit; examiners may know the application does not belong to them, but because of the history of the case or inner-workings of the office, are unable to transfer the case off their docket to its rightful location.

C. Patents Deemed “Bad” by the Public

A key concept in the discussion of “bad” patents is perception.³⁴ This perception may be wrong for multiple reasons. Public perception may be relative to a broad specification, rather than narrow claims allowed after examination. Every word in every claim potentially has a specific narrowed meaning in light of its supporting materials.³⁵ The scope of particular words is often in great contention in both prosecution and litigation.³⁶ In prosecution, the scope of a claim is often narrowed considerably during actions and responses between examiner and applicant.³⁷ Further, examination is made from the date of invention backwards. It often takes several years to prosecute and issue a patent.³⁸ Because of this delay, by the time a patent issues it may have been in public use for years. This alone may create a public perception that a patented technology should have been rejected as obvious.

Even if public perception is correct, issuance of a “bad” patent may not be the fault of a poor examiner. Examiners of many previously issued patents were limited to searching patent databases, which even today remain underdeveloped with respect to business method technologies.³⁹ While quick Internet searches exist today, this searching ability is a recent development, meaning that when many perceived poor patents were issued, available online resources were minimal.

Another issue facing technology patents in the late 1990s was that Europe was markedly ahead of the United States in technological areas such as mobile telecommunications.⁴⁰ With an underdeveloped world wide web at that time, the chances of an examiner finding European NPL to reject applications

³⁴ See Charles Emerick, *Law prof takes aim at ‘silly’ patents at University of Missouri*, DAILY REC., Nov. 6, 2007, available at http://findarticles.com/p/articles/mi_qn4181/is_20071106/ai_n21101914 (“There’s a perception out there that there are lots of bad patents” (quoting Mark Lemley)).

³⁵ See, e.g., *Phillips v. AWH Corp.*, 415 F.3d 1303, 1311–24 (Fed. Cir. 2005).

³⁶ See *id.*

³⁷ Professional Experience, *supra* note 1.

³⁸ See USPTO, Patent Pending Statistics, Dec. 20, 2005, http://www.uspto.gov/web/offices/com/annual/2005/060404_table4.html.

³⁹ This underdevelopment of business method technology in the patent databases is attributable to the fact that business methods were considered unpatentable until only about ten years ago.

⁴⁰ Edmund Andrews, *Next Stage of the Cellular Tour; As Europe Zooms Ahead, U.S. Fiddles With Formats*, N.Y. TIMES, July 27, 1999, available at <http://query.nytimes.com/gst/fullpage.html?res=9A03E3DA1E3EF934A15754C0A96F958260>.

could be very slim, especially given the small window of time with which to work.

Moreover, if an examiner had a hunch that a third party invented a claimed invention prior to the patent filer, obtaining such evidence could be very difficult. Information inquiries of third party competitors are unlikely to divulge helpful information without some kind of legal involvement.⁴¹ An initial inquiry might result in a dialogue with a customer service or sales representative.⁴² However, once the company is aware that patent protection may be at stake, matters are usually referred to its legal department, which is almost always reluctant to cooperate and risk disclosing information unnecessarily.⁴³ The PTO does not openly endorse such direct contact between examiners and companies,⁴⁴ but a separate service, the STIC, is under contract and has historically handled such inquiries.⁴⁵ Even with this guise of independence, critical information is rarely disseminated to examiners.⁴⁶

III. ANALYSIS

Commentators have taken a number of stances on the issuance of “bad” patents.⁴⁷ Commentator scrutiny and solutions vary widely from pre-examination practices and procedures to pre-grant and post-grant proceedings.⁴⁸ In examining the merit and feasibility of proffered proposals, however, prospective implementation hinges on the current practices of the PTO and its vision for improving the patent procurement and enforcement system. Governmental

⁴¹ Professional Experience, *supra* note 1.

⁴² *Id.*

⁴³ *Id.* On occasion, the author, in his time as an examiner, has been able to retrieve useful prior art via communications with third party competitors, but this is the certainly exception rather than the rule. Further, the hesitancy on the part of companies is understandable. In a recent case, a patent applicant sued a competitor who had offered the PTO prior art documentation used to reject the application, asserting that a competitor had committed fraudulent acts aimed at corrupting his patent application. *Jennings v. Auto Meter Products, Inc.*, 495 F.3d 466, 470 (7th Cir. 2007).

⁴⁴ Professional Experience, *supra* note 1.

⁴⁵ USPTO, The Center, 1996, <http://www1.uspto.gov/web/offices/pac/dapp/sir/stic/brochure.html>.

⁴⁶ Professional Experience, *supra* note 1.

⁴⁷ See discussion *infra* Part III.B.

⁴⁸ *Id.*; see also Kopelman, *supra* note 14, at 2418–20 (lobbying for a heavier burden on applicants to search and disclose prior art as well as the creation of non-monetary incentives for third parties to come forward with prior art).

change is generally slow and incremental rather than hurried and drastic.⁴⁹ As such, the PTO seems more likely to adopt a plan that tweaks or builds from its current system, than one that completely overhauls its general philosophy. The following subsections investigate the current state of patent examination at the PTO, as well as a number of commentators’ positions on the issuance of “bad” patents.

A. Patent Examination and Allowance at the PTO

1. Examination Techniques

Taking a closer look at the PTO, a patent examiner can have a docket comprised of over a hundred live cases,⁵⁰ with the expectation of disposing anywhere from three to six (or more) applications in a two-week period, depending on the examiner’s experience and examining hours accumulated during the period.⁵¹ Examiner production is determined by the number of counts they receive during the prosecution of applications on their docket.⁵² Generally speaking, an examiner will receive a count both when a first office action is completed (this is called a “new count”) and when an application is abandoned, allowed or otherwise disposed of (known as a “disposal count”).⁵³

From the examiner’s perspective, disposal counts are rather unpredictable because the applicant has significant control over when and how an application is disposed.⁵⁴ As such, examiners often gauge production by measuring new counts, that is, completion of first office actions.⁵⁵ After picking up a new

⁴⁹ The Executive Branch: Powers of the Presidency, <http://countrystudies.us/united-states/government-7.htm> (last visited Mar. 4, 2008) (“One of the first sobering realities a new president discovers is an inherited bureaucratic structure that can be difficult to manage and slow to change direction.”).

⁵⁰ Les J. Weinstein, Statement at FTC/DOJ Hearings: Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy, *Room For Improvement In The Patent System: Enhancing Both Innovation And Competition* 12 (Feb. 27, 2002), available at <http://www.ftc.gov/opp/intellect/020227lesweinstein.pdf> (“a [sic] often overwhelmed patent examiner, with usually over a hundred cases on his or her docket”).

⁵¹ See Groklaw, *Reports from the USPTO Meeting - Updated*, (Feb. 16, 2006), <http://www.groklaw.net/article.php?story=20060218124455621&query=reports+from+the+USPTO+meeting> (discussing the breakdown of expected biweekly production based on years of experience).

⁵² See M.P.E.P § 1705 (8th ed. rev. Sept. 2007).

⁵³ See *id.*

⁵⁴ Professional Experience, *supra* note 1.

⁵⁵ *Id.*

application, an examiner generally has one to two days to read the application, apply Title 35 of the United States Code, as well as the rules of the Manual of Patent Examining Procedure (MPEP), and write an office action, ranging in length from five pages to often over twenty pages, explaining his findings.⁵⁶

Included in the preparation of a first office action is an examiner's search of the prior art to determine if the applicant's invention is novel under 35 U.S.C. § 102, or non-obvious under 35 U.S.C. § 103.⁵⁷ In most technology areas, searching is performed primarily using United States and foreign patent databases, because the subject matter has developed to the point that prior patent publications and grants provide the examiner with art usable in a first action non-final rejection.⁵⁸ However, in the more technologically advanced and developing arts, such as business methods—which have only been patentable in the United States since 1998 following the *State Street Bank & Trust Co. v. Signature Financial Group*⁵⁹ decision—the patent databases are incomplete and underdeveloped in terms of prior art.⁶⁰ Thus, examiners are often faced with the task of searching NPL for the invention.⁶¹

NPL searching can be more time-consuming and arduous than patent searching for a number of reasons. First, patent searching is rather easy and straightforward for examiners. Applications such as EAST and WEST give examiners great operational control in terms of truncation, proximity and context.⁶² Recently, with the advent of Google Patents, Google's effective search algorithm and user-friendly results environment make it a rather attractive search tool for examiners.⁶³ If an examiner cannot find prior art via patents and

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ Wynn W. Coggins, *Prior Art in the Field of Business Method Patents – When is an Electronic Document a Printed Publication for Prior Art Purposes?*, Presentation at AIPLA (Fall 2002), available at <http://www.uspto.gov/web/menu/pbmethod/aipfall02paper.htm>.

⁵⁹ 149 F.3d 1368, 1373 (Fed. Cir. 1998).

⁶⁰ Coggins, *supra* note 58.

⁶¹ *Id.*

⁶² Randy Rabin, *If You Come to the USPTO to Work, Bring Your Own Desk*, INTELL. PROP. TODAY, May 2002, at 60, available at <http://www.uspto.gov/web/offices/com/sol/comments/epubsearch/exhE12.pdf>.

⁶³ Google Patents, <http://www.google.com/patents> (last visited Nov. 10, 2007); see TinyTechIP: Google Patents, <http://tinytechip.blogspot.com/2006/12/google-patents.html> (Dec. 14, 2006, 20:27).

pre-grant publications, however, he is likely to turn to DIALOG, which is the primary application examiners are taught to use to find NPL.⁶⁴

DIALOG, a Thomson business, has certain advantages.⁶⁵ Importantly, it is one of the largest literature sources available: with 1.4 billion unique records and over 900 databases, it contains 500 times more content than is available via web search engines.⁶⁶ Still, DIALOG’s infrastructure is antiquated, to say the least, as it has not changed proportionally with respect to other technology since its completion in 1966.⁶⁷ Scanning through results is slow, difficult and not user-friendly.⁶⁸

As a result, examiners turn to other search engines, such as Proquest, Ebscohost, JStor, and Nexis.⁶⁹ These are search tools comprising various academic journals, newspaper articles, and graduate student theses and dissertations.⁷⁰ Even so, these search engines have far less content than DIALOG.⁷¹ The Internet search engine Google, and its offspring Google Scholar,⁷² are steadily becoming favorites among examiners because they provide a very user-friendly and effective searching environment; but they too have their drawbacks.⁷³ First, they have much less content than DIALOG.⁷⁴ Second, although Google often seems able to read the mind of its user via its very impressive search algorithm, it does not offer the use of truncation, proximity and other

⁶⁴ USPTO, USPTO WHITE PAPER – AUTOMATED BUSINESS METHODS SECTION § V (2000), available at <http://www.uspto.gov/web/menu/busmethp/quality.htm>.

⁶⁵ See Thomson, *AboutDialog, A Thomson Business*, <http://www.dialog.com/about/> (last visited Nov. 10, 2007).

⁶⁶ *Id.*

⁶⁷ See Barry Dove, *A Survey of the Patent Search Tools and Services Used by Law Firms in Austin, Texas*, app. 1, 1997, http://ipmall.info/hosted_resources/tools_strategies/bp97/start.htm.

⁶⁸ *Id.*

⁶⁹ See USPTO, *Data Processing: Financial, Business Practice, Management, or Cost/Price Determination*, <http://www.uspto.gov/web/patents/searchtemplates/class705-015.htm> (last visited Nov. 10, 2007) (disclosing the required NPL search templates in Data Processing: Financial, Business Practice, Management and Cost/Price Determination subclasses within Class 705). Often prior to allowance, some art unit SPEs require their examiners to solicit a comprehensive search template performed by the EIC, or Electronic Information Center, prior to removal of any red flag. See *infra* Part IV.A.3.

⁷⁰ See Proquest, <http://www.proquest.com/>; Ebscohost, <http://connection.ebscohost.com/content/>; JStor, <http://www.jstor.org/>; LexisNexis, <http://www.nexis.com/>.

⁷¹ Professional Experience, *supra* note 1.

⁷² Google Scholar, <http://scholar.google.com> (last visited Nov. 18, 2007).

⁷³ Professional Experience, *supra* note 1.

⁷⁴ See Dove, *supra* note 67.

operators that are often critical to maximizing the effectiveness of a prior art search.⁷⁵

Searching can be a tedious and seemingly never-ending process for an Examiner, especially if it continues for more than a day or two for the same application.⁷⁶ In the event of an unfruitful attempt to find prior art, there are a number of viable avenues available to examiners. First, an examiner can reject the claims using reasoning, case law precedent and PTO practice rules enumerated in the MPEP.⁷⁷ There are numerous rationales including, but not limited to, nonfunctional descriptive material, official notice, inherency, design choice, obvious variants, KSR obviousness, and automation of known process, which can aid an examiner in asserting a rejection without rock-hard prior art for all claims.⁷⁸ Generally, as long as the independent claims have solid prior art against them, which is often the case in light of a broad recitation, an examiner can appropriately use these sometimes less effective techniques to bolster his rejections of dependent claims and avoid a second action non-final rejection.⁷⁹

Additionally, an examiner still has at her disposal all the rule-based objections,⁸⁰ as well as rejections relating to the written description and enablement requirements under 35 U.S.C. § 112, and patentable subject matter under 35 U.S.C. § 101.⁸¹ Moreover, an examiner may contact a fellow examiner within the art unit, including a primary examiner (examiner with signatory authority and several years of experience in the art), supervisory patent examiner (SPE), or in-house search expert knowledgeable in the art.⁸² Such contact is often made informally, such as via e-mail, phone or an impromptu meeting.⁸³

2. Allowance Conferences

To supplement the examiner's own search and examination, art units in the business methods workgroup can opt to have regular formal or informal

⁷⁵ Professional Experience, *supra* note 1.

⁷⁶ *Id.*

⁷⁷ See generally M.P.E.P. §§ 700, 2100.

⁷⁸ See M.P.E.P. § 2100–90.

⁷⁹ Professional Experience, *supra* note 1.

⁸⁰ See 37 C.F.R. §§ 1.1–1.198 (2007).

⁸¹ See 35 U.S.C. §§ 101, 112 (2006); see also USPTO, INTERIM GUIDELINES FOR EXAMINATION OF PATENT APPLICATIONS FOR PATENT SUBJECT MATTER ELIGIBILITY Nov. 22, 2005, <http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>.

⁸² Professional Experience, *supra* note 1.

⁸³ *Id.*

allowance conferences, during which any examiner may present materials believed to be potentially allowable subject matter.⁸⁴ Attendees of an allowance conference usually include examiners with potentially allowable or hard-to-reject cases, as well as any available senior examiners, and often the art unit SPE.⁸⁵ The contents of these proceedings are not made part of the public record, but allowance conferences may be an objective and democratic way for an examiner to allow a case.⁸⁶

In addition to cases where the examiner is confident of patentable subject matter, junior examiners will often decide to participate in allowance conferences if a particular case is difficult to search.⁸⁷ The PTO does not officially require allowance conferences, but these conferences are highly recommended in business method art units for all examiners so as to validate the credibility of purported allowances.⁸⁸

Another advantage to allowance conferences is that they can be effective not only for brainstorming and guiding the examiner towards applicable prior art, but also in exploiting the MPEP.⁸⁹ In practice, allowance panels serve as a “border patrol,” and are especially effective when an examiner fails to find prior art on an invention that is well known to panel members as a result of their superior experience.⁹⁰ In light of recent criticism of numerous patents, such as the crustless peanut butter sandwich and the one-click online shopping method,

⁸⁴ *Id.*

⁸⁵ See Harold Wegner, *The USPTO's 54% Allowance Rate*, IPFRONTLINE, Dec. 30, 2006, <http://www.ipfrontline.com/depts/article.asp?id=13796&deptid=5> (“[T]he PTO now requires an allowance conference for each proposed allowance - thus the examiner can no longer allow any application without getting agreement from two supervisors.” (quoting a practitioner)); see also Alston+Bird LLP, *Intellectual Property Advisory*, June 9, 2006, at 2–3, *available at* <http://www.alston.com/files/Publication/35968087-f8d9-4659-8256-25c0793b44e8/Presentation/PublicationAttachment/29bf38c0-f23a-46a0-b3e8-3b77796cbe2c/BNA%20Patent%20Process090606024419.pdf>.

⁸⁶ See Wegner, *supra* note 85. In lieu of an allowance conference, sometimes a brief meeting with a SPE comprising a perusal of the claims at issue is sufficient for an allowance determination. Professional Experience, *supra* note 1.

⁸⁷ Professional Experience, *supra* note 1. This search help procedure is not a separate conference; it is merely another support mechanism available to an examiner within an ‘allowance’ conference.

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ See Wegner, *supra* note 85.

keeping these well-known so-called inventions from blooming into full-blown “bad” patents is of paramount priority to the PTO.⁹¹

3. Flagging System and Other Safeguards

To ensure the issuance of worthy business method patents, the PTO has implemented an internal flagging system.⁹² This system red-flags all applications before they are declared allowable.⁹³ The examiner must fulfill a number of requirements prior to his SPE removing the flag. First, the examiner must perform a bona fide search of a number of pre-selected NPL databases on DIALOG, as well as all the patent databases.⁹⁴ A further requirement is the inclusion in the examiner’s allowance action of at least one reference from each of the U.S. patent databases, the foreign patent databases, and the NPL.⁹⁵ Once this requirement is completed, a number of PTO employees may peruse the application before it is cleared for allowance.⁹⁶

The rather difficult subject matter and relative infancy of the patent examination process for business methods translates to a heightened need for communication within the workgroup to address challenging issues.⁹⁷ Within the business methods workgroup, senior management strongly encourages communication between employees to resolve examination issues.⁹⁸ For example, primary examiners are allotted non-examining time, called “other time,” to aid junior examiners in their search of prior art and writing of office actions.⁹⁹

Examiner interaction promotes efficiency because each examiner brings a different background to the office and is able to help others who may have weaknesses in a given area. This yields a broader collective knowledge of the technology and examination practice.¹⁰⁰ SPEs can also be helpful, but they are

⁹¹ See USPTO, 2007–2012 STRATEGIC PLAN 14–17 (2006) [hereinafter STRATEGIC PLAN], available at <http://www1.uspto.gov/go/com/strat2007/stratplan2007-2012.pdf>. “Determining the appropriate measures of patent quality and the related performance targets are of critical interest to both the USPTO and the patent community.” *Id.* at 15.

⁹² Professional Experience, *supra* note 1.

⁹³ *Id.*

⁹⁴ See *supra* note 69 and accompanying text.

⁹⁵ Professional Experience, *supra* note 1.

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ See Posting of US Patent Agent Living Overseas to Patently-O Patent Law Blog, http://www.patentlyo.com/patent/2007/03/rumors_continua.html (March 2, 2007, 8:46).

¹⁰⁰ Professional Experience, *supra* note 1.

often engaged with other responsibilities and usually delegate personal assistance to primary examiners.¹⁰¹ Still, SPEs are generally present at allowance conferences, as a SPE’s signature is necessary to remove a red flag from a patent for allowance.¹⁰² Thus, some form of communication with a SPE regarding a particular application is inevitable as a pre-condition for allowance.

An alternative lifeline available to examiners, other than communicating with SPEs, is the assistance of the PTO’s business practice specialist.¹⁰³ The current business practice specialist, Robert Weinhardt, is a PTO veteran of over fifteen years with a wealth of experience in business methods and PTO practice in general.¹⁰⁴ Weinhardt dedicates a good portion of his time responding to e-mail inquiries, brainstorming with examiners on examination strategies, and serving as the resident expert on what is an evolving and complex field.¹⁰⁵

Other PTO personnel whom examiners may contact regarding business method patent allowances include the Workgroup Director, the Tech Center Director and the Commissioner of Patents.¹⁰⁶ While such management personnel generally concern themselves with the overall operation of the PTO, if an application is of particular significance or interest, for example, for either industry or public policy reasons, management intervention is a possibility.¹⁰⁷

The PTO has instituted further procedures to try to promote office action quality. The Office of Patent Quality Review (OPQR) comprises a fleet of review specialists and top examiners who review cases for errors.¹⁰⁸ In 2000,

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ Australian Law Reform Commission § 8, 1999, <http://www.austlii.edu.au/au/other/alrc/publications/reports/99/08.html> (“The USPTO has engaged an in-house business practice specialist to act as a resource on industry practices, terminology and standards for patent examiners assessing applications for business systems.”); see Michael Sandonato et al., *Current Developments in Business Method Patent Law* E-COMMERCE L.J., Sept. 2001, at 2, available at http://www.fitzpatrickcella.com/images/pub_attachment/attachment144.pdf (“The responsibilities of the Business Practice Specialist include identifying and developing legal and procedural training needs related to the electronic commerce and data processing, acting as a resource on technical issues related to business method patents, and examining and providing input on applications involving complicated interference or business practice issues.”).

¹⁰⁴ See also Posting by Dennis Crouch to Patently-O Patent Law Blog, http://www.patentlyo.com/patent/2005/05/eight_tips_for_.html (May 5, 2005).

¹⁰⁵ Professional Experience, *supra* note 1.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ U.S. Dep’t of Commerce, Office of the Inspector General, *USPTO Should Reassess How Examiner Goals, Performance Appraisal Plans, and The Award System Stimulate and*

the PTO instituted the “second-pair-of-eyes” review of business method patents.¹⁰⁹ This is a brief review conducted on all allowed cases to search for examiner errors.¹¹⁰ Another protective mechanism installed by OPQR was the Sensitive Application Warning System (SAWS), which is geared to “identify and monitor patent applications that may have a significant impact on the marketplace.”¹¹¹

4. Pilots and the PTO

Many procedures instituted by the PTO are initiated as pilot programs set to run for a limited period, and are then continued if successful.¹¹² One recent pilot program aimed at assuring patent quality is an online community review initiative, whereby public input is sought on applications.¹¹³ The program seeks to tap into outside attorneys, scientists and laypeople by inviting volunteers to submit prior art after an application publishes, which is generally within eighteen months of filing.¹¹⁴ This program enables thousands of PTO outsiders to read an application and submit pertinent prior art.¹¹⁵ The submissions are then ranked by community participants, resulting in the delivery of the highest-ranked references to the patent examiner for consideration.¹¹⁶

So far, the online community pilot has garnered notable support in the business community, with companies such as IBM, Microsoft, Hewlett-Packard

Reward Examiner Production at 32 (2004), available at <http://www.abanet.org/intelprop/109legis/CommerceDept%20IGReportonPTO.pdf> (illustrating the quality review process).

¹⁰⁹ Moazzam & Latimer, LLP, *TC1600 Addressing Backlog and Quality Issues*, THE USPTO CONNECTION, July 2005, at 1 (2005), available at <http://www.latimerip.com/downloads/Vol2-Issue4.pdf>; see also Posting of Dennis Crouch to Patently-O Patent Law Blog, http://www.patentlyo.com/patent/2007/04/pto_second_pair.html (Apr. 4, 2007, 12:22 PM).

¹¹⁰ See Crouch, *supra* note 109.

¹¹¹ Chua Siak Kim, *Patenting Business Methods*, L. GAZETTE, Oct. 2001, n.6, <http://www.lawgazette.com.sg/2001-10/Oct01-focus2.htm> (last visited Nov. 18, 2007).

¹¹² Professional Experience, *supra* note 1.

¹¹³ Eli Kintisch, *PTO Wants to Tap Experts to Help Patent Examiners*, 312 Science 982, 982 (May 2006).

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.* For further evaluation of this pilot and comparison to the author’s proposal, see *infra* Part IV.D.

and Oracle heading the initiative.¹¹⁷ Such a program, however, may be viewed negatively by examiners who are: (1) already inundated with materials and references pertinent to examination; and (2) confident in their own searching techniques, thus perhaps disinclining them to rely on others’ submissions.¹¹⁸

Although pilot programs ostensibly reflect the PTO’s answer to its critics, the dissatisfied public, and the greater patent community, the ratio of pilot programs that reach full implementation to the number of pilot programs instituted is not high.¹¹⁹ The PTO has been known to phase out pilot programs once the outcry subsides, and pilot programs do not necessarily reflect a bona fide effort to permanently change the patent examining landscape.¹²⁰

In terms of recent pilot programs that may have staying power, the PTO has instituted what it calls a “hoteling” pilot program, whereby examiners are able to work from home for the vast majority of their examining time.¹²¹ This program is a very popular option among senior examiners, and, for the most part, has been accepted as a viable program with permanent potential.¹²² Similarly, the PTO is instituting a laptop pilot program, through which any interested examiner who has been employed by the office for more than a year is given a laptop to perform overtime examiner’s duties from any remote location.¹²³ Although these two programs have been quite popular, the PTO has had difficulties promoting and maintaining other pilot programs.¹²⁴ As a result, the PTO has described pilot programs as merely “opportunit[ies] to try something to see if it works . . . [w]e don’t know if it will prove to be beneficial to the agency, [but] we will see.”¹²⁵

¹¹⁷ See Phillip Brooks’ Patent Infringement Updates, *Head of Patent Peer Review Deflects Infringement Concerns*, http://www.infringementupdates.com/2007/03/head_of_patent_.html (Mar. 29, 2007).

¹¹⁸ Professional Experience, *supra* note 1.

¹¹⁹ *Id.*

¹²⁰ USPTO, PROCEEDINGS OF THE PATENT PUBLIC ADVISORY COMMITTEE MEETING, Feb. 9, 2007, at 31 [hereinafter PUBLIC ADVISORY MEETING], available at http://www.uspto.gov/web/offices/com/advisory/acrobat/ppac_transcript_020907.pdf.

¹²¹ See Daniel Pulliam, *Patent office union expresses concern over massive telework program*, GOVERNMENTEXECUTIVE.COM, May 24, 2007, <http://www.govexec.com/dailyfed/0506/052406p1.htm>.

¹²² Professional Experience, *supra* note 1.

¹²³ See PUBLIC ADVISORY MEETING, *supra* note 120, at 33.

¹²⁴ See *id.* at 25–31 (discussing the Flat Goal Pilot).

¹²⁵ *Id.* at 31.

B. Commentators**1. Jaffe & Lerner's Discontent with Innovation and Lemley's "Rational Ignorance"**

Many commentators have attempted to analyze and resolve the problem of issuing "bad" patents. Adam B. Jaffe and Josh Lerner, in their recent book *Innovation and Its Discontents*, tackle what they contend has become a glaring issue in today's economy.¹²⁶ Commenting on the entirety of issued patents, Jaffe and Lerner posit that most patents are inconsequential, with very few returning considerable value.¹²⁷ However, sifting through the waste to find the few nuggets of gold is a task that will always have to be performed in some capacity.

Although it is true that the vast majority of patent applications ultimately fail to yield newsworthy economic or technological impact, the manpower that is dedicated to each application still has positive results. First, as more patent applications are examined, examiner actions are tried, tested and perfected. If a particular examiner action is affirmed through appeal to the Board of Patent Appeals and Interferences (BPAI) and subsequently the Federal Circuit, examiners receive validation that the procedures at issue are acceptable. These procedures can then be implemented in future applications, providing patent examiners and practitioners with both a benchmark and legal precedent with which to craft future arguments and conduct prosecution. Second, conducting a thorough examination for all patent applications relieves a potential burden on the courts to hear patent cases, should such examination not occur. Finally, a thorough and bona fide prosecution history streamlines examination of new applications. Examiners have access to all prosecuted applications, and can use this information as a reference in the application of the MPEP and prior art to make new rejections.¹²⁸ Such access can save examiners significant time, especially with regard to related applications where the same art is applicable, and PCT applications where international search reports give examiners a jump-start as to the target area of prior art.¹²⁹

Availing the examiner and other PTO employees of all resources necessary to make prior art rejections could improve the system. Having the most effective resources to reject an application lowers the necessary examination

¹²⁶ See generally JAFFE & LERNER, *supra* note 7, at 170–207 (discussing solutions to prevent and eliminate "bad" patents).

¹²⁷ *Id.* at 173.

¹²⁸ Professional Experience, *supra* note 1.

¹²⁹ *Id.*

time and should provide relevant prior art necessary in a first office action.¹³⁰ Consequently, prosecution may be shortened due to the fact that fewer second action non-final rejections will be issued by examiners, thus moving the application towards disposal and avoiding the potential for an applicant and attorney to unreasonably prolong the prosecution process.¹³¹ The more quickly applications are properly processed, the greater the overall number of examinations that occur, and the more progress can be made toward reducing the backlog of patent applications.¹³²

Moreover, examiners who have all relevant resources available to them will not have reason to include weaker rejections, knowing that better prior art exists. Exclusion of such weaker rejections is beneficial, as applying inferior art jeopardizes the examiner’s position while prosecuting the case with the applicant’s attorney.¹³³ If inferior art is used to make rejections, even minor amendments may induce the examiner to remove the prior art reference and perform an entirely new search on the subject matter.¹³⁴ Additionally, if an obviousness rejection is involved, the applicant may present secondary considerations to overcome the rejection, thus resulting in a patent for an invention that may not, in fact, be novel, but that is novel over the examiner’s limited resources.¹³⁵

Thus, while the PTO’s limitations may put it in difficult positions, the public must also be aware of these limitations. Further, many of the public writings criticizing PTO allowances refer not to the claims, but to the abstract, specification and other noncritical parts of the disclosure.¹³⁶ The release of information, whether true or false, may spread over the Internet, effectively creating gospel that the PTO has made yet another glaring mistake. This illustrates the never-satisfied attitude of the patent system’s critics and fans alike. Expectations are simply too high. As stated by Jaffe and Lerner, “Mistakes Will Always Be with Us.”¹³⁷ The PTO must work hard to minimize errors, but considering the volume of applications handled each year, errors are sure to creep in.

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ See M.P.E.P. § 2145.

¹³⁶ See, e.g., Hance Haney, *Is the Patent System Working Well?*, TECH. LIBERATION FRONT, Mar. 28, 2007, <http://techliberation.com/2007/03/28/is-the-patent-system-working-well/>; Brad Ideas, *supra* note 14; Raph Levien, *A Rant Against Bad Patents*, Oct. 3, 2001, <http://www.levien.com/free/patent-rant.html>.

¹³⁷ JAFFE & LERNER, *supra* note 7, at 172.

Therefore, rather than focusing on the pitfalls of the PTO when the latest “bad” patent issues, it would be more advantageous to think proactively and establish a communication channel between members of the public and the PTO to address issues before they become a significant impediment to our economy.¹³⁸

Jaffe and Lerner further note that “the intangible cost of a system with pervasive low-quality patents is much higher than just the cost of paying lawyers to file and defend patent cases.”¹³⁹ Thus, if there is sufficient deterioration in the quality of patents and continued delay in prosecution, it may well result in a marked shift in asset protection from patents to other forms of intellectual property. In our capitalist economy, the protection scheme that provides for the best chance at return on investment will prevail.¹⁴⁰ In the presence of a poor quality patent system, it is just a matter of time before the long-standing cultural and economic reputation of patents as strong, valuable assets evaporates in the wake of increased invalidation findings, patent trolls pecking away at large companies’ stockpiles, and other business plans providing inventors with more attractive investment alternatives.

Another key issue addressed by Jaffe and Lerner is the concept of securing an information flow into the PTO.¹⁴¹ Unfortunately, critical information is in the hands of competitors instead of examiners.¹⁴² There are strong incentives for firms to share technological information,¹⁴³ but it must occur within the proper secure environment. Firms are often reluctant to share information with examiners because of the uncontrolled and uninformed environment in which the information is transmitted, whether it is over the phone or via e-mail.¹⁴⁴

The reality is that most of the time examiners are in search of prior art and need firms to provide evidence to show that their invention, and not that of the applicant at issue, anticipates some part of the applicant’s invention.¹⁴⁵ Yet, it is difficult to communicate to a firm representative that the information she are releasing is not directed as an attack against the firm’s inventions.¹⁴⁶ Further, firms do not want to go on the record regarding their technologies and invention dates unless it is in a structured environment in which they are comfort-

¹³⁸ See discussion *infra* Part IV.

¹³⁹ JAFFE & LERNER, *supra* note 7, at 175.

¹⁴⁰ See *id.*

¹⁴¹ *Id.* at 177.

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ Professional Experience, *supra* note 1.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

able releasing information, such as a court of law—where measures within the Federal Rules of Evidence, such as hearsay and protective orders, serve to keep critical, deserving information confidential.¹⁴⁷

For information flow from industry to be realized, the PTO must give third parties the opportunity for input.¹⁴⁸ In an attempt to address this, the PTO has announced the start of a community pilot program that invites members of the public to comment and offer advice regarding pending applications.¹⁴⁹ However, this procedure must be narrowly focused on only critical applications as determined by the PTO, and must be segmented in the sense that only particular members of the public familiar with the technology are targeted for advice.¹⁵⁰ Otherwise, there would be an information overload and the public would be unable to fully devote its time to a particular matter when, for example, a thousand patent applications have been presented to them for comment.

An alternative means to involve the public would be implementation of a public notice of intent to issue a patent, followed by a brief period during which pertinent information could be submitted.¹⁵¹ Altruism aside, there must be some type of compensation offered to participants, such as a per-tip monetary reward, to convince people to devote time to approving or disapproving of a standing PTO decision to grant a patent application.

Another alternative is to make a pre-grant opposition procedure available to concerned parties.¹⁵² Third parties have historically not been given any opportunity to oppose the issuance of a pending application.¹⁵³ This is at least partially due to the traditional secrecy of applications until a patent is granted.¹⁵⁴ However, with the standard eighteen-month publication of applications, this is no longer a convincing reason.¹⁵⁵ Members of the public should be able to contribute information and assistance. An individual can protest divisional and

¹⁴⁷ *Id.*

¹⁴⁸ JAFFE & LERNER, *supra* note 7, at 177.

¹⁴⁹ See discussion *supra* Part III.A.4 and discussion *infra* Part IV.B.

¹⁵⁰ See discussion *infra* Part IV.

¹⁵¹ JAFFE & LERNER, *supra* note 7, at 180.

¹⁵² *Id.*

¹⁵³ Jeffrey A. Wolfson, *Patent Flooding in the Japanese Patent Office: Methods for Reducing Patent Flooding and Obtaining Effective Patent Protection*, 27 GEO. WASH. J. INT'L L. & ECON. 531, 537 (1994).

¹⁵⁴ JAFFE & LERNER, *supra* note 7, at 181.

¹⁵⁵ See Joseph M. Barich, *Pre-Issuance Publication of Pending Patent Applications: Not So Secret Any More*, 2001 U. ILL. J.L. TECH. & POL'Y 415, 417 (2001) (noting the most recent revision of 35 U.S.C. § 122 “calls for each application to be published eighteen months from the filing date of the application”).

continuation applications, which appear on the PTO website prior to publication.¹⁵⁶

Still, third parties can protest an application only before its publication.¹⁵⁷ This puts an individual in the unenviable position of having to visit the PTO website regularly in hopes of finding a protestable application.¹⁵⁸ Alternatively, after a patent issues, third parties may submit pertinent documentation to the public record. But, as proffered by Jaffe and Lerner, the appropriate time to allow third party input is *after* publication and *before* the patent is granted, so as to maximize the exposure of the application and prevent a bad allowance.¹⁵⁹

Finally, Jaffe and Lerner recognize that business method patents present perhaps the greatest challenge for examiners, in that much of the prior art lies in NPL.¹⁶⁰ This literature is not always at an examiner's disposal.¹⁶¹ The solution is to create incentives and opportunities for those who do have knowledge of prior art to bring it to the fore of the prosecution process.¹⁶² Specifics regarding the author's solution will be disclosed below.

2. Lemley's Solution to "Bad" Patents

Mark Lemley has been quite vocal on the issuance of "bad" patents, their ramifications, and how to remedy the problem.¹⁶³ Lemley sets forth the key concept of identifying important patents—that is, the PTO should focus its examination resources on important patents and pay little attention to the rest.¹⁶⁴ But how does one recognize what is or is not important?

Lemley's first suggestion is to weaken the presumption of validity for issued patents from the current "clear and convincing evidence" standard to a "preponderance of the evidence" standard, as is currently applied to copyright and trademark registrations.¹⁶⁵ Furthermore, Lemley proposes an option for applicants where they earn a presumption of validity by paying for a thorough

¹⁵⁶ JAFFE & LERNER, *supra* note 7, at 182.

¹⁵⁷ *Id.*

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.* at 199.

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ *See generally* Lemley et al., *supra* note 7.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

examination of their inventions.¹⁶⁶ Applicants could pay more money for a more thorough search to “gold-plate” the patent.¹⁶⁷ Finally, Lemley proposes a post-grant opposition system, whereby third parties could request and fund a thorough examination of issued patents.¹⁶⁸

Lowering the presumption of validity standard from “clear and convincing evidence” to “preponderance of the evidence” would not be likely to succeed given the current structure of the PTO. By lowering the standard of review (except for more thorough and paid reviews), the PTO may produce sub-par work product. Furthermore, reducing the quality of issued patents could lead to more litigation in the form of validity attacks in federal courts and appeals at the BPAI.

Lemley also identifies that examiners spend on average eighteen hours over a three-year period prosecuting a patent.¹⁶⁹ Although this number is based on an average production expectancy over the life of a patent over all examiner technology centers,¹⁷⁰ it cannot be fully relied upon due to the significant deviation in the amount of time spent from application to application, in light of the great disparity in the number of communications necessary to dispose of specific applications.¹⁷¹

First, examiners generally spend much more time on potentially allowable cases than on those that are rejectable almost immediately.¹⁷² The vast majority of patent applications are at least initially rejected.¹⁷³ Often, upon first glance at an application, an examiner will know which art to apply, or that a quick search on the patent databases will undoubtedly uncover relevant art.¹⁷⁴ Examiners will be able to accumulate extra time by quickly disposing of these cases that are easier to search and/or reject. This extra time can then be used to tackle the more difficult cases, especially those that may present challenges in terms of finding prior art.

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ See Anonymous Posting to Just_n_examiner: Advice from (or, rather, for) the Other Side, <http://just-n-examiner.livejournal.com/19846.html> (May. 28, 2007, 11:20 PM UTC) (discussing balanced disposal production requirements for examiners based on grade and scale).

¹⁷¹ Professional Experience, *supra* note 1.

¹⁷² *Id.*

¹⁷³ See *USPTO Allowance Rate*, Posting by Dennis Crouch to Patently-O Patent Law Blog, http://www.patentlyo.com/patent/2007/02/uspto_allowance.html (Feb. 12, 2007).

¹⁷⁴ Professional Experience, *supra* note 1.

Second, this average number of hours per case does not take into account that the more difficult technology areas (such as biotechnology and business methods, where many “bad” patent controversies lie) allot examiners a significantly greater amount of time for each balanced disposal (BD). The term BD refers to the average amount of time an examiner is given in which to complete her analysis of an application from start to finish, including performing searches and writing office actions.¹⁷⁵ For example, a GS-12 examiner, an individual with significant experience in the technology and/or at the PTO in the mechanical art field, receives as few as sixteen hours per BD, while an examiner having a similar level of experience in the biotechnology or business method art fields receives as much as 31.6 hours per BD.¹⁷⁶

Third, especially in business method patents, first action allowances are rare, and examiners often apply rejections and objections easily traversed by the applicant, rather than risk a bad allowance prior to a robust examination.¹⁷⁷ This forced continuation of prosecution gives the PTO more time and more eyes on an application before allowance.

Finally, even though examiners are given an allotted amount of time to review an application, there are several other examiners and PTO employees who will look at the application as it nears allowance.¹⁷⁸ This additional time has not been factored into the average BD value.¹⁷⁹ Not only is this extra time important, but also often the most experienced PTO employees are in these su-

¹⁷⁵ Slashdot, *supra* note 29 (“examiners, on average, have about 20 hours to spend on an application so that they will be rated ‘fully successful’; to meet this critical requirement in their Performance Appraisal plan they must average out, over any one year period, at least 95% of their assigned ‘expectancy’ Now the ‘hot button’ technologies have been rated at the highest level, so the software, business methods, biotech areas get roughly twice the time (i. e. [sic] about 40 hours).”).

¹⁷⁶ *Id.*; see also USPTO, PROCEEDINGS OF THE PATENT PUBLIC ADVISORY COMMITTEE MEETING, Nov. 9, 2006, available at http://www1.uspto.gov/go/com/advisory/acrobat/ppac_transcript_110906.pdf. Key points in this meeting include the discussion that complicated technologies get more examining time than simple devices like bird-feeders. *Id.* at 53. Also, the average examiner has only 20.4 hours to fully examine a case, which would include reading the case, drafting or understanding the claims, doing the search, and preparing office actions that may include a restriction, a first action, a final rejection, advisory action, and then an examiner’s answer in the event of an appeal. *See id.* at 53, 64.

¹⁷⁷ See Steven J. Shumaker, *Post-Festo Patent Bar Prepares for Prosecution Gridlock*, at 3, <http://www.ssiplaw.com/files/Festo.pdf> (last visited June, 30 2007) (“Unfortunately . . . most examiners are programmed to reject claims, and that first-action allowances are very rare. Even if the examiner’s rejection is off-base, he usually is not inclined to withdraw it unless there is some concession (usually an amendment) by the prosecutor.”).

¹⁷⁸ See discussion *infra* Part IV.A.

¹⁷⁹ Professional Experience, *supra* note 1.

pervisory and review positions, and are able to apply their knowledge to an application, perhaps leading to the discovery of pertinent prior art.¹⁸⁰

Lemley make an additional broad statement that “more than three-fourths of all patent applications ultimately result in successfully issued patents.”¹⁸¹ This claim fails to address the considerable metamorphosis that most applications undergo before allowance. During prosecution, claims are often amended multiple times to try to avoid prior art. Often what is left is a very narrow patent, whose protectable scope pales in comparison to that which is described in the specification. After such narrowing, most of these issued patents have little, if any, economic value.¹⁸²

3. Kesan & Gallo on the Costs of “Bad” Patents

Jay Kesan and Andres Gallo set forth the many costs associated with the issuance of “bad” patents, and propose a number of potential changes to help minimize the problem.¹⁸³ Outlining the current situation, the PTO “has recently come under increasing scrutiny for the quality of examinations to which patent applications are subjected.”¹⁸⁴ Still, the PTO’s lack of accountability and fee collection provide no incentive for the agency to develop “efficient mechanisms to avoid issuing incorrect patents, and thus avoid subsequent social costs.”¹⁸⁵

¹⁸⁰ *Id.*

¹⁸¹ Lemley et al., *supra* note 7.

¹⁸² See Leyendecker & Lemire, LLC, *Patent FAQ*, <http://lld-law.com/PatentFAQ.html> (last visited June 30, 2007) (“Understand, however, that most inventions are patentable in some manner over the prior art if the patent claims that define the legal scope of the invention are written narrowly enough. As discussed elsewhere on this site, narrow claims result in patents that are not very valuable; whereas, patents with broad claims are the most likely to get licensed.”); see also JAFFE & LERNER, *supra* note 7, at 173 (discussing that, overall, most patents carry little value).

¹⁸³ See generally Jay P. Kesan & Andres A. Gallo, *Why “Bad” Patents Survive in the Market and How Should We Change?—The Private and Social Costs of Patents*, 55 EMORY L.J. 61, 95–116 (2006).

¹⁸⁴ *Id.* at 63.

¹⁸⁵ *Id.* at 66. According to Kesan & Gallo, the social and private costs of bad patents are numerous. For example, “firms have to pay licensing fees to use the technology, and consumers have to pay higher prices to buy the patentee’s products.” *Id.* at 77. The social cost induced by bad patents comprises “the sum of all the private costs plus the externalities over the investment processes of competing firms.” *Id.* For a comprehensive enumeration of these costs, see *id.* at 66–70. See also Shubha Ghosh & Jay Kesan, *What Do Patents Purchase? In Search of Optimal Ignorance in the Patent Office*, 40 Hous. L. Rev. 1219, 1227–28 (2004).

To further compound the problem, “[a]s Allison and Lemley demonstrated, the type and complexity of patents have changed over the last decade, and this has made it more difficult for the Patent Office examiners to decide which patents should issue.”¹⁸⁶ According to Kesan and Gallo, examiners are not experienced in examining these new types of patents, especially business methods. Many examiners have technical degrees but no business background, and the PTO has been slow to hire examiners with business backgrounds.¹⁸⁷

Another problem pointed out by Kesan & Gallo is that:

the PTO issues many [bad] patents that would have been rejected had the examiner possessed perfect knowledge. This is particularly true since much of the most relevant prior art isn’t easy to find—it consists of sales or uses by third parties that don’t show up in any searchable database and will not be found by examiners in a hurry.¹⁸⁸

In an attempt to improve the quality of patents, Kesan and Gallo argue for “a low-cost, post-grant opposition process based primarily on written submissions with a limited estoppel effect and administered by Administrative Opposition Judges (AOJs).”¹⁸⁹ The Patent Quality Assistance Act of 2004,¹⁹⁰ a short-lived bill for patent reform, was also supportive of this post-grant opposition arrangement,¹⁹¹

Additionally, Kesan and Gallo note a number of less-developed alternatives to a post-grant opposition system.¹⁹² First, there is the institution of bounties for private citizens who provide information pertinent to patentability.¹⁹³ This would provide incentive to third parties, especially since the process would be anonymous, and would encourage applicants to provide greater disclosures.¹⁹⁴ Second, instead of patent examination, the PTO could impose a registration system.¹⁹⁵ Third, the PTO could initiate a pre-grant opposition program like the former systems of Germany and Japan.¹⁹⁶

¹⁸⁶ Kesan & Gallo, *supra* note 183, at 67.

¹⁸⁷ *See id.* at 67 (noting the nonexistent experience of the Patent Office with respect to some patent technologies).

¹⁸⁸ *Id.* at 68 n.34.

¹⁸⁹ *Id.* at 71.

¹⁹⁰ H.R. 5299, 108th Cong. (2004).

¹⁹¹ *See* Kesan & Gallo, *supra* note 183, at 74.

¹⁹² *Id.* at 71.

¹⁹³ *Id.*

¹⁹⁴ *Id.* at 72.

¹⁹⁵ *Id.*

¹⁹⁶ *Id.* at 95–96, 109–10.

Kesan and Gallo address both the merits and pitfalls of a pre-grant opposition system.¹⁹⁷ Advantageously, a pre-grant opposition system would provide an incentive for the PTO to analyze opposition claims objectively because the final decision on patentability would still be pending.¹⁹⁸ Also, a pre-grant opposition system provides an additional layer of examination prior to allowance; thus, arguably a stronger patent would be granted if a patent passes through both mechanisms.¹⁹⁹ One additional benefit of a pre-grant opposition system might be the movement of a significant amount of the legal efforts of applicants and patentees from the courts to the opposition system. On patents not yet granted, inventors and firms would have to use the opposition system instead of courts.²⁰⁰ Detractors of the pre-grant system point to: (1) firms increasingly hunting small inventors; (2) secret information potentially leaking to competitors; and (3) competitors withholding potentially invalidating art to save money.²⁰¹

There may be additional shortcomings to a pre-grant opposition system. For example, Kesan and Gallo posit that the PTO lacks experience in examining business method patents and has failed to hire examiners with adequate business backgrounds.²⁰² Although this may have been the case several years ago, an increase in hiring not only examiners in general, but specifically those holding advanced business degrees, could address this shortcoming without having to create a new system.

Assuming that all new hires are ready and willing to learn their new jobs, learning the fundamentals of searching is critical to business methods.²⁰³ Unlike other areas of technology, business methods have only been recognized as patentable for about nine years.²⁰⁴ Thus, many arts within business methods are underdeveloped as far as applications and patents are concerned. This means examiners are forced to search for NPL, which can be very time-consuming.²⁰⁵

¹⁹⁷ See *id.* at 109–11 (noting the several advantages and disadvantages of a pre-grant opposition system).

¹⁹⁸ *Id.* at 109.

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ *Id.* at 110.

²⁰² *Id.* at 67 n.28.

²⁰³ Professional Experience, *supra* note 1.

²⁰⁴ See John J. Love & Wynn W. Coggins, *Successfully Preparing and Prosecuting a Business Method Patent Application*, Presented at AIPLA, Spring 2001, at 1, available at <http://www.uspto.gov/web/menu/pbmethod/aiplapaper.rtf>.

²⁰⁵ See *supra* note 61 and accompanying text.

Furthermore, despite the regimented and confined nature of the eight month training program for new patent examiners, there have been many positive effects resulting from this type of training.²⁰⁶ First, it provides new examiners with a solid foundation of patent law, rules and procedures.²⁰⁷ Second, there is extensive training on search tools and strategies, both patent and non-patent related.²⁰⁸ Third, new business method examiners are placed in a small lab setting, with an individual trainer and fellow business method examiners.²⁰⁹ Having over a dozen examiners in one room, each with a wide range of useful experience, provides for the free-flow of information, thus enhancing everyone's overall business knowledge.²¹⁰ This type of open source peer-to-peer learning has been widely applied in the online networking context with significant success.²¹¹ However, newly hired examiners are still probationary and can be fired at will.²¹²

IV. PROPOSAL

A. *The PTO Should Employ a Panel of Industry and Academic Members to Review Controversial Patent Applications Prior to Allowance*

In an attempt to minimize the issuance of “bad” patents in the business methods art and relieve some of the burden on examiners, the author proposes the PTO consult a panel comprised of industry and academic personnel for assistance with controversial patent applications, specifically in determining if and where applicable prior art exists. Such an arrangement will be beneficial because industry and academic personnel will give a fresh perspective to the problems facing the PTO in a particular application, as well as heightened insight

²⁰⁶ See USPTO Patent Training Academy, Mar. 6, 2006, <http://usptocareers.gov/pdf/PatentTrainingAcademy1.pdf>.

²⁰⁷ Professional Experience, *supra* note 1.

²⁰⁸ *Id.*

²⁰⁹ *Id.*

²¹⁰ *Id.*

²¹¹ See generally Manoj Parameswaran et al., *P2P Networking: An Information-Sharing Alternative*, COMPUTER, July 2001, at 31–38, available at <http://crec.mcombs.utexas.edu/works/articles/PARA.Cxs2final.pdf> (noting the plurality of unique advantages offered by peer-to-peer networking).

²¹² *Popa, USPTO Work to Reduce Early Terminations of Probationary Employees*, POPA NEWS, Oct. 2007, at 5, available at http://www.popa.org/pdf/newsletters/2007_10.pdf.

into the state of the art in the years leading up to the time of the invention. The details of such a panel and its implementation are discussed below.

What makes a controversial patent application? Before a patent application can receive this designation, several criteria must be met. First, the examiner must conduct a thorough documented search not only of patent databases, but also of NPL, as is currently required before any business method allowance.²¹³ Among NPL, there is a core set of DIALOG databases in which examiners must perform a bona fide search of the subject matter before an allowance can be made.²¹⁴ If the above searches do not present the examiner with applicable prior art as to one or more claims, the examiner should then discuss the case with a supervisor or fellow examiner within his art unit. This step could take the form of an informal office visit and general inquiry regarding the application, or it could take place within the more structured weekly allowance conferences generally comprising the art unit SPE, a primary examiner and any other examiners who have similar allowance or search issues.

If an allowance conference proves unsuccessful, there could be an allowance panel comprising a plurality of art unit SPEs, primary examiners and the business practice specialist (BPS).²¹⁵ If this panel fails to find prior art or a rejectable approach to the application, the subject matter at issue is deemed allowable, the red flag is removed from the application and a notice of allowance is sent to the applicant.²¹⁶ The proposed industry panel could be instituted when members of the allowance panel: (1) do not recognize the technology or any appropriate searches; (2) are confident that the invention is not novel but lack sufficient evidence with the given resources; or (3) there is a unanimous uncertainty about the novelty or non-obviousness of the invention. The industry panel should not be used when the allowance panel arrives at what all agree is a good faith acceptable result. If all parties believe that an allowance should be made and are willing to attest to this, or if they pinpoint applicable prior art, the inquiry should end. Otherwise, as in the three above scenarios, an industry panel should ensue. Moreover, the industry panel would be particularly benefi-

²¹³ See Coggins, *supra* note 58. Note that in the event the examination has already gone through a round of prosecution, the examiner is still required to update her search, and several searches may ensue via office actions following request for continued examination (RCE) and other continuation procedures prior to allowance.

²¹⁴ See USPTO, WHITE PAPER ON BUSINESS METHOD PATENTS – FIGURES FOR NON PATENT LITERATURE DATABASES, <http://www.uspto.gov/web/menu/busmethp/figurenpl.htm> (last visited Feb. 28, 2007) (noting the various subject-specific databases PTO examiners are required to search).

²¹⁵ See Alston+Bird, *supra* note 85; see also Wegner, *supra* note 85.

²¹⁶ Professional Experience, *supra* note 1.

cial in the event that the subject matter of the application is of particular importance, notably pertaining to matters of national security or great economic impact.²¹⁷

1. Embodiments of the Industry Panel

There are a number of different ways to assemble the industry panel. One way is to include industry and academic professionals in the existing allowance conference. Alternatively, the panel could be supplementary to the in-house allowance panel, and comprise industry experts, a SPE, and/or the business practice specialist. Advantages to conducting a second panel would be another layer of protection against a bad allowance by allowing those who were a part of the first conference to get a potentially different perspective from the industry or academic experts. A disadvantage to such a second panel is that a participant from the first allowance panel (SPE, primary examiner, BPS) may be biased because of his previous decision.

Still, bias is avoidable if the guidelines of the proceedings are carefully laid out. First, the boundaries of responsibility between the PTO examiners and specialists and the industry experts must be clearly defined. Primary examiner functions, such as claim interpretation and statutory application, must remain the sole responsibility of the PTO contingent. The responsibilities of the industry panel members are solely based on the inquiries posed by the PTO. These inquiries will be technology-based and specific, so as to confine industry panel members' contributions to that which employs their expertise. For example, in the situation where a claimed invention is something which no one at the PTO has yet encountered, a general inquiry based on a layman's translation of the claims as provided by the PTO will be extended to the industry panel. The first pertinent question could be, "Do you know of a business practice that is described by or is similar to these few descriptive sentences?" If the answer is no, the industry panel's responsibilities have been met and the PTO may proceed with its handling of the application. If the answer to the above question were yes, the industry panel would be encouraged to engage in a brief discourse with the PTO members explaining its position.

Key to this discussion will be: (1) the difference, if any, between what the industry believes was part of the prior art and what the applicant is claiming; and (2) if there is an obvious or equivalent process in use, did such use antedate the applicant's effective filing date? After these issues are addressed, the PTO

²¹⁷ See discussion *supra* Part III.A.3 (discussing the PTO's sensitive application warning system 'SAWS').

can weigh the evidence and continue with the handling of the application. Note that in both scenarios, the PTO makes the final decision, and the industry panels serve essentially as expert witnesses supplementing the prosecution history. As such, it would be advantageous to formally document the participation of the industry panel in the prosecution history, whether or not its contributions ultimately prove to be useful. By documenting this industry panel contribution, the finality of the decision is bolstered. In the event there is dispute in the public over the claims’ allowability, the PTO could point to the industry inquiry to demonstrate its good faith effort to include the public in arriving at a final decision regarding patentability.

Additionally, the proceedings of the industry panel should be part of the public record. As the duration of prosecution increases, the amount of public disclosure should increase proportionally. Recently, the PTO has been trending this way with the institution of: (1) pre-grant publication of most applications eighteen months after filing; and (2) public and private Patent Application Information Retrieval (PAIR) systems regularly updating the public on published applications’ prosecutorial progress.²¹⁸ Therefore, the public should have the right to access this final assessment proceeding prior to allowance. Making this procedure a public one could increase the public’s goodwill toward the PTO in its attempt to bridge the gap between the federal government agency and the industries responsible for innovation.

Importantly, the proposed panel must be collaborative and include experienced examiners to translate questionable patent claims into plain English, and help explain issues to industry experts. This is similar to a program at the Board of Patent Appeals and Interferences, where examiners effectively clerk for judges and explain to them the technology over which they are trying to make a legal determination.²¹⁹

2. Advantages of the Industry-Based Panel

There are a number of advantages to outsourcing technology inquiries to industry and academic professionals. Primarily, it provides a fresh untainted perspective from individuals who are immersed on a daily basis with the same sort of technologies that are the subject of patent applications at issue. The problem with having individuals who are “PTO lifers” serve in this role is two-fold. First, as with any organization, there are internal pressures that may influ-

²¹⁸ See USPTO, *USPTO Will Begin Publishing Patent Applications*, Nov. 27, 2000, <http://www.uspto.gov/web/offices/com/speeches/00-72.htm>; see also M.P.E.P. § 1730.

²¹⁹ Professional Experience, *supra* note 1.

ence decision-making. Due to the public backlash resulting from the issuance of “bad” patents, especially in the business method realm, there is an implicit tendency of the agency to presume that an invention is non-novel or obvious until sufficient evidence shows otherwise.²²⁰ This practice results in the compulsion to reject applications even if the examiner believes the subject matter is allowable, and to shift the burden onto the courts to reverse the rejection and find the claims patentable.²²¹

The second part of the problem is institutionalization. Because all examiners are trained in the same environment, one-dimensional thinking may result. As with any agency, rules are at the core of the PTO’s existence.²²² These rules, laid out in the MPEP, C.F.R. and U.S.C., become entrenched in all examiners’ and specialists’ minds over time.²²³ In this sense, PTO employees become institutionalized—the recurring ideas and reasoning regarding both statutory rejections and technology subject matter become pervasive, and may make it difficult for examiners to think outside the box or see things from a different perspective.²²⁴ Injecting an outside perspective into the conversation may provide the intellectual spark necessary to locate applicable prior art and avoid issuing an undeserving patent.

Importantly, the key to these procedures is to aid the examiner, not to give her more work. Therefore, mere submission of prior art from the outside would not be as effective as an accompanied explanation about the contents of the prior art submission and its application to the claimed invention at issue.

3. Concerns Over the Panel

There are a number of concerns associated with the implementation of the proposed panel. Notably, how should the PTO select members of a panel, especially with the goal of avoiding conflicts of interest and bias within these panels? The first component of the panel is academic. As applied to business

²²⁰ See Miku H. Mehta & Laura Moskowitz, *Business Method Patents in the United States: A Judicial History & Prosecution Practice*, at 10, <http://www.sughrue.com/files/Publication/54011fba-0904-4dfe-83af-e5c4b0d1c538/Presentation/PublicationAttachment/5869b571-51c7-451b-bbd1-ed552fe8edc6/BusinessMethodPatentsAIPPIprosprac.pdf> (discussing the decreasing allowance rates of business method patents) (last visited Nov. 18, 2007).

²²¹ Professional Experience, *supra* note 1.

²²² See *Administrative Agency – History of Administrative Agency, Federal Administrative Agencies, State and Local Administrative Agencies, Further Readings*, <http://law.jrank.org/pages/4066/Administrative-Agency.html> (last visited Mar. 10, 2008).

²²³ Professional Experience, *supra* note 1.

²²⁴ Professional Experience, *supra* note 1.

methods, the PTO will solicit professors in areas such as finance, e-commerce, operations research and business management to apply for panel positions. A hiring committee will select the best-qualified individuals to participate in the panels. This can happen on a rotating basis, where a particular individual serves in an independent contractor role as a panel member for all applications in her area of expertise for a designated period of time. Alternatively, the PTO can recruit academic panel members on an application-by-application basis based on the particular subject matter at issue.

The second component of the panel is industry. This selection may be difficult, since a chosen panel member may work for a company in competition with the assignee of the application at issue. There are a couple of ways to address this matter. First, the PTO could hire an industry panel member on a full-time basis, essentially eliminating the conflict of interest. Second, the individual could recuse himself if he determined a conflict existed. Third, the actual contents of the application, including the identity of the assignee and inventor, could remain undisclosed to the industry panel member. This final suggestion may be difficult in light of the eighteen-month publication practice.

4. Cost of Implementation

The cost of the proposed panel will not be of great consequence to the PTO. For examiners, participation in the panels will be part of their regular examining responsibilities, and will not result in any additional monetary compensation. As for the industry and academic panel members, these individuals could be paid in several different ways. One option is payment per appearance: for each application necessitating an industry panel, each non-PTO member of the panel would be paid a one-time sum.

A second option is to hire panel members on a yearly basis as independent contractors, with a base salary and a bonus compensation for participating in greater than required number of panels. Alternatively, the PTO could hire panel members as independent contractors for a set number of panel appearances.

Further, the PTO could minimize the cost of industry panels by transferring some of the financial burden to the applicant. Such action would be especially appropriate where the PTO has made its decision to maintain a rejection, and the applicant desires an outside opinion. In this case, an applicant could petition for an industry panel, which would not be a matter of right and may or may not be granted depending on the particular context of the application. If the PTO agrees to hold the panel, some portion of the costs would fall on the applicant. Of course, this approach will not be advantageous or favored for applicants unless the PTO develops a track record of accepting the panel's advice, resulting in findings of allowable subject matter.

But given the above, are these incentives enough to entice industry professionals and academics away from their current positions, even if only briefly? Industry professionals may be less inclined to participate for several reasons. First, they may be devoted to their companies both contractually and professionally. A fortiori, these companies are likely to be the direct competitors of the assignees of applications at issue. Often it is profit, rather than the betterment of the industry as a whole, that is paramount. Whether a fee per application will suffice may also depend on the industry. Academics, on the other hand, have a unique connection to the material they study. Betterment of the field may outweigh profits in the case of academics. This, coupled with less restriction due to fear of competitors, could make academics more likely to join the panel than industry professionals.

B. Compensatory Interactive Online Community Alternative

In lieu of or in addition to the panel proposed above, the PTO could develop an interactive community whereby selected patent applications are presented to the public prior to their allowance, and the PTO would then weigh the public's comments and concerns before continuing the prosecution process.²²⁵

With the advancement of the Internet, interactive communities have become an integral source of communication for our society.²²⁶ Social networks such as MySpace²²⁷ and Facebook²²⁸ are increasing their market share at remarkable rates.²²⁹ Websites such as IT Toolbox and Global Spec that are specific to information technology and engineering—two fields closely correlated with the patent domain—are tremendous online resources for industry members to share their ideas and learn from the postings of other members.²³⁰

The vast popularity of these online communities indicates a growing comfort with this communication format.²³¹ People are now used to the idea of

²²⁵ JAFFE & LERNER, *supra* note 7, at 177–81.

²²⁶ See Jenny Preece et al., *History and emergence of online communities*, in *ENCYCLOPEDIA OF COMMUNITY* (2003) at 5–7, available at <http://www.ifsm.umbc.edu/~preece/paper/6%20Final%20Enc%20preece%20et%20al.pdf>.

²²⁷ <http://www.myspace.com>.

²²⁸ <http://www.facebook.com>.

²²⁹ Preece et. al, *supra* note 226 at 6.

²³⁰ See CR4, <http://cr4.globalspec.com> (last visited Mar. 25, 2007); ITtoolbox, <http://www.ittoolbox.com> (last visited Mar. 25, 2007).

²³¹ See generally Steve Ennen, *The Impact of Social Networks and Vertical Digital Communities on the Business Information Industry*, July 18, 2007, <http://www.google.com/base/a/2382219/D14289605851123204137>.

logging in to converse with others.²³² Extending this community model to aid the PTO’s search for prior art could be very beneficial. Still, there are two key issues to address regarding an interactive online community. First, which applications will be accessible? Second, who will have access to these selected applications?

The accessible applications should meet the following criteria: (1) the application must undergo a regular examination, an allowance conference and an allowance panel without a unanimous decision to implement or maintain a rejection; and (2) a majority of the allowance panel must find that outside assistance would be beneficial. Applications that meet the above criteria should be accessible to a limited number of individuals for a limited period of time. Individuals who are privy to these applications should be experts in the particular field at issue.

The PTO could solicit input from the online community a number of ways. One option is the solicitation could mirror that of the panel, where the PTO selects academics and industry professionals from an applicant pool. Alternatively, the PTO could make the applications available to all academic faculty in a particular department of every university that wishes to participate. Eligibility in this situation could be as easy as filing an online form with the PTO to register the university. In a third scenario, the PTO could make applications available to industry professionals. In this situation, however, selecting who has access would be very difficult in light of the competition issue. One potential solution to minimize this issue is to make the application owner/assignee/inventor anonymous; however, due to competition and inherent conflicts of interest, allowing industry professionals access almost necessitates that the entire public have access to the information to ensure a level playing field. A final option is to grant the entire public access to the applications via the interactive community.

The proposed interactive community involvement could be a secondary or parallel procedure to the proposed panel discussed in Part IV(A). The online community communication means could take any of a number of forms, such as a message board, blog, chat room or email. The time which any eligible application would be accessible should be anywhere from two weeks to a month. Coupled with the idea of only releasing a few applications at a time, community members would have ample time to respond.

²³² Preece et. al, *supra* note 226, at 5–7.

1. **Interactive Community Advantages and Disadvantages**

An online interactive community has a number of advantages over the industry panel proposed above. First, communicating online is more convenient than convening an industry panel. A participant can choose any time within the given commenting period, and log onto the Internet from anywhere in the world to submit her opinion. Conversely, an industry panel would require scheduling a particular meeting time that would likely disrupt one or more participants' personal schedules. Additionally, an industry panel may require participants to physically meet at a certain location to conduct the panel, thus expanding the burden.

Second, an interactive online community would be available to a larger number of people than an industry panel, and this larger pool of people could contribute a greater number of opinions regarding an application's patentability. An industry panel would likely comprise only a handful of industry and academic professionals, whereas an interactive online community could be available to entire faculties in a particular department, or large groups of industry personnel within the field of the purported invention.

Third, a particular application would be available to participants in an interactive community for a longer period of time than with an industry panel. Rather than a one-day, several hour session, an application may be posted for a few weeks online, allowing selected participants time to formulate a more thorough opinion, and perhaps enabling them to use their own searching capabilities to uncover prior art that the PTO did not find.

Conversely, however, an online community's relatively informal nature may diminish the overall quality of contributions. In light of this rule relaxation, contributions may lose focus and stray away from the primary goal of the discussion, thus reducing the overall value derived from the proceedings. The PTO loses a portion of its control when contributors are free to sign in at their leisure and contribute as much or as little as they desire, without the PTO managing the proceedings. Such a scenario may dissuade the PTO from adopting an online community model. Moreover, it may be very difficult to harness contributions from the general public if the PTO does not provide compensation.

2. **Compensation for Community Participants**

Determining proper compensation for community participants is no easy task. Perhaps, most importantly, what actions are worthy of compensation? Is simple registration or selection for the online community sufficient, or must participants contribute to the community in order to be compensated?

Should they only be compensated when they provide a particularly valuable contribution? If members of the online community are hand-picked, the PTO could compensate those members with a system similar to the aforementioned industry panels. If the PTO includes universities in the online community, the PTO could reward those universities with federal grants for research as a reward for helpful information. The logistics of determining what constitutes helpful information, however, introduces subjectivity to the issue by requiring the university to sign a contract with the PTO upon registration setting forth: (1) the designated and eligible contributors; (2) the terms of the agreement; (3) a minimum number of submissions that the university must proffer during a given time period; and (4) an acceptable range reflecting the number of applications the university is responsible to address during a given time period.

Finally, in the event that the online community is open to the public, compensation would not be feasible except in extraordinary circumstances. For example, if the PTO is trying to find prior art for a particularly controversial and difficult application, the agency could post its inquiry on its website, and attach a compensation offer in the form of a bounty, payable in the event that a member of the public’s contribution led directly to a proper rejection of the application’s claimed subject matter under 35 U.S.C. § 102 or § 103.

C. Comparing the Two Proposals—Which is Better for the PTO?

Control is a key factor in comparing the two above proposals. The PTO is likely inclined to select a proposal that relinquishes the least amount of its authority while still producing the necessary information on prior art with respect to patent applications. From the agency’s perspective, the fewer people involved, the fewer people and contributions that must be monitored. Additionally, compensation becomes difficult in an online community environment unless contracts or set rewards are involved. By instituting an industry panel, the PTO would have virtually complete supervision, suffer minimal loss of control, and face fewer compensatory issues. As such, the industry panel seems a more viable option.

If the PTO were to implement an industry panel, however, recruiting industry professionals remains a significant concern. There are numerous competition and compensatory issues that may prevent successful recruitment. The alternative of filling the panel with academics is not ideal, as an amalgamation of industry professionals and academics would render the best results by offering a wide range of perspectives on the issue at hand.

D. Comparison of Alternatives

The PTO and members of the patent community have attempted to address the problem of uncovering prior art to avoid issuing “bad” patents.²³³ One solution is an open collaboration review project, known as the Community Patent Review Project (CPR).²³⁴ The PTO, IBM and New York Law School spearheaded this pilot project, which began in 2007, with the goal of enabling members of the public to submit prior art references, along with commentary, to patent examiners.²³⁵ Specifically, open review of applications takes place before substantive examination begins, and is intended to facilitate the examiner’s search.²³⁶ The system ranks the prior art received from third parties and forwards a short list of references to the examiner for consideration.²³⁷ Under the proposal, the patent applicant, herself, requests such a review.²³⁸

There are several concerns regarding this new pilot program. There is no clear method for determining which applications to review, and no compensation for participants.²³⁹ Additionally, participation in this peer-review project is available to many individuals who arguably are not qualified, or lack the requisite knowledge to render useful technological opinions.²⁴⁰ To combat such a scenario, the pilot program includes offering patent education and instruction opportunities to participants.²⁴¹

Perhaps the most significant deficiency of the Community Patent Review pilot, however, is the time the review is performed—before the examination.²⁴² Initially, most applications are claimed broadly and do not reflect the

²³³ Manny W. Schechter, *Open Collaboration Is Medicine for Our Ailing Patent System*, 72 PAT. TRADEMARK & COPYRIGHT J. 682 (2006), available at http://dotank.nyls.edu/communitypatent/BNA_10-20-06.html; see also STRATEGIC PLAN, *supra* note 91, at 14–17. The PTO has released its strategic plan for 2007–2012, which includes the goal of optimizing patent quality and timeliness. *Id.* One of the mentioned initiatives is an open source community with an open source database to provide examiners with potential prior art. *Id.* at 16.

²³⁴ See N.Y. LAW SCH. INST. FOR INFO. LAW & POLICY, COMMUNITY PATENT REVIEW PROJECT SUMMARY (2007) [hereinafter COMMUNITY PATENT REVIEW], available at http://dotank.nyls.edu/communitypatent/p2p_exec_sum_feb_07.pdf.

²³⁵ *Id.* This pilot is set to last at least until patent reform legislation bills are enacted.

²³⁶ See *id.* at 1, 3.

²³⁷ See *id.* at 12.

²³⁸ *Id.* at 8.

²³⁹ See *id.*; Schechter, *supra* note 233.

²⁴⁰ COMMUNITY PATENT REVIEW, *supra* note 234.

²⁴¹ *Id.*

²⁴² See *id.*

true inventive concept as embodied in the specification.²⁴³ Attorneys initially draft claims broadly to gauge how much prior art exists, to test the examiner’s performance and for a whole host of other reasons.²⁴⁴ As the prosecution progresses, claims are narrowed through a series of communications and amendments. An online community could perform a more efficient and effective community review on claims that have already been examined, are closer to allowance and are thus more reflective of the applicant’s invention.

Other proposed alternatives include third-party pre-grant reviews of issued patent applications, similar to the Japanese patent system.²⁴⁵ This process “allows rival companies—both foreign and domestic—to learn the details of the innovation and challenge the examiner during what is now done in total secrecy.”²⁴⁶ Concerns regarding this approach include: (1) competitors are made aware of all the details of an application prior to grant; and (2) competitors can challenge the patent application in an attempt to delay the patent process or perform their own related research.²⁴⁷

A major flaw of third-party pre-grant reviews is competitors are playing a vital role in the process without sufficient safeguards to prevent unscrupulous business activity. In contrast, in the author’s proposal, the PTO makes a concerted effort to avoid conflicts of interest by: (1) carefully selecting the members of an industry panel or interactive community; and (2) maintaining enough control over the process so as not to allow undue delay and corruption to seep into the system.

V. CONCLUSION

Ensuring that only truly innovative inventions garner protection is critical to maintaining the value of the limited exclusive monopoly granted by a patent. The best way to accomplish this is to establish a strong and thorough examination process. Although it is impossible to guarantee that all issued patents are deserving, by strengthening the front end of the prosecution, the PTO

²⁴³ See *Can One Claim Too Broadly?*, Posting of Jim Ivey to Intellectual Property Forum, http://www.intelproplaw.com/ip_forum/index.php?topic=683.0 (Jan. 31, 2004, 4:20PM).

²⁴⁴ *Id.*

²⁴⁵ *Amendment In the Nature of a Substitute to H.R. 2795, The “Patent Act of 2005”*: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Property, 109th Cong. 210 (2005).

²⁴⁶ *Id.*

²⁴⁷ *Id.*; see *Define Patent Terms Clearly, Says Drug Industry*, THE HINDU BUS. LINE, Oct. 25, 2004, <http://www.thehindubusinessline.com/2004/10/25/stories/2004102502130500.htm> (“Pre-grant opposition is a delaying tactic.”).

can work to minimize the problem of “bad” patents. Specifically, the PTO should expand its resources to include consultation with individuals on the cutting edge of technology in areas such as business methods. These individuals have special knowledge and represent an untapped resource critical to evaluating patent applications. By assembling and instituting a panel comprised of industry professionals and academics to assist in addressing issues of patentability for selected patent applications, the PTO will not only prevent blatant allowance “bad” patents, but also forge a relationship between industry, academia and government to ensure that inventors are afforded the highest quality examination process possible. Just as important, this endeavor will help change the culture of rejection and reduce the public ridicule that has enveloped the business methods workgroup at the PTO in recent years.