Peer to Patent: A Cure for Our Ailing Patent Examination System

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I. INTRODUCTION

Since the United States Patent and Trademark Office (USPTO) was founded in its current form in 1836, the patent examination process has remained relatively unchanged. Today, as in 1836, a single examiner conducts the prior art search and applies the located art to the patent application in front of him in relative isolation. While the tools available to the independent examiner have progressed since that time, including the availability of East and West electronic databases, the paradigm of a single isolated examiner has remained unaltered. This lack of change stands in stark contrast to the recent and continuing expansion of the Web 2.0 and its concomitant emphasis on community involvement. Web 2.0 provides powerful new tools for pooling information and
expertise, leading to enhanced social interactivity, user-generated information repositories, and more.

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The Peer to Patent project launched its second pilot period on October 19, 2010. It was introduced in 2007 as the first program at the USPTO to attempt to harness the power of the Web 2.0. The Peer to Patent project is one step aimed at bridging the gap between the USPTO’s current use of Web 1.0 technologies for searching electronic databases via East and West, and Web 2.0’s capability of providing input from experts from communities around the world. The goal of the Peer to Patent project is to provide a desperately needed, higher-quality examination process at the USPTO, while reducing the burden on the examiner of locating relevant prior art references. Peer to Patent may thus be just the medicine needed to restore confidence in the patent examination system and to attack the backlog of pending patent applications before the USPTO.

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During our research for this article, we interviewed many of the people that were involved in getting the project off the ground in mid-20074 and many of the people that guided the project through its first pilot period from 2008–2009.5 Included within this elite set of patent professionals are Manny Schecter, Chief Patent Counsel at IBM;6 Curt Rose, Director of Patents at Hewlett-Packard;7 Scott Asmus, Patent Counsel at General Electric;8 Matt Rainey, Vice President and Patent Counsel at Intellectual Ventures;9 Adam Avrunin, Chief Patent Counsel at Red Hat;10 and Mark Webbink, ex-Senior Vice President and Deputy General Counsel at Red Hat and now Executive Director at the Center for Patent Innovations at New York Law School (NYLS).11 This article will address the background and current status of the Peer to Patent Project, the future of the Peer to Patent Project, and additional features that could be incorporated into the Peer to Patent project, all with the inside insight and expertise of these patent professionals.

II. BACKGROUND AND CURRENT STATUS OF THE PEER TO PATENT PROJECT

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There has been an enormous amount of debate over the last several years about a perceived decrease in the quality of patents issued by the USPTO, and consequently, about whether or not the agency is fulfilling its mandate under the Constitution to promote the progress of science and the useful arts.12 Currently, the USPTO is struggling to deal with an overwhelming backlog of over 1.2 million pending patent applications.13 For the patents the USPTO does issue, there is a perceived decrease in quality caused, at

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6 Telephone Interview with Manny Schecter, Chief Patent Counsel, IBM (July 30, 2010).
7 Telephone Interview with Curt Rose, Dir. of Patents, Hewlett-Packard (July 22, 2010).
8 Telephone Interview with Scott Asmus, Patent Attorney, General Electric (July 28, 2010).
9 Telephone Interview with Matt Rainey, Vice President & Patent Counsel, Intellectual Ventures (Aug. 3, 2010).
10 Telephone Interview with Adam Avrunin, Chief Patent Counsel, Red Hat (July 28, 2010).
12 U.S. CONST. art. 1, § 8, cl. 8.
least in part, by the number of undeservedly broad claims and by the number of patents held to be invalid during a reexamination or litigation. In patent cases that went to trial in 2009, nearly half of the challenges to patent validity, approximately 43%, were successful\textsuperscript{14} and over half of the validity challenges based on obviousness grounds were successful.\textsuperscript{15} The expense of litigating suspect patents, according to IBM’s Manny Schecter, “drains our economy of at least hundreds of millions of dollars per year.”\textsuperscript{16} USPTO Director David Kappos has also recently commented on how the growing patent backlog stifles job growth and the development of new businesses and products.\textsuperscript{17} Any effort to examine more applications and trim the backlog, however, needs to be balanced with initiatives to ensure the issuance of higher-quality patents.

The Peer to Patent program was developed to address both of these seemingly countervailing problems, by improving both the quality and efficiency of patent examination by sourcing the shared knowledge of the global technical community,\textsuperscript{18} or “crowdsourcing.”\textsuperscript{19} Specifically, the Peer to Patent program’s aim is to involve third-party experts residing outside of the USPTO in the search for, and submission of, prior art references.

Examiners at the USPTO typically have around twenty hours to examine patent applications.\textsuperscript{20} In this limited time the examiners must digest the new material in the application, research the prior art, and draft an office action on the merits of the application. This short time frame makes it difficult to perform a thorough search for relevant prior art. Examiners are further constrained because their research, for reasons outside the scope of this paper, is generally limited to internal databases that focus primarily on patents and patent applications, at the expense of non-patent literature (NPL). Furthermore, as noted by Mark Webbink, even NPL that examiners do somehow find and cite is not indexed, subjected to optical character recognition (OCR’d), or tagged in any meaningful way so as to allow future searchers or other examiners to find the previously located NPL art.\textsuperscript{21} Additionally, for new technologies such as software and business methods, there is not a significant amount of patent prior art in the internal databases, and, as a result, the resources that the examiner can rely upon to reject an improperly broad claim are sparse, even if the claim scope is broad enough to cover something well known in the industry.

The Peer to Patent project was set up to address this lack of prior art resources by using the Internet and social networking tools to provide those in the relevant technical community with an opportunity to examine the application and offer not only what they

\textsuperscript{14} Full Calendar Year 2009 Report, PATSTATS.ORG, http://www.patstats.org/2009_full_year_posting.htm (last visited Nov. 9, 2010).
\textsuperscript{15} Id.
\textsuperscript{17} Schmid, supra note 13.
\textsuperscript{19} Jeff Howe, Crowdsourcing: A Definition, http://crowdsourcing.typepad.com/ (last visited Nov. 9, 2010) (“Crowdsourcing is the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call.”).
\textsuperscript{20} Anniversary Report, supra note 4, at 4.
\textsuperscript{21} Webbink, supra note 11.
think is relevant prior art, but also their commentary on how the relevant art could be applied to the claims, what elements of the claims are known in the art, and what elements of the claims are potentially new, all before the USPTO examiner even begins reviewing the application.\textsuperscript{22} This allows the public to recommend NPL such as articles, conference presentations, web pages, products sold in the marketplace, newsgroup (e.g., Usenet) postings, or even publicly available or open source software code that the examiner would likely be unable to find in his or her own limited search.\textsuperscript{23}

Although many solely attribute Beth Noveck of New York Law School with developing the Peer to Patent project, the project actually originated as a close collaboration between Noveck, IBM, and the USPTO, directed to improving the quality of examination of software patents filed with the USPTO.\textsuperscript{24} Schecter drove the corporate involvement and sponsorship for the project.\textsuperscript{25} Corporate involvement was critical in the early stages of the Peer to Patent project as the project was entirely funded by corporate sponsorship and foundation grants during the first pilot period from 2007–2009.\textsuperscript{26} Noveck provided leadership for the project and also provided law students to help in their spare time,\textsuperscript{27} and USPTO Technology Center Director, Jack Harvey, offered his Technology Center 2100 (Computer Architecture, Software, and Information Security) and his time for the project.\textsuperscript{28} Schecter stated that one reason Technology Center 2100 was chosen was because the open source software community is more skeptical about patents than are inventors in other technology areas, and thus the Peer to Patent project provided the open source community with an opportunity to get involved and do something about the perceived lack of patent quality in the software arts.\textsuperscript{29} Additionally, Schecter stated that the open source community was already quite familiar with using collaborative online tools.\textsuperscript{30} Thus, they represented a natural starting point for a project that relied heavily on collaborative tools.\textsuperscript{31}

At the time of that initial collaboration between Noveck, IBM, and the USPTO, and as it remains today, the only avenue for a third-party to submit art against a pending United States Patent Application (outside of the Peer to Patent project) was to comply with the rules set forth in 37 C.F.R. § 1.99 governing third-party submissions. In short, § 1.99 requires that a third-party submitter wishing to submit art to the USPTO include “(1) the fee set forth in § 1.17(p),\textsuperscript{32} (2) a list of the patents or publications submitted for

\begin{footnotes}
\item[23] Anniversary Report, supra note 4, at 4.
\item[24] Schecter, supra note 6.
\item[25] At the time of the origination of the Peer to Patent project, Manny Schecter was working under David Kappos at IBM. Kappos is now the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office.
\item[26] Anniversary Report, supra note 4, at 27.
\item[29] Schecter, supra note 6.
\item[30] Id.
\item[31] Id.
\end{footnotes}
consideration by the Office, including the date of publication of each patent or publication, (3) a copy of each listed patent or publication in written form or at least the pertinent portions, and (4) an English language translation of all the necessary and pertinent parts of any non-English language patent or publication in written form relied upon.” 33 Furthermore, the submission must be “served upon the applicant in accordance with § 1.248, . . . shall not include any explanation of the patents or publications, or any other information,” and must be filed “within two months from the date of publication of the application (§ 1.215(a)) or prior to the mailing of a notice of allowance (§ 1.311), whichever is earlier.” 34 A submission that “does not comply with the requirements of this section will not be entered.” 35

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As an alternative to the burdensome requirements of 37 C.F.R. § 1.99, the Peer to Patent project, launched in June 2007, provided a platform by which any member of the public could submit relevant art along with commentary and analysis, free of charge, and without serving the applicant as required by the § 1.99. After the launch, the project actively began soliciting public participation in the project. 36 During the years one and two of the first pilot program, only applications falling within Technology Centers 2100 (Computer Architecture, Software, and Information Security) and 3600 (Business Methods) could participate in the program. 37 During the second pilot period, starting in October 2010, the program is expected to start accepting applications in the telecommunications, bioinformatics, and biotechnology fields. 38

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Applicants volunteering to participate in the program must file a consent form with the USPTO, after which their application is published on the Peer to Patent website for four months. 39 As an incentive for applicants to participate in the Peer to Patent program, applications submitted to the program are allowed to jump to the front of the USPTO queue. 40 Advantageously, this can be done without meeting the requirements for expediting prosecution of applications under 37 C.F.R. § 1.102 41 and without conducting a pre-examination search or providing an accelerated examination support document, as required by the Accelerated Examination program. 42 While Schecter stated that the “make special” designation was not a factor in IBM’s decision to participate in the project, he indicated his belief that universities, startups, and small inventors would find this incentive particularly attractive. 43 Scott Asmus of GE, on the other hand, stated that he felt the current two to three year wait to a first office action was a serious hindrance, and allowing patent applicants submitted to the Peer to Patent Program to jump to the

33 Third-party Submission in Published Application, 37 C.F.R. § 1.99(b)(1)–(4) (2009).
34 Id. § 1.99(c)–(e).
35 Id. § 1.99(e).
36 Id.
38 Webbink, supra note 11; Asmus, supra note 8.
39 Applicant Guidelines, supra note 37, at 1.
40 Kappos, supra note 18.
41 Advancement of Examination, 37 C.F.R. § 1.102 (2009).
42 The full requirements for the Accelerated Examination program are provided in the Federal Register, 71 Fed. Reg. 36,323 (June 26, 2006).
43 Schecter, supra note 6.
front of the queue was a great way to speed up the prosecution of important cases.\textsuperscript{44} As noted by Webbink, the ability to jump to the front of the queue is expected to be retained in the second pilot period.\textsuperscript{45}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{fig1.png}
\caption{The figure above illustrates the general process that an application goes through in the Peer to Patent project after publication on the Peer to Patent website.\textsuperscript{46} First, registered peer reviewers review and discuss the disclosure and claims of the submitted application. Second, the reviewers can research and find prior art on their own, including art they may already have on hand. Third, the reviewers can upload art they believe may be relevant to the pending claims. Fourth, the reviewers can annotate the claims relative to the uploaded prior art, rank the quality of their own uploaded art relative to the claims, and rank the quality of art uploaded by others. Fifth and finally, the top ten rated prior art references are forwarded to the USPTO in an information disclosure statement (IDS) drafted and submitted by the Peer to Patent program itself.\textsuperscript{47}}
\end{figure}

\textsuperscript{44} Asmus, \textit{supra} note 8.
\textsuperscript{45} Webbink, \textit{supra} note 11.
\textsuperscript{46} This image appears on the Peer to Patent website, PEER TO PATENT, http://www.peertopatent.org/ (last visited Oct. 17, 2010). Use of this image is governed by the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 license. See CREATIVE COMMONS, http://creativecommons.org/licenses/by-nc-sa/3.0/us (last visited Nov. 9, 2010). This image has been reproduced with the permission of Peer to Patent.
\textsuperscript{47} U.S. PATENT & TRADEMARK OFFICE, APPLICANT’S CONSENT TO THIRD-PARTY COMMENTS IN PUBLISHED APPLICATIONS AND CONSENT TO PILOT PARTICIPATION, http://www.uspto.gov/web/patents/peerpriorartpilot/consent.pdf (last visited Nov. 9, 2010).
\textsuperscript{48} See PEER TO PATENT, \textit{supra} note 5.
\textsuperscript{49} Noveck, \textit{supra} note 22, at 146.
\textsuperscript{50} See PEER TO PATENT, \textit{supra} note 5.
on the collective intelligence and experience of a plurality of interested parties having expertise in the particular technology field, mitigating the effects of improper submissions resulting from those who do not understand the scope of the application’s claims or the scope of the submitted prior art.

¶14 Importantly, reviewers can also describe why they feel a particular prior art reference is relevant to the application by marking up the reference, the claims of the application, or both. This method of mark-up ensures that the examiner spends his or her time on the most relevant portions of the submitted prior art and does not waste his or her time on those portions of the claims shown to disclose no useful advance in the art.

¶15 All of these above-noted features stand in stark contrast to the current statutory basis for third-party art submissions, in which parties are allocated a small window in which to submit art, are required to pay a fee, and cannot provide any annotations regarding the claims or the prior art, thus forcing the examiner to spend additional time reviewing the reference and comparing it to the pending claims of the application.  

¶16 The first pilot program ended in July 2009, and the USPTO has since been in a review period during which the agency’s newly appointed chief economist is analyzing groups of applications to gain insight into the effects of the third-party contributions of prior art references and commentary.  

Preliminary results, however, indicate some clear benefits to Peer to Patent. Most importantly, the third-party reviewers were able to assist the examiners by providing relevant art and, presumably, ensuring that a higher quality patent would result from the examination process. Near the end of the two-year pilot program, sixty-six applications that had undergone Peer to Patent review had received their first office action. Of these office actions, nearly 30% included a rejection that used prior art submitted and reviewed by the Peer to Patent reviewers as a primary reference for the rejections. These numbers show a noteworthy contribution to the examination process and the quality of the reviewed prior art. The Peer to Patent reviewers made especially salient contributions when submitting NPL. About 36% of the art submitted by Peer to Patent reviewers was NPL, and over 60% of the reviewer-submitted prior art that was cited by examiners was NPL. As noted by Curt Rose of HP, examiners can use the NPL provided by reviewers itself as the basis for a future rejection, or as a springboard to new NPL, perhaps via citations in the submitted NPL or via the discovery of new or related search terms from the NPL. Schecter, Rose, and Asmus each indicated that applications they submitted to the Peer to Patent website received one or more office actions in which the examiner relied upon art cited from the Peer to Patent project as a primary reference. This data illustrates that peer reviewers can contribute to both the quality and efficiency of the patent examination process.

52 Kappos, supra note 18.
53 Anniversary Report, supra note 4, at 23.
54 Id.
55 Id. at 24.
56 Rose, supra note 7.
57 Schecter, supra note 6; Rose, supra note 7; Asmus, supra note 8.
III. The Future of Peer to Patent

¶17 As mentioned above, the Peer to Patent project will continue in the U.S. with a second pilot program starting in October 2010 and continuing into 2011.\(^{58}\) Schecter, Rose, and Asmus, based on their positive experiences in the first pilot, have already indicated that they will continue to participate in the second pilot by submitting additional applications for their respective organizations.\(^{59}\) During the second pilot program, the USPTO has indicated that they will, for the first time, begin providing a significant portion of the operating expenses for the project.\(^{60}\)

¶18 Similar projects are being considered in Australia (AU) and Japan after successful pilot projects in these countries.\(^{61}\) The United Kingdom (UK) continues to be interested in starting its own version of the Peer to Patent project as soon as financial resources become available.\(^{62}\)

¶19 Webbink, meanwhile, has stated that work has recently been completed on reconfiguring the Peer to Patent website to support multiple platforms.\(^{63}\) This multi-platform capability will allow the Peer to Patent website to be viewed in various jurisdictions across the globe in a user’s native language and will allow a user in a particular jurisdiction to limit application search results to that jurisdiction or to expand the scope of any search across multiple jurisdictions.\(^{64}\) Assuming that related-application information is loaded into the Peer to Patent platform, this capability should provide for additional “work-sharing” opportunities across multiple patent-granting jurisdictions. For example, art submitted by a scientist at IBM against a U.S. application could be used by the U.S. examiner during prosecution in the U.S. and also shared with a corresponding European examiner at the European Patent Office reviewing a European counterpart application to the U.S. application. The localization capability should also help extend what Rose describes as an “interesting result” of non-U.S.-based scientists submitting art against pending U.S. applications in the U.S. Peer to Patent system (and non-AU-based scientists submitting art against pending AU applications in the AU Peer to Patent System) despite the limited geographic reach of any issuing U.S. or AU patent.\(^{65}\)

¶20 Taking a longer view, Schecter, Rose, Asmus, Webbink, and Adam Avrunin of Red Hat all indicated a desire to eventually extend the Peer to Patent system into an international platform that every patent-granting entity can hook into and that would become an integral part of the Patent Cooperation Treaty (PCT) patent application process, open to third-party prior art submitters from around the globe.\(^{66}\)

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\(^{58}\) Webbink, supra note 11; Asmus, supra note 8.

\(^{59}\) Schecter, supra note 6; Rose, supra note 7; Asmus, supra note 8.

\(^{60}\) Webbink, supra note 11.


\(^{62}\) Webbink, supra note 11.

\(^{63}\) Id.

\(^{64}\) Id.

\(^{65}\) Rose, supra note 7.

\(^{66}\) Schecter, supra note 6; Rose, supra note 7; Asmus, supra note 8; Webbink, supra note 11; Avrunin, supra note 10.
IV. ROOM TO GROW—ADDITIONAL FEATURES FOR PEER TO PATENT

¶21 Most people involved in the Peer to Patent project have viewed it, thus far, as a success. As with any project, however, there are a number of ways in which it can be further improved. For example, scaling the system up to accept hundreds, if not thousands, of applications raises the problem of efficiently locating applications that are of importance to a particular organization or researcher. While the Peer to Patent project already provides a search capability, a “save search” capability would be useful and could help in scaling up the project to a larger number of applications. For example, a researcher or organization particularly interested in patents related to magnetoresistive non-volatile random access memories could set up a “saved search,” that would send a notice to the respective researcher or organization every time an application is submitted to the Peer to Patent project that matches these key words. In response to receiving the notice, the researcher or organization could review the application to see if it is related to, or of interest with respect to, the technology with which the researcher or organization is involved.

¶22 Additionally, increasing the number of annotations provided by reviewers that link each element in the submitted art to each claim element of the application could be useful. The Peer to Patent system already permits reviewers to annotate claims respective to submitted prior art, but does not currently require it. In fact, in surveying examiners involved in reviewing applications that were subjected to Peer to Patent review, Webbink stated that the examiners appreciated any annotations provided by submitters and found them extremely valuable and useful in reviewing the art submitted and in conducting their own additional searches.67 In light of this, Matt Rainey of Intellectual Ventures has suggested taking the project one step further by requiring prior art submitters to map a passage, figure, or both in the submitted art to each claim element in the application in order to demonstrate specifically how the references anticipate or make the claims obvious before the submission is accepted by the Peer to Patent system, which would ensure that every examiner is similarly aided with these useful claim annotations.68 Doing so would provide improved information and utility to the examiner while at the same time minimizing the potential for bad faith “dumping” of prior art on pending patent applications submitted for peer review.69

¶23 Ideas for increasing expert participation in the project include providing small monetary remuneration to reviewers; increasing marketing to, solicitation of expert reviewers, or both; soliciting law firm involvement in the project; and taking the project out of its self-imposed pilot status.

¶24 Providing additional incentives to reviewers may be one way to increase participation. Schecter, Asmus, and Rose all stated that it was sometimes difficult to get their organizations’ engineers and scientists to spend time reviewing and submitting art for the project in their spare time.70 Schecter stated that he would entertain any idea for increasing participation in the project and improving patent examination in the process, including providing additional incentives (although not necessarily monetary

67 Webbink, supra note 11.
68 Rainey, supra note 9.
69 Id.
70 Schecter, supra note 6; Rose, supra note 7; Asmus, supra note 8.
incentives).\textsuperscript{71} For example, IBM already provides some non-monetary incentives for its scientists, such as featuring successful prior art submissions on its internal website.\textsuperscript{72}

\textsection{25} However, providing monetary incentives may be one way to tilt the equation in favor of the project and get scientists and engineers that are already quite busy with their day jobs, and life outside of work, to become more involved in the project. If the patent community is truly interested in patent quality, perhaps now is the time for the community to provide the financial incentives necessary to motivate and compensate those that are in the best position to have access to the most material and most relevant art. The promise of financial compensation would increase the number of participating reviewers and the amount of time spent by each registered reviewer. Varying levels of compensation could be provided based on whether the submitted art is used by the examiner or not, providing additional incentive to read and understand the claims, and to submit quality, material prior art.

\textsection{26} Rose is not so sure that providing financial remuneration is a good idea, and in any case, does not believe that tangible awards are necessary.\textsuperscript{73} Rose pointed to the amount of content already on the Internet that was generated without any tangible award; he believes that adding a tangible remuneration to the process would only complicate matters.\textsuperscript{74}

\textsection{27} On the topic of increasing participation, both Schecter and Asmus lamented the lack of law firm participation in the project, either via submission of applications to the project or via prior art submissions against pending applications. Both stated that law firm participation is one area where they would like to see improvement in the second pilot. Although Asmus recognized the difficulty in getting traditionally conservative engineers and attorneys to adapt to the changes in the prosecution process required by the Peer to Patent project, he argued that we are all harmed by a weak patent system, that it is our duty make the United States patent system the best that we can, and thus he encouraged outside counsel to participate in the project.\textsuperscript{75} To the extent that law firms avoid participation in the project for fears of imparting any willfulness charges against their client, the Peer to Patent steering committee published a memorandum regarding willfulness on their website.\textsuperscript{76} The memorandum concludes that a peer-reviewer is unlikely to be held liable for willful infringement merely by participating in the Peer to Patent project.\textsuperscript{77}

\textsection{28} Asmus also noted that the mere designation of the Peer to Patent project as a pilot program may be harming the level of participation.\textsuperscript{78} The USPTO, by picking up a portion of the cost of the Peer to Patent pilot during the second pilot period, has taken an important first step in exiting pilot status and may be indicating that it is nearing a point at which it will integrate the peer review program as a standard (although perhaps

\textsuperscript{71} Schecter, \textit{supra} note 6.
\textsuperscript{72} \textit{Id}.
\textsuperscript{73} Rose, \textit{supra} note 7.
\textsuperscript{74} \textit{Id}.
\textsuperscript{75} Asmus, \textit{supra} note 8.
\textsuperscript{77} \textit{Id}. at 4.
\textsuperscript{78} Asmus, \textit{supra} note 8.
voluntary) application process for one or more technology centers, such as software. Asmus believes that once the project exits pilot status, and patent software vendors such as Computer Packages, Inc. integrate the administrative details of the project into their products, participation in the project will increase. Asmus compared the beginnings of the Peer to Patent project to the beginnings of the electronic filing system (EFS) at the USPTO. Although the thought of not using EFS now seems a distant memory to most practicing patent attorneys, the adoption rate at the time the EFS was first introduced was quite low. There is no reason to believe that the Peer to Patent system will not go through a similar growth expansion once it exits pilot status.

Another useful feature that could be added is a synonym database of related technical terms. As noted earlier, the Peer to Patent project website already allows users to “tag” applications with relevant technical terms or synonyms relative to terms used in the application, in order to improve the ability to conduct better searches on the technology and improve the ability to find the application being tagged in a future search. However, this process is not automatic and relies upon manual human review. Rainey has pushed for the inclusion of a database of related technical terms (i.e., a “technology thesaurus”) that automatically tags an application with related terms. Such a database would allow for particular applications drafted by, for example, a non-technical attorney (or perhaps using alternative or non-standard language) to show up in searches for a particular technology for which the applications would not otherwise appear. For example, an application directed to an “emissive display” may be automatically tagged with the terms “plasma,” “SED,” “LED,” “polymeric,” “electroluminescence,” or any combination thereof. In this way, even though the application never uses the term “plasma,” a search by a scientist for the term “plasma” may turn up the application within its search results whereas, without the automatic tagging, it would not have. Reviewers would then still have the ability to manually add or subtract tags, or to edit the automatically added tags, when reviewing the application in more detail.

This tagging process would be particularly beneficial for international or foreign patent applications filed in the U.S. after translation to English from another language. The descriptions of the technology in these applications are likely to use terms substantially different from those in general use in the U.S. and other English-speaking nations. Automatic tagging of those applications with alternate word-forms could substantially increase the reviewers’ ability to find the application and to search for relevant prior art. Furthermore, if the tags are retained in the electronic file history of the patent, the tags could help increase the pool of available prior art for future applications and for future searches by third parties and by examiners.

Additionally, and especially relevant to classes of patents such as software and business methods where prior art is not as well documented, the Peer to Patent system should provide customized links to allow a reviewer to submit what he or she views as an important patent to popular technical community websites such as (at least in the software realm) acm.org and slashdot.org. These types of technical community websites have shown a particular acumen for finding relevant and material prior art for software

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79 Id.
80 Id.
81 Noveck, supra note 22, at 146.
82 Rainey, supra note 9.
patents. Additional community-based websites could be identified for business methods, biotechnology, telecommunications, and other classes of patents, and an appropriate list of links provided based on the detected or tagged underlying technology in the application. In this manner, if a reviewer identifies a particularly important or broad patent application on Peer to Patent, the reviewer could submit the application for enhanced review by a larger pool of experts via the linked technical community websites. Additionally, if a particular patent application bridges two or more technologies, an expert in one of the technologies who is reviewing the application could request the involvement of experts in the other technologies to aid in the identification of prior art or common knowledge.

Finally, the Peer to Patent project could be expanded beyond initial examination. More specifically, and in order to continue the work of preventing the assertion of improper patents, the Peer to Patent system could be expanded into the realm of post-issuance review and re-examination. While this has been somewhat implemented via the NYLS’s post-issue.org website, it does not post all issued patents and does not allow third-party reviewers to submit prior art against any issued patent. Rather, the website currently requires reviewers to “request” that a particular issued patent be added to the website, after which time third-party users are allowed to submit art against it.

The Peer to Patent project would be more useful if, after an application issues as a patent, the webpage for that application was updated to show the issued claims, show the prosecution history, and allow posting of prior art on that now-issued patent. Any member of the public should then be allowed to submit prior art under the same terms as during the Peer to Patent examination process. Under this proposal, however, no action is taken, and no submitted prior art is officially considered, until the patent is litigated or a re-examination ordered. In the case of re-examination, the law could be further changed to require that the examiner review not only art submitted in a traditional re-examination request under 37 C.F.R. § 1.501, but also any citations made on the corresponding post-issuance Peer to Patent website. Of course, the same submission rules as before could be applied, such that if more than ten references have been posted, only the top ten are forwarded to the examiner during re-examination.

Providing for such a post-issuance continuous review process would further advance the goals of the Peer to Patent project. That is, it would improve the public’s perception of patent quality, reduce the tax on the public caused by non-inventive patents, and reduce litigation costs. Even if no litigation or reexamination is initiated, if material prior art is already posted on a particular patent’s Peer to Patent webpage, the patent owner may be more cautious in asserting the patent.

Some of these changes will require a change in the law. However, as Congress is currently interested in reviewing the patent process and is considering instituting various forms of post-grant review, now may be the best time to achieve such changes. These changes to post-examination review arguably solve many of the problems that Congress is looking to address, without substantially limiting the rights of inventors under the

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83 See, e.g., Creative Sues Apple, SLASHDOT (May 16, 2006), http://apple.slashdot.org/story/06/05/16/0414226/Creative-Sues-Apple (discussing the assertion of Creative patent number 6,928,433 against Apple in 2006).

Constitution, and without substantially impeding the strong knowledge-based economy that has developed in the United States.

V. CONCLUSION

¶36 As the Peer to Patent project begins its second pilot period, it enjoys a documented record of success in the software and business method classes, during which it has been shown that community review can bring valuable prior art to light that otherwise would have been unknown to the examiner during examination of the application. 85 We will soon discover whether the same concepts can successfully be applied to the more traditional classes of telecommunications and biotechnology. Assuming the same type of success can be shown during the second pilot as in the prior two, the next time we see the Peer to Patent project may be as a permanent part of prosecution practice before the USPTO. Not only would this help to relieve the prior art search burden on patent examiners, it would also integrate the scientific and engineering communities into the patent review and granting process, and make sure that the best art, including highly relevant non-patent literature, is available for consideration by the examiner during prosecution, thus making the Peer to Patent system the remedy needed to restore confidence in the patent examination system and to reduce the detrimental backlog of pending patent applications before the USPTO.

85 Avrunin, supra note 10.