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September 16, 2011

**VIA EMAIL - [aia\\_implementation@uspto.gov](mailto:aia_implementation@uspto.gov)**

United States Patent and Trademark Office  
Attn: Hiram Bernstein, Senior Legal Advisor, Office of Patent Legal Administration  
P.O. Box 1450  
Alexandria, VA 22313-1450

RE: America Invents Act – Rule-Making and Implementation  
V. Third Party Preissuance Submissions, 35 U.S.C. 122

Dear Mr. Bernstein:

On July 22, 2011, the USPTO issued an invitation for public comment related to the prospective adoption of the America Invents Act. Now that Congress has approved the Act and the President has signed it into law, New York Law School's Center for Patent Innovations offers the attached comments specifically related to Section V of the invitation, Third Party Preissuance Submissions.

The Center for Patent Innovations has been responsible for operating the Peer To Patent pilot project in conjunction with the USPTO since 2007. In that role we believe we have developed unique insight into what is helpful, what is not, and where caution is required. We are hopeful that these comments may be useful to the USPTO.

Sincerely,



Mark H. Webbink  
Visiting Professor and Executive Director

**UNITED STATES PATENT AND TRADEMARK OFFICE**

**Leahy-Smith America Invents Act**

**Response to Request for Comments**

**Submitted on behalf of the Center for Patent Innovations  
New York Law School  
Mark H. Webbink  
Visiting Professor**

**Comments submitted to: [aia\\_implementation@uspto.gov](mailto:aia_implementation@uspto.gov)**

## Introduction

The USPTO has requested comments on suggested rules to implement the Leahy-Smith America Invents Act, approved by the Senate on September 8, 2011 and headed to the President for signature. In this response to that request, New York Law School's Center for Patent Innovations addresses itself to Section 8 of the Act and the following specific request for comment:

### **V. Third Party Preissuance Submissions, 35 U.S.C. 122:**

Effective date (page 84): Takes effect 1-year from the date of enactment; and Applies to any patent application filed before, on or after that effective date.

#### **A. Requirements:**

- i. new 35 U.S.C. 122(e) allows the submission of certain types of information (any patent, published patent application, or other printed publication) later in the prosecution; but does not provide for allegations of public use and sale or improper inventorship, which current 35 U.S.C. 122(c) continues to provide for,
- ii. certain time periods (submission must be made before the earlier of (i) allowance, or (ii) later of 6 months after the date of application publication or the date of first rejection),
- iii. a concise description of relevance, and a statement of compliance, and
- iv. a fee as the Director may prescribe.

In this response we provide a summary of the underlying premises for our recommendations, rules we believe will best implement the intent of Congress with respect to Section 8, and other implementation steps we believe would be of value with respect to Section 8. Following this summary is background information to support our recommendations.

## Summary of Recommendations

### **Section 8 Rulemaking and Implementation**

#### **Underlying Premises**

We believe the following premises should underlie the rule-making and implementation pertinent to Section 8:

- Third-party prior art contributions should be encouraged, not discouraged. Note that publicity and marketing can encourage prior art contributions. In addition, implementation details can have the effect of strongly encouraging or strongly discouraging prior art contributions.
- Web-based submissions from a well-designed platform will streamline and speed the submission process and will ensure consistency of both the process and the submissions.

- Registration with the web-based site should be required for its use. This would permit identification of the submitting party for rule compliance purposes and would encourage professional behavior on the site.
- Limitations on the number of permitted submissions per application on the web-based system would prevent “prior art dumping.”
- Third-party status would exclude inventors, assignees, any affiliates of the foregoing, and any representatives of the foregoing, including but not limited to legal counsel, patent agents, and retained patent search firms.<sup>1</sup>
- A declaration of third-party status at the time of submission would reduce the possibility of applicant gaming of the system, i.e., rigging the results to point away from useful prior art to non-useful prior art.
- Applicant consent to include an application in web-based public prior art review is no longer necessary, and either third-parties or patent examiners should be able to request an application’s participation. While we do not believe it would be efficient to include every application in such a review, the USPTO should consider a variety of approaches in determining what applications will be posted, including automatically posting classes or subclasses of applications that have yielded high levels of third-party prior art in the past, represent new and emerging technologies, or have proving particularly problematic for examiners in their traditional searches.
- We recommend that the USPTO monitor the web-based contributions to determine where the greatest contributions are being made from public submissions of prior art. Such information can be used to enhance the effectiveness of outreach programs.
- A request to include an application in the public prior art review should be facilitated by the system once the application is published, and its removal from the review process should be automatic based on the governing rules of Section 8.

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<sup>1</sup> Some explanation behind the definition of a third-party and limitations on the number of references that may be submitted on-line requires some background explanation. Under the existing statute and rules any party can submit prior art if they are willing to pay for the privilege. The pay-to-play approach was adopted to discourage third parties from “dumping” prior art on an application in order to delay its examination. The concern was solely with third-parties doing this; there was no reason an applicant would “dump” prior art on their own application.

This same concern was expressed with Peer To Patent, i.e., third-parties could use the mechanism to dump prior art on an application. For that reason we implemented a limit on the amount of prior art that would be forwarded to the USPTO, originally 10 references and then reduced to 6. Where more than 6 references were submitted, we ask the reviewers to arbitrate (by voting), and if they did not do so then the P2P staff arbitrated, giving deference to non-patent literature prior art. Again, we had no particular concern about applicants gaming the system by submitting 6 of their own references (with less relevance than others submitted) in order to push more relevant references from the IDS ultimately submitted to the USPTO. It’s not that it couldn’t happen, but we were monitoring who was submitting the prior art.

With the USPTO running its own system this same monitoring would now require a specific rule against “applicant dumping.” To our knowledge there is nothing per se illegal about an applicant submitting excess, irrelevant prior art. If that is true, what is to prevent an applicant from gaming the web-based system by submitting 6 irrelevant references, voting to give them priority over all other references, and thus blocking more relevant references from ever reaching the examiner? If they were ever caught doing this, it may constitute a fraud on the patent office charge, but we think it is worth making it clear that applicants (or anyone associated with them) cannot use this mechanism for submitting prior art.

- If possible, integrate into the system a notice subscription process that would notify registered users of the publication of applications in the class or subclass of patent applications to which they have subscribed. This would permit parties with specific interests to be alerted to patent applications that may be of interest and would assist them in identifying applications to be included in the public prior art review. This feature is available in Peer To Patent and has proven useful
- In addition to subscription by class or subclass, registered users should be able to subscribe by key words.
- The USPTO should establish practices to encourage public participation in the public prior art review, including participation by and among law students and engineering and science students.

### **Specific Rules to Be Adopted**

Beyond those rules that emanate directly from the language of Section 8, we recommend rules pertaining to the following:

- Prior art submitted through the web-based system may be submitted at no cost to the submitting party. Third-parties wishing to continue to submit prior art in hard-copy would remain subject to the same submission fee as at present.
- Any one third-party may submit up to six items of prior art relevant to a single application through the web-based system. Third-parties wishing to submit more than six items of prior art would be obligated to do so in hard-copy form and subject to the submission fee. This would further discourage prior art dumping.
- Define third-party to exclude the following parties with respect to a specific patent application: inventors, assignees, any affiliates of the foregoing, and any representatives of the foregoing, including but not limited to legal counsel, patent agents, and retained search firms.
- Require registration with the web-based site in order to participate, and require identification of name, profession, and contact information.
- Submission of prior art on any specific application would include a declaration of compliance with the Act. To the extent possible, aid submitters in conveniently determining facts needed to make such a declaration. Do not hold reviewers responsible for facts not reasonably determinable by them. For instance, there is typically a lag between action taken by PTO (such as an office action or notice of allowance) and publicly available notice in PAIR of such action.
- Limit the number of items to be considered by an examiner from the web-based system to the six highest-ranked submissions. In the case of no rankings or equal ranking of more than six items, preference will be given to non-patent literature.
- Should more than six items of prior art be posted but only six items are forwarded to the examiner for consideration, applicants will not be cited for inequitable conduct for failing to submit the references beyond those six forwarded to the examiner. Those “excess” references should be presumed to be less relevant and applicants should not be presumed to be aware of those references just because someone posted them to the web-site. Finally, applicants should not be cited for inequitable conduct for failing to (separately) cite the six references actually forwarded to the examiner.

## Suggestions for Implementation

We offer the following suggestions pertinent to the implementation of a web-based third-party prior art review and submission system:

- We have learned from Peer To Patent that collaboration works, so providing a web-based workspace to facilitate and encourage participation is critical. Many aspects of the present Peer to Patent interface may be used as they are, though some changes or improvements may be worth considering.
- Adopt a Peer To Patent-type interface which provides for communities and formal submission of prior art. One change would be that no one other than the submitting party would be able to annotate the prior art. Distinguish clearly between “workspace interactions” and formal submission of prior art and annotations. Develop and communicate clear guidelines about which portions of these will be considered by the examiner and thus become a part of the public record (e.g. the file wrapper).
- Do not require a submission to address relevance of submitted prior art to every claim in application of interest. Useful information can be obtained by making input mandatory on a small number of representative claims, with the option to expand comments on others.
- Enhance searching/sorting features to make navigation to an application of interest fast and easy. Make it easy for a user to associate together applications he/she is collaborating on or otherwise interested in.
- Restrict annotations to a submission to the submitting party.
- Lessen the burden of the unpredictability and lack of total transparency associated with the statutory limits of review window. Applications no longer within the comment period permitted by Section 122 should be immediately removed from the interface; it should be not possible for reviewers to inadvertently submit art against an application which is no longer eligible for comment. Additionally, to the extent possible, advance notice of projected removal should be provided on the interface to permit peer reviewers an opportunity to prioritize their work and collaboration and also to avoid “surprises” on applications under active consideration (e.g. the sudden disappearance of an application they intended to do more work on).
- The new interface could potentially allow any application to receive third-party prior art. We do not believe it would be useful for all applications to automatically go to the interface, nor do we believe that selecting only certain classes to go through it would pass muster. We recommend adoption of a system that allows a third-party or examiner to initiate the peer review. All they would have to do is enter a new publication number. If there is an active community already, they would be sent to that workspace. If there is no active community, they would be asked if they want to start one and off they would go.
- Since the USPTO has a year until this new provision becomes active, the USPTO should use that year to get their interface ready to go. We recommend that the Peer To Patent pilot be extended until such time as the USPTO interface is ready to be launched.
- In designing the interface and back-end database the USPTO should assure that all of the metadata identifying the submitted prior art is retained so that it remains searchable even if the text of the prior art document itself is not searchable.

- New York Law School is prepared to make all of the software code and design elements of Peer To Patent available under license to the USPTO at no cost in order to facilitate the implementation of the USPTO third-party prior art review system.
- Implement the web-based system at the earliest possible date, i.e., one year from the effective date of the legislation.

## **Conclusion**

We wish to thank the USPTO for the opportunity to provide these observations and recommendations. In the U.S. there is a clear gap in the prior art needed by patent examiners to make a thorough review of patent applications. A web-based third-party prior art review and submission system is a relatively inexpensive means for addressing a portion of that *prior art gap*. The pilot projects run to date have demonstrated that peer reviewers will volunteer their time to search for prior art, and that those efforts are reasonably effective in finding previously-unavailable, relevant prior art. While peer review-contributed prior art is not a panacea for all issues related to patent quality, it is capable of making a meaningful contribution to improving patent quality. New York Law School is prepared to lend its assistance to the USPTO in implementing a web-based public prior art review process as a regular feature of the U.S. patent system.

## **Background to Recommendations**

### **The Issue of Patent Quality and the Need for Section 8.**

Over the three decades from 1980 through 2010 the U.S. Patent and Trademark Office (“USPTO”) has experienced exponential growth. This growth has been driven by a number of different forces. Subject matter previously considered unpatentable has entered the scope of patentability, including computer software and business methods. Whole new and rapidly expanding areas of technology subject matter have developed, including nanotechnology, hybrid electric vehicles, virtual machine technology, and information security, just to name a few. In the four decades from 1970 through 2010 the USPTO added 194 new classifications of patentable subject matter, representing more than half of all classes currently in use.

For all of this expansion in subject matter, the USPTO was also seeing dramatic growth in annual filings. In 1950 the USPTO received 67,000 new utility patent applications. In 1960 that number was approximately 80,000. In 1970 it increased to 103,000, in 1980 to only 104,000, in 1990 to approximately 165,000, in 2000 to 296,000, and in 2010 to more than 456,000. That represents a 3.25% annual rate of growth over the last 60 years, but that annual rate of growth has been almost 5.25% over the last 20 years.

Such growth in both the breadth and depth of subject matter has challenged the USPTO’s ability to provide timely and thorough examinations of utility patent applications. In 2009 the backlog of unexamined applications exceeded 765,000. By the end of 2010 that number had been reduced to 722,000, but it remains near its all-time high. In the past eight months that backlog has been reduced further to just 689,000. Average time to first office actions routinely runs to more than 24 months, and the average time to final disposition is three years from filing.<sup>1</sup>

### **The Issue of Patent Quality**

While faced with this clear issue of sheer volume evidenced by objective data, the perception of low patent quality has tended to be far more anecdotal. Part of the problem is one of definition. When is a patent of low quality? A simple definition is “a patent that has issued which incorporates one or more claims that, given perfect information as to prior art and well understood technology associations, would not have issued.” In other words, claims of the patent have been allowed which, given better information or better understanding by the examiner, should have been denied. The perception is strongest in the areas of computer software and business methods, but almost no area of technology is immune.

There is some objective data to support these perceptions. Statistics from the USPTO on *ex parte* reexaminations through June 30, 2011, show 92% of *ex parte* petitions for reexamination being granted. Of those *ex parte* reexaminations that have been completed, 77% have resulted in one or more claims being changed or rejected, with 11% having all of their claims canceled. Although the number of *ex parte* requests filed every year remains relatively small compared to the total utility patent population (there will be about 1,000 such requests filed in 2011), the

number of requests filed every year has been growing at a rate of more than 14% per year since 2006.<sup>2</sup>

We see similar, if not more disconcerting trends in *inter partes* reexaminations. Here the USPTO statistics, also through June 30, 2011, show 95% of reexamination petitions being granted. Of those *inter partes* reexaminations that have been completed, 87% have resulted in one or more claims being changed or rejected, with 44% having all of their claims canceled. The number of *inter partes* reexaminations is even smaller than that for *ex parte* reexaminations (about 500 such requests will be filed in 2011), but the rate of growth in the number of *inter partes* reexaminations is even higher (more than 48% per year over the past five years), with *inter partes* reexamination likely to surpass *ex parte* reexaminations in the year 2014.<sup>3</sup>

We should be careful with making overly broad generalizations from these relatively small statistical samples. The vast majority of patents are never asserted in litigation or subjected to reexaminations. However, we see this same sort of phenomenon in patent litigation, where 49% of challenged claims are found to be unpatentable.<sup>4</sup>

So, although these statistical samples are too small to support broad generalizations, more than half of patents for which the validity has been challenged either in litigation or reexamination have seen their claims narrowed or found totally invalid. No matter how small, that is objective evidence of a problem in the validity of patent claims being granted, i.e., patent quality. The issue then is not whether there exists a patent quality issue, but only how big it may be. From this evidence we can deduce that the likelihood of an issued patent containing invalid claims is greater than 0% but less than 50%. Picking the midpoint, 25%, we can refer to this as the “*prior art gap*,” i.e., the percentage of claims that likely would not be allowed but for better prior art before the patent examiner.

The result of these real and perceived problems is a patent system that is actually burdening the innovation process in the U.S. rather than promoting it. These successful challenges to issued patents also have the pernicious effect of undermining confidence in our patent system. The USPTO shares these concerns and has undertaken a broad range of initiatives to address them. Among those initiatives is Peer To Patent. Section 8 of the America Invents Act can help address this issue.

### **Patent Examiners Lack Access to Complete and Relevant Prior Art**

The prior art resources available to patent examiners at the USPTO are extensive. U.S. patent examiners are able to conduct computer-based searches on virtually every database of issued patents and pending patent applications worldwide. This gives them extensive access to patent prior art.

However, it does not follow that such access exists with respect to non-patent literature (“NPL”) prior art. For NPL those formal databases that exist to which USPTO examiners have access are far more limited. Even most NPL that has been submitted to the USPTO in patent examinations and reexaminations remains inaccessible to patent examiners conducting computer-based

searches because the NPL remains locked in non-text-searchable PDF formats and remains scattered among the many and various examination files. As a consequence, examiner access to NPL is far more limited.

While patent prior art is more frequently cited than non-patent literature prior art, such patent prior art is also less likely to exist where the subject matter area is new, e.g., nanotechnology, or where the subject matter has only become patentable in relatively recent years, e.g., software and business methods. However, where patent prior art does not substantiate invalidity for either novelty or non-obviousness, the likelihood of an examiner finding NPL remains relatively low across all subject matters. This lack of access to NPL prior art is at least one of the contributing factors to the *prior art gap*.

## **Peer To Patent and What We Have Learned**

### **How Peer To Patent Is Designed and Structured**

In this age of the Internet, collaboration among individuals from around the globe has become possible. We see the results of such successful collaboration in a wide range of matter. The success of Wikipedia would not be possible without the thousands of volunteer contributors and collaborators who develop, post, edit, and verify its content.<sup>5</sup> Free and open source software, such as the Linux operating system and the Apache server software, would also not be possible but for such ready, sophisticated, and regular collaboration.<sup>6</sup>

It is this same concept of presenting specific tasks to be solved to a worldwide community of volunteer experts that inspired Beth Noveck's blog, *Peer to Patent: A Modest Proposal*.<sup>7</sup> The idea is to present pending published patent applications for review by the public, encouraging discussion among interested parties, and having those parties identify prior art they believe is relevant to the claims of the application. Those same individuals may then annotate that prior art to explain the relevance and stack rank it against other contributed prior art. The contributed prior art judged most relevant is then forwarded to the USPTO (or other national patent office), along with the related annotations that help explain the peer reviewer's understanding of the claims and the relevance of the prior art, for consideration by the examiner.

Some basic principles that drive Peer To Patent:

- All peer review activity is voluntary;
- Participation requires registration with the website but does not require public disclosure of identity;
- Discussions are self-governing;
- Behavior is expected to be professional and focused on the task at hand – this is not the place to rant about the patent system or applicant behavior;
- Peer To Patent staff will only arbitrate where the peer review community fails to do so.

## **The First U.S. Peer To Patent Pilot Project (2007-2009)**

### **Structure of the First U.S. Pilot**

The first Peer To Patent pilot project was launched in June 2007 in a cooperative effort between New York Law School and the USPTO and substantial funding from private industry and foundations.<sup>8</sup> The initial pilot ran until June 2008 but was then extended until June 2009. During the pilot, applications were voluntarily submitted by applicants for review. As an inducement to applicants to participate, participating applications were moved to the head of the queue for first office action once the Peer To Patent review was complete.

Participating applications are posted to the Peer To Patent website only after they have published; Peer To Patent does not cause premature disclosure of claimed inventions. Once the application is available for review peer reviewers have approximately three months<sup>9</sup> in which to discuss the merits of and innovation embodied in the application, identify and post prior art, annotate such prior art for relevance, and stack rank those prior art contributions against each other. The communities around each application are self-forming. Where an application is lacking input, law student volunteers attempt to seek out peer reviewers to contribute. At the conclusion of the review period the prior art and annotations are incorporated into an Information Disclosure Statement that is then forwarded to the USPTO. It is important to note that at no time do the Peer To Patent reviewers participate directly in the examination of the applications; examination is strictly limited to the efforts of the USPTO examining corps. It is also worthwhile noting that the peer reviewer input, whether comments, prior art, or annotations, remains in public view.

One of the concerns expressed during the design of Peer To Patent was the potential for prior art dumping. That is, Peer To Patent would be used as a vehicle to overwhelm the examiner with substantially useless prior art that the examiner would be required to consider, thus significantly delaying the first office action and overburdening the examiner. To counter this Peer To Patent limits the amount of prior art that is forwarded to the examiner. In the original pilot the limit was ten items of prior art. If more than ten items were contributed, the stack ranking applied by the participants would be used to determine the ten most useful items of prior art, with preference given to non-patent literature.

Another concern during the design of Peer To Patent was the use of the website simply as a forum in which to rant on the patent system, e.g., against software patents. This did not occur. In part this was due to the requirement of peer reviewers to register with the website. The more significant factor was likely the pure professionalism of the peer reviewers, who were not inclined to spend their valuable time on the site without some useful effect.

### **Results of the First U.S. Pilot**

In this first two-year pilot 223 applications were submitted. These applications were limited to computer software and business methods.<sup>10</sup> Peer To Patent reviewers identified prior art relevant to 189 of those applications. The 189 applications came from 73 different applicants, including:

large applicants like IBM and GE; financial sector companies like Citicorp and Goldman Sachs; traditional industries like Proctor & Gamble and Weyerhaeuser; and 21 independent inventors.

To test the independent value of the Peer To Patent contributions during the first pilot participating examiners were instructed to only consider the Peer To Patent IDS after conducting their own search and initial examination.<sup>11</sup> In addition, at the end of the second year of the pilot 53 examiners were surveyed to obtain their reaction to the utility of the program. Those examiners reported that prior art submitted by Peer To Patent was helpful, with 28 percent of examiners using prior art submitted by Peer To Patent in their rejections. It is worth noting that seven out of 10 examiners thought that the Peer To Patent process would be helpful if implemented in regular office practice suggesting that the pilot has significant support. As one examiner responded, “[t]his program would be helpful because: first, I have resources that I can rely on in case the resources do not turn up during the search, and second is it might give me different directions/keywords when doing the search.” For those examiners that received access to Peer-to-Patent prior art before their initial examination, approximately 56 percent found peer reviewed prior art to be either helpful or very helpful.

Activity for both years one and two were about the same with approximately 3.5 reviewers participating in each application and an average of 3.5 items of prior art being identified. Most interesting was the fact that 36% of the prior art submitted was non-patent literature. This is far more than examiners usually find on their own, where only one case in approximately 500 cites to non-patent literature. The non-patent literature submitted by Peer To Patent also played a significant role in those office actions which relied on Peer To Patent contributions in rejecting claims.

Peer To Patent prior art was used as a basis for rejecting claims in 20% of the cases.<sup>12</sup> That is, in 80% of the cases the Peer To Patent prior art, while not necessarily irrelevant, was not deemed necessary by the examiner. From a practical perspective these results draw two conclusions. First, examiners are doing a credible job of finding the best prior art reasonably available about 80% of the time. However, in 20% of the cases the citizen-experts have been able to lend meaningful assistance to the examiner. This contribution percentage reflects well against the presumed 25% *prior art gap*.

It is worthwhile to note that one key aspect of the Peer To Patent IDS’s that examiners found particularly useful was the annotations. The annotations not only helped quickly direct the examiner’s attention to the asserted relevance of the Peer To Patent prior art submissions, a number of examiners stated that the annotations helped them better comprehend the claimed inventions.

Who were these citizen-experts participating in Peer To Patent and what incited them to participate? Statistics gathered by the project show that more than 60% of the reviewers were professional scientists and technologists with much of the remaining 40% representing legal professionals and professional searchers. The average education of peer reviewers was an advanced degree. Their motivation for participating: primarily for professional reasons, i.e., on behalf of their employer or because they had a vested interest in the technology and wished to maintain freedom to innovate.<sup>13</sup> However, we also found that individuals lacking specific

technology backgrounds but trained in how to construct and conduct prior art searches were also highly effective in finding relevant prior art. This was particularly true (and useful) in engaging law students with an interest in patent law as Peer To Patent peer reviewers.

One key change that improved applicant participation in the first pilot was the USPTO assuming responsibility for applicant notification/solicitation. The USPTO first undertook these efforts in December 2008, a year and a half into the first pilot. The result was a three-fold increase in the number of participating applications over the last six months of the pilot.

It is also worth noting that Peer To Patent did not drastically alter the landscape of patent issuances. A comparison of statistics compiled by the blog Patently O and by the Peer To Patent staff show:

Patently O:

Total published apps: 22,000 published patent apps (Feb 2006)  
Total apps issued: 54% (11880 apps)  
Total apps abandoned: 29% (6380 apps)  
Total apps pending: 17% (3740 apps)

P2P:

Total apps on P2P: 226 (based on "Office Actions Pilot 1 & 2" document)  
Total apps issued: ~39% (90 apps)  
Total apps abandoned: 20% (44 apps)  
Total apps pending: ~41% (92 apps)

In other words, the overall rate of issuances and abandonments has not been dramatically altered by Peer To Patent participation. Where Peer To Patent is making its greatest contribution is in limiting the breadth of allowed claims.

### **Evaluation of the First U.S. Pilot**

At the conclusion of the first pilot (the last of the applications were processed for review in October 2009) the USPTO conducted an evaluation of the program. The results of that evaluation were presented to the senior management of the USPTO in December 2009. The conclusions reached by the evaluation:

1. The contribution rate (i.e., the percentage of prior art identified by the program that the examiner did not find on his/her own) was meaningful and positive when compared to reasonable expectations.
2. Voluntary participation by applicants requires the active participation of the USPTO in identifying eligibility and encouraging participation.

3. The ability of the program to scale (as measured by the volume of participating applications and average peer contribution per application) was not sufficiently tested in the pilot to draw a conclusion about how well the program would scale in the future.
4. Marketing efforts to recruit peer reviewers will need to be continued and enhanced if the program is to scale.
5. The participating public believes the collaborative process can make a positive contribution in assisting examiners in finding relevant useful prior art.
6. The vast majority of opinion from the public, applicants, peer reviewers, and examiners was positive toward the program.
7. Most public concerns about the program were either misplaced or simply skeptical of the program's ability to scale and long-term contribution.
8. By-and-large, examiners found the annotations provided with the prior art to be useful in understanding both the application and the prior art.
9. Participating law students gained a useful understanding of the patent process from their participation.
10. For control purposes the process for considering prior art contributed through the program was out of normal examiner review sequence; incorporating the consideration into the normal search and review experience would largely eliminate any additional workload on participating examiners.
11. Inefficiencies in the process of handling the prior art contributions were manifest in the cost of producing hard copies and the number of IDS's that were lost or misplaced.
12. The program will benefit from pending patent reform legislation.
13. There is international interest in peer reviewer prior art searching.

The evaluation report made the following recommendations:

1. Re-implement the program at the earliest date permitted by budget constraints.
2. Continue the program as a voluntary program with the same incentives (advanced date of examination) as used in the first pilot.
3. Expand the program to other technology centers to test the rate of contribution in other subject matter areas.
4. Continue to involve law students at a range of academic institutions in the recruitment of peer reviewers and the management of the peer review process.
5. Send regular mailings to all applicants with pending applications that are eligible to participate in the program prior to the date of publication.
6. Continue to automate the process of gathering and transmitting the prior art and annotations to the USPTO in order to make the process more efficient and to reduce the likelihood of lost contributions.
7. Post applications to the program website sooner and maintain them on the website for review for a shorter period (60 days versus the 90-day review period used in the pilot).
8. Reduce the number of permitted submissions from 10 to 6 per application, placing a great premium on the ranking of prior art contributions and reducing the number of contributions the examiner needs to consider. [Note: fewer than 10% of participating applications for which prior art was submitted had more than 6 items of prior art. By further limiting the number of items of prior art that may be submitted a premium is placed on the peer review ranking process and the burden on the examiners is reduced.]

9. Produce marketing materials that educate peer reviewers and their employers on the value of participating.
10. Develop educational materials for peer reviewers to improve their understanding of claim construction with the view of improving the relevancy of peer review prior art contributions.
11. Improve the system for peer reviewer recognition to include a rating of their contributions.
12. Re-evaluate the program on an annual basis to assure it is continuing to make a meaningful contribution to patent quality.

With those findings and recommendations the USPTO decided to launch a second pilot.

## **The Second U.S. Peer To Patent Pilot Project (2010 – 2011)**

### **Structure of the Second U.S. Pilot**

The second U.S. Peer To Patent pilot launched in late October 2010. It is scheduled to continue accepting applications through September 30, 2011. All applications will be processed for peer review by the end of 2011. Consistent with the recommendations from the first pilot:

- the review period was shortened to three months from the original four;
- the number of items of prior art to be forwarded to the USPTO was reduced from ten to six (there were only two instances during the first pilot where more than six items of prior art were posted for a patent application on the Peer To Patent website);
- the USPTO assumed the role of notifying applicants of their eligibility to participate;
- the subject matter areas eligible to participate in the pilot was expanded to include telecommunications, speech recognition, biotechnology and bioinformatics;<sup>14</sup> and
- the maximum number of participating applications was increased from 400 to 1000.

### **Results of the Second U.S. Pilot to Date**

Through its first ten months the second pilot has received almost 300 applications for processing. While well below the limit of 1000, this still represents a significant increase over the annual average of 111 applications in the first pilot and even over the annualized rate of 174 applications during the last six months of the first pilot. Regular communication of program eligibility from the USPTO has clearly improved the rate of participation.

Despite that increase in volume of participating applications, the rate of peer reviewer contribution has remained substantially consistent with that of the first pilot. As of this writing no meaningful number of participating applications has received a first office action such that a conclusion can be reached as to the quality of contributions during this second pilot. All indications are that peer reviewer activity can and will scale with both an increase in application volume and a widening of subject matter participation.

### **What We Have Learned From Peer To Patent**

Although the second U.S. pilot is on-going, we have already learned a number of lessons from Peer To Patent. Those include:

- Volunteer third-parties are capable of identifying relevant and useful prior art that makes a meaningful contribution to improving the thoroughness of examinations.
- Volunteer third-parties have varied motives for participating. Excluded from those motives is direct compensation for their efforts.
- Volunteer third-parties need not have a specific technical background in order to make a useful contribution.
- Volunteers have been able to find relevant and useful non-patent literature prior art at a much higher rate than examiners.
- An organized, web-based format provides a collaborative forum for volunteers to learn from each other, to identify and submit prior art in an organized manner, to annotate that prior art, and to prioritize the relevance of that prior art.
- An organized, web-based format requires a minimum of effort to manage and maintain.
- Capturing and retaining prior art metadata increases the future utility of that prior art.
- Reasonable rules around prior art submissions prevent “prior art dumping.”
- Site registration has helped maintain the professional nature of the web-based approach.

## Endnote

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<sup>1</sup> For the latest USPTO patent production statistics visit the USPTO's Patent Data Visualization Center at <http://www.uspto.gov/dashboards/patents/main.dashxml>

<sup>2</sup> [http://www.uspto.gov/patents/EP\\_quarterly\\_report\\_June\\_2011.pdf](http://www.uspto.gov/patents/EP_quarterly_report_June_2011.pdf)

<sup>3</sup> [http://www.uspto.gov/patents/IP\\_quarterly\\_report\\_June\\_2011.pdf](http://www.uspto.gov/patents/IP_quarterly_report_June_2011.pdf) See also, Roger Shang, *Reexamination and Improving Patent Quality*, 7 NW J. Tech. & Intell. Prop. 2-185 (2009).

<sup>4</sup> Dawn Rudenko Albert, *The Changing Face of IP Litigation*, Footnote 2, LITIGATION STRATEGIES FOR INTELLECTUAL PROPERTY CASES, Aspatore (2010)

<sup>5</sup> <http://en.wikipedia.org/wiki/Wikipedia>

<sup>6</sup> See, Justin P. Johnson, Collaboration, Peer Review, and Open Source Software, 18 INFORMATION ECONOMICS AND POLICY 477 (2006).

<sup>7</sup> [http://cairns.typepad.com/blog/2005/07/peer\\_to\\_patent\\_.html](http://cairns.typepad.com/blog/2005/07/peer_to_patent_.html)

<sup>8</sup> To date the Peer To Patent program in the U.S. has received most of its funding from the MacArthur Foundation, the Omidyar Network, Article One Partners, CA, GE, Hewlett Packard, IBM, Intellectual Ventures, Microsoft, Open Invention Network, Red Hat. In the present pilot approximately two-thirds of the funding is coming from the USPTO.

<sup>9</sup> In the first pilot the review period was four months. However, observing the timing of the participation, it was decided that three months was adequate, and that is the review term used in the current pilot.

<sup>10</sup> Business methods, i.e., U.S. Patent Class 705, were only added during the second year of the first pilot.

<sup>11</sup> It became clear during the course of the first pilot that this instruction was, at least in part, ignored by some examiners. There were clear instances where an examiner structured his/her own search in such an unusual way that it found the prior art contributed by Peer To Patent. This was later determined to not be a bad thing. The point of Peer To Patent is to help the examiner get the best prior art in front of her or him. Consequently, no such control has been used in the second pilot.

<sup>12</sup> Specifically, Peer To Patent prior art was used as either the primary basis or a contributing basis for rejecting one or more claims in 39 of the 189 applications. Those applications impacted by Peer To Patent in the first pilot were:

- 20070260907
- 20070255832
- 20080120576
- 20080046686
- 20080022202
- 20070180110
- 20070174746
- 20070160202
- 20070234226
- 20070220583
- 20070226722
- 20070208822
- 20070271363
- 20080016013
- 20070244891
- 20080255875
- 20090062969
- 20080294578

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- 20080301712
  - 20090063248
  - 20090110192
  - 20080028242
  - 20080104325
  - 20080104494
  - 20080221945
  - 20080162919
  - 20080307264
  - 20090119118
  - 20090129585
  - 20090089450
  - 20090144087
  - 20070162625
  - 20080104353
  - 20090006439
  - 20090144374
  - 20090063329
  - 20090138797
  - 20070118696
  - 20070136608

<sup>13</sup> If you are interested in learning more about the results of the first pilot, you can find the first and second year Peer To Patent Anniversary reports at <http://dotank.nyls.edu/communitypatent/P2Panniversaryreport.pdf> and [http://dotank.nyls.edu/communitypatent/CPI\\_P2P\\_YearTwo\\_lo.pdf](http://dotank.nyls.edu/communitypatent/CPI_P2P_YearTwo_lo.pdf).

<sup>14</sup> The patent classes eligible to participate in the second pilot are: 260 (only subclasses 1, 665B, 665R); 370 (all subclasses); 380 (all); 424 (1.11 - 10.4, 78.02 - 78.38, 464-482, 400, 402-502, 43-47, 48, 49-58, 59-65, 61-64, 69-78.38, 600-724); 455 (all); 504(all); 514 (23-43, 45-62, 65-975, 772.1-772.7, 788.1); 534 (10-16); 518 (all); 532 (all); 540 (all); 554 (all); 556 (all); 560 (all); 562 (all); 568 (all); 536 (1.11-22.1, 25.1-128); 540 (all); 544 (all); 546 (all); 549 (1-251, 356-366, 369-428, 432-455); 570 (all); 700 (1-89, 95-129, 145-212, 265, 275-306); 702 (19-32); 703 (all); 704 (all); 705 (all); 706 (all); 707 (all); 708 (all); 709 (all); 710 (all); 711 (all); 712 (all); 713 (all); 714 (all); 715 (all); 717 (all); 718 (all); 726 (all); and 987 (all).