

Written Comments on USPTO “Use of Crowdsourcing to Identify Relevant Prior Art”

[Docket No. PTO-P-2014-0013]

Moot Court Room, Benjamin N. Cardozo School of Law
55 Fifth Avenue, New York, NY 10003
December 2nd, 2014
1:00 - 5:00 PM EST

Patexia Inc.

[1.0] Summary

Patexia Inc. (“Patexia”) respectfully submits its comments on the “USPTO Use of Crowdsourcing to Identify Relevant Prior Art” roundtable event held at the Benjamin N. Cardozo School of Law in New York on December 2nd, 2014. Patexia thanks the USPTO for continuing its engagement with stakeholders on crowdsourcing initiatives to identify prior art, and for committing to improving patent quality through more efficient examination.

Patexia is proud to represent the Patexia community and all that it has accomplished in its efforts to provide a crowdsourcing solution for identifying relevant prior art. Patexia offers the following suggestions in response to the USPTO’s request for public comment. The five topics listed and summarized below will be addressed throughout this document:

1. In what ways can the USPTO utilize crowdsourcing to identify relevant prior art that would be available for use in the examination of published applications while maintaining the ex parte nature of patent examination? → **Ex Parte**
2. If the USPTO were to post a question relating to the technology of a published application on a crowdsourcing Web site, what follow-up communications, if any, could someone from the USPTO have with the parties on the Web site? → **Follow Up**
3. What appropriate precautions, if any, could the USPTO employ to ensure that the use of crowdsourcing tools does not encourage a protest of other form of pre-issuance opposition to the grant of a patent? → **Protest and Opposition**
4. If the USPTO cites in an application prior art obtained via crowdsourcing tools, to what extent, if any, should the USPTO document the crowdsourcing activities used to identify the prior art? → **Source Citation**
5. For each published patent application, if the USPTO gave the patent applicant the option to opt-in or opt-out of the USPTO’s use of crowdsourcing, would applicants choose to participate in the crowdsourcing program? What considerations would inform the applicant’s decision? → **Choice and Incentives**

We will begin by taking a closer look at topic number five (i.e. opt-in vs. opt-out), as the solution taken to resolve this issue will have an impact on the other four, and it will help to define the overall crowdsourcing model and process.

[2.0] Applicant Participation

As an early-stage crowdsourcing pilot project, Peer-to-Patent was successful in proving that crowdsourcing can be an effective strategy for improving examiner access to non-patent literature prior art. However, the program was executed on voluntary basis (both on the client and crowd side) and as a result it faced some challenges with respect to encouraging opt-in applicant participation and receiving active participation from the crowd on all topics. In total,

Peer-to-Patent covered 189 applications¹. The program served its purpose, which was to prove the viability of crowdsourcing in improving examination process, however, to measure the value more accurately and to have a more meaningful impact on examination efficiency and patent quality, a crowdsourcing program must have a higher level of participation on both sides (applicant and expert crowd). Below is a summary of the pros and cons for opt-in and opt-out crowdsourcing programs, and Patexia's recommendation on the same.

[2.1] Opt-In Program

We believe that an opt-in program with applicant consent would give the examiner greater flexibility with respect to engaging a crowdsourcing community.

[2.1.1] Opt-In Pros

- **Flexibility:** Written consent of the applicant allows an examiner to use crowdsourcing outside of the limitations required by 35 U.S.C. 122(e), for example the submission of a statement of relevance.
- **Timing:** The examiner can choose the timing of crowdsourcing (e.g. before first office action, before second office action, etc...).
- **More Use Cases:** The examiner will have flexibility in choosing how to leverage the power of crowdsourcing (see Figure 1):
 - Crowdsourced state-of-the-art search for technologies that are immature or emerging to collect relevant non-patent literature (NPL) and improve examination on that subject matter
 - Targeted crowdsourcing to find relevant art for a specific claim
- **Optimization:** The many moving parts of a complex crowdsourced search could be optimized and improved in a more controlled manner due to flexibility of the program:
 - Best time to use crowdsourcing during or before examination
 - Type of qualified experts to populate a crowdsourcing community
 - Communication with the crowd and design of the questions that an examiner would like to crowdsource
- **Applicant:** An applicant will be receiving the highest quality patent thereby reducing the risk of their asset being invalidated in litigation or post-grant proceedings.

[2.1.2] Opt-In Cons

- **Limited Scalability:** Requiring applicant consent may limit the scalability of the crowdsourcing program if the incentives to participate are not sufficient.

¹ [Peer-to-Patent Second Anniversary Report](#)

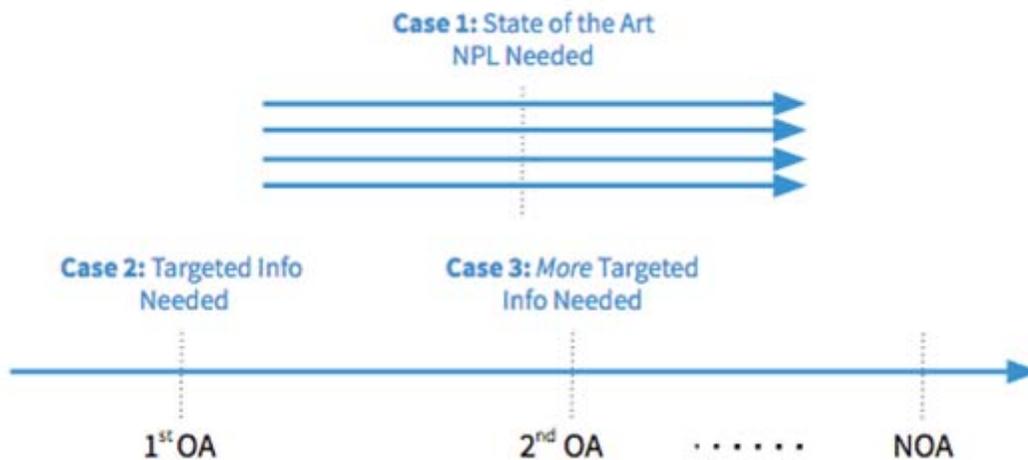


Figure 1. Use cases for an opt-in crowdsourcing program

[2.2] Opt-Out Program

In this scenario, all patent applications would be eligible for a crowdsourcing program by default. However, there will be certain limitations imposed by the US legal code.

[2.2.1] Opt-Out Pros

- **Scalable:** Not requiring applicant consent for crowdsourcing would empower the examiner to choose any application for crowdsourcing that may benefit from the model.

[2.2.2] Opt-Out Cons

- **Lack of Flexibility:** Without applicant consent, an examiner’s use of crowdsourcing likely be limited to the preissuance window defined by 35 U.S.C. 122(e).
- **Limited Communication:** Examiner communication and question design would be limited in light of maintaining the ex parte nature of patent examination.
- **Limited Process Control:** If an opt-out crowdsourcing program were to fail, it would be impossible to understand the reasons given that a lack of flexibility makes it hard to control and optimize the different moving parts (e.g. timing, type of study, examiner communication, etc...).

[2.3] Closer Look at Scalability

Before we make a decision between the two options (i.e. opt-in vs. opt-out) we would like to take a closer look at long-term scalability to understand that if at some point in the future, crowdsourcing all patent applications would be an effective use of the USPTO’s resources.

The USPTO receives more than 400,000 applications per year, which are assigned to different technology centers and examined by a few thousand examiners. Borrowing from management

consulting and the popular 80/20 rule², we believe that in many cases (e.g. about 80%) the examiner may be able to quickly find prior art, review an application, and conduct the necessary correspondence with an applicant to make a decision. For example, the examiner may receive a new application from a new applicant that is very similar to a previously examined application from a different applicant. Also, the examiner may be able to identify very relevant prior art employing the PTO's current databases. In such cases, the use of crowdsourcing is not necessary. However, for the remaining cases (e.g. about 20%) which takes most of examiner's time, crowdsourcing may help to expedite the examination process. Examples of the latter include:

- Emerging and immature areas that the examiner or their group has not yet explored
- A persistent applicant who narrows or modifies their claims based on the same or new art and consistently asks for further examination

In these cases, leveraging crowdsourcing would reduce the examination time and improve the overall productivity of the office and examination process.

To identify areas and types of applications that could benefit from crowdsourcing, we suggest looking at examination performance in areas that meet the previously defined criteria. For example, if efficiency is below average (i.e. more time than normal is taken to review the application), or if efficiency is inline or above other areas but patents are routinely ending up in post-grant review or litigation, crowdsourcing can improve efficiency by reducing the time and improving the quality of examination.

[2.4] Recommendation for Opt-In

Considering the above pros and cons, Patexia suggests that the USPTO start with a 12-24 month opt-in crowdsourcing program. The ability to control for and adjust any one part of the complex crowdsourcing process would allow the USPTO to learn best practices over time, while keeping an eye towards an eventual office-wide opt-out program to scale and cover all applications. To encourage applicant participation, which, as previously mentioned, was a challenge for the original Peer-to-Patent project, Patexia suggests two options:

- I. Permitting or integrating crowdsourced examination to be one of the PTO's accelerated examination options, and/or,
- II. Looking at technology areas where the current backlog is affecting the industry and offering solutions to alleviate that pain through a new *fast track examination* powered by crowdsourcing.

In *Technology Center 2100 - Computer Architecture, Software, and Information Security*, the current backlog is close to 20 months before first office action³. Given the ephemeral life cycle of

² [Pareto Principle](#)

³ [Fox Rothschild IP Spotlight, December 2013](#)

many software products, which in some cases is less than five years, this delay in examination is a major concern for many top software companies. One possible solution would be to package opt-in crowdsourcing with the Track One fast-track examination program that has been offered since 2011. Companies such as Google, which have obtained 875 fast-track patents as of December 2014, about 14% of the approximately 6,200 issued since the option was first offered under the AIA, would be likely participants in such a program⁴.

Once an applicant has opted-in to the crowdsourcing program, an examiner will be able to use crowdsourcing at their discretion. To make the best use of the USPTO’s time, Patexia suggests utilizing such resources only in particularly problematic situations. For emerging or immature technology areas where art, especially non-patent literature, is limited, crowdsourcing can be an effective way to strengthen the examiner’s understanding of the nascent space. When dealing with a persistent applicant, crowdsourcing can be used to support decisive action regarding amended claim language. By crowdsourcing just for the missing pieces, the USPTO can make the most of the crowdsourcing resources at its disposal.

[3.0] Proposed Pilot Project

As suggested in Patexia’s previous written comments, which were submitted on May 9th, 2014 in response to the first Crowdsourcing Roundtable held at the USPTO in Alexandria, VA on April 9th, 2014⁵, Patexia proposes that the USPTO begin implementing crowdsourcing to identify relevant prior art with a pilot project spanning a defined period of time, such as 12-24 months. Based on the recommendation of starting with a finite opt-in crowdsourcing program, and using the 80/20 rule as a guide for where to start, Patexia suggests that the scope of the pilot project cover 1,000-2,000 applications and involve 100-200 examiners (see Figure 2). Examiners, who will be selected based on their association with a specific technology center, will be given a quota of approximately ten crowdsourcing studies to use at their discretion during the period of time defined for the pilot project.

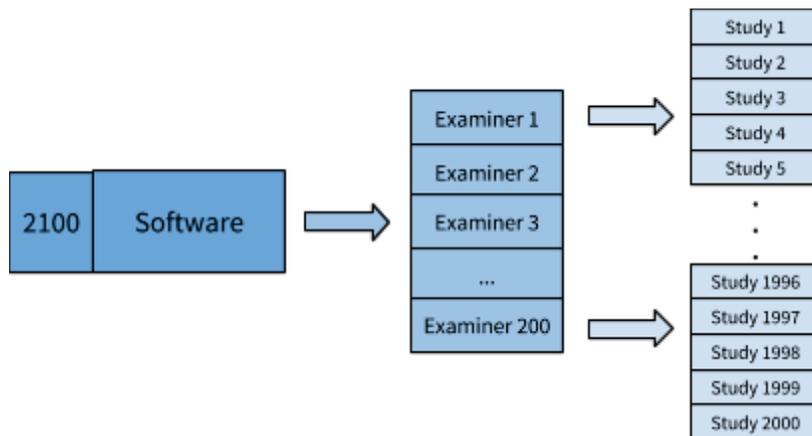


Figure 2. Overview of the proposed USPTO crowdsourcing pilot project

⁴ [Washington Post, “Google has gotten more fast-track patents than any other company,” October 2014](#)

⁵ [USPTO Crowdsourcing Roundtable, April 2014](#)

To overcome the limited participation experienced by Peer-to-Patent, a crowdsourcing program will need to match willing opt-in applicants with active subject matter expert networks. On the examiner side, Patexia suggests that examiners are selected from *Technology Center 2100 or 2400*. Based on the emerging nature of many of the technologies in this area, and the current backlog of about 20 months to first office action for *TC2100*, it is likely that many companies would be willing to opt-in to a crowdsourcing program, especially if it was packaged with a fast-track examination. Any meaningful decrease in the wait time would likely provide the value necessary to justify any additional cost associated with the proposed crowdsourcing pilot project as it will improve the overall efficiency of the Patent Office.

On the subject matter expert, or crowdsourcing community, side, software represents an example where motivated “super-users” actively contribute their knowledge and perspective to open-source and other collaborative online platforms. Matching willing software applicants with a growing base of engaged software experts would likely increase the participation in and overall quality of an opt-in crowdsourcing program.

Throughout the proposed crowdsourcing pilot project useful data points will be gathered to improve the process and ultimately serve as the foundation for a successful and scalable opt-out USPTO crowdsourcing program. Best practices for when an examiner should use crowdsourcing, the type of questions for an examiner to ask, and the type of experts that should be engaged within a crowdsourcing community, among other things, will be determined over time.

Results from the pilot project can also be used to motivate future applicant participation in a crowdsourcing program. For example, as “crowdsourced applications” become granted patents, statistics can be gathered concerning overall patent quality when compared to patents stemming from “non-crowdsourced applications.” Such statistics can include patent impact, measured by the number of citations received, and strength, measured by the number of post-grant validity challenges survived, among others.

[4.0] The System - An Overview

For the proposed pilot project, Patexia suggests a system that efficiently connects the USPTO, a private crowdsourcing company, and that crowdsourcing company’s community, as depicted in Figure 3. The proposed system has been designed using the following core principles:



Figure 3. Complete system design of the proposed USPTO crowdsourcing pilot project

[4.1] Legal Considerations

Patexia's crowdsourcing model has always relied on the careful design of targeted technical questions, without a reliance on verbatim claim language, when crafting a prior art search contest. Creating a bridge between the legal and technical spaces will help find otherwise difficult to find documents that are readily available to the science and tech community, such as non-patent literature (NPL). During this process, private crowdsourcing company can obfuscate any information related to the applicant or the application itself, including the serial number.

Purely technical prompts, such as "Can the crowdsourcing community find a reference dated before January 1st, 2000 which describes a method of performing a quota enforcement operation by checking to see if the message count exceeds the message limit?" will allow the examiner to concisely describe the point of novelty in question in a way that is very familiar to the science and tech community. This approach will serve to benefit the interaction between the USPTO and a private crowdsourcing company such as Patexia and its community of experts.

As an intermediary, the private crowdsourcing company will also serve as a buffer between the USPTO examiners and the crowdsourcing community. Technical prompts or questions from the examiner will be sent directly to the private crowdsourcing company, and filtered prior art submissions will be returned by the private crowdsourcing company to the examiner. During the filtering process the private crowdsourcing company will standardize responses and remove any qualitative analysis that goes beyond the concise description of technical relevance that is required. The art will be allowed to stand on its own and be freely interpreted by the examiner. Use of an opt-in program will provide applicant consent and thereby avoid any risk of violating 35 U.S.C. 122(c). This consideration will help to later expand the model to a scalable opt-out program without major changes to implementation.

[4.2] Mutual Benefit

As part of its ongoing efforts to find relevant prior art, the crowdsourcing community will both leverage and contribute to the growing universe of non-patent literature, pursuant to the USPTO Request for Information (RFI) titled "*Crowdsourced Non-Patent Literature Hosting*" (Solicitation Number: PTOHMB201501). Over time, the private sector can work to develop powerful tools, such as an API associated with the crowdsourced non-patent literature (NPL) hosting service, to give the crowdsourcing community members the ability to directly cite NPL documents when preparing a prior art submission in response to an examiner prompt.

[4.3] Efficient Division of Labor

Over the past five years, private crowdsourcing companies such as Patexia have gained a tremendous amount of experience with respect to designing prior art search contests, recruiting and engaging a global community of subject matter experts, and analyzing and presenting user-generated validity analysis in a meaningful way by hosting several hundred crowdsourced studies on their platforms.

Offloading the work of crowdsourcing the search for and organizing prior art references to the private sector will allow USPTO examiners to focus on examination and comparison of the art with respect to the application. This also allows USPTO to focus on finding the right applications for crowdsourcing (i.e. based on 80/20 rule), identifying the best time during examination to use crowdsourcing, and optimizing the depth and scope of questions to crowdsource. This proposed system will ultimately give examiners more time to do what they do best – evaluate prior art and prosecute patent applications, which will increase Office productivity and reduce backlog.

[5.0] The System - Specifics

Each step within the proposed system is designed to support efficient, controlled communication between the USPTO, a private crowdsourcing company, and the private crowdsourcing company's community.

[5.1] Timing for Requests of Prior Art (USPTO ↔ Private Crowdsourcing Company)

With the consent of the applicant conferred under the proposed opt-in program, the USPTO will be able to utilize third-party crowdsourcing resources more freely (i.e. before publication and before first office action) and at its discretion. In one use case, examiners will be able to leverage crowdsourcing in a non-application specific manner. If several examiners within a technology center are encountering applications in an emerging technology area, such as voice-activated devices, a crowdsourcing search for non-patent literature prior art in that area can be requested. This use case can be compared to a proactive state of the art search.

In another use case, examiners would be able to use crowdsourcing in an application-specific manner, both before and after publication. Ahead of a first office action, the examiner could use crowdsourcing to answer a targeted question about one or more of the original claim elements. Before any additional office actions, an examiner could use crowdsourcing in a more highly targeted capacity to address any uncertainties that may be presented by amended claim language. For any use case, the private crowdsourcing company can remove all applicant information, including the application's serial number in an effort to test the quality of submissions and the risk of preissuance protest and opposition once the PTO moves to opt-out program.

[5.2] Request for Prior Art (USPTO → Private Crowdsourcing Company)

To generate a request for crowdsourced prior art, an examiner will be able to communicate directly with a private crowdsourcing company (see Figure 4). A request for prior art will include one or more technical questions, which will have been crafted by the examiner and modified by the private crowdsourcing company, if necessary, and a deadline for delivery of results (e.g., 1 week, 3 weeks, etc). Information and preferences concerning where an examiner would like to focus a crowdsourced search, such as geographical region, language, etc., may be included in the request as well. All applicant info and the application's serial number will have been removed by this point in the process, either by the examiner prior to providing the request or by the private crowdsourcing company.

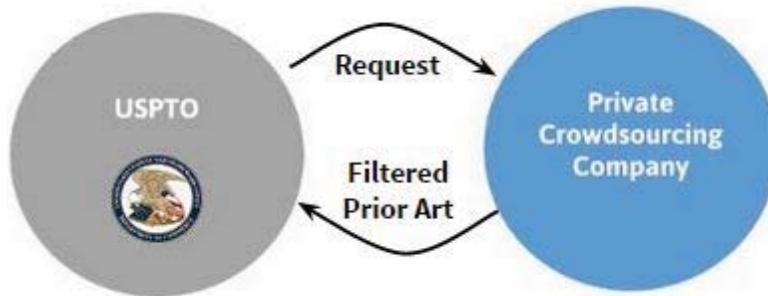


Figure 4. Interaction between the USPTO and the private crowdsourcing company within the proposed system

[5.3] Searching for Prior Art (Private Crowdsourcing Company ↔ Crowdsourcing Community)

Once presented with one or more technical questions by the private crowdsourcing company, the crowdsourcing community will immediately begin its search for prior art.

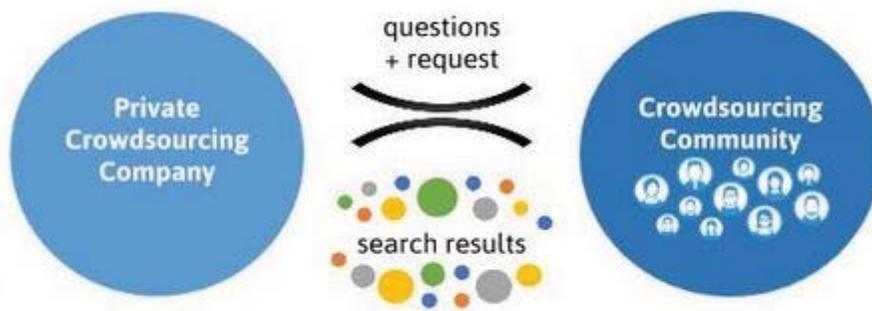


Figure 5. Interaction between the private crowdsourcing company and its community within the proposed system

Prior art references will be submitted for further review directly to the private crowdsourcing company by its crowdsourcing community through standardized templates. These templates will include pre-defined fields asking for the specific location of any relevant technical information (e.g. page, column, line, copied quote, etc.). Throughout the crowdsourcing process the examiner will also be able to passively monitor any discussions concerning their technical prompt taking place across the crowdsourcing platform.

[5.4] Delivery of Prior Art (Private Crowdsourcing Company → USPTO)

Upon completion of the crowdsourced search for prior art by the crowdsourcing community, the private crowdsourcing company will review all submissions to certify that the document and the corresponding analysis meets the criteria set forth by the requesting examiner. If any submission fails to meet these standards, the private crowdsourcing company will take the necessary corrective action before supplying the prior art to the examiner. While these actions may not be all

necessary for an opt-in program (due to consent of the applicant), it will help for adjusting and fine-tuning the program for a long-term opt-out program.

The private crowdsourcing company will also include some metadata on each user responsible for a qualified submission of prior art when responding to the USPTO, provided that the user has agreed to the appropriate legal terms. This metadata may include age, gender, educational background, or other variables. This information may be included partly in the file history and/or on the face of a granted patent under a “Prior Art Discovered through Crowdsourcing” section. The fact that a particular piece of prior art was found through crowdsourcing can also be included in the rejection letter to the applicant. The fact that a particular piece of prior art found through crowdsourcing impacted an application can also be shared with the corresponding member of the crowdsourcing community in an effort to maintain engagement and increase the transparency of patent examination from the public’s perspective.

[5.5] Feedback (USPTO ↔ Private Crowdsourcing Company ↔ Crowdsourcing Community)

After an examiner has had a chance to review and evaluate the filtered prior art received from the private crowdsourcing company, the communication channels can remain open for feedback and clarification, and, if necessary, for continued searching in or around the same point of novelty. Examiners will be able to ask follow up questions of the private crowdsourcing company, which will in turn be presented to the corresponding crowdsourcing community member by the company in pursuit of an answer. The private crowdsourcing company will remain as an intermediary between the USPTO and the crowdsourcing community throughout the follow up process to monitor the discussion. Upon request and based on the examiner’s feedback, the private crowdsourcing company can expand the previously requested search for prior art, or present a modified version of the earlier prompt, in an attempt to provide more targeted information, should the circumstances surrounding the study change at all while underway.

[6.0] Logistics at the USPTO

Highlighting the benefits of and encouraging applicant participation in the USPTO crowdsourcing program will be important to the success of the proposed opt-in pilot project. From start to finish and throughout the process, applicant and examiner feedback will contribute to improved educational tools and promotional materials to ensure the future success of an expanded crowdsourcing initiative at the USPTO.

[6.1] Choice and Incentive to Participate in Crowdsourcing

To incentivize applicant participation in the crowdsourcing program, Patexia suggests including supporting information and offering additional considerations to influence the decision at hand. In the short term, a statement explaining that crowdsourcing is being used to improve patent quality may suffice for would-be early adopters. For specific technology centers, such as 2100, packaging opt-in crowdsourcing with fast-track examination may encourage software and other companies to

participate in situations where they would have otherwise waited 20 months or longer for the first office action on their application.

In the long term, Patexia suggests including tangible examples of how crowdsourcing has improved patent quality. Side-by-side statistics on impact, measured by number of citations, strength, measured by the percent of validity challenges survived, whether in litigation or in post-grant review before the PTAB, and commercial success, measured by sales of related products, can be presented to applicants as tangible benefits of participating in the crowdsourcing program. Overall, if a crowdsourcing program can make a meaningful impact on decreasing the application backlog in specific technology areas and improving general examiner efficiency, the value of such a program would justify any additional cost associated with its implementation and maintenance.

[6.2] Citing Prior Art Found through Crowdsourcing

As more and more applicants decide to opt-in to the crowdsourcing program, more prior art will be discovered by the crowdsourcing community and delivered to the USPTO by the private crowdsourcing company. Just as prior art identified by the examiner and applicant are distinguished in the file history and on the face of a granted patent, Patexia suggests including a section titled “Prior Art Identified through Crowdsourcing.” The private crowdsourcing company can also provide some metadata on the crowdsourcing community member responsible for finding each specific reference, and this can be included as well. Throughout this process, Patexia suggests to not include the name or affiliation of any crowdsourcing community member.

[7.0] Scalability and Moving Towards an Opt-Out Program

The results of the proposed pilot project will provide meaningful data on the effectiveness of crowdsourcing, and how that varies, if at all, across technology centers, by examiner, or otherwise. This feedback can be used to expand the program in terms of applications covered and examiners involved, however, the ability to scale an opt-in program will be limited.

For a long term crowdsourcing program to be considered fully-scalable (i.e. covering every application received by the USPTO), an opt-out program would be necessary. The meaningful takeaways from the opt-in pilot program would serve as the foundation for a fully-scalable opt-out program. Over time, communication between the USPTO and private crowdsourcing companies will become more efficient, and the use of crowdsourcing platforms and corresponding interfaces and APIs (e.g. access to the growing NPL database, public PAIR) easier to use.

[7.1] Examiner Feedback on Effectiveness

Using the Peer-to-Patent as an example, Patexia suggests a detailed look at how examiners feel about the results of the proposed pilot project, in terms of usefulness of references, ease of use, and other factors, upon completion. Meaningful variations with respect to success across technology areas and even personal differences can be further scrutinized and any necessary improvements can be made before deciding to expand the crowdsourcing program in a significant way. This

feedback can also support improvements to the information used to incentivize applicant participation in the crowdsourcing program.

[8.0] Summary of Questions and Answers

In addressing the five core topics outlined in Section [1.0], Patexia would like to provide the following point by point summary:

[8.1] Ex Parte Nature of Patent Examination

- [4.1] Purely technical prompts, such as “Can the crowdsourcing community find a reference dated before January 1st, 2000 which describes a method of performing a quota enforcement operation by checking to see if the message count exceeds the message limit?” will allow the examiner to concisely describe the point of novelty in question in a way that is very familiar to the science and tech community.
- [5.2] A request for prior art will include one or more technical questions, which will have been crafted by the examiner and modified by the private crowdsourcing company, if necessary...
- [5.3] Throughout the crowdsourcing process the examiner will also be able to passively monitor any discussions concerning their technical prompt taking place across the crowdsourcing platform.

[8.2] Follow up and Communication Channels

- [5.5] ...communication channels will remain open for feedback and clarification, and, if necessary, for continued searching in or around the same point of novelty. Examiners will be able to ask follow up questions of the private crowdsourcing company, which will in turn be presented to the corresponding crowdsourcing community member by the company in pursuit of an answer.
- [5.5] The private crowdsourcing company can expand the previously requested search for prior art, or present a modified version of the earlier prompt, in an attempt to provide more targeted information...

[8.3] Precautions to Avoid Protest and Opposition

- [4.1] During the filtering process the private crowdsourcing company will standardize responses and remove any qualitative analysis that goes beyond the concise description of technical relevance that is required. The art will be allowed to stand on its own and be freely interpreted by the examiner without risk of violating 35 U.S.C. 122(c).

[8.4] Providing the Source Citation for Crowdsourced Prior Art

- [5.4] This information may be included in the file history and/or on the face of a granted patent under a “Prior Art Discovered through Crowdsourcing” section.

- [6.2] metadata on the crowdsourcing community member responsible for finding each specific reference, and this can be included as well. Information such as age, gender, and education level of a contributor...

[8.5] Presenting Applications with **Choice and Incentives** to Participate

- [3.0] For example, as “crowdsourced applications” become granted patents, statistics can be gathered concerning overall patent quality when compared to patents stemming from “non-crowdsourced applications.” Such statistics can include patent impact, measured by the number of citations received, and strength, measured by the number of post-grant validity challenges survived, among others.
- [6.1] For specific technology centers, such as 2100, packaging opt-in crowdsourcing with fast-track examination may encourage software and other companies to participate in situations where they would have otherwise waited 20 months or longer for the first office action on their application.

[9.0] **Conclusion**

In summary, Patexia suggests that the USPTO start with a 12-24 opt-in crowdsourcing pilot project to cover 1,000-2,000 applications. Throughout this process, the USPTO can leverage the experience and communities of the private crowdsourcing sector to optimize the model and expedite communication and learning. Once all the moving parts have been optimized, informed decisions can be made about all potential issues and a fully-scalable opt-out crowdsourcing program can be implemented as a long-term solution. Patexia supports the USPTO’s efforts to incorporate crowdsourcing into the patent examination process and believes that it will lead to improved patent quality and a healthier patent system.

Special thanks to the entire Patexia Community which has been helping us understand and improve our crowdsourcing model since 2010.

Respectfully Submitted,

Pedram Sameni, Ph.D.
President and CEO
(e) pedram@patexia.com
(t) 424.239.9733
Patexia Inc.

Kyle Hoellger, M.Sc
Director, Client Solutions
(e) kyle@patexia.com
(t) 424.272.0239
Patexia Inc.

Sanjay Prasad
Principal
(e) sanjay@prasadip.com
(t) 650.868.6011
Prasad IP PC