From: Laura Sheridan [email redacted
Sent: Wednesday, May 06, 2015 5:59 PM
To: WorldClassPatentQuality
Cc: Suzanne Michel; Buddy Toliver (btoliver)
Subject: Response to Request for Comments on Enhancing Patent Quality

Dear Mr. Cygan,

Please find attached Cisco and Google's response to the Request for Comments on Enhancing Patent Quality (Docket No. PTO–P–2014–0043).

Sincerely,
Laura Sheridan

Laura Sheridan | Patent Counsel |[email redacted] | 646-481-9109

Before the
United States Patent and Trademark Office
Alexandria, VA 22313

In re:	)	Docket No. PTO–P–2014–0043
	)	
Request for Comments on	)	
Enhancing Patent Quality	)	
	)	

COMMENTS OF CISCO SYSTEMS, INC. & GOOGLE INC.

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I. INTRODUCTION

Determining how best to improve patent quality requires understanding the importance and characteristics of high quality patents. A quality patent is one that promotes innovation, rather than hinders it, by respecting the quid pro quo of the patent system, giving the public a full and enabling disclosure of the invention in exchange for the patent's exclusive rights. A quality patent also provides clear notice of its scope and represents a meaningful technological contribution to society. In defining and assessing patent quality, it is the public's perspective that is relevant, as the grant of exclusive rights to the patent applicant necessarily takes those rights away from the public domain. As Judge Michel observed at the Office's Patent Quality Summit, "the examiner is the guardian of the public domain."

Consistently issuing high quality patents is a difficult task, but it is critical to an effective patent system that fosters innovation, enriches the state of the art, and deters unnecessary and wasteful litigation. Invalid patents place a large burden on productive and innovative companies, actually harming rather than promoting innovation. This is especially true for patents that cover trivial ideas, which can be used to extract payments based on the high cost of litigation. An assumption that careful examination is unimportant for most patents, and that it is efficient to wait for private litigants to test validity because those disputes will involve only valuable patents, is false. It is important that all applications be carefully examined and meet high quality standards.

The Office has taken an unprecedented but much needed step toward achieving this goal, engaging stakeholders and outlining pillars and proposals to frame this discussion. We thank the Office for undertaking this effort, and for convening the Patent Quality Summit in March. As echoed by many who attended the Summit, given the complexity and difficulty of this work, achieving the goal of high quality patents must be a shared responsibility between applicants and examiners. In the comments that follow, we address this shared responsibility and provide concrete suggestions for improving patent quality in the context of the three pillars outlined in the Federal Register notice. Our comments also include feedback on the Office's proposals.

II. PATENT QUALITY PILLARS

A. Pillar 1: Excellence in Work Products

Patent examiners are the gatekeepers responsible for issuance of high quality patents. This is a challenging task, and the current system does not adequately account for the reality of what is involved. Efforts to address excellence in work products must start by improving the process for monitoring examination, shifting the focus from meeting numbers to generating thoughtful claim analysis, and placing requirements on applicants to make the process more efficient and effective. Through this pillar, the Office should improve enforcement of Section 112, which is critical in ensuring that issued patents meet needed quality standards in the the software and high-tech industries. Proper application of Section 103 is also key, ensuring that issued patents truly represent a meaningful technological advancement. Finally, the Office should reevaluate how prior art is considered on the record. We provide suggestions for achieving excellence in work products in both the short and long terms.

1. Suggestions for Achieving Excellence in Work Products

a. Evaluate the Examination Process

The Office should use the Patent Quality Initiative as an opportunity to evaluate the examination process and make changes to promote a culture of quality.

- **Change the count system.**

The patent examiner count system has been largely the same for many years,[1] evaluating an examiner's performance by tracking whether or not she has met her required number of "counts" for a two-week period. The Office should evaluate whether the current count system allows for the examination and oversight needed for the issuance of high-quality patents. As part of this evaluation, the Office should ensure that the count system does not create incentives to issue undeserving patents. One potential problem is that of "end loading," involving the submission of a large quantity of written decisions at

[1] The November 18, 2014 testimony of Bill Smith describes the current patent examiner count system. *See* http://oversight.house.gov/wp-content/uploads/2014/11/Smith-BakerHostetler-Statement.pdf.

the end of the quarter in order to meet production goals. As a result of this practice, supervisory examiners may not have enough time to review the submitted work, which impacts quality. Another potential problem is that of "patent mortgaging," involving the submission of incomplete work by patent examiners to receive credit and avoid a performance warning. Patent mortgaging may impact the reputation of the Office, and could have a negative effect on quality as well.

The current system overemphasizes meeting number goals and underemphasizes meeting quality requirements, which incentivizes behavior that may result in the issuance of undeserving patents. Examiners should be given the time that they need to provide robust examination. The ideal system would allow for a more collaborative process between patent examiners and applicants, and recognize that patent applications may require varying degrees of attention based on complexity or drafting. We suggest the formation of a task force to evaluate the current count system that includes members of the Office, the Patent Office Professional Association, and stakeholders.

- **Implement careful quality control of the examination process.**

Patent Office supervisors and the examiner performance appraisal process should place a greater emphasis on quality. We also recommend that the Office evaluate how quality-related data may be obtained from the performance appraisal process and used to improve examination by both specific examiners and by art units. Such data can be used, for instance, to identify areas where more training would be beneficial.

Closely related to the performance appraisal process is the granting of signatory authority. This is a critical step in the examination process, signifying when an examiner can work without the oversight of a supervisor. Given the importance of oversight in ensuring quality, this authority should only be granted following consistent and thorough examination of an examiner's work product, and serve as both motivation and reward for examiners to maintain high quality standards. The Office should also consider putting in place a recertification process to build trust in the system, making sure that examiners with signatory authority have maintained the same level of quality, or determining when they are in need of additional training.

b. Strictly Enforce Section 112

Many patent applicants have incentives to obtain claims that are as vague and broad as possible, allowing them to exploit ambiguities in the future to demand royalty payments on products the inventors never dreamed of, much less enabled. These vague, overbroad claims are a deterrent to innovation, failing to provide the public with notice of what is, and is not, within the boundaries of the patent, preempting subject matter that the applicant did not invent, carving rights from the public without corresponding enrichment of the public body of knowledge, and generating costly litigation. The PTO should counteract these incentives by strictly enforcing Section 112.

➢ **Require applicants to define key claim terms.**

The Office should require patent applicants to clearly define the boundaries of what is being claimed, ensuring compliance with the definiteness requirement of Section 112(b). Vigorous enforcement of the definiteness requirement is an essential antidote to the strong incentives that applicants face to pursue ambiguous claims. It can also ensure that the lack of standard terminology affecting many software inventions cannot be exploited as an additional source of ambiguity. The definiteness requirement is the primary mechanism of the patent system for ensuring that claims have clear boundaries that provide the public with fair notice of what is protected and what is not. This notice promotes innovation by facilitating technology transfer through licensing and design-arounds, and thereby reduces wasteful litigation.

To achieve these benefits, applicants should be required to identify all key claim terms and provide definitions for those terms by pointing or linking to the specification, providing a glossary, or relying on an identified dictionary.[2] Requiring this at the outset of prosecution will allow the examiner to efficiently evaluate the terms under the broadest reasonable interpretation standard. The examiner will be better able to develop search terminology, which will improve the identification of prior art. Prosecution is made more

[2] The PTO has the authority to require patent applicants to provide information pertinent to examination—even when the information sought may go beyond that information material to patentability. *See Star Fruits S.N.C. v. United States*, 393 F.3d 1277, 1282, 1284 (Fed. Cir. 2005).

efficient by ensuring that the examiner and applicant share a common understanding of the invention and are not talking past each other.

After filing, new terms should rarely appear in amended and later-filed claims during the course of prosecution. However, when they do, a definition should be required at the time of the amendment that points to support in the specification, just as was required at the outset of prosecution. After an applicant submits definitions for key claim terms, if an examiner is unclear about a term or its definition, the examiner can clear up any ambiguity by making a request under Rule 1.105, which allows for information that is necessary for proper examination of an application to be requested by the patent examiner.[3]

In the future, the creation of this glossary of terms and definitions could be automated by reviewing the claim terms and finding language in the specification that corresponds to those terms. This automated glossary could then be sent to the patent applicant for review and revision, thereby still requiring the applicant to provide these definitions on the record but giving some help in the process. This is an idea IBM has presented in the past, and we agree that it would be very useful.

- **Enforce the enablement and written description requirements.**

The enablement and written description requirements of Section 112 have not been adequately enforced in the software and high-tech fields. This could be due to many reasons, all of which the Office should investigate and rectify. The constraints of the count system and large workloads may limit the amount of time examiners have to adequately review the specification. As part of an evaluation of the count system, the Office should ensure that adequate time is provided for a thorough examination of these requirements. Examiners may need additional training on these issues. And Office management and supervisory examiners should emphasize the importance of these Section 112 requirements and incorporate an evaluation of these issues into any quality assessment.

[3] 37 C.F.R. 1.105 ("In the course of examining or treating a matter in a pending or abandoned application ... the examiner or other Office employee may require the submission ... of such information as may be reasonably necessary to properly examine or treat the matter....").

➢ **Invigorate Section 112 enforcement in continuation applications.**

Some patent applicants file numerous continuation applications, keeping a patent family pending for many years in order to capture developments in the market, or to add vague language that can be stretched in litigation. Patent assertion entities often employ this tactic creating uncertainty that hinders innovation. Section 112's written description and enablement requirements ought to prevent such claims that reach beyond the scope of the disclosure, but inadequate enforcement has allowed this this gamesmanship to thrive, especially in the software and high-tech areas. The practice harms innovation and creates a burden for the Office that increases the backlog. The Office should especially increase its vigilance in applying Section 112 in families having multiple continuations or early priority dates. This pattern is often an indication that an applicant may be seeking overly broad claims in order to capture later market developments.

We also recommend that the Office study whether regulations can be used to further rein in continuation abuse, such as escalating filing fees.

c. Improve the Application of Section 103

Section 103 ensures that issued patents represent meaningful technological contributions to society, and not just obvious improvements to existing technology. If the bar is set too low, the result will deter innovation by the existence of patents on technology that should be in the public domain. The application of Section 103 should be improved to avoid this result, and the Office should look to the decisions that are issuing from the PTAB for guidance on how to do so.

➢ **Provide increased obviousness training.**

In the software and high technology areas, the bar for whether or not a claim is obvious under Section 103 is often set too low, with examiners allowing claims that cover only minor improvements over existing technology. The Office should provide examiners with increased training on both the proper evaluation of a claim for obviousness, as well as application of the Office's increased technical training to understand the state of the art

and what is, and is not, an obvious improvement to it. This would be a good area to focus on as part of the Software Partnership, or as part of this broader Patent Quality Initiative.

➢ **Use PTAB proceedings for guidance.**

PTAB proceedings are providing a wealth of data in real time. The Office should study the results of these proceedings and gain insight into how aspects of examination can be improved. This includes potential improvements to prior art searching and analysis of claims, and identification of areas for further training. One such area that may benefit from a review of PTAB proceedings is the application of Section 103. Many of the PTAB proceedings apply Section 103 in canceling claims, and examiners may be able to learn from how PTAB judges have done so. In this way, PTAB proceedings can provide a feedback loop to allow improvements to be made in the short-term.

d. Reevaluate the Consideration of Prior Art

At the close of prosecution, the record often contains a long list of prior art from a variety of sources including the applicant's submission, third party submissions, and the examiner's search. The Office should reevaluate how prior art is handled throughout prosecution based on the suggestions that follow.

➢ **Require applicants to fully distinguish the prior art.**

In prosecution, a patent examiner will develop claim rejections based on the prior art and provide a detailed description of how that prior art applies to each and every claim limitation. In response, a patent applicant will typically distinguish the claim based solely on one limitation without addressing the relevance of the prior art to the other limitations. The lack of rebuttal regarding the remaining limitations fails to provide a clear record regarding the applicant's understanding of the claim scope or the prior art.

To rectify this problem, the Office should include a statement in the record that the failure to address any argument made by the examiner regarding how the prior art applies to each element is deemed to be an admission of the argument.

- **Provide more clarity on the treatment of the art of record.**

The public is rightly concerned that prior art gets "whitewashed" based on a presumption that the examiner has carefully considered all of the art cited on the record and allowed the patent over it, even though that is rarely the case. To clarify the record, the Office should include language that makes clear the reality, for instance by indicating that the examiner considered references forming the basis of claim rejections and others particularly signaled out in greater detail than other references. Doing so will ease the hesitancy of the public to use the preissuance submission procedure. It would also remove opposition to proposals like pre-examination search that would create more prior art of record. This in turn will help increase the quality of examination.

- **Provide consistent evaluation of preissuance submissions.**

As made clear in recent Patent Office roundtables, third parties are reluctant to file preissuance submissions for fear that the cited prior art will not be adequately considered, but will be listed as considered and that the application will issue. The third party would then face claims that were not properly limited in light of the prior art but are still presumed valid over it. To build confidence in the preissuance submission process and encourage its use, the Office should consistently address preissuance submissions on the record, either including the prior art in claim rejections or explaining why it was not applied.

2. Responses to PTO Proposals

a. Proposal 1: Applicant Requests for Prosecution Review of Selected Applications

In Proposal 1, the Office proposes a mechanism for an applicant to request Office of Patent Quality Assurance (OPQA) prosecution review of a particular application where the applicant believes that the application contains an issue that would benefit from further review. We do not believe this to be an efficient use of OPQA's limited resources. The OPQA reviewers independently assess whether randomly selected patent applications

contain errors, reviewing less than 1% of all Office actions each year. Given an already strained workforce, the Office should consider folding Proposal 1 into an expansion of the existing Ombudsman Program. Doing so would avoid interrupting the important work of the OPQA and provide a more efficient review of prosecution issues.

b. Proposal 2: Automated Pre-Examination Search

In Proposal 2, the Office asks whether an automated pre-examination search might be of use in improving patent quality. While a pre-examination search should never be a substitute for a full search by the examiner, the results can help educate the examiner about the particular area of art so that a more efficient, better-focused search can be conducted during full examination. Therefore, we support the use of an automated pre-examination search as part of the Office's approach to examining patent applications.

One way to conduct pre-examination searches is using Google Prior Art Finder. Google is currently working to integrate Google Prior Art Finder into Google Patent Search to provide a single search interface for locating relevant patents as well as non-patent literature. The improved Google Patent Search will also automatically classify this non-patent literature using CPC labels. This classification will allow for CPC-based prior art searching of non-patent literature, streamlining searches for relevant prior art. Google Patent Search also searches foreign patent literature using machine translation technology. Thus, by conducting a pre-examination search using the improved Google Patent Search, an examiner will get results that include both non-patent literature and foreign patent documents, all through one search interface.

Getting the best pre-examination search possible also requires improving prior art accessibility. The Office can increase the availability of hard-to-access software prior art by continuing to encourage industry and academia to digitize this prior art and make it publicly available. To ensure widespread access to and searching of this prior art by patent examiners and the public, the Office should also encourage those groups to make sure that the information can be effectively indexed by search engines.

c. Proposal 3: Clarity of the Record

In Proposal 3, the Office requests stakeholder input on further measures and initiatives for enhancing the clarity and completeness of all aspects of the record during

prosecution of an application. We appreciate the Office's recognition of the importance of clarity. This is a critical issue in improving patent quality. As a shared responsibility between the Office and applicants, this is an opportunity to require of applicants what they are in the best position to provide: clarity of the claim terms and of distinctions over the prior art. We have outlined suggestions for this above.

B. Pillar 2: Excellence in Measuring Patent Quality

It is important to measure the quality of patents emerging from the Office, both to provide transparency and confidence in the system as well as to identify areas needing improvement.

1. Suggestions for Achieving Excellence in Measuring Patent Quality

a. Provide Total Data Transparency

The Office should provide increased transparency into patent examination, making it possible to view examination activity for specific patent applications, across art units, and over the entirety of the Office. Providing this transparency will further the goals of the Open Government Initiative.

Coding all examination activity is necessary to achieve that level of transparency. For instance, by coding every rejection and the application of Section 112(f) to claims and making that data available, the Office would promote public understanding of how the Office applies multiple patentability standards. The data would also allow the Office to identify issues or potential problems and rectify them quickly through increased examiner training or other strategies. Such response can be a valuable tool in improving patent quality. Data gathered could shed light on differences in the application of Section 103 among art units, increases in the application of Section 112(f) following the training initiative, or changes brought by developments in the case law.

b. Undergo a Quality Audit

Currently, the Office generates a quality composite metric, which looks at various criteria in attempting to assess quality of examination.[4] However, given the small sample

[4] *See* PTO quality metric dashboard at http://www.uspto.gov/dashboards/patents/main.dashxml.

size and the random selection of patent applications within that sample, there is simply not enough data to assess overall quality. Nor do the underlying components of the metric actually assess the key features of patent quality.[5] Rather, for the most part, the metrics are directed to procedural compliance.

To usefully assess quality, all data related to examination should be available for analysis, as described above. Additionally, an independent entity should perform a substantive review of the enforcement of patentability requirements in a larger sampling of applications, which would provide a robust assessment of the performance of the Office.

c. Mine Abandoned Patent Applications for Training

Abandoned patent applications may provide a wealth of quality information in real time, similar to that provided by PTAB proceedings. The Office should evaluate abandoned patent applications as a training opportunity and look to them as potentially highlighting high quality examination with strong application of the statutory requirements. For instance, the Office should evaluate what about abandoned applications caused the applicant to stop pursuing them. Did the examiner provide particularly challenging prior art references? Or, was Section 112 applied and the patent applicant was unable to identify support or provide a definition for a claim term? In the alternative, the abandoned patent application may represent poor examination quality by the examiner, in which case it would also be important to identify those problems for training purposes.

2. Responses to PTO Proposals

a. Proposal 4: Review of and Improvements to Quality Metrics

In Proposal 4, the Office proposes to re-assess the effectiveness of the quality composite metric and asks for stakeholder guidance on its effectiveness. There was widespread agreement at the Quality Summit that the current quality metrics assess compliance with procedural requirements, not patent quality. We suggest that the Office keep the current quality composite metric but change its name so that this distinction is clear. The examination process is important and it should be assessed on a regular basis, but it should not be conflated with patent quality.

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[5] *See* USPTO, *Adoption of Metrics for the Enhancement of Patent Quality Fiscal Year 2011*.

C. Pillar 3: Excellence in Customer Service

If the Office has a "customer," it is the public, which may benefit from the issuance of patents that encourage innovation and suffer from those that are improvidently granted. The applicant, on the other hand, is not a customer but rather a party petitioning the government seeking those exclusive rights. Therefore, we disagree with the framing of this pillar as directed to excellence in "customer service." Rather these initiatives are relevant to the "applicant experience" and the "examination process" and should be appropriately named. Keeping this distinction in mind through proper naming of the initiatives is critical to the goal of creating an Office culture that focuses on quality.

1. Suggestions for Achieving Excellence in the Examination Process

a. Provide Examiners with Interview Training

At the Quality Summit, numerous stakeholders asked that the Office provide patent examiners with interview training. The point was made that patent examiners are negotiating against lawyers much of the time and would benefit from learning negotiation skills. This would also promote a more fulsome discussion between the Office and the applicant in interviews.

2. Responses to PTO Proposals

a. Proposal 5: Review of Current Compact Prosecution Model and the Effect on Quality

In Proposal 5, the Office seeks assistance from the public in determining whether the current compact prosecution model should be modified. We believe that it should, and ask the Office to get rid of both final rejections and RCEs. It is inefficient for the conversation between the patent applicant and the examiner to be interrupted by these events. The Office should instead allow for multiple Office actions triggering increasing fees and a cap on how many are possible. Once the applicant has reached the limit on Office actions, the Office should allow the applicant to bring the matter to a panel of examiners for further consideration. If no resolution is reached at that point, the applicant could then appeal to the Board. This examination structure would reduce the caseload at the Board so that only

the truly important and complicated issues reach them, rather than issues that could have been more efficiently resolved by allowing examination to continue or involving additional patent examiners. As these changes would materially impact the count system, we recommend folding this review into the evaluation of the examination process that we suggested in the context of Pillar 1.

b. Proposal 6: In-Person Interview Capability with All Examiners

We appreciate that conversations between the examiner and the applicant are helpful in furthering prosecution. We do not have a position on how best to implement interviews with examiners who do not work from the main office or a satellite location. However, for all interviews, the Office should record or otherwise capture the full content of the interview so that the record is clear. Currently, the typical interview record is sparse, and is often crafted by the patent applicant in a way that obscures or avoids what was discussed. This sabotages the goal of clarity, but the problem can be fixed by simply recording interviews so that their content is available to the public. Otherwise, interviews will remain a private loophole in an otherwise public record.