RE: Topic Submission for USPTO Quality Case Studies

To The Office of Patent Quality Assurance at the USPTO:

Oracle commends the USPTO for its continued work to improve patent quality. The USPTO already performs a variety of reviews of applications for internal quality purposes. For example, supervisors at the USPTO review the quality of examiners' work product. The USPTO also has the Ombudsman program for applicants to report any issues that may have been missed at the supervisory level. The USPTO has also started looking at examiner-related statistics regarding case disposition to investigate outliers. We commend the USPTO for taking these steps toward improving patent quality, but these methods still allow low-quality patents to slip through the cracks. Low-quality patents are heavily advertised by the anti-patent community, resulting in a negative public view regarding the integrity of the patent system. These low-quality patents also show up in costly disputes between non-practicing entities and operating companies such as Oracle, thereby limiting operating companies from practicing the technology and inhibiting rather than promoting the progress of the sciences and useful arts. For these reasons, we believe that the current methods of quality control are necessary but not sufficient.

We believe the current methods fall short at scale due to their heavy reliance on manual review. Supervisors at the USPTO do an excellent job of performing the critical first line of defense on patent quality. However, as we have learned from supervising thousands of patent applications at Oracle, supervisors of patent work cannot catch all of the critical mistakes in a patent application even when they are highly diligent. Applicants have the ability to escalate to the supervisor or utilize the Ombudsman program when the issues disadvantage the applicants themselves. However, the supervisor escalation process and the Ombudsman program are not likely to stop a poor quality patent from slipping through the cracks to the benefit of an individual applicant but at the disadvantage of the public. Many applicants dislike escalating issues to USPTO supervisors for fear of placing examiners in defensive positions when the fates of their patent applications ultimately rest with the examiners. Finally, examiner statistics are good at detecting outliers in terms of case dispositions, but they reveal nothing about the content of the cases that are being disposed. Application content review continues to rely too heavily on manual labor leading to differing opinions without any insight on the common and historical practices of other examiners and of the courts.

In furtherance of the stated purpose of "improving patent quality," we recommend the USPTO take steps to find patent applications having measurably low quality and prevent the grant of these low quality patent applications until the measured defect is addressed. Put another way, the USPTO should study patent applications as filed in comparison with patent applications as granted to determine which characteristics are almost always fixed prior to issuance. We initially suggest a statistical analysis of the contents of the claims and the

specifications in order to find and highlight issues that might otherwise be missed by examiners and their supervisors.

For highly developed technologies such as computer software and hardware, the USPTO almost never issues a patent with extremely short independent claims (less than 300 characters or about 4 lines of text)—the English language simply requires more space to describe the scope of these highly developed technologies. We are not suggesting that the merit of a patent claim is measured based on its variable length—there is no basis in law for discriminating against different styles of claim drafting when those styles have a reasonable likelihood of satisfying the stringent requirements of patent law. What we are suggesting is that, below this extremely low threshold, independent claims are flagged for a manual case-by-case review by examiners and their supervisors to prevent any of these extremely short claims from slipping through the cracks if they are, in fact, overly broad in light of the prior art.

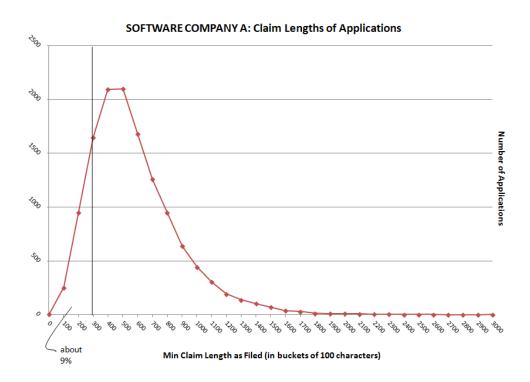
In a recent and ongoing patent quality study, Oracle used patent quality metrics such as the presence of extremely short claims to find and fix cases that statistically have almost no chance of allowance as filed, thereby promoting compact prosecution of our cases. The data from our study confirms that extremely short claims are practically impossible to obtain for highly developed technologies. Because the USPTO does not currently have any tools in place to highlight these claims, we also suspect that at least some of the cases that did issue with extremely short claims slipped through the cracks at the USPTO without being detected during examination. Unfortunately for the public, all of these issued patents carry a presumption of validity.

Our study covered Oracle's portfolio as well as the portfolios of other large software and hardware companies. We found that these extremely short independent claims occurred in 1% or fewer of issued patents even though originally-filed applications had these extremely short claims much more frequently. We also found that companies differed in how aggressively they pursued these extremely short claims. For example, Company A pursued the extremely short claims in 13% of their applications as filed, and Company B pursued the extremely short claims in 9% of their applications as filed. Despite the variable inputs (13% and 9%, respectively) to the patent office, the output was roughly the same: these extremely short independent claims occurred in 1% or fewer of issued patents for both companies. In fact, Company B obtained a slightly higher percentage of patents with extremely short independent claims despite the lower frequency in which they were initially pursued.

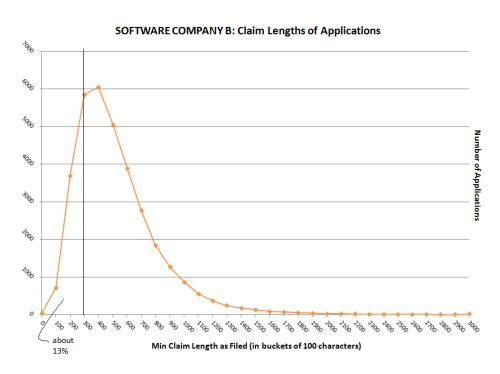
each case. We combined this information about the length of independent claims with information from LexisNexis PatentAdvisor® about the number of office actions and RCEs for each case.

<sup>&</sup>lt;sup>1</sup> The data for our study was gathered using claims exported from Innography® for all cases filed in the history of both companies. We then automatically and uniformly determined which claims were independent claims and automatically and uniformly determined the length of the independent claims for

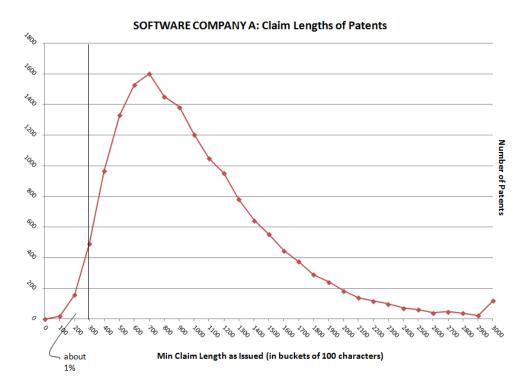
**Chart 1** below shows the number of applications filed by Company A with corresponding minimum claim lengths. About 9% of cases as filed had an extremely short independent claim.



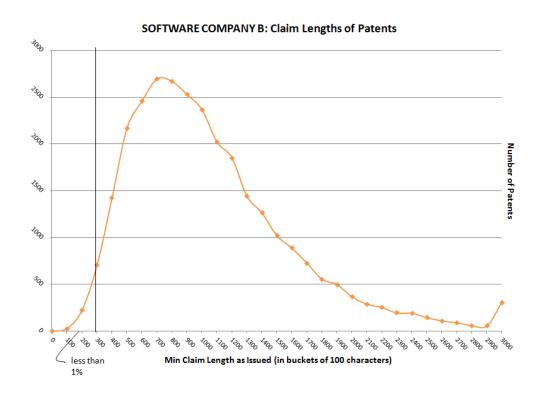
**Chart 2** below shows the number of applications filed by Company B with corresponding minimum claim lengths. About 13% of cases as filed had an extremely short independent claim.



**Chart 3** below shows the number of patents granted for Company A with corresponding minimum claim lengths. About 1% of patents had an extremely short independent claim.



**Chart 4** below shows the number of patents granted for Company B with corresponding minimum claim lengths. Less than 1% of patents had an extremely short independent claim.



These extremely short claims also inhibit compact prosecution, which is one of the stated goals of the USPTO. According to our study, applications with extremely short independent claims experienced more RCEs and office actions than applications with independent claims that were near but above the threshold length. In fact, applications with extremely short independent claims cost the applicant an average of 2-3 additional office actions, or approximately \$6000-\$9000 in attorneys' fees alone. Applicants would benefit significantly if the USPTO helped to discourage applicants and their attorneys from starting the claims so far from the likely end result. Compact prosecution also helps to reduce the backlog at the USPTO.

We also invite the patent office to investigate other ways for automatically finding and addressing the lowest quality patent applications. The public benefits when low quality patents do not slip through the cracks at the USPTO. Other ways of finding low quality patents may include, for example, looking for extremely short specifications. Presumably, extremely short specifications (perhaps 3 pages or less) should often give rise to written description and/or enablement rejections during prosecution. We believe examiners could benefit from automated patent application analysis prior to examination to ensure that these infrequently raised issues are considered before these cases reach final dispositions, especially if the patent office incentivized this further consideration. As another example, the patent office could investigate language that is inherently ambiguous. Some terms simply do not belong in patent claims and do not promote clarity of the record and are not consistent with caselaw precedent.<sup>3</sup> As yet another example, the patent office could investigate antecedent basis problems such as ambiguous antecedents of the form "...a/an X...a/an X...the/said X...." These ambiguous antecedents leave open the question of which X is being referenced and can lead to increased litigation costs and even invalidity.<sup>4</sup>

Oracle is willing to fully cooperate with the USPTO by sharing more information about our study. For applicants, these high-level metrics are useful to gain wisdom on and avoid the common pitfalls that lead to inefficient prosecution. For the public, the USPTO can use these metrics to prevent the grant of low quality patents that otherwise hinder progress.

Respectfully submitted,



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<sup>2</sup> Gaudry, Kate S. "How USPTO Teleworking Program Impacts Patent Applicants." *Law360*. May 12, 2014. Available at: http://www.kilpatricktownsend.com/~/media/Files/articles/2014/ How%20USPTO%20Tleworking%20Program%20Impacts%20Patent%20Applicants1.ashx. (noting on page 3 the average attorney fees of \$3000 for an office action response)

<sup>&</sup>lt;sup>3</sup> See *Unwired Planet LLC v. Google Inc.* (Dist. Nev. 2015) (involving the term "largely").

<sup>&</sup>lt;sup>4</sup> See *Adaptix, Inc. v. Apple, Inc.* (N.D. Cal. 2015) (invalidated due to improper antecedent basis).