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To: WorldClassPatentQuality

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Subject: Quality Summit - a reflection on search

I attended the Quality Summit in March. I felt it was well-executed and very worthwhile. I offered several comments from the floor while I was there, being clear that I was speaking for myself and not for my employer, AT&T, where I work as an in-house patent attorney. The following comments are likewise for myself only.

I have been practicing patent law for nearly 25 years now. My focus over that time has been on software patents, as I came out of a software engineering background before I went into law. I can remember a USPTO presentation at Stanford Law School early in my career at which noted Silicon Valley patent attorney Ron Laurie gave a talk on software patents. Mr. Laurie broke it down this way: Some people who dislike software patents say all patents are bad; and some say all software patents are bad; but I say, bad software patents are bad. What Mr. Laurie meant was that software patents that are issued despite the presence in the art of 102/103 references – which, for whatever reason, the Patent Office does not find during examination – are problematic.

A long time has passed, and much is changed. Today, the Patent Office hires examiners who are trained in computer science. Today, the Patent Office has more powerful tools for searching the art, or at least the patent art. Today, the Patent Office has the benefit of the KSR decision, which allows it to more flexibly apply the 103 standard. Even so, my own experience as a practitioner is that patent applications are still being allowed that under 102/103 ought not to be.

Case in point: I recently inherited a substantial docket from another attorney in our group. One of the cases that crossed my desk had received an allowance, and I was asked to advise on whether to file a continuation. I reviewed the allowed claims, scratched my head, and then spent literally two minutes – no more – on Google. I found three references, sent them to outside prosecution counsel and instructed him to consider them. We ended up withdrawing the case from issue and pursuing different claims in view of the art that I had found. What struck me was that neither the inventor, nor the outside counsel, nor (most importantly) the Patent Office had been able to find what I had found so quickly and easily.

This is, of course, just one anecdote. Still, this and other similar experiences I've had make me worry that we still have the situation in software patents that Mr. Laurie spoke of some twenty years ago. I fear that it's not only the software and Internet patents that were granted in the 1990s that are problematic, but the ones being granted today as well. I will be the first to say that I can't prove that inadequate search is a widespread problem; but the fact that it keeps coming up in my practice, together with the stories I hear from outside counsel and from colleagues in the patent bar, suggests to me that it is real and that I am not the only one who perceives it.

I don't know what search tools are currently at the Examiners' disposal for non-patent art, how Examiners are trained in search, what search techniques they usually use, how broad their experience is, or what other factors may be at work here. However, I do know that when I find art that others have missed, it is sometimes on a hunch or intuition that tells me I've seen this somewhere before. In the 30+ years that I've spent in the software, computer and telecoms industries (both as an engineer and as a lawyer), as well as reading technology news and scientific articles for pleasure over that same time period, and having had the privilege of working with leading researchers in a range of companies, many of whom I still keep in touch with, I've developed a sense for "what's out there." That sense, while riddled with gaps and inaccuracies, is good enough to tell me that some potentially very relevant art has been overlooked during patent examination and also to tell me roughly where (and when, in time) to look for it. I use this both in prosecution and in defensive matters.

Fairly often, I run into a case where the putatively inventive element in a patent or patent application is so old in the art and so taken for granted by those of skill in the art that it does not show up in any recent patents or publications. To find it may require looking back at (or just knowing about) seminal work done decades previously. A Wi-Fi "invention" that fails to take into account the early work done in the AlohaNet project at the University of Hawaii from the 1970s, or a multimedia messaging "invention" that fails to consider the MIME standards from the early 1990s, or a VOIP "invention" that is not compared with the Etherphone project from Xerox PARC in the 1980s... well, you get the idea. I draw on my own knowledge base of the history of relevant technologies to help me assess what is and isn't new.

At the Summit, we discussed the notion that Examiners might benefit from searching the art after first having had a preliminary interview with the applicant's counsel, so that the Examiner's understanding of the invention would be improved and the search would be more "on target." I support that idea. But I think that even where the invention is well understood by the Examiner and the claims are relatively clear – that is to say, even where the Examiner totally "gets it" about what the claimed invention is – the search still sometimes falls short of what it could be and arguably should be. Better search tools, in particular for non-US and non-patent art, can help, but it takes more. It takes broad (not necessarily

deep) knowledge of the art, both in the immediate field of the invention and in analogous fields as well. It takes creativity, to be able to develop analogies to related technologies and to craft searches that, with just four or five search terms, capture the essence of the invention while screening out nonessentials. It takes a sense of history, knowing when certain major technological developments took place so that a search scoped for the relevant time period can be made. It takes a knowledge of a range of search techniques commonly used by the USPTO as well as by foreign patent offices and private search firms, but also a willingness to question the tried-and-true techniques (such as forward and backward searching in the patent literature, which can be time-consuming compared to the results produced) and to try out new techniques that may yield better results, or yield the same results faster. It takes feedback – perhaps by picking out a sampling of soon-to-be-allowed patents and running independent "black hat" searches on them to see how well the Examiner did, and helping the Examiner (and the broader corps of Examiners) learn from this experience without anyone's being penalized for what he or she failed to find. It takes intellectual curiosity about the history of technology. Last but not least, it takes an attitude of trusting one's instincts: being able to say, "I know it's out there and by gum, I can find it."

I would welcome a conversation on this with anyone from the Patent Office who would like to speak with me about it. Many thanks for all that you are doing to improve the quality of patents, and especially to ensure that they are searched well enough to be worthy of the presumption of validity – to be overcome only by clear and convincing evidence –to which they are legally entitled.

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