

From: Jon Potter
Sent: Monday, April 15, 2013 2:42 PM
To: SoftwareRoundtable2013
Subject: App Developers Alliance Comments

Please find attached the App Developers Alliance (www.appalliance.org) comments relating to the Software Roundtables.

Please contact Milin Mehta (milin@appalliance.org) if you have any questions regarding the attached.

Thank you very much.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Comments Re: Partnership for Enhancement of Quality of Software-Related Patents

Docket No. PTO-P-2012-0052

COMMENTS OF APPLICATION DEVELOPERS ALLIANCE

**COMMENTS OF APPLICATION DEVELOPERS ALLIANCE RE:
PARTNERSHIP FOR ENHANCEMENT OF QUALITY
OF SOFTWARE-RELATED PATENTS**

Poor-quality and overbroad software-related patents are fueling an explosion of opportunistic and unfair litigation by patent trolls, or PAEs (“patent assertions entities”). In doing so, these patents are driving innovative and productive small firms out of business, and are imposing an unsustainable tax on one of the most innovative and dynamic sectors of the U.S. economy – app development. Urgent reform is needed to reduce the number of poor-quality software patents and to limit the harm cause by these patents. The Application Developers Alliance, and our membership of more than 20,000 developers and 115 companies, welcome the PTO’s focus on this critical issue, and we appreciate the opportunity to comment.¹

I. The Problem

The goal of patents is to reward and encourage innovation. The largest and most innovative group of software creators in America today are our members – app developers. Yet those innovators typically oppose the existence of software-related patents, and they view actual and threatened litigation based on such patents as one of the greatest burdens on their businesses. That is not the attitude of a few scofflaws; it is the reality for the overwhelming majority of developers who are conscientiously respecting intellectual property rights, and who are creating products and services that no one has ever created before. A broad-based survey of software developers would find that most reject software patents as unnecessary, overbroad, and inhibiting innovation. Something is fundamentally wrong.

Our app developer members keep telling us the same stories about indiscriminate patent troll abuses:

¹ In addition to these written comments, the Alliance made oral presentations at both PTO Roundtables – through Alliance President Jon Potter at Stanford University on February 12, 2013, and through Alliance Vice President Tim Sparapani in New York on February 27, 2013.

- The app developer receives a letter from a troll – which typically has never brought a product to the public, and has never disclosed to the public the details of how to make a new product. The troll asserts that the app developers’ innovative new app infringes the troll’s patent. It identifies the patent – it may or may not specify the claim at issue. However, the patent/claim is extraordinarily broad and/or vague/ambiguous, potentially covering broad functions applicable to any app that interacts with a server, a network, a rendering or display device, or other software.
- The app developer calls the troll to find out how the troll interprets its patent claim and how it claims the app infringes it. The troll’s answer is chilling: that information is available in the litigation discovery process, but if the developer chooses to litigate then the license fees and damages will be much higher and the legal fees will likely be devastating. Just blindly pay a royalty, because it will cost too much to find out what you are paying for and whether it is worth it.²
- Such troll threats are a central fact of app developer life. In one recent meeting of eleven small-company founders and executives, the conversation organically turned to patents when one participant asked another – “Have you received your Lodsys letter yet?” The discussion then careened from Lodsys letters and trolls to lawyers, litigation costs, insurance alternatives, and royalties. There was little discussion of the merits of the trolls’ patent claims, because the merits have little relevance to patent litigation threats.
- For most app developers, the costs of fighting are too great, and their only hope of avoiding ruinous legal costs is to stay beneath the trolls’ radar. In preparation for the PTO Software Partnership Roundtables, we spoke with executives of all those eleven

² A potentially valuable reform would be to require patent suit threat letters to provide such details.

companies. We asked them to join the Alliance at a press conference, to author op-eds for publication in newspapers and online, and to tell their stories before video cameras for future webcasts and educational uses. Uniformly, they declined, because they are afraid of speaking publicly and inviting more claim letters and more litigation from patent trolls.³

- Trying to fly beneath the radar imposes its own costs. Many developers delay seeking or announcing funding, or avoid making a strong marketing push when releasing new products, in the knowledge that publicity and success is a magnet for troll suits. Meanwhile, app developers seeking funding are commonly confronted by investor concerns about troll suits, and investors frequently demand an anti-troll strategy as a core part of the app developer's business plan.⁴
- Some app developers are fighting back, but for a small business, the costs of doing so are huge. One developer, self-financed with a wife, 3 kids and 30 employees, could have paid a troll a \$2,000 nuisance royalty. But instead he has chosen to fight, and has already paid \$30,000 to a brand-name law firm.

In theory, the harm done by poor quality and overbroad patents is limited to the costs of defending litigation initiated by the owner of a weak patent. But the reality is that small app developers cannot afford even a successful fight on the merits. Defending a troll patent infringement action means:

³ Some anonymous videos of app developers discussing the troll menace are posted at <http://devsbuild.it/forum/industry-discussion/patent-issues>.

⁴ Alliance member Ron Garret is both an angel investor and a developer. He discusses how he has been deterred from the market in both capacities by the threat of troll litigation at <http://devsbuild.it/forum/industry-discussion/patent-issues/3664>.

- A small firm built for innovation is distracted from productive work to fight with a troll built for litigation, in the troll's preferred venue, which is typically plaintiff-friendly and remote from the defendant;
- Innovators dependent on investor and consumer confidence must explain why a bet-the-firm lawsuit should not cause concern, while the unaccountable troll has no reputational concerns;
- A small defendant providing detailed and expensive discovery regarding product development and revenues, while the troll has little burden beyond producing its patent; and
- Liability risks that are extremely hard to quantify given patent ambiguity and breadth, troll secrecy, and the difficulties of calculating damages when a patent allegedly covers one aspect of a complex product.

In a very real sense, therefore, the PTO is the court of last resort: once a bad, overbroad or vague patent issues, the harm is done.⁵ It is, therefore, of vital importance that the PTO move fast to improve software-related patent quality.

II. Two Key Principles

Many app developers oppose the existence of patents on software, believing that the Patent Act does not authorize them; copyright provides enough protection; and the costs are too high. But in this Comment, we are working within the current framework – assuming the availability of patents but focusing on their quality.

Underlying the many formal rules of patent law are two fundamental principles:

⁵ Because litigation is so expensive and impractical in so many cases, there is a critical need to strengthen the ability of the public to vindicate the public domain within the PTO. Re-examination should be made swifter and more readily available to the public. One starting point could be to extend to software-related patents the America Invents Act provisions broadening the availability of re-examination for financial business method patents.

1. Patents should not be granted for mere ideas or functions. Patents are valuable monopolies. They are supposed to validate inventions, not mere functions, just as copyrights validate expressions, not mere ideas. But when a patent is issued for a never-validated software “invention” that is described only by its results, and not by how it functions and actually accomplishes the described feat, then that patent monopolizes an idea and a goal, and not a product or an actual invention. Just as a copyright cannot monopolize the idea of falling in love, and the next infatuated songwriter can lawfully use different words or musical notes to express the same feeling – so should a patent not monopolize the idea of data being transmitted, or interacting with a device or a network, or performing any function at all, unless the precise and unique methodology is known so that next-generation innovators can lawfully and innovatively work around the patented technology to produce the same result, and thereby create competition which promotes consumer welfare and the economy. Most Americans with a smartphone have looked at their device and thought “it would be cool if it could do _____.”⁶ But that thought is not a valuable innovation; the valuable innovation occurs when an app developer figures out how to make the device “do _____.” Patents should never be issued for “doing _____ with a smartphone” or “doing _____ with a computer,” because all such patents do is make it more expensive for someone to actually do _____.

2. Patent claims must be clear, precise, and not overbroad. Before it grants any patent claim, the PTO must ensure that its boundaries are clear, precise, and limited to the actual invention demonstrated by the applicant. The public is entitled to full disclosure; that is an essential part of the patent bargain. Rival innovators are entitled to know precisely what is covered and what is not; that is essential to enabling them to innovate around the patent and thus

⁶ In one instance mentioned by Tim Sparapani at the New York Roundtable, an old patent invoked by a troll essentially claimed the broad idea of enabling someone to play an investigative game on a computer. When an actual innovator – an app developer – created the first software that did such a thing, it was sued.

create competition. And the patent claim must be clearly written to claim only the incremental innovation made by the applicant, to avoid a double-claiming of the prior art; property rights are nothing more than a nuisance if the Government awards conflicting entitlements to the same property. Overbroad and fuzzy patent claims ensure that there will either be unmerited settlements of wasteful litigation; when the PTO grants such claims, it is harming the economy.

III. Suggested Improvements

The above principles are easily stated, but harder to implement. But the PTO can improve software-related patent quality by focusing on several points of improvement.

1. Require plain, clear and detailed language. The PTO should follow longstanding federal policy by requiring plain writing in patent applications. Examiners should disapprove applications that do not very clearly describe both the invention and the claims in terms that are comprehensible to the reasonably smart person in the relevant professional field. The Plain Writing Act of 2010 requires public-facing federal documents to employ plain writing. Similarly, a Presidential Executive Order directs federal agencies to use plain writing in regulations – specifically to ensure that regulations are “simple and easy to understand, with the goal of minimizing uncertainty and litigation.” Like federal regulations, patent applications are accessible to the public and, once approved, have the force of law.⁷

Requiring plain, clear and detailed language in patent applications will enable other innovators to know how to avoid infringement, what they should innovate around, and when to

⁷ Patent terms can also be analogized to real property titles. State title registries record title to real property in minute detail to ensure that property rights are clearly defined to the last inch. Because of that clarity, created by a neutrally written description, litigation over the demarcation of real property rights is rare. In contrast, allowing patent claimants latitude to write self-serving vague and broad descriptions of the property claimed in their patent applications creates a dysfunctional system in which the real extent of property rights can only be determined by the expensive – often prohibitively expensive – process of patent litigation.

seek a license. Moreover, the public record of rejections and resubmissions will help businesses and courts understand the precise boundaries of patent grants.

2. Require detailed description and enablement, potentially including code. The PTO must enforce the requirement that applications describe inventions with sufficient detail to enable the reader to make and use the claimed invention. This means that the average coder should be able to duplicate patented software simply by reading the patent application and conscientiously following its instructions. It also makes for an easy test of whether the invention actually works (and deserves a patent).

The PTO should consider requiring applicants to submit working code before granting a software patent, to ensure that something has actually been invented and that it actually works. Submitting code should not be burdensome for an applicant who has actually written code that achieves what he claims he has achieved, and it would ensure that the patent relates to a specific and well-documented invention and is not awarded for a simple idea. Alternatively, if actual code is not required, then the software patent examination process should be much more exacting, and much more thorough, than it seems to be currently.

3. Limit claims to actual, documented, inventions. Finally, the PTO must ensure that it does not grant claims that are broader, or could be read to be broader, than the actual invention demonstrated, publicly disclosed, and enabled by the patent application. A patent applicant is entitled to a patent on an actual incremental innovation over prior art that it clearly demonstrates, discloses, describes and enables. But the public is entitled to know clearly, from the face of the patent, what matters of prior art or obviousness are not within the patent, and what broader ideas or functions, as opposed to specific means of performing those functions, are beyond the patent.

4. Strengthen PTO Examiners' capacity. PTO Examiners have an extraordinarily difficult task to do in reviewing the flood of software-related patent applications. The quantity of applications is overwhelming; sophisticated knowledge of technology and software is essential; and the relevant art is changing rapidly.

Rigor in examination is necessary, but not easy. More personnel and funding may be needed, and, particularly in light of the rapid development of the art, a strong, continuous training program is essential. Some commenters at the Roundtable suggested imposing requirements on applicants that would standardize software applications to some extent, and requiring use of common language and formats and standardized dictionaries or glossaries could both improve the clarity of the ultimate patent claims and facilitate Examiners' tasks. More rigor may also bring its own reward: the tougher Examiners are on bad or overbroad claims, the less applicants will be encouraged to flood the PTO with such claims.

IV. Conclusion

Because of the combination of poor, vague and overbroad software-related patents and abusive practices by patent trolls, the U.S. software-related patent system as currently constituted is imposing a huge and unwarranted burden on the U.S. economy, and especially on small and innovative businesses such as app developers. Some of its costs are obvious, including expensive and wasteful litigation and app developers who are driven from the market. Other costs are hidden, including instances in which app developers do not enter the market for fear of litigation, and instances in which they cannot get the investment needed to finance their innovation because investors are deterred by the trolls.

As a result, America's software developers, our best innovators and business-builders and job-creators, have almost completely lost respect for the intellectual property system that for

centuries has been the pride of American business and innovation. There is a widespread belief that the PTO, courts and Congress have been captured by the mistaken dogma that more patents = more innovation.

In reality, of course, better patents = more innovation. Quality is paramount; quantity of patents is neither good nor bad per se. Innovators are both patent plaintiffs and patent defendants, and the purpose of the patent laws is to help and encourage innovators on both sides of the plaintiff/defendant divide, to provide clarity, and to ensure full and meaningful disclosure to the public. The PTO is right to focus on patent quality in this proceeding. By doing so on an ongoing basis, and by demanding more rigor and clarity from both Examiners and applicants, it can begin to restore the confidence of the nation's innovators.