Peer to Patent Needs Your Expertise

You can help ensure that computer-related patents are properly reviewed and stop the worthless ones from being granted.

Technologists rarely have an opportunity to influence social and legal policy directly. Peer to Patent (www.peertopatent.org) is one such opportunity. It addresses the proliferation of computer-related patents that sometimes hinder innovation rather than promote it—while offering technologists a chance to guide the system toward healthy equilibrium in a way that makes exemplary use of their expertise. Peer to Patent is a project that every *Communications* reader should at least visit; many will find participation important and rewarding, spending as much or as little time as they'd like.

ACM's mission calls on its members to lend their expertise to help policymakers and institutions determine the proper role of technology. The U.S. patent system is a particularly apt context for exercising this mandate, because inventors in the computer field live under the constant fear of lawsuits based on patents that should never have been granted in the first place [1, 2].

One example of the alarming disruptions that patents can wreak on the spread of computer technology was a 2006 legal clash in which patents exerted by NTP, a patent-holding company, nearly shut down the popular email service on BlackBerry mobile devices. Most of these patents were eventually overturned due to the existence of prior art (evidence that the ideas being patented were in use earlier by other inventors). Yet these rulings were too late for BlackBerry developer Research in Motion, which eventually paid more than $600 million to NTP to resolve the lawsuit, a burden compounded by untold legal fees and possible lost business due to public concern over the product's continuing viability.

What if programmers and computer scientists who knew how commonplace the NTP inventions were could have submitted prior art to the patent office, nipping the applications in the bud and averting wasteful lawsuits? That's exactly what Peer to Patent promises for the patent applications available for review on its Web site.

Launched last year in cooperation with the U.S. Patent and Trademark Office, Peer to Patent sets up a well-structured forum at peertopatent.org, with training and group discussion, that channels input from the public directly to the USPTO's examiners who decide what patents to grant. As a one-year pilot, Peer to Patent began July 15, 2007 at www.uspto.gov. Its counterparts in Britain and the European Union are now gearing up for similar experiments testing the public's ability and willingness to contribute to the patent-examination process and thereby justify making it more open in the future. Corporate sponsors include General Electric, Hewlett-Packard, IBM, Microsoft, and Red Hat.

Recognizing that computer professionals are not professional patent examiners, the peertopatent.org Web site is attractively designed for efficient participation. You log in, view the full text and figures of patents, offer comments, and submit pointers to

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prior art that would help an examiner determine whether an invention merits a patent. Discussion in the site's forums is constructive and focused. Rating prior-art submissions allows the strongest and most relevant ones to rise to the top. Moderators remind participants of the site's goals and culture. In addition to finding and voting on prior art, these forums are places where potential employers and employees can meet one another; so too can potential collaborators looking to staff research projects.

It's important to understand that a patent examiner—an impartial government employee—still makes the ultimate decision as to whether to award a patent. The system is designed to resist gaming. If, say, a company's competitors want to jump on its patents, they can still go right ahead. Prior art is prior art no matter who finds it.

Go to peertopatent.org and click the "View an Application" link for a patent on any familiar-looking technology. Reading patent applications can be intimidating at first; fortunately, resources at peertopatent.org will get you started. I suggest simply jumping in and reading a particular patent's description. Keep a second tab or window open on the browser so you can switch back and forth between text and figures. Believe it or not, a patent is supposed to teach you how to re-create its invention. True, the lawyers who write the applications often seem not to take this responsibility seriously. But most descriptions are decipherable, and after you understand the description, you can deal with the claims that define the ideas to which the applicant wants exclusive rights.

Some patent applications will probably prompt you to think "I'm no expert in this area, but I know colleagues who are." Contacting them is one of the best contributions a participant can make to the system. You can also encourage companies to submit patents for review, earning the reward of expedited handling in the patent office.

Peer to Patent does not represent a total solution to the world's patent problems. Jason Schultz, a staff attorney at the Electronic Frontier Foundation, describes himself as "a big fan" but says, "I don't think the Peer to Patent project alone will fix what's wrong with the system." Patent lawyers I interviewed are supportive and cautiously optimistic. The computer science researchers I interviewed, while generally viewing the project as valuable, aired some skepticism. For instance, Jon Bentley of Avaya Labs, called the project "an exciting proposal" but warned that people typically volunteer for projects "unencumbered by cash flow," whereas "the essence of patents (well, one essence) is exactly money."

The sheer volume of patent applications (which has grown to several thousand computer-related applications a year in the U.S. alone) could strain the capacity of Peer to Patent volunteers if the system expands from a pilot to become common practice. In addition, some opponents of software patents believe that the act of reviewing them also legitimizes them. If software is indeed a poor fit for the kinds of research and rewards propelled by the patent system, patents can be a hindrance, even if they pass the prior-art test.

There are counterarguments to these objections, but Peer to Patent should be appealing largely because it's an immediate intervention with measurable outcomes. Patent applications will not receive the reviews they need until researchers see them as part of their personal responsibility to society, in the same way they spend time refereeing journal papers, sitting on the boards of nonprofit organizations, and performing university-related duties unrelated to their own central research tasks.

Get a feel for what this experience would be like by giving Peer to Patent a test run. The promising start-up you save from a lawsuit may be your own.

References

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