'Uber-izing' the IP Function

David Kline

Sam Zellner, AT&T's point man for patent portfolio development and monetization, was caught in a bind. With 5,000 issued and pending wireless patents under his charge, Zellner's job was first of all to make sure that AT&T's wireless portfolio—rated No. 2 in patent quality in the telecom sector by the Patent Board—was aligned with its business goals and adequately protected the company's products and services. But his job also included identifying which of his wireless patents were most valuable and then directing these for use in one of four ways:

• Could the patent be mapped to a standard and submitted to a pool?

• Was the patent suitable for licensing?

• Was it a good candidate for sale?

• Did the patent's greatest value lie in protecting AT&T products?

Unfortunately, Zellner found that the resources available to him to do his job were severely constrained, even at a company as large as AT&T. Typically, he would call upon a handful of wireless engineers and subject-matter experts within the company to evaluate patents according to the valuation criteria above. But their

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time was limited, and their expertise often confined to one or at most a couple of wireless technology areas—cellular but not wi-fi, for example, or base stations but not handsets. And besides, they could handle at most only a few patents at a time, so Zellner was finding it difficult to scale the evaluation effort to meet the requirements of a large portfolio monetization program.

Zellner's only other option was to retain outside consultants at technical or reverse engineering firms. But here Zellner faced the same twin problems of siloed expertise

and limited scale, as well as a third problem: cost. Consultants are not cheap.

So he decided to try something different. He had heard about a crowd-sourced patent research firm called Article One Partners (AOP), whose global network of 40,000 expert researchers in 170 countries—42 percent of whom have graduate degrees in a wide range of science, technology and engineering specialties—had made a name for themselves uncovering patent-busting prior art in the most hidden corners of the globe for defendants in

big-time infringement suits, saving them many millions of dollars.

Could the AOP crowd, Zellner wondered, evaluate a large tranche of AT&T wireless patents not just for validity but for their potential value, as well (i.e., for their relevance to standards, for evidence of use and licensing or sale potential, and for their strength as protective shields for AT&T products and services)?

It so happened that AOP's research crowd could do exactly that—and, indeed, had already done it for companies like the Dutch-based global technology giant Philips. So Zellner put them to work evaluating 150 wireless patents, in batches of 50 per month.

"What was interesting about AOP, first of all, was the broad range of expertise of their researchers," Zellner explains. "This produced some unexpected benefits. In one case, several researchers discovered that a particular patent in our cellular business also mapped to an aviation standard. My inventor was not involved in the aviation field, so he would have never spotted its application to that standard."

In several other cases, adds Zellner, multiple researchers mapped a patent to several different sections of the same standard. "That gave me a lot more confidence in the value of those patents," he says.

And in the case of still other patents, the research crowd discovered that other companies were utilizing the claimed technology. As Zellner

observes: "This kind of evidence of use is extremely important in considering a patent's licensing or sale value."

Overall, Zellner says that crowdsourced research for patent quality and value proved its value for AT&T. "Patents are assets created by the company, so we need to run this unit as a business and get a return on them," he explains. "And because crowdsourcing was so effective, we've incorporated AOP into our regular IP development and monetization process. I've also started using AOP's private platform internally to crowdsource other IP solutions in-house."

Welcome to the brave new corporate IP function of tomorrow, one that's been "Uber-ized" to tap into powerful on-demand networks of patent, technical and market expertise that can enable savvy IP leaders to supercharge their IP monetization efforts.

In this new world, IP is merely the latest business function to discover that crowdsourced networks of expertise can often produce better, faster and cheaper results. There is InnoCentive.com for crowdsourced help with innovation and R&D projects, TopCoder.com for software development, HourlyNerd.com for business development and strategy assistance and even Quantopian. com for expert help developing investment algorithms.

The emergence of on-demand crowdsourced IP networks such as

AOP's is sparking a disruptive shift in the corporate IP function, and proponents such as AT&T's Sam Zellner say it will yield significant benefits to IP professionals of all types. These include:

• Freeing IP leaders from the constraints of limited internal resources.

• Enabling the evaluation and monetization of portfolios at scale.

• Facilitating the development of higher-quality, higher-value patents.

• Expanding the IP leader's monetization toolkit.

Just how much that IP toolkit can be expanded is revealed by Brian Hinman, chief intellectual property officer of the $30 billion technology leader Philips. "For several years now," he explains, "the AOP crowd has provided Philips with prior art information to help us assess the relative strength of our patent rights compared to third-party patent rights. More recently, we expanded our engagement with the AOP crowd for other IP support services, including identification of manufacturing and distribution channels for certain goods, tracking potential copyright owners and exploring trends in particular technology domains."

Hinman says he believes the crowd has made a difference. "AOP's network has produced actionable intelligence that enabled us to make informed decisions regarding litigation strategy, patent enforcement or acquisition, innovation focus and invention generation," he says. "IP landscapes obtained from

the crowd have also helped our understanding of the competitive landscape faced by some of our business units."

AOP CEO Peter Vanderheyden highlights another intriguing use of his firm's on-demand IP research network. "We were engaged by a global licensing organization for a major consumer products standard," he recalls. "I can't reveal the name, but they wanted us to find out where in the world unlicensed devices were being sold. So we asked our researchers to go into their local stores, wherever they were in the world, and take six pictures of each device's packaging—one picture for each side—to see if they showed signs of being properly licensed."

Vanderheyden pauses a moment, then laughs. "Well, as you can imagine, we turned up quite a few unlicensed products. And this was unbiased, third party, time-stamped evidence—very admissible in court. Which, of course, the licensing organization mentioned when it contacted those unlicensed vendors. AOP's boots on the ground made them millions of dollars."

Finally, some companies and law firms simply use the AOP research crowd as their default prior art search firm. Says Jamie Beaber of the law firm Mayer Brown: "AOP has this ability to scale up highly-talented researchers in very short order to work large projects. They consistently deliver high-quality search results supported by great service,

which is why we now use them as our exclusive search vendor."

To be sure, the use of crowd-sourced expert networks such as AOP's also poses certain risks and challenges for companies. Explains AT&T's Sam Zellner: "Patents are fragile things. So, like any legal instrument, great care must be taken when opening them up to people untrained in patent law. We've worked very closely with AOP—and we know they have very rigorous internal procedures in place—to make sure their researchers don't do anything to inadvertently damage a patent. For example, their researchers can't pontificate or even comment on the patents they evaluate. All they do is locate and retrieve prior art or other public information about them."

Vanderheyden agrees this is a crucial issue. "AOP researchers are mostly technical experts, not lawyers. So our study leaders translate each patent claim into technical language, and then the crowd goes out and finds the data or evidence that the client needs. Traditional prior art search firms generally just look at the same few usual sources. But we look in everything, and we look everywhere, like some global human search engine. We have found dispositive evidence in tiny Finnish libraries, in products and even once in a New York City pawnshop. But the crowd always knows its job is to find, not to interpret. That's up to the client and its legal team."

Brian Hinman of Philips points to another concern: the need for careful prior planning. "Each study needs be carefully scoped at the outset, by asking tailored, well-defined questions," he insists. "Then it has to be closely managed jointly by AOP and Philips to maintain the focus and obtain a manageable and useful dataset of results. Typically, AOP deliverables are ordered lists of prior art documents and landscape overviews, available dynamically through their AOP Connect platform, which further enhances the speed and efficiency of their work. Their study results have been well-organized, carefully curated and shared in a systematic manner."

In the age when *Alice* validity concerns and post-grant IPR challenges has turned patent quality and value into matters of vital concern, minimalist or pro-forma prior art and evidence of use research can no longer represent the standard of care. With IP portfolios now accounting for a substantial portion of firm wealth, scalable on-demand networks of patent, technical and IP monetization expertise could be the wave of the future.

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