

Change in practice

The implementation of the America Invents Act and the prospect of further reforms in the near future mean that prosecuting attorneys must be adaptive if they are to continue securing high-quality patents for their clients

By Jack Ellis

A few years ago, patent quality was not something that you would have expected to hear being discussed in daily newspapers and on national television networks. But as the debate about ‘patent trolls’ and supposed abuses of the system has intensified, talk of ‘good’ and ‘bad’ patents has entered the mainstream.

One of the leading voices in the pro-reform camp, the Electronic Frontier Foundation, maintains that the issue “causing the bulk of the troll problem [is] the flood of overbroad, low-quality software patents”. In its report on the impact of non-practising entity (NPE) litigation, the US Government Accountability Office concluded that “many recent patent infringement lawsuits are related to the prevalence of low quality patents, that is, patents with unclear property rights”. And even John Lindgren, CEO of NPE Conversant, stated that “some companies are abusing the US patent system by using poor quality patents” in a press release announcing his company’s commitment to ‘ethical’ licensing principles.

The problem is that – like so much of the jargon in the patent reform debate – the term ‘patent quality’ is open to wide interpretation. For many of those pushing for deep-cutting changes to the US patent system, ‘low quality’ is often conflated with ‘overly broad claims’. They argue that patents

featuring such a broad scope of claims enable ‘trolls’ to assert against a wide cross-section of parties, and in many cases should not have been issued in the first place.

But for Steve Shumaker, founding principal at Shumaker & Sieffert, appropriately broad claims can actually be the hallmark of a top quality patent. “A quality patent needs breadth of claims supported by a depth of technical detail that drills into a given embodiment of the invention,” he says. “But it also needs an array of alternative embodiments that can help to support broad genus claims. I think the client should really go after what they are truly entitled to, measured by their contributions to technology and what is patentable over the prior art. As attorneys, we should be pushing the line of scope against the prior art.”

Another important consideration when assessing the strength of a patent is how useful it is in helping its owner to achieve its commercial goals. “The quality of a patent has to be evaluated in the context in which it is being used,” confirms Steven Slater, founding partner at Slater & Matsil. “We strive to work with our clients to understand how they plan to use their patent as a business asset. That will be different from client to client and from industry to industry. Whether a patent is good quality will also vary depending on whether it is intended to be used purely for defensive purposes, to protect or build up market share, or to differentiate its owner in a particular industry or a new field.”

With so many variables, coming up with a method of quantifying patent quality is a tough proposition. But Ocean Tomo attempted to do just that when it first teamed up with IAM five years ago to compile the Ocean Tomo Ratings (OTR) tables. These annual rankings seek to identify the United States’ leading law firms in terms of the quality of the patents they procure for their clients. To this end, Ocean Tomo has developed metrics based on

the notion that patents which are maintained by their owners for longer are of higher quality than those which are abandoned. Ocean Tomo predicts patent maintenance and abandonment events for individual patents by comparatively scoring them on factors including technology classifications, the number of independent and dependent claims, the average claim length, the shortest independent claim, the number of different words per claim, the length of the written specification, the forward citation rate, the number and age of cited prior art references, the length of prosecution, the number and country of origin of related family members, and the presence or absence of specific limiting claim language. The result is an OTR score (see box opposite) for each patent. An average of those scores determines which attorney firms are listed in our rankings.

There have been some significant changes over the past 12 months, with a number of firms that previously dominated the tables disappearing from view and new players debuting high in the listings.

One notable faller is Lee & Hayes, which took the top spot in both the IT and overall tables for 2012, but finds itself in seventh place for IT patents this year. However, this by no means suggests that the patents procured by the firm are of lower quality; rather, an explosion of prosecution activity among competitors has forced the Spokane-based outfit down the tables. Schwegman Lundberg & Woessner, for example, prosecuted three times as many patents eligible for the OTR tables in 2013 as Lee & Hayes did in 2012, with eBay being a major source of IT-related patent work for the former outfit (see Table 12).

There is a similar explanation for the absence of Virginia's Volentine & Whitt from this year's rankings, after it topped the consumer electronics table for 2012. The number of patents prosecuted by the firm was 30% lower in 2013, while other firms' output in the consumer electronics field was significantly higher – with an average 15% increase for the top 10 attorney firms active in that sector last year.

Service levels

Another noteworthy change from the 2012 tables is that full-service firms appear to be more prevalent this year. Baker Botts, K&L Gates and Pillsbury Winthrop Shaw Pittman are among the general commercial firms that entered the top 20 attorney firms in all industries this year; while full-service firms which also featured on last year's tables – including Haynes and Boone, Fish & Richardson and Perkins Coie – have made significant gains.

The Ocean Tomo Ratings patent score – methodology

The tables featured in this article were generated using the Ocean Tomo Ratings (OTR) system. This uses a regression model to calculate a raw probability score for a patent. Raw scores represent the simple probability that a patent will be maintained for the full statutory term. For convenience, these raw scores are mathematically adjusted to provide a normalised mean or nominal expected score of 100.

The adjusted score – the 'OTR score' – is akin to an intelligence quotient (IQ) used to score human intelligence. Thus, a score of 100 on the OTR scale generally corresponds to an expected normal or median quality (average expected maintenance rate). An OTR score higher than 100 indicates above-average quality (higher expected maintenance rate), while an OTR score lower than 100 indicates below-average quality (lower expected maintenance rate).

As with IQ, the OTR score provides

only part of the equation for determining patent quality/value. Thus, a high OTR score does not guarantee high quality or value, and vice versa. It only establishes a statistical correlation based on the body of available data.

To create the rankings, Ocean Tomo first selected the top 50 law firms according to the number of US utility patents issued over the trailing three years within each chosen sector and selected the top 100 law firms overall. To segment the law firms by the four representative industry groups (industrials, consumer electronics/discretionary, healthcare and information technology) and overall, Ocean Tomo used patents that have both a prosecuting attorney on the issued patent, and an assignee. Patents that have no assignee on the record were excluded. The resulting sets were then sorted based on the average OTR score of those patents, top down.

Tables 1-5: Top law firms based on three-year patent count average OTR score

Table 1. Industrials

Change from 2013	Rank	Attorney firm	Average OTR score
↑	1	Perkins Coie	116.1
↑	2	Klarquist Sparkman	112.3
↓	3	Schwegman Lundberg & Woessner	111.6
↑	4	Hanley Flight & Zimmerman	109.8
↑	5	Fletcher Yoder	109.7
↓	6	Fish & Richardson	108.2
↑	7	Patterson & Sheridan	107.3
↓	8	Kilpatrick Townsend & Stockton	106.3
↓	9	Andrus Intellectual Property Law	105.5
↓	10	Bachman & LaPointe	105.3
Min 105.3 Max 116.1 Median 109.0			

Table 2. Consumer electronics/discretionary

Change from 2013	Rank	Attorney firm	Average OTR score
↑	1	Knobbe Martens Olson & Bear	121.2
↑	2	Lee Hong Degerman Kang & Waimey	118.9
↑	3	McKenna Long & Aldridge	116.1
↑	4	Fish & Richardson	113.0
↑	5	K&L Gates	111.0
↓	6	Wolf Greenfield & Sacks	110.0
↑	7	Renner Otto Boisselle & Sklar	106.3
↑	8	McDermott Will & Emery	104.1
↓	9	Harness Dickey & Pierce	102.1
↑	10	Birch Stewart Kolasch & Birch	100.1
Min 100.1 Max 121.2 Median 110.5			

Table 3. Healthcare (pharma/bio)

Change from 2013	Rank	Attorney firm	Average OTR score
-	1	Shumaker & Sieffert	144.2
↑	2	Workman Nydegger	142.8
↓	3	Schwegman Lundberg & Woessner	140.7
-	4	Knobbe Martens Olson & Bear	140.5
↑	5	Bozicevic Field & Francis	138.5
↓	6	Vista IP Law Group	138.0
↑	7	Fulwider Patton	136.4
-	8	Harness Dickey & Pierce	131.7
↑	9	Wilson Sonsini Goodrich & Rosati	128.4
↑	10	Squire Sanders	128.0
Min 128.0		Max 144.2	Median 138.3

Table 4. Information technology

Change from 2013	Rank	Attorney firm	Average OTR score
↑	1	Schwegman Lundberg & Woessner	127.6
↑	2	Sterne Kessler Goldstein & Fox	124.2
↑	3	Knobbe Martens Olson & Bear	124.1
↑	4	Perkins Coie	123.7
↑	5	Fish & Richardson	123.7
↑	6	Blakely Sokoloff Taylor & Zafman	123.5
↓	7	Lee & Hayes	123.3
↑	8	Slater & Matsil	121.8
↑	9	Baker Botts	120.1
↑	10	Haynes and Boone	118.3
Min 118.3		Max 127.6	Median 123.6

However, Shumaker does not believe that this indicates that clients are now selecting corporate outfits over specialist firms. "For a long time there have been many firms that do both patent litigation and prosecution, and then there are prosecution boutiques," he says. "It has happened often before that groups of attorneys' specialised more on

prosecution broke away from larger general practice or litigation-focused firms, but I have not observed a recent trend in that regard."

One possible explanation is that, as they strive to maximise the commercial value of their patents, clients are seeking out one-stop shop solutions offering a breadth of commercial legal expertise, rather



**ENGINEERED FOR
CONSISTENT QUALITY**

- Legal expertise and technical depth
- Uniform process and rigorous review
- Reliable results and value

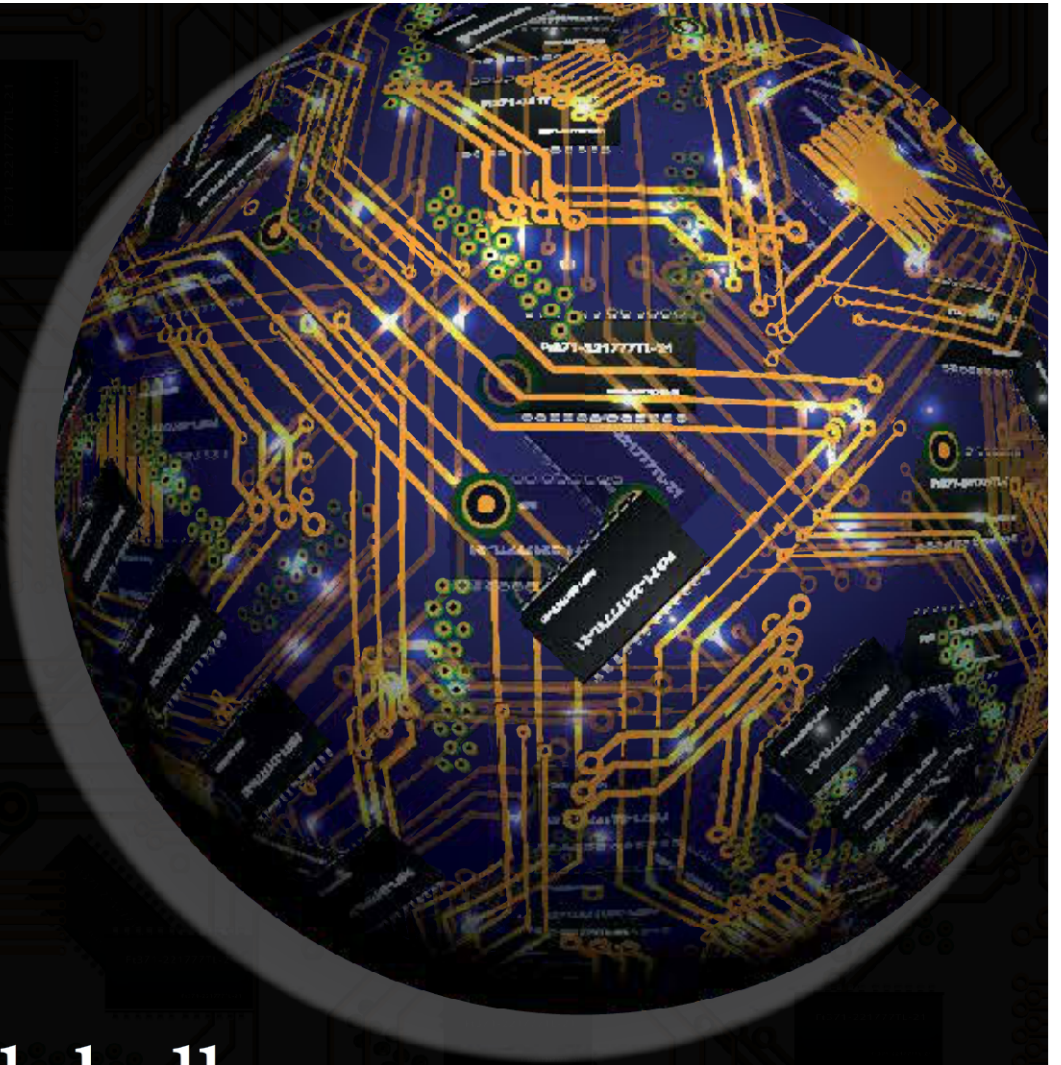
Shumaker & Sieffert, P.A. is built to deliver high-quality patent protection.

shumaker  **sieffert**

www.ssiplaw.com



Honored to be listed in the
2014 IAM/Ocean Tomo
Patent Quality Ratings



Think Globally, Patent Intelligently



972-732-1001 | www.slater-matsil.com

**IP strategies engineered to protect your
most valuable business assets.**

For fifteen years, Slater & Matsil has been bridging law and technology for clients around the world. We combine quality legal skills with engineering experience to construct superior patent solutions designed to support your IP strategy.

than attorneys focused primarily on rights procurement. But Slater suggests that the abundance of full-service firms on the tables is the result of ongoing fluidity in the legal services market, coupled perhaps with the effects of economic pressures. “There is always some churn where the IP team of a general practice firm breaks off to form a boutique,” he says. “In the same year, you’ll see a boutique which has reached a certain critical mass team up with a general practice firm, which thereby enhances its own IP practice.” It is a constant trend in the industry that is by no means unique – although it may be a little more prevalent in the IP field, he contends. Rights holders are more concerned with the specific expertise on offer, rather than firm structure, when selecting outside prosecution counsel. “As a client, what you have to look at is the IP practice group itself, whether it is standalone or part of a larger firm,” he adds. “You need to look at the attorneys and the experience they have individually.”

A closer look at the data would suggest that it is changes in patenting activity, rather than a stronger preference on the part of clients for full-service firms, that best explain the increase. Pittsburgh-based international general practice firm K&L Gates, for example, makes it onto both the consumer electronics and overall industries law firm tables for 2013. Last year it prosecuted three times as many patents for just one client – Sony – than it did for all of its clients during 2012, propelling it up the rankings. Similarly, full-service Texan outfit Haynes and Boone climbed seven places up the overall industries table, having prosecuted double the number of patents in 2013 for clients eBay and Taiwan Semiconductor compared to the previous year.

Generalists and specialists

For Slater, the bottom line is always the same when it comes to obtaining valuable patents: “Whether you are a general practice firm or an IP boutique, you have to understand how the patents will be used.” And despite the gains made by full-service firms in 2013, he maintains that patent-focused specialists continue to provide an essential service for businesses when it comes to prosecution. “Being a boutique allows us to be flexible and adaptable to clients’ needs,” he says, taking his own firm as an example. “We can be very flexible when it comes to working in tandem with in-house counsel, understanding their systems of working and their objectives.”

In Slater’s opinion, boutiques and full-service firms each have something to offer patentees, and can even have a symbiotic relationship with one another. It is not

Table 5. Overall, all industries

Change from 2013	Rank	Attorney firm	Average OTR score
↑	1	Schwegman Lundberg & Woessner	123.7
↑	2	Knobbe Martens Olson & Bear	122.0
↑	3	Perkins Coie	122.0
↑	4	Blakely Sokoloff Taylor & Zafman	121.2
↑	5	Fish & Richardson	120.7
↑	6	Nixon Peabody	120.7
↓	7	Sterne Kessler Goldstein & Fox	120.5
↑	8	Slater & Matsil	119.5
↑	9	Haynes and Boone	118.0
↑	10	Myers Bigel Sibley & Sajovec	116.4
↑	11	Baker Botts	116.1
↑	12	McKenna Long & Aldridge	115.3
↓	13	Patterson & Sheridan	114.8
↑	14	Kilpatrick Townsend & Stockton	113.6
↑	15	Mattingly & Malur	113.6
↓	16	Wolf Greenfield & Sacks	112.9
↑	17	Morrison & Foerster	112.6
↑	18	K&L Gates	109.7
↑	19	Merchant & Gould	109.5
↑	20	Pillsbury Winthrop Shaw Pittman	107.6
Min 107.6	Max 123.7	Median 116.3	

Table 6. Top in-house patent departments based on three-year patent count average OTR score

Rank	Attorney name	Average OTR score
1	Digimarc Corporation	180.7
2	Tyco Healthcare Group LP	127.2
3	Medtronic, Inc	125.8
4	Panasonic Patent Center	117.8
5	Ericsson Inc	114.7
6	Motorola Inc	113.8
7	Canon USA Inc IP Divison	113.4
8	Hewlett-Packard Company	113.4
9	Johnson & Johnson	112.9
10	3M Innovative Properties Company	106.3
Min 106.3	Max 180.7	Median 114.2

uncommon for full-service firms and patent boutiques to call on each other’s respective strengths in order to ensure that they can obtain high-quality patents for their clients. Slater confirms that referrals to his IP-focused firm from general practice competitors occur in several contexts. “Sometimes, they might refer a client to us because they simply did not have IP practitioners with experience that was up to the particular task at hand,” he says. “In other cases, even where a general practice firm does have an established and expert IP team, we have been a referral firm because of our expertise in a particular industry or technology. Frequently, we will be hired by