

The brokered patent market in 2014

The life of a patent broker has never been easy. Over the last year it has become even harder, with prices dropping and deal flow slowing

By **Kent Richardson, Erik Oliver and Michael Costa**

For the past two years we have published articles on the brokered patent market in the January issues of *Intellectual Asset Management* (“Turning the spotlight on the brokered patent market”, issue 57 and “The brokered patent market in 2013”, issue 63). We carefully track the brokered patent packages for sale on the open market and provide insights into the comprehensive state of the market and how it is changing. We have received positive feedback regarding our reports and are pleased to continue to provide brokered patent market perspectives by analysing the 2014 market, which covers public packages with fewer than 200 assets offered on the open market by brokers and patent sellers between June 1 2013 and May 31 2014.

To this end, we track packages of patent assets that are offered by brokers and sellers. For each package we receive, we collect detailed package information about pricing, families and other materials pertinent to buyers’ decision making. Our dataset for the 2014 market included 556 packages containing 4,271 issued US patents and 7,021 total assets (compared with 296 packages containing 4,319 issued US patents and 9,359 total assets for the 2013 market of June 1 2012 to May 31 2013). These numbers highlight a striking change: more packages are in the market, but fewer assets are being offered, reflecting a substantial decrease in the number of large packages being offered.

Additionally, asking prices on a per US-issued patent and per asset basis have fallen significantly.

Further, our analysis of all of the public deal data for patent sales is now showing a more compressed sales timeframe (24 months from the listing date for newer listed packages, as opposed to 48 months for packages that were listed in 2009) and a smaller percentage of packages selling (approximately 50% of packages listed in 2009 eventually sold, compared to 33% of packages listed in 2011 and compared to our estimation that approximately 32% of packages listed in 2013 will sell).

For operating companies, we see compressed sales timeframes correlating with *ad hoc* buying processes being replaced with greater systemisation of buying programmes, including automated analysis of incoming packages. For example, more operating companies are now utilising in-depth analysis requests, which results in a more compact and linear buying process. For non-practising entity (NPE) buyers, Intellectual Ventures reduced its buying programme, as we discussed in our in-depth analysis of the company (“What’s inside IV’s patent portfolio?”, issue 66), and other NPEs appear to be more selective, possibly in response to changes in the negative patent legal climate and reduced financing for NPEs.

The net result is that the public patent market is becoming more competitive and brokers are telling us that buyers have higher expectations of a more complete package upfront (eg, including evidence of use (EOU) from the start).

Paper flow

We decided to analyse the 2014 market in a similar manner to running a diligence cycle when looking to buy a package. We began



Hi, I'm David Smith, the Founder and CEO of Tynax, and I thought I'd take this opportunity to let you know a little more about our business and what we do. We're Patent Brokers, but we do things a little differently than most. You might not know Tynax at all, but even if you do, here are 10 things you're likely unaware of:

10 THINGS YOU DIDN'T KNOW ABOUT TYNAX

TYNAX
THE PATENT BROKERS
www.tynax.com

The market may be down but business is up in 2014 for Tynax. We're recording our best year ever in 2014 both in terms of the number of transactions closed and the dollar value of those deals.

Prices are up in 2014 for Tynax. OK, I know the prices in the industry are down, but representing sellers we scored some record-breaking transactions this year in terms of price-per-patent. The average prices are down for the majority of our transactions this year but the high-value deals we've negotiated work to pull up our average over previous years.

Over 29,000 high-tech patents are currently offered for sale. At the time of writing, Tynax offers 29,552 patents for sale, comprising 2,481 patent-for-sale listings. There are also 282 patent-wanted listings.

Over 347,000 high-tech patents are potentially available for sale. Many patents are available for purchasing, mostly from large corporate patent holders, but they are not placed on the market. We currently have 347,746 of these patents in a searchable database.

Our matching system sends email alerts to buyers when patents matching their interests are placed on the market. Matching buyers with patents for sale is a top priority for us, and an area where we have invested in software development. Email alerts can be automated and highly specific.

Much of our work involves sourcing patents for buyers. With our expertise, databases and software resources, Tynax is well placed to source patents for buyers. In many cases we hide the identity of the buyer. In all cases we negotiate the lowest prices and best terms for our buying clients.

Our "hidden" database drives our sales and marketing efforts. As a patent broker we believe it's important to maintain a comprehensive and accurate database of buyers, potential buyers, sellers, brokers and industry insiders. Our brokering staff have access to dedicated servers, a custom CRM system, millions of records and matching capabilities that are not visible from our public website.

Tynax hires experienced US litigation and prosecution attorneys to prepare claims charts. Our approach to claims charts is to produce Rule 11 charts that could be suitable for litigation.

We publish our own books, videos, and complete courses on patent brokering and transactions. On the Resources section of our site, you will find free books, guides, reports on patent transactions, and information on patent courses we have designed and offer via Silicon Valley Business School.

Our new Claimscharts.com website offers a discrete exchange for EOU. On this new site, we discretely connect claims chart seekers with claims chart owners. We then broker transactions transferring assets from sellers to buyers.

So there you go. Ten things you didn't know, and might not care about at all. If you've read through to this point, you either have too much time on your hands or you're highly interested in buying or selling patents. In that case, check out our website or ping me on david@tynax.com and we'll be happy to help you.

Table 1. Brokers with 10 or more packages

Brokers
Adapt IP Ventures
Global IP Law Group
ICAP
Iceberg
Intellectual Asset Group (IAG)
Intellectual Profit
IP Offerings
ipCapital Licensing Company
IPInvestments Group
Munich Innovation Group
N&G Consulting
Patent Profit International
Quinn Pacific
Tangible IP
ThinkFire
Tynax

by looking at brokers and the packages that are on the market. Then we focused on the technology areas, package size and pricing of the packages. Subsequently, we looked at the decision to bid or pass. Finally, we refined the datasets we are considering to focus on sold packages, the attributes of sold packages and how sales trends have changed across recent years.

Patent brokers

As in previous years, this analysis focuses on the brokered patent market because it is open to all buyers. We work with many of the brokers and offer the service of helping patent owners pick a broker when selling assets. The brokers provide an initial filter on the assets, the seller’s pricing expectations have been established and the outcomes can be tracked. Brokers bring useful skills, including:

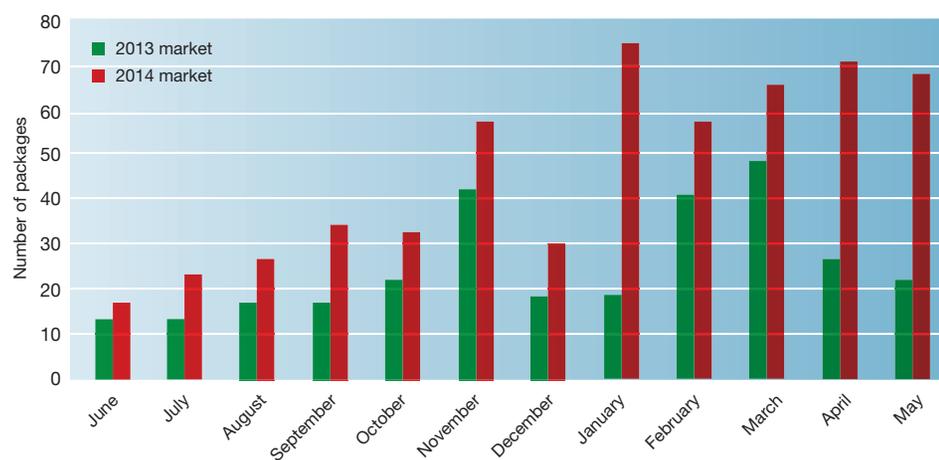
- selection of viable sellers, including some certainty that the seller is willing to sell;
- screening of patents and identification of important patents and claims;

- pricing guidance;
- guidance for sellers with regard to sales of terms and timelines;
- definition of a process for diligence, bidding and sales;
- more EOUs/EOU development; and
- tougher negotiation on pricing.

Brokers with 10 or more packages

Despite the increased number of packages we saw (556 packages in the 2014 market, up from 296 in the 2013 market), the number of brokers increased by only three (58 brokers, up from 55 in the 2013 market). It follows that each of these brokers would therefore list more packages, which was the case: 40 out of 58 brokers listed three or more packages in our 2014 market dataset (compared to 25 out of 55 in the 2013 market). Moreover, our data shows that some brokers increased their dominance of the market: 16 out of 58 brokers listed 10 or more packages and accounted for 72% of the listed packages. The top four brokers accounted for 33% of listed packages. As in previous years, we continue to see little technology specialisation among brokers, with the exception of brokers affiliated with semiconductor reverse engineering houses.

Figure 1. Package frequency by month



Packages per month/year

As is evident in Figure 1, our data capture method changed in October 2013 when we asked brokers to send all of their packages to us. We did this for two reasons. First, we had more clients buying, so we had more interest in a variety of technology areas. Second, we found that our clients change their technology areas of interest often enough that receiving all of the packages upfront worked out better for both brokers and the clients. This change allowed us to capture more of the packages on the open market. In the months following the change, we saw an average of 57.3 packages per month, with a maximum of 75 packages in January 2014 and a minimum of 30 in December 2013. The outliers, December and January, are explained by the holiday season. Based on comparisons with others, we are capturing about 90% of the packages in the market; this adjusted monthly average would imply a total annual market of 764 packages.

Technology distribution

When we receive a package from a broker, we use the package materials to categorise the package according to our taxonomy of technical areas. It is a two-tiered classification, with 16 general technical categories and 98 sub-categories. As seen in Figure 2, the distribution of the general

Additional data capture

ROL Group has focused on total deal flow capture of all available packages in the high-tech market, even outside clients’ current buying areas. This helps to ensure that as clients’ criteria change – and they regularly change – we can help connect our clients with the brokers that have matching packages more quickly. This approach has

enabled us to show buying clients more packages and has resulted in a better view of the market as a whole. However, it also makes this year’s data more challenging to compare to previous years, since we received significantly more packages. This change to capturing information about all of the available packages began in October 2013.

technologies is heavily skewed towards software and cloud computing. With the recent cases since *CLS Bank v Alice*, it will be interesting to see whether there is a drop-off in software portfolios on the market.

The most common three categories – application software, cloud computing and system infrastructure – represent almost 50% of packages. The popularity of these categories demonstrates the market’s current focus on internet computing. Additionally, we have observed a significant drop in the proportion of packages in the semiconductor category. Only 10% of packages from the 2014 market were semiconductor packages, down from 20% in the 2013 market. While the numbers declined, it is possible that this does not reflect a change in the overall semiconductor portfolio percentages, as our clients were more focused on semiconductor buying in 2013; this may have skewed our 2013 market dataset towards semiconductor packages. Also, we believe that because of the difficulties in detecting infringement, semiconductor package sales continue to be a challenge.

The good news is that with more packages on the market and increasing diversity, there are assets available from every technology category.

Shift to smaller packages

In the 2014 market the average package size decreased significantly. The average package contained 12.6 total assets and 7.8 US-issued patents, down from 18 and 9.3, respectively, in the 2013 market. The percentage of packages with 10 or fewer assets was similar from 2013 to 2014 (it increased from 68% to 71%), but there was significant growth in the number of packages containing between 11 and 25 assets. Considering the drop in total patent assets, it does not appear that large packages were simply being broken up into smaller ones. It is possible that the assets that might have been in larger packages are no longer being brought to the brokered patent market.

Pricing

In the 2014 market we saw that 83% of packages contained pricing guidance. This is a slight fall from the 2013 market, where 87% of packages had pricing guidance. It is likely that this drop is due to our methodology change. Additional packages that we now capture and are outside of our clients’ buying areas are discussed less with brokers; therefore, there are fewer opportunities for pricing guidance to be

Figure 2. Package distribution by tech category

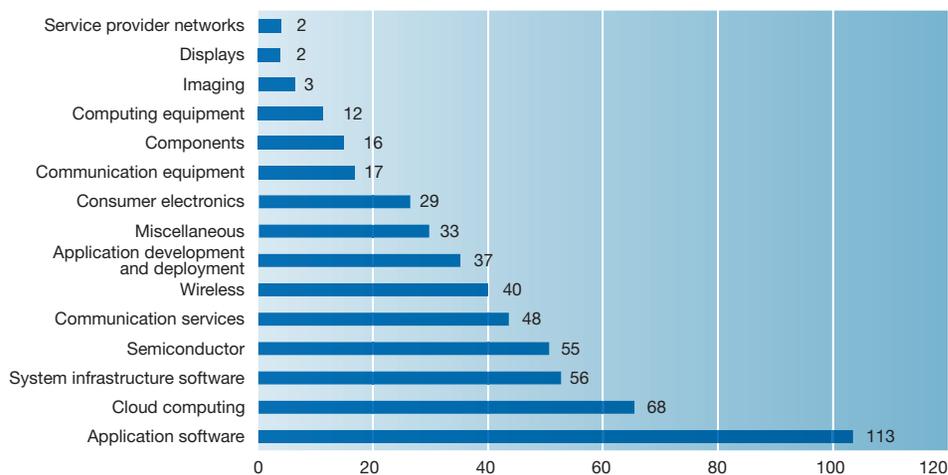
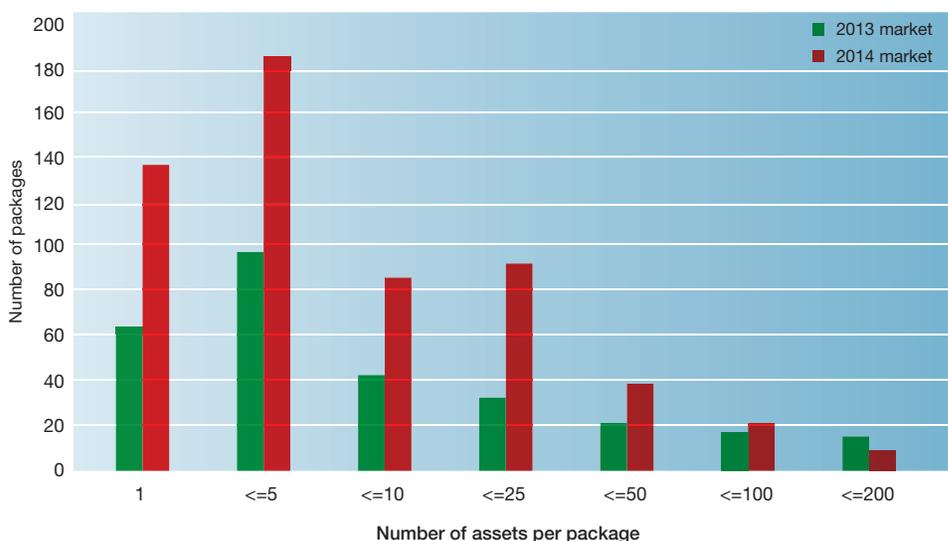


Figure 3. Frequency of package sizes by total number of assets



added after initial receipt of the package. However, the proportion of packages with pricing guidance remains significantly higher than the 56% in the 2012 market. Additionally, we are getting this pricing information more easily than in previous years. Now, brokers often give pricing information to us in the initial email or in the package documentation. Those that do not provide pricing in that format are more likely to provide it in response to email requests, in contrast to previous years when many brokers would provide pricing only via phone calls.

Distribution of asking prices

The distribution of package prices has shifted significantly to lower-priced

Figure 4. Distribution of asking prices, top and bottom 5% removed

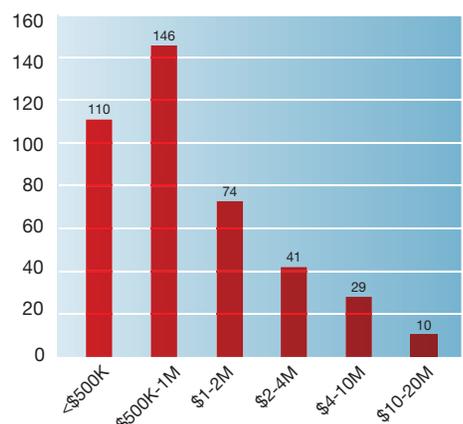


Figure 5. Per asset asking price in relation to broker pricing guidance

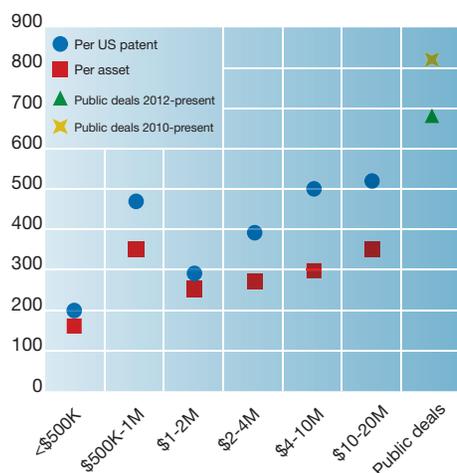
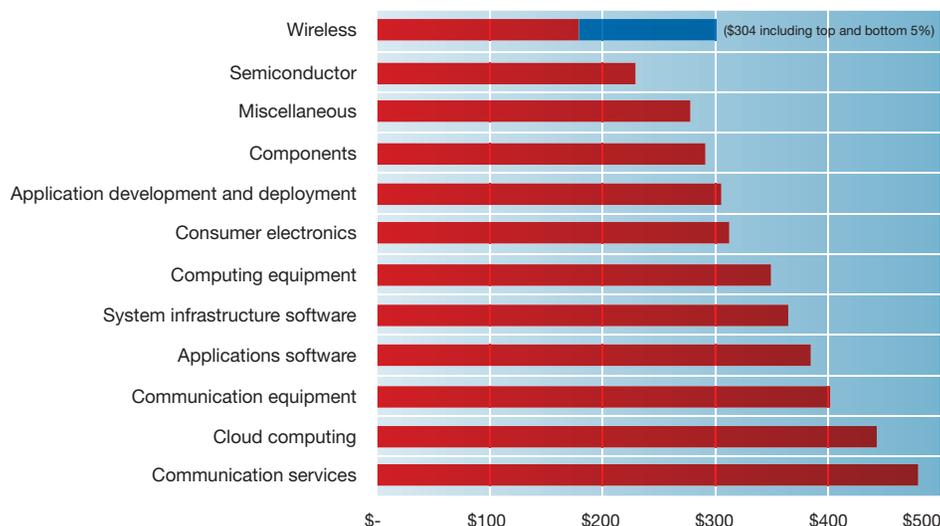


Figure 6. Asking prices per US-issued patent by tech category



packages. Sixty-two percent of packages had an asking price of less than \$1 million, as opposed to 53% in the 2013 market. Also, this year, we saw no packages with an asking price of \$20 million or greater.

From the 2013 market to the 2014 market, the average asking price per asset has dropped by 12%, from \$305,000 to \$269,000. The average asking price per US patent has dropped by almost twice as much – 23% – from \$467,000 to \$360,000. This – along with the drop in the percentage of packages that sell – shows that the market is softening. We have also heard anecdotally from multiple brokers that prices are falling; therefore, we believe that the drop in asking price is evidence of sales prices falling proportionally. We believe that the actual sales price of sold packages is still 35% below the broker’s asking prices as calculated in last year’s article.

Despite the drop in average asking price per asset, the 2014 market still has a comparable maximum asking price per asset. However, the standard deviation of asking prices has fallen significantly, which implies that prices are beginning to normalise. This normalisation is likely due to the dominant brokers, as discussed above, pricing their packages consistently; but the process is still in progress. The outliers are similar to those in the 2013 market and the standard deviation is still high at approximately 75% of the average asking price (compared to approximately 85% in 2013 market).

Surprisingly, broker provision of EOU is not boosting asking prices as seen last year. In the 2013 market we saw a 27% mark-up for packages where EOUs were provided; in the 2014 market this mark-up is less than 5%. This comports with anecdotal evidence from brokers that EOU is becoming a more standard expectation. In the 2013 market 33% of packages had broker-provided EOUs, while in the 2014 market 47% had them. We are also seeing some brokers ask sellers for upfront fees to cover some of the costs of preparing the offering package, including EOUs.

Pricing per asset/per issued US patent

Pricing for public deals is also dropping significantly, but it remains much higher than the pricing guidance on the open market. The ROL Group has compiled a list of public patent sales from 2010 to present. The list comprises 35 transactions involving public companies such as Yahoo!, Kodak,

Table 2. Broker asking price and impact of EOUs

	All packages, top and bottom 5% of data points from each set removed		Packages with EOUs, top and bottom 5% of data points from each set removed	
	\$ per asset	\$ per US patent	\$ per asset	\$ per US patent
Average	269	360	280	367
Min	31	50	39	63
Max	750	1,425	750	1,071
StdDev	219	258	219	244
NumData	419	410	190	188

Panasonic and General Electric. These deals include more than just patents and often include licences and non-patent assets in the mix. The average price per asset for all of the deals is \$827,000 (2010 to 2014). However, when we review the more recent deals (only deals from 2012 to 2014), we have \$673,000 per asset, showing a downward pricing trend in the price of patents.

Despite this downward trend, both the public deal sets are priced significantly higher than the asking prices on the 2014 market. The public deal values are for completed deals only, whereas the asking prices are not sale prices. Historically, we estimate sale prices to be around 65% of asking prices, which means that the separation between open market deal pricing and public deal pricing is even greater than represented in the graph.

Asking prices by tech category

The average asking prices per US-issued patent per tech category were calculated for every tech area with at least five packages on the market after the top and bottom 5% of data points were removed. It is evident that tech categories are strong drivers for asking price, as the category with the highest asking price per asset: communication services demanded 207% of the asking price per US-issued patent for the semiconductor category (see sidebar explaining wireless category pricing). These results do not necessarily correlate with the distribution of the number of packages on the 2014 market by technology category discussed above. Internet computing categories, application software, cloud computing and system infrastructure software are the most common categories on the market and demand a high asking price. However, the fourth most common category, semiconductors, demands the second-lowest asking price. This implies that the high supply of internet computing categories is matched or exceeded by demand; whereas demand for semiconductor packages, which are also in high supply, is significantly lower.

Key diligence data

To run an efficient patent-buying programme, buyers need to set effective buying criteria. These help to eliminate packages that fail to provide meaningful value to the buyer. Typical buying criteria include technology fields, maximum price and remaining life of the key assets.

Last year’s article focused on clients’ pass decisions in the common diligence

Table 3. Reasons for passing on a package

Reason for passing	2013 market	2014 market
Technology area does not fit	64%	70%
Actual market adoption is too small	6%	12%
Evidence of use fails to map properly	13%	5%
Pricing	4%	5%
Unresolved prior art	7%	4%
Remaining asset life is too short	4%	3%
Bids are due too soon	2%	2%

paths for a package. Through an analysis of packages that were assigned a diligence workflow for a client, the following section examines the changes to that path and the importance of particular criteria.

At 70%, technology fit remains the primary reason for passing (ie, not recommending a bid) on a package. This high percentage is unsurprising, given that a wide net is cast to find packages to present and the technology area is the first and quickest criterion to be evaluated.

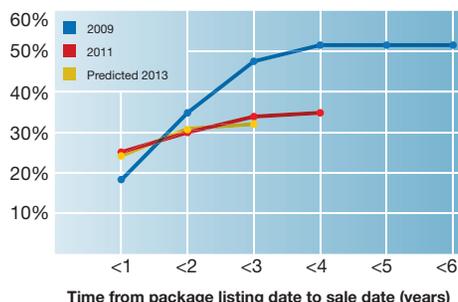
“Actual market adoption is too small” (12%, up from 6%) and “evidence of use fails to map properly” (down 5% from 13%) have switched places as the second and third most common reasons for passing on a package. Additionally, the likelihoods of these reasons for passing occurring have changed drastically; “actual market adoption is too small” occurred twice as often as last year and “evidence of use fails to map properly” occurred less than half as frequently. Our clients are more focused on immediate market impact and are therefore quickly skipping packages in smaller markets to avoid spending time to look at

Wireless pricing

The wireless category contains a wide range of wireless assets, including WiFi chipsets, RFID, wireless handsets, wireless infrastructure and antennae. In contrast, the higher priced communications services category contains the bundled value added services that use wireless devices and other communications equipment (eg, VoIP or audio conferencing or LTE services layered on top of the base station). Because the wireless category assets have widely varying price points, a disproportionate number of packages had a price per US-issued patent that fell into

the top and bottom 5% of the price per US-issued patents across all categories. When packages with the top and bottom 5% were removed across all packages, the top and bottom 10% of the wireless category packages were removed from consideration. Three of these outliers had particularly high per US-issued patent asking prices of \$1.5 million and the minimum asking price per US-issued patent was \$2,500. If the outliers in this tech category had not been removed, the average asking price per US-issued patent in the wireless category would be \$304,000.

Figure 7. Cumulative sales by years from package listing date



Notes on methodology for determining sales

The USPTO assignments database was used to determine sales; because reel/frame numbers have one recorded date, but often multiple executed dates, the recorded date was used. Therefore, for the purposes of this article a package is determined to be sold if there was a recorded assignment for one of the assets in the package after the broker listing date of the package. Because some sales go unrecorded for a few months after the sale, the sales timeframe may actually be compressed into a shorter time period than reported.

Thus, our methodology works best when at least 18 months have passed since receipt of the package, because this allows one year for the sale and six months for recordation of the assignment.

the EOUs where the business impact is not sufficiently meaningful.

The other significant change is a decrease in passing due to “unresolved prior art” – 4%, down from 7%. Buyers are being more selective in other categories earlier in the diligence process. This means that fewer packages get to the stage where prior art is analysed and therefore fewer packages are eliminated from consideration for prior art reasons.

Overall, being selective early in diligence benefits buyers because eliminating packages earlier in the process means that they spend less time and money analysing a package on which they are going to pass. EOU analysis and prior art searches in particular are often more labour intensive and therefore more costly than other diligence activities.

Long-term sales view

Switching to a new sample set of all of the unique public packages we have received (961), we analysed package sales by year listed. This sample set includes packages that were analysed in our previous papers on the 2012 market and the 2013 market and 53 packages previously analysed for long-term sales from 2009. Our methodology uses the US Patent and Trademark Office (USPTO) assignments database to identify sales (if at least one patent in a package is found to have a sale assignment, that package is treated as sold). However, this approach does exhibit a lag due to delays in recording assignments. Also, this data is presented on a calendar-year basis rather than a market-year basis.

In our article on the 2013 market, we observed an extended sales process and, in aggregate, the results remain similar to those from last year. We then looked at the data by listing year to see whether the sales cycle from first entry on the market

has changed. By comparing the time to sale of sold packages listed in 2009, 2011 and 2013 (timeframe based on receipt date to recorded assignment date of each package), a stark contrast emerges.

We observed that the overall chance of selling a package has fallen from 51% if listed in 2009 to 33% if listed in 2011. A drop from 51% to 33% reflects some of the difficulties that we hear brokers are experiencing in selling packages. Although the market may be robust, it has become tougher. Bear in mind that this sales data necessarily lags behind the actual market (by up to 18 months); we believe that the current market is actually worse.

An additional result of our analysis is that the period in which to culminate a sale has dropped. Considering packages listed in 2011, no additional sales have been recorded in the past year. Further, for a package listed in 2011, only 6% of listed packages sold in the second year on the market, as compared with 15% of 2009 packages selling in their second year. The third year on the market was even grimmer for 2011 packages: only 3% sold, as compared to 13% of 2009 packages. This suggests that buyers are establishing formal evaluation processes and making decisions more rapidly.

Our estimate for packages listed in 2013 was calculated in the following manner. Packages listed in 2013 that had been on the market for more than 12 months – listed January 2013 to May 2013 – determined the sales rate for 2013 packages in the first year on the market. Then, the sales rates from packages listed in 2011 and 2012 were used to determine how quickly sales would fall off in subsequent years.

Sales

For our sales analysis, we used the sold dataset of 164 sold packages (961 listed packages). However, we now look at the

Table 4. Sales by package size

Number of assets	2014		2013		2012		All sales	
	All assets	US issued						
1	23%	38%	19%	31%	35%	39%	24%	36%
2-5	35%	27%	34%	25%	27%	25%	34%	27%
6-10	15%	15%	19%	17%	12%	14%	17%	16%
11-25	10%	6%	12%	9%	8%	11%	10%	8%
26-50	8%	8%	10%	6%	8%	0%	8%	5%
51-100	4%	2%	5%	5%	8%	0%	5%	2%
101-200	4%	4%	2%	6%	4%	11%	3%	5%

same data from the perspective of the date of sale (per the recorded assignment). This allows us to assess what was actually sold during a calendar year (note that data showing a 2014 purchase/sale year reflects only sales of packages received by May 31 2014 and with assignments recorded by July 7 2014).

Sales by EOU provided

As discussed in the pricing section above, a broker providing EOU no longer shows an increase in asking price. However, EOU does increase the chance of sale. Packages with EOUs provided accounted for more than half of the sales in the first five months of 2014. This is a distinct advantage considering that most of these sales came from the 2013 and 2014 markets (as defined in the previous sections), where the likelihood of EOU being provided was only 33% and 41%, respectively. Putting these numbers in context, a broker has about a 25% better chance of a sale if there is EOU. In the tougher market, including EOU seems prudent.

Sales by bid due date/receipt date

We also analysed how much time a buyer really has to bid on a package. While there is no pressure to bid quickly on undesirable packages, we wanted to focus on packages that did sell in order to calculate when buyers need to make buying decisions. Table 5 shows that the middle of the distribution tends to range from between four and six months after the bid due date for sales occurring in recent years. However, because this is the date on which the sale is recorded at the USPTO, the bids are in fact placed significantly earlier. Many buyers do not immediately record their sales with the USPTO after the deal closes – the average

delay is three months, based on spot-checks of a random sub-sample of the sold packages. If you add an additional two-week timeframe between reaching an agreement and closing the sale, the centre of the curve shifts from five months after the bid due date to closer to one-and-a-half months.

For sold packages, there is a 25% chance that the agreement between the buyer and seller was made on or around the bid due date and a 50% chance that an agreement was made by one-and-a-half months after the bid due date. This is a change from previous years, as buyers must now get their bids in on time or request additional time to respond from the broker if they do not want to miss opportunities.

On the surface, this observation seems to contradict the fact that we see many bid due dates pushed back by the broker, but the rapid timetable for sold packages is masked by the 67% of packages that will never sell and the bid due date getting pushed back on unsold packages. Due to the operationalisation of buying programmes, the packages that do sell are selling fast.

Sellers

In order to determine what types of entity were successfully selling their assets, we categorised all selling entities into types. We found that as expected the sales occurring from January 1 2013 to July 7 2014 were mostly by operating companies, followed by individual inventors. However, there was also a slight increase in NPE sold packages: during 2013 and 2014, NPE sales accounted for 3% more of the market than they did across sales from all years (37.5% above the overall average). We will continue to look for more NPE sales in the next year.

Despite the slight increase in NPEs selling their assets, no NPE sold more than

Figure 8. Percentage of sales with EOUs by sale year

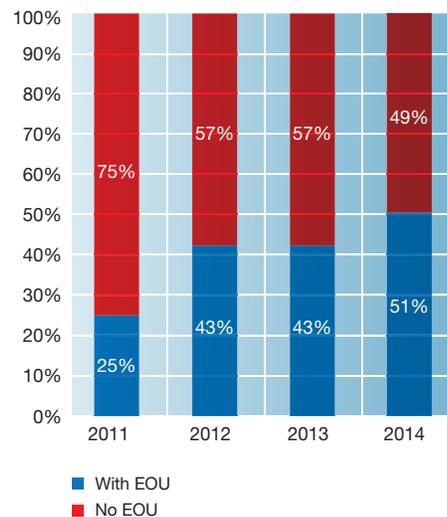


Table 5. Recorded assignment date compared with bid due date and receipt date

Months	Sold 2014		Sold 2013		Sold 2012		All sales
	Receipt date	Bid due date	Receipt date	Bid due date	Receipt date	Bid due date	Receipt date
Sold before	2%	2%	0%	8%	0%	5%	1%
Same month	0%	4%	3%	2%	0%	20%	1%
1-3	16%	23%	16%	30%	21%	15%	16%
4-6	18%	26%	21%	21%	32%	20%	20%
7-12	35%	26%	43%	34%	32%	30%	35%
13-18	20%	13%	14%	2%	7%	0%	15%
19-24	6%	4%	0%	0%	0%	0%	6%
>24	2%	2%	3%	4%	7%	10%	5%

Figure 9. Distribution of seller type by sale year

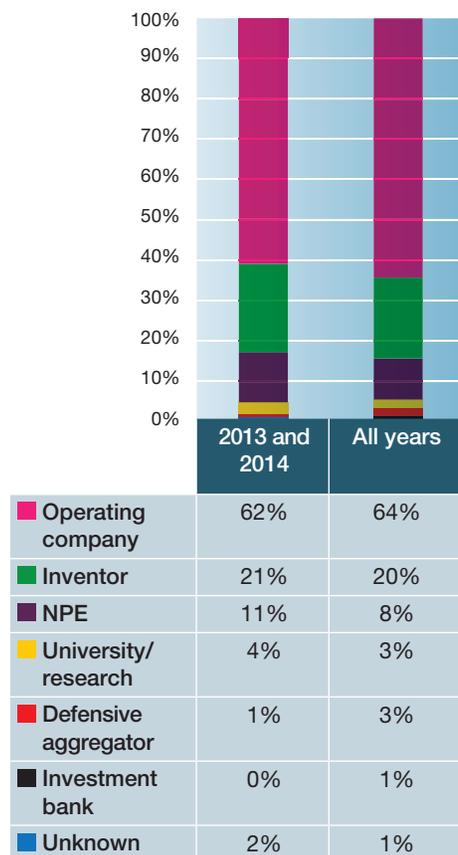
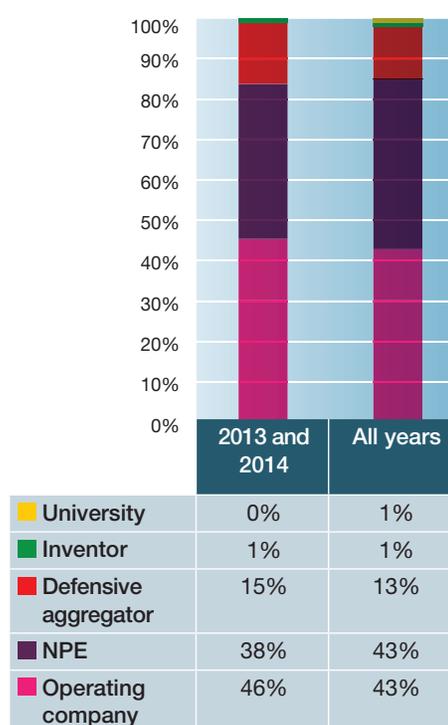


Figure 10. Distribution of buyer type by sale year



Intellectual Ventures while waiting to fund its Invention Investment Fund 3. We have started to see Intellectual Ventures resume buying, so the NPE number may rise in the coming year.

Repeat buyers

During this period 59 buyers purchased 112 packages and 14 buyers purchased multiple packages. Repeat buyers account for 58% of the purchased packages, with the top four buyers accounting for 35% of the purchases.

Full market size

We extrapolated our data on pricing, sales and packages to determine the size of the 2014 market. We size the market for deals with fewer than 200 assets in the package sold by brokers to the open market. We estimate \$260 million (\$283 million last year) in annual sales, with broker fees of about \$52 million (\$57 million last year). The biggest differences from last year are as follows:

- There are 22% more packages in the estimated market;
- The average assets per package had decreased;
- The sales window has remained at 36 months, although only 1% of total sales are expected to occur after to 24 months; and
- Our estimated sales rate has decreased.

To derive the market size, we first estimated the number of new packages brought to the market in a year (764, as discussed above). We then used the 36-month sales rate (22% sell), recognising that the number could be as high as 32% (predicted above). As noted above, sales rates calculations are delayed by the sales window and assignment data (up to 18 months), so we reduced the expected sales rate based on our current estimates of 22%. We used this same practice in last year's paper, reducing the sales rate from 50% to 30%, and our estimate was confirmed by this year's number being 32%. Then, we discounted the sales price from the asking price (65% of the asking price).

We believe that the actual sales price is one of the more difficult areas to estimate because so few transactions are reported. We adjusted the number of US-issued patents per package to 10.45 to take into account the large number of small packages and the pricing differences of big packages versus small packages. While the average number of US-issued assets per package is 12.6, the median is only four and a greater number of smaller packages sell. We believe that the price and number of assets could be

one package. Seven operating companies, on the other hand, were part of the nine entities that sold more than one package from January 1 2013 to July 7 2014. These sales accounted for 21% of sold packages, 32% of sold assets and 35% of sold US-issued patents. More impressively, the average sales rate (sold packages/listed packages) of these nine companies is 69% – more than twice the expected rate of sale on the open market.

Buyers

Just as we did with the sellers, we classified all buyers into types. We found that the sales occurring from January 1 2013 to July 7 2014 were purchased by a much higher percentage of operating companies (46%) than observed in our previous paper. Last year, we found that 35% of sold packages listed before 2013 were purchased by operating companies. Additionally, purchases by NPEs have fallen from 56% to 38%, while purchases by defensive aggregators have increased from 8% to 15%. The decrease in NPE purchasing activity likely relates to a decrease in buying by

Table 6. List of repeat corporate sellers

Company name
Alcatel Lucent
AT&T
Cypress Semiconductor
Earthlink
Leap Wireless
NXP Semiconductors
UT Starcom

Table 7. Summary of data

Packages studied June 2013 to May 2014	556
Number of issued US patents	4,271
Total assets	7,021
Packages old enough to have sold Q1-Q3 2013	351
Percentage sold in first nine months	10%
Asking price per US issued patent	\$360,000
Asking price per listed patent asset	\$269,000
Percentage packages selling	32%
Average number of US issued patents per package (excluding packages with over 200 assets)	12.6
Median number of US issued patents per package (excluding packages with over 200 assets)	3
Percentage of packages with 10 or fewer issued US patents	81%
Annual sales	\$260 million
Number of people employed as brokers (est)	173

50% below or above this number. Using the adjusted number of issued US patents per package brings us to a total market of \$260 million per year.

Using an average commission rate of 20%, the revenue from this market for brokers is \$52 million per year.

We back-tested the market size by estimating the average loaded labour rate per broker (\$300,000 a year). This gives 173 brokers. Assuming that four brokers work in each brokerage shop, this results in 58 brokerages (our data shows 58). Each brokerage would bring about 13 packages to the market per year. However, our data shows that a few brokers bring many packages to the market, with the majority bringing a few packages.

This 2014 market size estimate seems to reflect a comparative calculation base on the estimated 2013 market size in last year's paper. Last year we estimated the 2013 market to be 624 packages per year; therefore, we are seeing a 22% increase, to 764 packages, in package flow as discussed above. On the surface, this appears to be a drastic increase in market size, but the number of packages is only one element in calculating market size. Other factors include the smaller package size and lower prices. After accounting for the 16% decrease in average US-issued patents per package and the 12% decrease in asking price per US-issued patent, the result is that the total value of the market decreased by 10% from 2013 to 2014. This would produce a 2014 market size of \$254 million (compared to \$283 million in 2013).

Opportunities

With more than 60 new packages coming to market each month, the opportunity to find something to fit your needs exists. Eighty percent of the packages have a target asking price below \$2 million, allowing companies to purchase assets to address specific problems at a relatively low cost.

We are seeing an even lower percentage of packages selling than last year, indicating a continued downward trend. Corporate buyers continue to be seen as significant buyers and have overtaken NPEs as the greatest buying segment.

We continue to evaluate, bid on and buy patents for our clients and will continue to track the data and refine our database. This being our third year of reporting on our data, and having collected a larger segment of the market data, we have had the opportunity to look into sales trends on a deeper level. As soon as the data started answering these questions, new detailed and in-depth questions presented themselves. We look forward to continuing to answer these. *iam*

Kent Richardson and Erik Oliver are the founding partners of ROL Group and Michael Costa is an intellectual asset analyst with the firm

Action plan



When buying patents:

- state the business case for buying – identify what problem you are solving;
- model a return for your buying programme;
- your buying operations must reflect that over 90% of the patents will not fit your needs – eliminating those patents from consideration early will greatly reduce your costs; and
- operationalise your buying programme as much as possible. This is becoming more common and is therefore more important for all buyers.

Programme parameters include:

- timeline – this is even more important than in previous years because the packages that are selling are selling faster;
- budget;
- buying team authority and responsibilities;
- buying criteria;
- listing of acceptable sources of patent packages; and
- special requirements, such as a whitelist of unlicensed companies.

The following is a fail-fast triage process for eliminating undesirable packages quickly:

- Extract criteria from the business case to identify interesting markets and technologies, and define the diligence needs.
- Undertake a multi-part analysis of markets, technical knowledge and legal analysis where a failure in any one area eliminates the package from further review.
- Track basic information about your programme so that you can learn from your past.

Tips for bidding and buying:

- Your valuation model determines a maximum bid price.
- Assume that diligence will take longer than planned.
- Consider adding a consulting agreement with the inventors if they are available.