2015 NPE Activity

Highlights



From the Editors

Every year, RPX produces a series of detailed reports on NPE (non-practicing entity) activity, covering patent infringement litigation, the transaction of patent assets in the marketplace, and a breakdown of the billions of dollars that companies have spent on related legal fees, settlements, and judgments. As we complete the collection and in-depth analysis of tens of thousands of data points for our 2015 reports, we offer a first look here—a preliminary accounting and perspective—of some key indicators for the year thus far.

NPE activity rebounded in 2015 after what now appears to have been a slowdown in the latter half of 2014.

NPE Litigation Rebounds

NPE activity rebounded in 2015 after what now appears to have been a slowdown in the latter half of 2014. Since last year, patent validity challenges under the America Invents Act (AIA) have continued to grow in popularity and enjoy measurable success. The Supreme Court's Alice decision has also begun proving its worth, invalidating many low-quality software patents asserted in NPE suits. In 2014, this combination of factors might have seemed insurmountable to NPEs; yet clearly, these and other defendant-friendly developments failed to slow the overall rate at which new lawsuits were filed in 2015.

Continuing Trends and NPE Responsiveness

The Eastern District of Texas, long thought to be the most plaintiff-friendly litigation venue, remains by far the district of choice for NPEs to bring suit. In fact, its popularity grew in the last two years, suggesting that NPEs have increasingly sought the most hospitable litigation environment possible while facing the headwinds of successful Alice and AIA patent validity challenges. Our data also show a mid-year surge in cases filed in Texas, a sign that NPEs were well aware of policymakers' focus on legislating venue restriction as a means of better balancing the playing field.

Three Years Later: The America Invents Act

Data on patent validity challenges brought under the AIA offer newer revelations. With 2015 in the books, there now exists a three-year span of data on inter partes reviews (IPRs) and covered business method (CBM) reviews as tools for defendants against NPE suits, tools that use an 18-month administrative process before the Patent Trial and Appeal Board (PTAB). The data thus far indicate that patent validity challenges before the PTAB can be powerful tools for defendants in litigation.

The information on the pages that follow—and RPX's deeper, detailed reports to come on NPE Litigation, the NPE Marketplace, and NPE Cost in 2015—are products of RPX's years-long, continual effort to bring increasing transparency to an opaque marketplace, where the value of patent assets is often distorted by the high cost of litigation. Each year, RPX expands its data set by the thousands and refines its analyses to better advance clarity and sensible decision-making in the exchange of patents by all participants in the market.

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Litigation Volume

In 2015, NPE litigation volume surpassed that of 2014—an indicator that NPEs remain busy despite rising popularity of AIA patent validity challenges and changes in the legal landscape. But that volume was not evenly distributed: new court procedural rules that took effect in December (which triggered a surge of hundreds of suits), and a spike in filings in the Eastern District of Texas during the summer, made outsized contributions to the year's robust showing and highlighted the adaptive nature of NPEs.

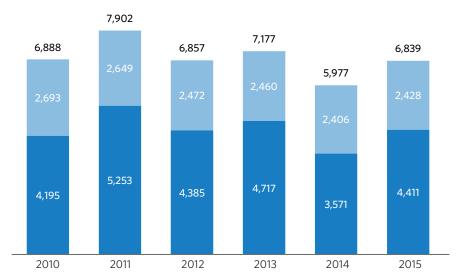
Chart 1: Patent Cases Filed

- Operating Company Cases
- NPE Cases

5.360 5,219 4,589 4,411 2,945 2,177 3,734 3,621 3,033 2,903 1,423 768 2010 2011 2012 2013 2014 2015 Chart 1 (cases filed) shows the total number of patent cases filed between 2010 and 2015. This chart offers a simple, baseline view of NPE litigation activity over time. However, the view is somewhat misleading because reforms in 2011 changed the rules for how plaintiffs could sue multiple defendants over the same patents, therefore changing how cases are counted. Chart 2 (case defendants) is a better measure, showing the total number of defendants added to those cases.

Chart 2: Total Defendants Added in Cases¹

- Total Defendants Added in Operating Company Cases
- Total Defendants Added in NPE Cases



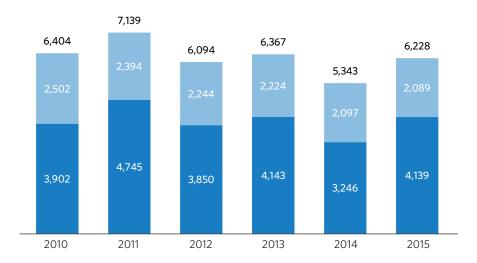
¹We have revised these figures to reflect recent improvements to our volume estimates of procedurally complex litigations (e.g. temporary administrative consolidations).

Litigation Volume

Chart 3 (campaign defendants) offers the most sophisticated measure: defendants added to litigation campaigns. RPX defines "campaigns" as clusters of litigation brought by the same plaintiff, each of which involves at least some of the same (or related) patents. (See Methodology for more details.) This measure cuts even further through the noise of procedural complexity to capture the impact of NPE litigation on defendants.

Chart 3: Total Defendants Added in Campaigns

- Total Defendants Added in Operating Company Campaigns
- Total Defendants Added in NPE Campaigns



Top Plaintiffs and Defendants

In 2015, the list of top ten NPE defendants remained much the same as in past years a lineup of global Internet and technology giants. However, a much broader range of large and smaller automotive, banking, retail, E-commerce, consumer products, and shipping companies also were targeted by the ten most active NPEs of the year.

Table 1: Top Ten NPE Defendants by Campaign Defendants Added Campaign counts differ from case counts. See Methodology for details.

Defendant	2015 Rank	Campaigns
Samsung	1	45
Apple	2	28
Amazon	3	27
AT&T	3	27
LG Electronics	5	26
HP	6	24
Microsoft	6	24
Dell	8	22
ZTE	8	22
нтс	10	21
Sony	10	21

Table 2: Top Ten NPEs by Campaign Defendants Added

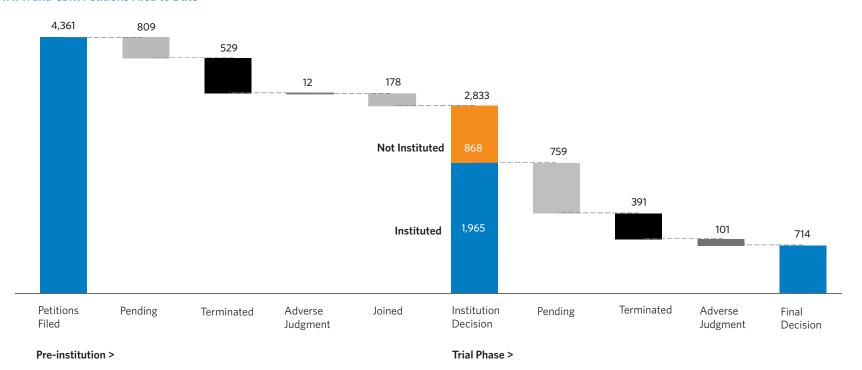
NPE	2015 Rank	Defendants
Leigh M. Rothschild	1	141
eDekka LLC	2	101
IPNav	3	96
Empire IP LLC	4	81
Wi-LAN Inc.	5	77
CryptoPeak Solutions, LLC	6	65
Shipping & Transit, LLC	6	65
Hawk Technology Systems LLC	8	59
Acacia Research Corporation	9	58
Olivistar LLC	10	57

Patent Validity Challenges

The 2011 America Invents Act introduced faster and more efficient means for challenging patent validity outside of district courts. While it is clear that IPRs and CBM reviews have indeed become frequently used weapons of choice against abusive patent suits, the data also indicate that the power of PTAB review is more nuanced than some statistics suggest.

As Chart 4 shows, to date, there have been 4,361 petitions filed for either IPR or CBM review. Those that have reached final written decision have been, on average, fairly successful. Likewise, about 69% of institution decisions—the point at which the PTAB either ends the challenge or proceeds to trial—have instituted trial on at least some of the petitioner's arguments. Those odds are good; however, data in 2014 and 2015 show that institution rates are on the decline.

Chart 4: IPR and CBM Petitions Filed to Date

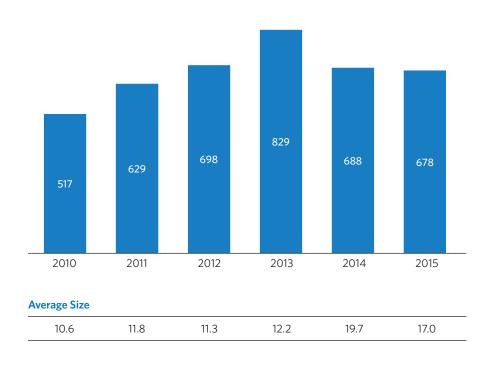


Pre-litigation Patent Market

RPX reviews a sizeable portion of patent portfolios offered for sale. The number of patent portfolios offered for sale reflects a desire by patent owners to test the ability to monetize their patent assets without resorting to a lengthy and inefficient assertion and litigation process. It also reflects desires by NPEs to look for portfolios to assert, and by operating companies to supplement existing portfolios.

Chart 5 shows portfolios offered to RPX across time—along with the average number of patents per portfolio. Although we have seen a relatively steady state in the numbers of portfolios offered, the average portfolio size has increased since 2010.

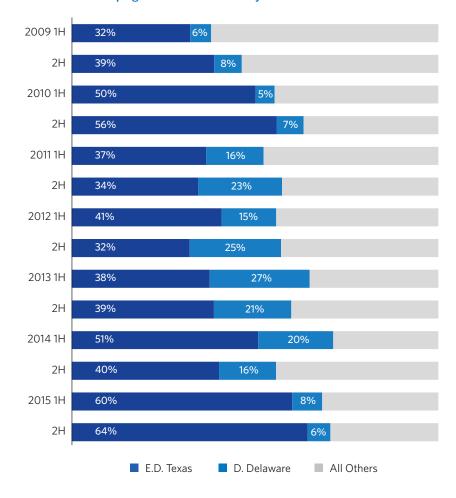
Chart 5: Portfolios Offered to RPX Shown with the Average Number of Patents per Portfolio ("Average Size")



Venue

NPEs sued more defendants in the Eastern District of Texas in 2015 than in any year since at least 2009. This surge is partly a sign of NPE opportunism: NPEs sued more defendants overall just in June 2015 than in any month since 2013, primarily in the Eastern District of Texas, perhaps due to rumors of venue reform emerging that same month. More significantly, the Eastern District's popularity has increased in the last three years, from 32% in late 2012 to 64% in late 2015. This increase is likely due to recent defendant-friendly changes—Alice (June 2014) and stays pending IPR (September 2012 onward)—that appear to be less effective in this venue, making it even more popular among NPE plaintiffs.

Chart 6: NPE Campaign Defendants Added by Venue



Methodology

RPX strives to continuously improve the accuracy and scope of its data and may make minor changes to methodology and underlying data presented in future analyses and reports. In addition, certain aspects of our methodology, such as the treatment of severances and consolidations, may result in slight changes as time passes.

NPE Definition

For the purposes of this report the following are considered NPEs:

- Patent assertion entities (PAEs): entities believed to earn revenue predominantly through asserting patents
- 2. Universities and research institutions
- 3. Individual inventors
- 4. Non-competing entities (NCEs): operating companies asserting patents outside their areas of products or services

Cases Filed, Total Defendants Added, and Unique Defendants Added

"Cases filed" refers to filed actions. A single case filed may include multiple defendants. The date for a case filed is the date that it was originally filed.

"Total defendants added" refers to the total number of case/defendant pairings added for a given criterion. New filings, as well as amended complaints that add a defendant, are taken into account in total defendants added.

"Unique defendants added" refers to the total number of entities that have been added as a defendant in a case (via original or amended complaint) for a given criterion. For example, if Company A has been added in seven cases in 2013, it still counts as one unique defendant added in 2013.

The date for determining total defendants added and unique defendants added is the date that a defendant was added to a case. This date may differ from the date the case was originally filed. For example, defendants added in amended complaints may be bucketed in a different time period than the period that applies for the case filed.

"NPE cases filed", "total NPE defendants added", and "unique NPE defendants added" have the same meaning as the above terms but are limited to cases filed by NPEs.

Campaign, New Campaigns Filed, Total Campaign Defendants, and Unique Campaign Defendants

"Campaign" refers to all cases filed by the same plaintiff (inclusive of all members in the corporate family), where each case has at least one patent or family member of a patent in common with another case in the campaign.

"Campaigns filed" refers to unique campaigns. The date for a campaign filed is the filing date of the first case filed in the campaign. For example, if a campaign includes ten cases, there will be only one new campaign filed; the filing date for the campaign is established by the filing date of the first case filed in the campaign.

"Total campaign defendants added" refers to the total number of campaign/defendant pairings for a given criterion.

"Unique campaign defendants added" refers to the total number of entities that have been added in a campaign for a given criterion.

The date for determining total campaign defendants added and unique campaign defendants added is the date a defendant was first added to a campaign.

"NPE campaigns filed", "total NPE campaign defendants added", and "unique NPE campaign defendants added" have the same meaning as the above terms but are limited to campaigns filed by NPEs.

Methodology

NPE Identification

RPX identifies NPEs through a manual review process performed by experienced employees with sophisticated knowledge of the patent industry.

The process includes, among other things, searching for evidence of operating or patent monetization activities on the Internet including company websites; reviewing complaints, with a focus on accused products and allegations regarding products and/ or services sold by the patent owner; considering the outside counsel employed by the entity (e.g. whether outside counsel has a history of representing NPEs); reviewing public filings; reviewing corporate disclosure statements filed in litigation; and soliciting market intelligence from patent professionals.

While there are elements of subjectivity in this approach, we believe that the process is robust based on feedback from other patent professionals.

Litigation Identification

RPX has manually reviewed for inclusion in this report all litigations with a nature-ofsuit code 830 (Patent) on PACER (Public Access to Court Electronic Records). Out of those cases, RPX has included only those with complaints that allege patent infringement. For example, RPX excludes false marking cases, misfiles, and ownership disputes.

Inter Partes Review and Covered Business Method Review Identification

RPX has reviewed for inclusion in this report all interpartes and Covered Business Method reviews made available through the Patent Trial and Appeal Board's Patent Review Processing System with case numbers starting with "IPR" or "CBM".

Inter partes review (IPR) is a proceeding that was introduced in September 2012 as part of the America Invents Act. A petitioner can request the US Patent and Trademark Office (USPTO) to review the patentability of one or more claims in a patent on the basis of prior art consisting of patents of printed publications.

Covered business method (CBM) review is another proceeding that was introduced in September 2012 as part of the America Invents Act. A petitioner that has been sued or threatened with suit on patents that claim certain types of financial business methods can request the USPTO to review the patentability of one or more claims in a patent on various grounds.

Declaratory Judgment Actions

Declaratory judgment actions are excluded unless otherwise expressly noted.

Corporate Families

RPX has developed a proprietary database of corporate families. All entities in a corporate family are generally treated as a single unique entity. Portfolio companies owned by private equity firms are a notable exception; they are treated as independent entities. To the extent multiple members of a corporate family are defendants in a lawsuit, RPX counts those entities as a single defendant. Corporate families may change over time. For example, M&A activity may result in consolidation of entities.

NPE Roll-up

RPX's proprietary litigation database rolls up certain related NPEs to a single NPE entity. RPX has manually identified these relationships by, among other things, reviewing corporate disclosures, patent assignment records, and RPX market intelligence. For example, Acacia has numerous subsidiaries that RPX has identified. These entities are all represented as Acacia in this report's analyses concerning the most prolific NPEs.

Transfers, Severances, and Consolidations

RPX takes into account transfers, severances, and consolidations as follows:

When a case is transferred, RPX counts the original action and the new action as a single case filed. RPX considers the filing date of the original action to be the case filing date.

Methodology

When several cases are consolidated, RPX counts the consolidation as one case filed but multiple total defendants added. RPX considers the filing date of the earliest-filed consolidated case to be the case filing date.

When a case is severed into multiple cases, RPX counts multiple cases filed. RPX considers the filing date of the original case to be the filing date of each of the severed cases.

Consolidations and severances may happen after the year of filing; in such circumstances, RPX's count of the number of cases filed for the year of filing will change as described above.

Market Sector Classifications

RPX has created a proprietary list of market sectors. RPX manually categorizes each case filed into a market sector based on a review of the accused products, defendants, and asserted patents.

In certain portions of this report, defendants are also classified into an RPX market sector. Classification of defendants is based on the type of NPE litigation that the defendant appears in most often.

First-time Defendants

First-time defendants are calculated on a normalized defendant basis based on the minimum defendant start date in an NPE litigation.

Data Set

This report uses data from the RPX database as of December 31, 2015. These data will be affected by the lag time between when cases are filed and when PACER makes case information available to the public. Thus, future analyses may shift, also due in part to any subsequent transfers, severances, and consolidations of cases from 2015.

About RPX

RPX Corporation (NASDAQ: RPXC) provides marketbased and technology solutions to help corporate legal departments reduce the risk and costs associated with both patent litigation and legal discovery services. Our patent risk management services address NPE (nonpracticing entity) patent litigation. Members of the RPX client network pay an annual fee that is calculated based on their net operating incomes. We then use this aggregated capital to acquire potentially problematic patents and rights from the pre-litigation market and out of active litigations before they can become a costly problem for our clients. RPX promises never to litigate or assert the patent assets it purchases.

In addition to our defensive patent acquisition service, RPX also facilitates syndicated transactions that include contributions from participating clients in addition to their annual subscription fees. Similar to other acquisitions, these syndicated deals are designed to efficiently share resources and collectively reduce litigation risk. And we offer unique NPE litigation insurance, written on A rated paper and backed by a Lloyd's underwriting syndicate. Further, RPX provides clients with in-depth industry data, market intelligence, and patent advisory services.

RPX subsidiary Inventus is a leading international discovery management provider focused on reducing the costs and risks associated with the discovery process through the effective use of technology solutions. Inventus has been providing litigation support services to corporate legal departments, law firms, and government agencies since 1991.

RPX has invested over \$2 billion to acquire more than 15,000 US and international patent assets and rights, achieved nearly 950 litigation dismissals, and prevented more than 4,000 NPE litigations from occurring. Since our founding in 2008, we have saved our clients more than \$3.2 billion in avoided NPE legal and settlement costs. The RPX network comprises more than 250 clients in sectors including automotive, consumer electronics and personal computing, E-commerce and software, financial services, media content and distribution, mobile communications, networking, and semiconductors.

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