2015 Patent Litigation Study
A change in patentee fortunes
Patent litigation: first decline in five years

- Number of patent lawsuits filed in 2014 dropped by 13%; dramatic shift from recent years
- Driven by Alice Corp. v. CLS Bank, which raised the bar for patentability and enforcement of software patents
- What will be the impact on future patent enforcement? Will existing patent cases before the US Supreme Court similarly impact litigation trends?

Number of patent lawsuits filed in 2014 dropped by 13%; dramatic shift from recent years

District rankings: the more things change, the more they stay the same

- Top five districts in terms of patent-holder favorability remain the same (Virginia Eastern; Delaware; Texas Eastern; Wisconsin Western; Florida Middle)
- Forum shopping really matters when it comes to success rates and damages
- If damages are motivating your litigation, would you consider a bench trial given the much lower median damages?

Jury decisions continue to climb

- Jury decisions account for 67% of identified cases in last five years (excluding ANDA cases)
- Median jury award is 31x greater than median bench award in last 5 years
- If damages are motivating your litigation, would you consider a bench trial given the much lower median damages?

Jury decisions account for 67% of identified cases in last five years (excluding ANDA cases)

Time-to-trial slows down

- Median time-to-trial is about 2.4 years
- As the number of patent lawsuits escalated dramatically over the last decade, the time-to-trial increased
- How is your company preparing for the long haul? Should you reconsider your litigation strategy given a longer period to resolution?

52% of appealed cases are modified in some regard

NPEs still carry a big stick, but face increased challenges

- Damages awards for NPEs are 4.5x greater than those for practicing entities over the last five years
- NPE cases concentrated in certain district courts: 5 district courts (of 94) account for 42% of all identified NPE decisions
- NPEs are 10% less successful overall
- Patent-eligible subject matter constrained following Alice Corp. v. CLS Bank decision
- Higher likelihood of the losing plaintiff having to reimburse defendant’s costs, following two 2014 Supreme Court decisions
- Will NPEs continue to litigate at similar rates as seen in the last decade? How will potential Congressional reform or court action impact NPE activity?

District rankings: the more things change, the more they stay the same

- Top five districts in terms of patent-holder favorability remain the same (Virginia Eastern; Delaware; Texas Eastern; Wisconsin Western; Florida Middle)
- Forum shopping really matters when it comes to success rates and damages
- Has your company ranked its most important litigation goals when choosing a venue? Is a speedy outcome worth lower damages or lower chances of prevailing?

52% of appealed cases are modified in some regard

Industry segmentation: large differences in median damages but similar success rates

- Consumer products leads in number of cases
- Biotech/pharma has highest median damages award, followed by telecommunications and medical devices
- Will these trends continue?

52% of appealed cases are modified in some regard

Leading Observations
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In a dramatic shift from recent years, the annual number of patent actions filed declined for the first time since 2009. Approximately 5,700 cases were filed in 2014—representing a drop of 13%. The decline in year-over-year growth is in stark contrast to the compound annual growth rate (CAGR) in the number of patent cases filed since 2009, which had been growing at 24% through 2013. The overall CAGR between 1991 and 2014 now stands at 7%. The decline in the number of patent cases filed is likely driven by various factors, the primary one being the Supreme Court’s June decision in *Alice Corp. v. CLS Bank*, which significantly impacted the ability to obtain and assert software patents.

In contrast, the number of patents granted by the United States Patent and Trademark Office (USPTO) continued to grow steadily, increasing by 14% over last year. Despite the divergence in 2014, there continues to be a very high correlation (approximately 95%) between the numbers of patent cases filed and patents granted.

**Figure 1. Patent case filings and grants**

Years are based on September year-end.

Sources: *Performance & Accountability Report* (USPTO) and *Judicial Facts and Figures* (US Courts)
Median damages trends

Median damages award continues downward trend

Adjusting for inflation using the consumer price index (CPI), the annual median damages award between 1995 and 2014 ranged from $1.9 million to $17.0 million, with an overall median award of $5.4 million over the last 20 years. In 2014, the median damages award was $2.0 million—the second-lowest point in 20 years.

Segmenting the 20-year period from 1995 through 2014 into four periods, we see a continued steep decline in the median damages award since 2000.

Gulf between NPE and practicing entity damages grows

Our analysis shows the continuation of a trend that began in the early 2000s: much higher damages awarded to NPEs relative to practicing entities. Unlike awards for practicing entities, NPE awards increased between the two most recent periods. In addition, the NPE median award has grown to almost 4.5x the median for practicing entities in the most current five-year period.

Figure 2. Median damages award

Median damages award (in $M)

<table>
<thead>
<tr>
<th>Period</th>
<th>NPEs</th>
<th>Practicing entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995–1999</td>
<td>$5.6</td>
<td>$5.7</td>
</tr>
<tr>
<td>2000–2004</td>
<td>$7.6</td>
<td>$5.8</td>
</tr>
<tr>
<td>2005–2009</td>
<td>$5.3</td>
<td>$7.5</td>
</tr>
<tr>
<td>2010–2014</td>
<td>$2.9</td>
<td>$5.0</td>
</tr>
</tbody>
</table>

The number of identified decisions is indicated in the top corner.

Figure 3. Median damages award: NPEs vs. practicing entities

Median damages award (in $M)

1995–1999: 61 decisions, 100 decisions, 152 decisions, 157 decisions
2000–2004: $5.6, $7.6, $5.8, $11.4
2005–2009: $5.3, $7.5, $5.0
2010–2014: $2.9, $2.0

NPEs
Practicing entities
No billion-dollar cases, but one 2014 award squeaks into the top 10

Large damages awards grab headlines. Since 2012—when three awards of $1 billion or more broke into the top ten list—no awards have even come close. However, 2014 saw one case, *Masimo Corporation v. Philips Electronics*, land in the top 10 list. This $467 million award involved technology for measuring blood oxygen levels. In another notable medical device case, Medtronic settled patent litigation with Edwards Lifesciences over heart valves for approximately $1.15 billion.

The table below displays the top ten initial damages awards since 1995. It is important to note that the awards reflected in the following table are those identified during initial adjudication—most have since been vacated, remanded or reduced, were settled while pending appeal, or are still under appeal.

**Figure 4. Top ten largest initial adjudicated damages awards: 1995–2014**

<table>
<thead>
<tr>
<th>Year</th>
<th>Plaintiff</th>
<th>Defendant</th>
<th>Technology</th>
<th>Award (in $M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Centocor Ortho Biotech Inc.</td>
<td>Abbott Laboratories</td>
<td>Arthritis drugs</td>
<td>$1,673</td>
</tr>
<tr>
<td>2007</td>
<td>Lucent Technologies Inc.</td>
<td>Microsoft Corp.</td>
<td>MP3 technology</td>
<td>$1,538</td>
</tr>
<tr>
<td>2012</td>
<td>Carnegie Mellon University</td>
<td>Marvell Technology Group</td>
<td>Noise reduction on circuits for disk drives</td>
<td>$1,169</td>
</tr>
<tr>
<td>2012</td>
<td>Apple Inc.</td>
<td>Samsung Electronics Co.</td>
<td>Smartphone software</td>
<td>$1,049</td>
</tr>
<tr>
<td>2012</td>
<td>Monsanto Company</td>
<td>E. I. du Pont de Nemours and Co.</td>
<td>Genetically modified soybean seeds</td>
<td>$1,000</td>
</tr>
<tr>
<td>2010</td>
<td>Mirror Worlds LLC</td>
<td>Apple Inc.</td>
<td>Operating system</td>
<td>$626</td>
</tr>
<tr>
<td>2005</td>
<td>Cordis Corp.</td>
<td>Medtronic Vascular, Inc.</td>
<td>Vascular stents</td>
<td>$595</td>
</tr>
<tr>
<td>2004</td>
<td>Eolas Technologies Inc.</td>
<td>Microsoft Corp.</td>
<td>Internet browser</td>
<td>$521</td>
</tr>
<tr>
<td>2011</td>
<td>Bruce N. Saffran, M.D.</td>
<td>Johnson &amp; Johnson</td>
<td>Drug-eluting stents</td>
<td>$482</td>
</tr>
<tr>
<td>2014</td>
<td>Masimo Corporation</td>
<td>Philips Electronics N. America Corp.</td>
<td>Device measuring blood oxygen levels</td>
<td>$467</td>
</tr>
</tbody>
</table>
Jury trials are favored overall

Unlike the 1980s and 1990s, the modern era of patent infringement litigation has seen juries evolve as the preferred trier of fact. In the last five years, the percentage of cases decided by a jury reached 67%, excluding Abbreviated New Drug Application (ANDA)-related litigation.¹

Jury vs. bench success gap narrows

Numerous factors contribute to the increasing use of juries. Over the last 20 years, patent holders have experienced higher trial success rates with juries than with the bench. However, the margin between bench and jury success rates has steadily narrowed over time.

Figure 5. Percent of cases decided by juries (excluding ANDA cases)

<table>
<thead>
<tr>
<th>Decade</th>
<th>Jury Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980s</td>
<td>14%</td>
</tr>
<tr>
<td>1990s</td>
<td>26%</td>
</tr>
<tr>
<td>2000s</td>
<td>61%</td>
</tr>
<tr>
<td>2010s</td>
<td>67%</td>
</tr>
</tbody>
</table>

Figure 6. Trial success rates: bench vs. jury

<table>
<thead>
<tr>
<th>Decade</th>
<th>Bench Success Rate</th>
<th>Jury Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995–1999</td>
<td>43%</td>
<td>81%</td>
</tr>
<tr>
<td>2000–2004</td>
<td>55%</td>
<td>78%</td>
</tr>
<tr>
<td>2005–2009</td>
<td>58%</td>
<td>77%</td>
</tr>
<tr>
<td>2010–2014</td>
<td>65%</td>
<td>75%</td>
</tr>
</tbody>
</table>

¹ These cases are, with rare exceptions, tried by the bench, and their increasing prevalence in recent years would otherwise skew this measure.
Still, median jury awards substantially outpace the bench

Since 2000, median jury awards have been significantly greater than median bench awards. This growing gap reflects the decrease in high-stakes damages cases that are heard by the bench, as large-stakes cases are almost always tried by juries.

Figure 7. Median damages award: bench vs. jury decisions

Median damages award (in $M)

Bench

Jury

$6.1 $4.7 $1.6 $13.3 $0.5 $8.0 $0.3 $9.4
Reasonable royalties are the most prevalent measure of damages

How are patent holders most often compensated for infringement?

Reasonable royalties are the type of damages most frequently awarded in patent cases, more than double the frequency of lost profits awards. There are several reasons why lost profits damages are not as common as reasonable royalties:

- Even patentees eligible for lost profits awards might eschew lost profits claims. Patent holders might not want to risk disclosing proprietary cost and profit information necessary for the calculation of lost profits.
- Lost profits entitlement can be more difficult to establish. The proliferation of competition and specialized distribution channels provides greater access to substitute products; therefore, even without an alleged infringer’s products on the market, consumers may not have bought the patentee’s product.
- NPEs, which bring an increasing proportion of patent actions, are ineligible for lost profits damages. Excluding NPE results, the proportion of damages awarded through reasonable royalties decreases by about 6%.
- Damages awards for price erosion claims have become almost nonexistent in recent years. The cost and complexity of price erosion analyses have reduced the recovery (and likely the pursuit) of price erosion claims.

Conjoint analysis: a new lens in calculating damages

The complexity of a quantification of lost profits and/or reasonable royalties is heightened when the analysis demands an identification of the portion of the accused product’s sales that are attributable to patented-infringing components, as opposed to non-patented elements. This apportionment analysis applies to many otherwise generic products with patented enhancements. The courts’ standards for such apportionment have become more rigorous, and, as a result, damages claims may require empirical data to apportion value to the patented components. Such evidence can be gathered through surveys and statistical analysis of consumer behavior. Conjoint analysis can provide insight on how customers value the product attributes (i.e., features; functionality; and benefits) that contribute to an overall product or service.

The analytical rigor of conjoint analysis can be applied to determine the most influential combination of product attributes on customer choice. The results can be honed to better understand differences in preferences amongst a core customer segment or across a wider market. The insights drawn can be used to illustrate relationships between customer demand and willingness to pay for individual product attributes.

Want to know more? Scan this code to access PwC’s Experience Radar.

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2 Because some litigants receive damages awards of both lost profits and reasonable royalties, the totals exceed 100%.
Success rates vary by type of entity and stage of decision

The overall success rate for practicing entities is almost 10% higher than that for NPEs over the last 20 years. NPEs are much less successful at the summary judgment stage: winning in only 4% of identified decisions, as opposed to 10% for practicing entities. Conversely, the trial success rates are comparable, at roughly two-thirds.

NPEs and practicing entities are more successful with juries

Both practicing entities and NPEs have been significantly more successful when juries decide their cases. Our analysis shows a divergence: while practicing entities enjoy a success rate 10% higher than NPEs when their cases are decided by the bench, their success rates with juries are the same.
Our research shows that the ten most active industry classifications (out of 20) collectively account for almost 90% of identified decisions. Patent cases associated with the consumer products industry were most prevalent between 1995 and 2014, representing 18% of all identified decisions.

Figure 11. Distribution of cases: top ten industries, 1995–2014
Median damages award is largest in biotech/pharma industry

While patents associated with the consumer products industry represented the largest percentage of identified decisions, their median damages award was relatively low compared to the nine other most active industries. Consistent with last year’s study, patented technology associated with the biotech/pharma, telecommunications and medical devices industries experienced a significantly higher median damages award than other industries.

Figure 12. Median damages award: top ten industries, 1995–2014

Median damages award (in $M)

Overall median damages award for all industries is about $5.4M

*The number of identified decisions is indicated within the respective circle.*

Medtech: Continue the innovation challenge

Innovation: the mere concept needs redefining in a health ecosystem that demands and rewards new models for delivering better care at lower costs across a broad patient population. Medtech companies should be ready to compete in this new environment, or risk being displaced by competitors that can show evidence that their innovations achieve the same high clinical standards but are faster, better, cheaper, and more integrated into a care delivery continuum that increasingly transcends geography. In many instances, these companies exist outside the traditional medtech realm. With all this change, there is opportunity.

In PwC’s report *Medtech companies prepare for an innovation makeover*, our Health Research Institute found several trends that medical device companies may want to take to heart, including:

- The value of a device is no longer solely in the product itself. While clinical efficacy is a must, the true value in medtech today is a company’s ability to provide information, services, and other assistance to customers to solve additional problems such as improving diagnostics, monitoring patients remotely, and more.

- Medtech companies are looking to open innovation as a key approach to drive future growth. However, medtech executives admit finding the right external partners with whom to collaborate is difficult.

To read *Medtech companies prepare for an innovation makeover* please scan this QR code.
Success rates fairly consistent across industries

While the overall success rate (trial and summary judgment combined) for all industries during the 20-year period was approximately 33%, holders of patents related to the consumer products, biotech/pharma, medical devices and computer hardware/electronics industries achieved success rates slightly higher than the overall median. The table below also demonstrates that success rates across the top ten industries were relatively consistent, deviating less than 10% from the 33% aggregate success rate for the study.
Telecommunications and computer hardware/electronics lead in jury decisions

The percentage of cases decided by juries varies significantly by industry. The wide disparity is highlighted by the difference in jury decisions between the biotech/pharma and telecommunications industries.

While the biotech/pharma industry experienced the highest median damages award, it had a considerably lower percentage of jury decisions than the other top ten industries. This is partly due to the frequent incidence of ANDA-related litigations, which are tried primarily by the bench. Removing ANDA-related litigation would increase the percentage of cases decided by juries in the biotech/pharma industry to 47%.

Figure 14. Percentage of cases decided by juries: top ten industries, 1995–2014

Consumer goods CEOs weigh in

The consumer products industry continues to encompass the highest volume of identified patent decisions, with a success rate that is generally higher than the overall median. Looking to the future, where are consumer products companies focusing their vision? How might these roads impact their patent litigation strategy?

• 57% of consumer goods CEOs are entering other sectors or considering doing so.
• 67% are concerned about the shift in consumer shopping patterns. Like their peers in other sectors, many consumer goods CEOs expect a range of disruptive forces—such as regulation, competition and changes in customer behavior—to reshape the commercial landscape.
• Consumer goods CEOs recognize the strategic significance of mobile technologies for engaging with customers, data analytics and cyber security tools. But they place slightly less weight on data analytics than their peers in other industries (74% versus 80% overall).
• Scan this QR code to learn more about what industry CEOs are concerned about.4

4 All stats from PwC’s 18th Annual Global CEO Survey, 2015.
Time-to-trial analysis

General slowdown over the last decade

Overall, time-to-trial has remained relatively steady, at about 2.4 years, since 2005. An increase of about one-third of a year is evident since 2000–2004, when case volume was significantly lower, and the median was just over two years.

Figure 15. Median time-to-trial

Median time-to-trial: extended to about 2.4 years
**District rankings**

Certain districts are more favorable to patent holders

Certain jurisdictions (particularly Virginia Eastern, Delaware, Texas Eastern and Wisconsin Western) continue to be more favorable venues for patent holders, with shorter time-to-trial, higher success rates and greater median damages awards. The table below presents the 15 most active districts and their categorical rankings for each of these metrics, with the overall ranking based on a simple average of the three.

The overall ranking of the districts remained relatively stable, with the top five districts in terms of favorability to patent holders remaining the same. California’s Northern District experienced the most significant change, dropping from tenth place last year to thirteenth.

### Figure 16. District court rankings: 1995–2014

The rankings for these courts are based on their relative ranking for each of the three measures, equally weighted.

<table>
<thead>
<tr>
<th>Overall rank</th>
<th>District</th>
<th>Median time-to-trial (in years)</th>
<th>Rank</th>
<th>Overall success rate</th>
<th>Rank</th>
<th>Median damages award</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Virginia Eastern</td>
<td>1.0</td>
<td>1</td>
<td>30%</td>
<td>8</td>
<td>$32,619,063</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Delaware</td>
<td>2.0</td>
<td>5</td>
<td>43%</td>
<td>4</td>
<td>$16,257,851</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Texas Eastern</td>
<td>2.3</td>
<td>7</td>
<td>55%</td>
<td>1</td>
<td>$8,949,616</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Wisconsin Western</td>
<td>1.1</td>
<td>2</td>
<td>32%</td>
<td>7</td>
<td>$6,484,809</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Florida Middle</td>
<td>1.8</td>
<td>3</td>
<td>55%</td>
<td>2</td>
<td>$192,839</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Texas Southern</td>
<td>2.0</td>
<td>4</td>
<td>22%</td>
<td>15</td>
<td>$57,959,587</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Texas Northern</td>
<td>2.4</td>
<td>8</td>
<td>46%</td>
<td>3</td>
<td>$3,702,082</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>New Jersey</td>
<td>2.7</td>
<td>12</td>
<td>34%</td>
<td>5</td>
<td>$16,850,037</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>California Central</td>
<td>2.2</td>
<td>6</td>
<td>29%</td>
<td>10</td>
<td>$3,189,642</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>New York Southern</td>
<td>2.5</td>
<td>9</td>
<td>28%</td>
<td>11</td>
<td>$3,625,039</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>Massachusetts</td>
<td>3.6</td>
<td>14</td>
<td>32%</td>
<td>6</td>
<td>$2,735,082</td>
<td>12</td>
</tr>
<tr>
<td>12</td>
<td>Minnesota</td>
<td>2.7</td>
<td>11</td>
<td>30%</td>
<td>9</td>
<td>$1,674,563</td>
<td>13</td>
</tr>
<tr>
<td>13</td>
<td>California Northern</td>
<td>2.7</td>
<td>13</td>
<td>26%</td>
<td>13</td>
<td>$5,391,311</td>
<td>8</td>
</tr>
<tr>
<td>14</td>
<td>Illinois Northern</td>
<td>3.7</td>
<td>15</td>
<td>26%</td>
<td>12</td>
<td>$6,074,044</td>
<td>7</td>
</tr>
<tr>
<td>15</td>
<td>Florida Southern</td>
<td>2.5</td>
<td>10</td>
<td>23%</td>
<td>14</td>
<td>$386,133</td>
<td>14</td>
</tr>
<tr>
<td><strong>Overall (all decisions identified)</strong></td>
<td><strong>2.3</strong></td>
<td><strong>33%</strong></td>
<td><strong>$5,391,311</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NPE decisions concentrated in a few districts

Cases with NPEs as patent holders were concentrated in a few districts. The top five districts (out of 94 total) with the most identified decisions involving NPEs accounted for 42% of all identified decisions—and the top ten districts accounted for 58%. The percentage of NPE decisions in the most active NPE districts continues to increase, indicating continued concentration of NPE cases in certain courts.

The districts with the most identified NPE decisions, however, present a dichotomy in relative NPE success rates. Texas Eastern, with the most identified NPE cases by far, also has one of the highest success rates, almost double the NPE average. However, the next three districts yielded success rates roughly 10% or more below the overall NPE average of 26%.

Figure 17. District courts with most identified decisions with NPE as patent holder: 1995–2014

<table>
<thead>
<tr>
<th>District</th>
<th>Decisions involving NPEs</th>
<th>Total identified decisions</th>
<th>NPE % of total decisions</th>
<th>NPE success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Eastern</td>
<td>55</td>
<td>148</td>
<td>37%</td>
<td>49%</td>
</tr>
<tr>
<td>Illinois Northern</td>
<td>36</td>
<td>148</td>
<td>24%</td>
<td>17%</td>
</tr>
<tr>
<td>New York Southern</td>
<td>34</td>
<td>142</td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td>California Northern</td>
<td>31</td>
<td>171</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>Delaware</td>
<td>26</td>
<td>221</td>
<td>12%</td>
<td>35%</td>
</tr>
<tr>
<td>California Central</td>
<td>17</td>
<td>95</td>
<td>18%</td>
<td>35%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>15</td>
<td>82</td>
<td>18%</td>
<td>33%</td>
</tr>
<tr>
<td>Florida Southern</td>
<td>14</td>
<td>43</td>
<td>33%</td>
<td>14%</td>
</tr>
<tr>
<td>Pennsylvania Eastern</td>
<td>11</td>
<td>35</td>
<td>31%</td>
<td>18%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>10</td>
<td>50</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Texas Southern</td>
<td>10</td>
<td>50</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>DC</td>
<td>10</td>
<td>24</td>
<td>42%</td>
<td>0%</td>
</tr>
<tr>
<td>Virginia Eastern</td>
<td>10</td>
<td>56</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Texas Northern</td>
<td>9</td>
<td>35</td>
<td>26%</td>
<td>56%</td>
</tr>
<tr>
<td>US Court of Federal Claims</td>
<td>8</td>
<td>20</td>
<td>40%</td>
<td>13%</td>
</tr>
<tr>
<td>Florida Middle</td>
<td>8</td>
<td>38</td>
<td>21%</td>
<td>63%</td>
</tr>
<tr>
<td>Colorado</td>
<td>7</td>
<td>27</td>
<td>26%</td>
<td>43%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>7</td>
<td>96</td>
<td>7%</td>
<td>14%</td>
</tr>
<tr>
<td>Pennsylvania Western</td>
<td>6</td>
<td>17</td>
<td>35%</td>
<td>67%</td>
</tr>
<tr>
<td>Maryland</td>
<td>6</td>
<td>18</td>
<td>33%</td>
<td>0%</td>
</tr>
<tr>
<td>Michigan Eastern</td>
<td>6</td>
<td>44</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>All identified decisions</td>
<td>432</td>
<td>2,162</td>
<td>20%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Includes districts with more than 5 identified decisions involving an NPE as the patent holder.
**Practicing entities and NPEs: By the numbers**

The median damages award for NPEs was significantly higher than that of practicing entities, while practicing entities enjoyed higher success rates and slightly shorter median time-to-trial.

We further analyzed NPE litigation by NPE type: (1) companies/for-profit organizations, (2) universities/non-profit organizations, and (3) individuals/inventors.

The median damages award for NPEs that are universities/non-profits surpassed damages awarded to companies/for-profit organizations, an interesting change from prior years. NPEs that are individuals/inventors continue to lag in median damages.

Individual NPEs also lag far behind in success rates. As with median damages, universities/non-profits lead the pack in overall success.

**Figure 18. Key statistics for practicing entities and NPEs: 1995–2014**

<table>
<thead>
<tr>
<th></th>
<th>Median time-to-trial (in years)</th>
<th>Overall success rate</th>
<th>Median damages award</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPEs</td>
<td>2.6</td>
<td>26%</td>
<td>$9,163,544</td>
</tr>
<tr>
<td>Practicing entities</td>
<td>2.3</td>
<td>35%</td>
<td>$4,586,077</td>
</tr>
</tbody>
</table>

**Figure 19. Patent holder median damages award by NPE type: 1995–2014**

- **Company**: Median damages award ($11.5M), 31% success rate (64/206 cases)
- **University & non-profit**: Median damages award ($16.2M), 48% success rate (11/23 cases)
- **Individual**: Median damages award ($3.0M), 18% success rate (36/203 cases)

The median damages award for NPEs that are universities/non-profits surpassed damages awarded to companies/for-profit organizations, an interesting change from prior years. NPEs that are individuals/inventors continue to lag in median damages.

**Figure 20. Patent holder success rates by NPE type: 1995–2014**

- **Company**: 31% success rate, 64/206 cases
- **University & non-profit**: 48% success rate, 11/23 cases
- **Individual**: 18% success rate, 36/203 cases

The number of cases is indicated within the respective column.
Statistics by judge

We also captured information on the presiding judge in identified patent litigation disputes. The table below represents statistics for the judges with the most identified decisions from 1995–2014. The median damages award in cases presided over by nine of these judges significantly exceeds the overall median damages award, possibly indicating that larger disputes tend to be handled by more experienced judges.

Interestingly, patent holder success rates for seven of these judges also exceeds the overall success rate, particularly in the Eastern District of Texas.

Figure 21. Most active district court judges: 1995–2014

<table>
<thead>
<tr>
<th>Rank</th>
<th>Judge last name</th>
<th>Judge first name</th>
<th>District</th>
<th>Identified decisions</th>
<th>Identified trial decisions</th>
<th>Median damages award</th>
<th>Overall success rate</th>
<th>Median time-to-trial (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Robinson</td>
<td>Sue</td>
<td>Delaware</td>
<td>72</td>
<td>42</td>
<td>$21,900,503</td>
<td>38%</td>
<td>1.9</td>
</tr>
<tr>
<td>2</td>
<td>Sleet</td>
<td>Gregory</td>
<td>Delaware</td>
<td>33</td>
<td>29</td>
<td>$21,624,925</td>
<td>58%</td>
<td>1.9</td>
</tr>
<tr>
<td>3</td>
<td>Davis</td>
<td>Leonard</td>
<td>Texas Eastern</td>
<td>30</td>
<td>22</td>
<td>$8,895,467</td>
<td>63%</td>
<td>2.4</td>
</tr>
<tr>
<td>4</td>
<td>Stark</td>
<td>Leonard</td>
<td>Delaware</td>
<td>23</td>
<td>11</td>
<td>$16,001,822</td>
<td>48%</td>
<td>2.1</td>
</tr>
<tr>
<td>5</td>
<td>Clark</td>
<td>Ron</td>
<td>Texas Eastern</td>
<td>15</td>
<td>13</td>
<td>$6,950,660</td>
<td>73%</td>
<td>1.8</td>
</tr>
<tr>
<td>6</td>
<td>Huff</td>
<td>Marilyn</td>
<td>California Southern</td>
<td>12</td>
<td>7</td>
<td>$42,854,609</td>
<td>42%</td>
<td>2.1</td>
</tr>
<tr>
<td>7</td>
<td>Young</td>
<td>William</td>
<td>Massachusetts</td>
<td>12</td>
<td>4</td>
<td>$236,890</td>
<td>17%</td>
<td>1.7</td>
</tr>
<tr>
<td>8</td>
<td>Darrah</td>
<td>John</td>
<td>Illinois Northern</td>
<td>11</td>
<td>3</td>
<td>$10,301,716</td>
<td>9%</td>
<td>3.5</td>
</tr>
<tr>
<td>9</td>
<td>Alsup</td>
<td>William</td>
<td>California Northern</td>
<td>11</td>
<td>4</td>
<td>$19,394,779</td>
<td>9%</td>
<td>1.6</td>
</tr>
<tr>
<td>10</td>
<td>Gilstrap</td>
<td>Rodney</td>
<td>Texas Eastern</td>
<td>11</td>
<td>9</td>
<td>$8,241,792</td>
<td>64%</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Summary appellate statistics

For the second time, our study analyzed appellate outcomes in patent litigations from the Federal Circuit. Our analysis began with district court decisions originally tried between 2006 and 2012, which ensured that the large majority of cases appealed had reached a conclusion at the Federal Circuit. We then researched the appellate status of such cases through 2014.

Overall, appeals were lodged in 75% of cases analyzed. While less than 1% of appeals remain pending and 22% of appeals were dismissed or settled, over three-fourths (77%) of appeals have reached a conclusion. Additionally, 61% of the appealed cases received a written opinion and 16% resulted in summary affirmances, where the Federal Circuit upheld the district court decision without further explanation or discussion.

Figure 22. Status of district court cases: 2006–2012 decisions
Which party appeals more often? It depends on your perspective...

The alleged infringer appeals more often overall (28% individually) than the patent holder (21% individually) after trial. This reflects the fact that patent holders win more often at trial (70% trial win rate in 2005–2014), and thus have less reason to appeal. As would be expected, the “loser” of the district court trial appeals more often.

However, adding the perspective of who won and who lost at trial gives a more nuanced view of who appeals more often. Based on our data, losing patent holders appeal more often (46% individually) than losing alleged infringers (38% individually).

Further, 10% of successful patent holders and 7% of successful alleged infringers appeal individually. This demonstrates that even a favorable outcome at the district court can leave a party not fully satisfied, whether on issues involving the patent claims, product and territory coverage, damages awarded, pre-/post-judgment interest, enhanced damages, or permanent injunction.

Figure 23. Appeals after district court decisions: 2006–2012
Appellate outcomes: a mixed bag

Our analysis shows that 33% of appealed patent infringement cases were mixed decisions; that is, some aspects of the appeal were affirmed while others were reversed, remanded or vacated. Additionally, almost half of cases were affirmed in total and 19% were entirely reversed, vacated and/or remanded.

In total, roughly equal portions of appealed cases are affirmed in total (48%) as are modified in some regard (52%). The likelihood of any given appeal outcome varies according to which party won or lost the initial district court case. In cases where the patent holder lost at district court, about two-thirds of the appeals are affirmed in total, with the balance being modified in whole or in part. Conversely, where the patentee won at district court, around two-thirds of the appeals are modified in whole or in part.

We also analyzed damages issues in the context of appeals. Of the appellate opinions we examined (excluding summary affirmances), 18% discussed substantive damages issues. Of these opinions, 80% had damages issue(s) reversed, vacated and/or remanded—i.e., modified in some regard.

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Figure 24. Appeal outcome by success of patent holder in district court: 2006–2012

5 The 2014 Patent Litigation Study reported incorrect figures for this chart. Corrected figures for 2014 are: Affirmed in total-44%; Reversed/vacated/remanded-21%; Mixed decisions-35%.

(*) Mixed decisions are decisions in which the appeal was both affirmed in part and reversed, vacated or remanded in part.
Results vary by originating district

When assessing the distribution of appeal outcomes among the five district courts with the most appeals during the 2006–2012 time period, Texas Eastern and California Northern align with the overall percentage of cases affirmed. However, Delaware, New Jersey and New York Southern saw affirmation at roughly 60%. Rates of cases reversed, remanded and vacated in total were generally consistent with the overall 19% finding; however, New York Southern had only 9% completely overturned (i.e., reversed/vacated/remanded).

Figure 25. Appeal outcomes from top five district courts: 2006–2012
Methodology

To study the trends related to patent decisions, PwC identified final decisions at summary judgment and trial recorded in two Lexis Advance databases, US District Court Cases and Jury Verdicts and Settlements, as well as in corresponding docket entries from LexisNexis Courtlink.

The study identified 2,162 district court patent decisions issued since 1995. Some figures cited in this study have been rounded: therefore totals may not equal the sum of their components.

Definitions for important terms used throughout the study are listed here:

- **Cases decided at summary judgment** include those district court patent infringement cases where a judge has issued a dispositive opinion regarding invalidity and/or infringement at summary judgment.

- **Cases decided at trial** include those district court patent infringement cases where a decision was rendered by a judge or jury after trial.

- **Success** includes instances where a liability decision was made in favor of the patent holder.

- **Time-to-trial** is calculated from the complaint date to the first day of either the bench or jury trial for each case.

- **Nonpracticing entity (NPE)** is an entity that does not have the capability to design, manufacture, or distribute products with features protected by the patent.

- **Median damages** have been adjusted for inflation to 2014 US dollars.
Authors

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