Advisory services

# A closer look*

## 2008 Patent Litigation Study: Damages awards, success rates and time-to-trial


*connectedthinking

PricewaterhouseCoopers

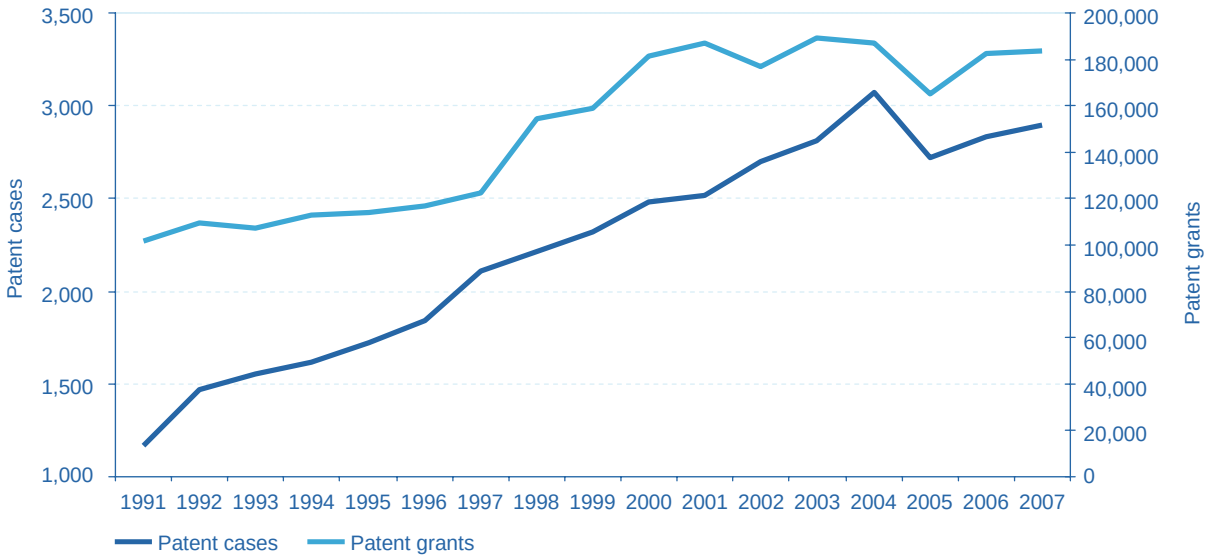
# The heart of the matter

With the current threat of an economic recession, commercial litigation and, in particular, patent litigation is picking up. This comes at a moment of heightened action in the patent arena:  a recent damages award of $1.5 billion, eight other damages awards in federal district courts exceeding $100 million in the past three years alone, judicial decisions reducing the likelihood of permanent injunctions and scope of eligible damages, proposed legislation to reduce the availability of damages, and a continuing increase in patents granted and actions filed. Indeed, senior executives are facing a myriad of issues on the use of litigation to protect and monetize their patented products and ideas. Although the risks in patent litigation have increased, the damages awards remain significant. These issues also raise questions about companies' patent positions, protection and enforcement strategies, and litigation tactics.

The 2007 *Microsoft v. Alcatel-Lucent* damages award of $1.5 billion in Federal District Court (since reversed by the Court of Appeals for the Federal Circuit, CAFC) draws attention to the magnitude of the economic impact in patent litigation. While the appellate process continues, if the award stands, it would be the largest damages award in US patent litigation history. On the other hand, recent Supreme Court decisions have reduced the leverage of patent holders in enforcing their intellectual property rights. Implications from the decision in *eBay v. MercExchange* indicate a weakening of the negotiating position for patent holders due to a lower threat of injunctive relief. The decision in the *MedImmune v. Genentech* matter reduced the financial and willfulness exposure to a licensee in challenging the validity of a licensor's patent. The decision in the *Microsoft v. AT&T* matter restricted damages from infringing foreign sales. And, the *KSR v. Teleflex* decision broadened the view of patent obviousness, potentially contributing to increased findings of invalidity. On the legislative front, the pending Patent Reform Act of 2007 attempts to reduce the damages available to patent holders by utilizing royalty apportionment and easing the defense on a claim of willfulness. These judicial and legislative developments have curtailed the enforcement capability of patent holders, causing many executives to reassess the associated cost-benefits.

Although the impact of judicial decisions and prospective legislation remains to be seen, patent holders continue to assert their patented innovations before the federal courts at a significant and increasing clip. The number of patent infringement actions filed was 2,896 in 2007, lower than the 3,075 cases in 2004, but with a compound average growth rate (CAGR) of 5.8% since 1991. Meanwhile, the number of patents granted has also risen with a CAGR of 3.8% since 1991—about two-thirds the growth rate of new case filings of patent infringement. 2007 witnessed an increase in the number of patents granted from 182,687 in 2006 to 183,831, as shown in Chart 1. Various regulatory initiatives have been introduced to improve the quality of patents granted, as well as to restrict continuations or practices that would lead to uncertain patent expiration dates. In all, these trends suggest that corporations continue to realize value from patenting by the protection provided to their product commercialization initiatives, as well as through enforcement and other monetization efforts.

**Chart 1: Patent Case Filings and Grants**




Years are based on September year-end.

Sources: *U.S. Patent and Trademark Office: Performance and Accountability Report* and *U.S. Courts: Judicial Facts and Figures*

Reflecting these trends and developments, PricewaterhouseCoopers (PwC) has compiled and maintained a comprehensive database of patent damages awards (from 1980 through 2007), as well as patent holder success rates, appellate reversals and modifications, and time-to-trial statistics (from 1995 through 2007). Based upon this study, several observations can be made to help executives and litigators in assessing their patent enforcement and monetization decisions, while informing on litigation tactics.

## In a nutshell:

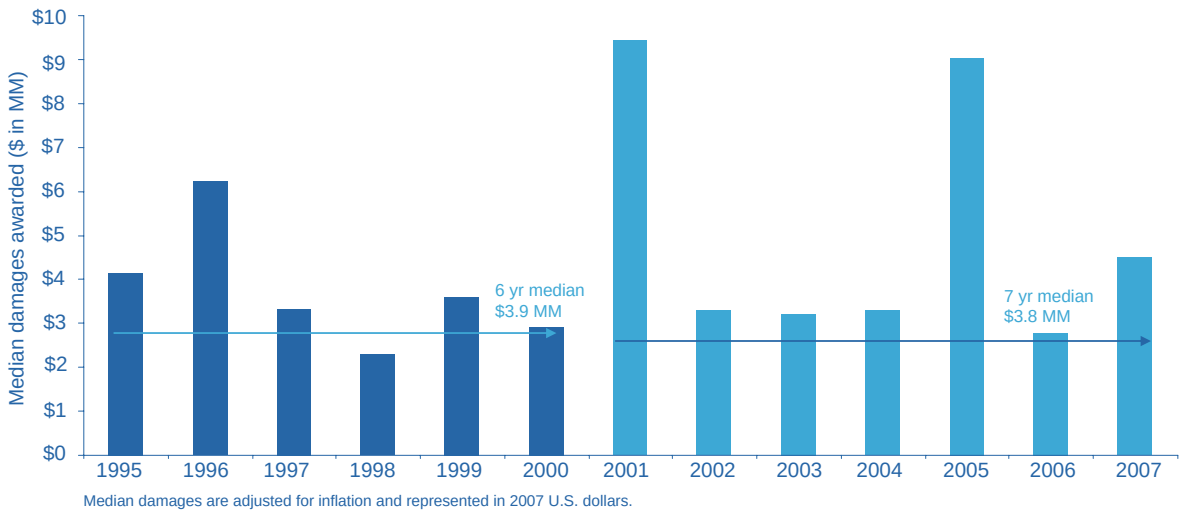
- The annual median damages award since 1995 has remained fairly consistent, when adjusted for inflation.
- The disparity between jury and bench awards has widened and is likely the contributing factor in the significant increase in use of juries since 1995.
- Reasonable royalties continue to be the predominant measure of damages awards.
- Patent holders have been successful 37% of the time overall, with a 19% win rate in summary judgments and a 57% win rate at trial.
- Alleged infringers increase their trial success rates slightly as plaintiffs, but have not experienced the same increased success in summary judgments.
- While the median time-to-trial has remained fairly constant since 1995, significant variations arise by jurisdiction, and patent holder success rates tend to decrease with longer time-to-trial, up to a point.
- Certain federal district courts (particularly Virginia Eastern, California Central, and Pennsylvania Eastern) continue to be more favorable to patent holders, with shorter time-to-trial, higher success rates, and higher median damages awards.
- 32% of summary judgments are appealed, with 59% modified or reversed; while 43% of trial decisions are appealed, with 67% modified or reversed.

# An in-depth discussion

## The annual median damages award since 1995 has remained fairly consistent, when adjusted for inflation.

Adjusting for inflation using the Consumer Price Index (CPI), the median annual damages award has remained fairly stable over the last 13 years. The median was $3.9 million from 1995 through 2000, and $3.8 million from 2001 through 2007. There are a few exceptions (1996, 2001, and 2005), as evidenced in Chart 2A; however, those exceptions are influenced by significantly fewer cases with damages under $1 million.

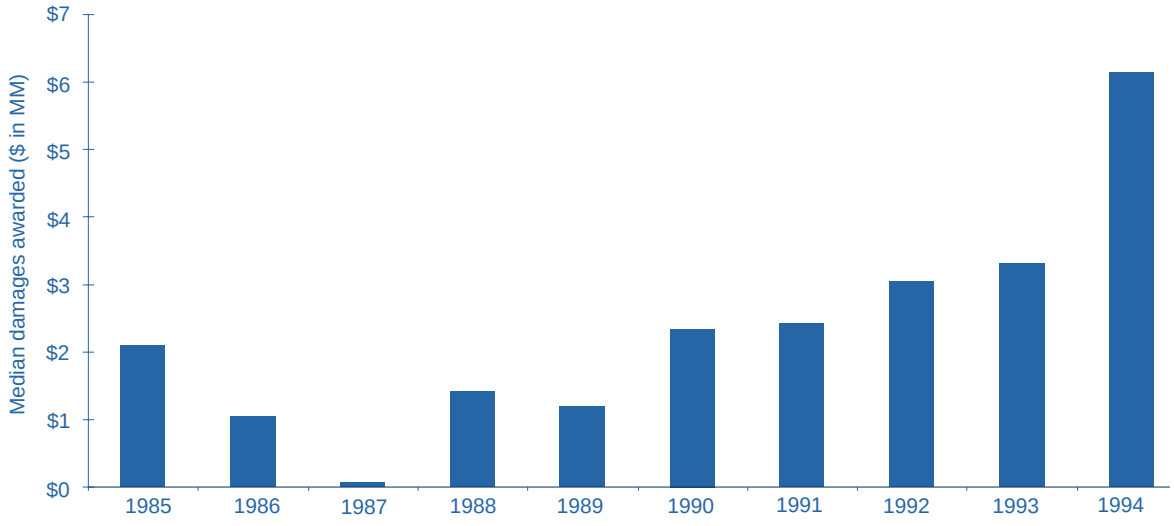
**Chart 2A: Median Damages Awarded: 1995 to 2007**




Median damages are adjusted for inflation and represented in 2007 U.S. dollars.

As shown in Chart 2B, prior to 1995, the annual median awards of patent infringement cases were generally increasing. The median went from $2.1 million in 1985 to $6.1 million in 1994.

**Chart 2B: Median Damages Awarded: 1985 to 1994**




Median damages are adjusted for inflation and represented in 2007 U.S. dollars.

Chart 2C illustrates that median damages awards by industry vary dramatically, with the telecommunications sector experiencing the highest exposure to damages at a median award of over $31 million since 1995. Roughly one-third of the telecommunications cases, involving damages awards, were tried in either Texas Eastern or Texas Northern District Court. These courts appear to be a magnet for telecommunications patent holders, with the latest high-profile *Motorola v. RIM* case being filed there as well. Additionally, telecommunications and medical devices have been the most active industries for adjudicated decisions on damages.

**Chart 2C: Median Damages Awarded by Industry: 1995 to 2007**

| Industry | # of decisions | Median damages awarded |
|---|---|---|
| Automotive | 7 | $34,108 |
| Biotechnology | 14 | $4,876,728 |
| Business services | 11 | $1,620,359 |
| Medical devices | 38 | $6,036,747 |
| Mining | 14 | $8,802,521 |
| Misc. manufactured goods | 8 | $1,350,627 |
| Office equipment | 6 | $8,037,748 |
| Pharmaceuticals | 17 | $1,374,833 |
| Software | 11 | $8,529,664 |
| Telecommunications | 37 | $31,362,353 |

Median damages are adjusted for inflation and represented in 2007 U.S. dollars. The industry sectors in the table above represent 61% of the decisions with identified damages data included in the study.

Despite the leveling of overall median damages awards since 1995, landmark damages awards continue to make corporate management keenly aware of the risks and rewards for enforcing their patent rights. Since 2005, there have been several significant federal district court rulings with damages awards exceeding $100 million, as displayed in Chart 2D. While some of these matters are still in the appellate process, others have been upheld by the CAFC.

**Chart 2D: Damages Awards Exceeding $100 Million: 2005 to 2007**

| Year | Defendant | Plaintiff | Technology | Award (in MM) |
|---|---|---|---|---|
| 2007 | Microsoft | Alcatel-Lucent | MP3 technology | $1,500.0 |
| 2007 | Medtronic | DePuy Spine | Spinal implant devices | $226.3[†] |
| 2007 | WL Gore & Associates | C.R. Bard Inc | Vascular and stent-grafts | $185.0 |
| 2007 | Microsoft/Autodesk | z4 Technologies Inc | Anti-piracy software program | $160.0[†] |
| 2006 | Hynix | Rambus | Memory chips | $133.0 |
| 2005 | AT&T Wireless/Alltel | Freedom Wireless, Inc | Prepaid wireless service | $128.0 |
| 2006 | Alcon Inc | Advanced Medical Optics | Fluidics for eye surgery | $121.0 |
| 2007 | Vonage | Verizon | Internet telephony technology | $117.5 |
| 2006 | DirecTV | Finisar Corp | On-demand television | $115.9 |

[†]These damages have been upheld by the Court of Appeals for the Federal Circuit (CAFC).

In addition to these recent activities, other landmark damages awards over the last 20 years also include those listed in Chart 2E. Many of these cases serve as precedents in different industries, setting the bar at a high level for patent damages awards.

**Chart 2E: Landmark Damages Awards: 1985 to 2007**

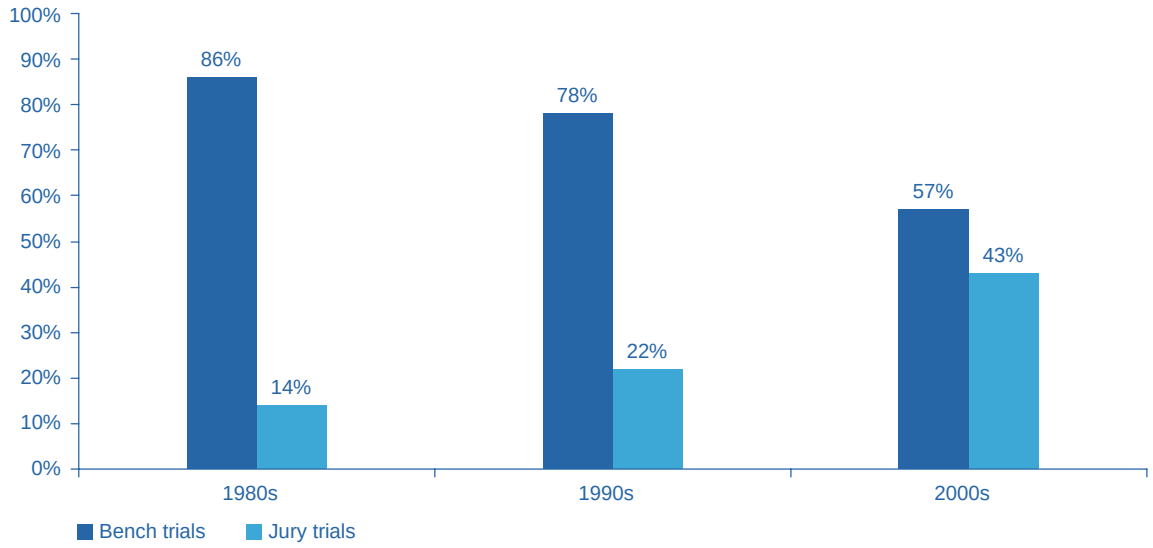
| Year | Defendant | Plaintiff | Technology | Award (in MM) |
|---|---|---|---|---|
| 1990 | Kodak | Polaroid | Instant photo camera | $910.0† |
| 2003 | Microsoft | Eolas Technologies | Internet browser | $521.0† |
| 2002 | Roche Diagnostics | Igen International | ECL technology | $505.0 |
| 1994 | Nintendo | Alpex Computer | Video games | $260.0 |
| 1986 | Hughes Tool Co | Smith International | Seal rings on drill bits | $205.0† |
| 1997 | Paragon Trade Brands, Inc | Procter & Gamble Co | Disposable baby diapers | $178.4† |

†These damages have been upheld by the Court of Appeals for the Federal Circuit (CAFC).

## The disparity between jury and bench awards has widened and is likely the contributing factor in the significant increase in use of juries since 1995.

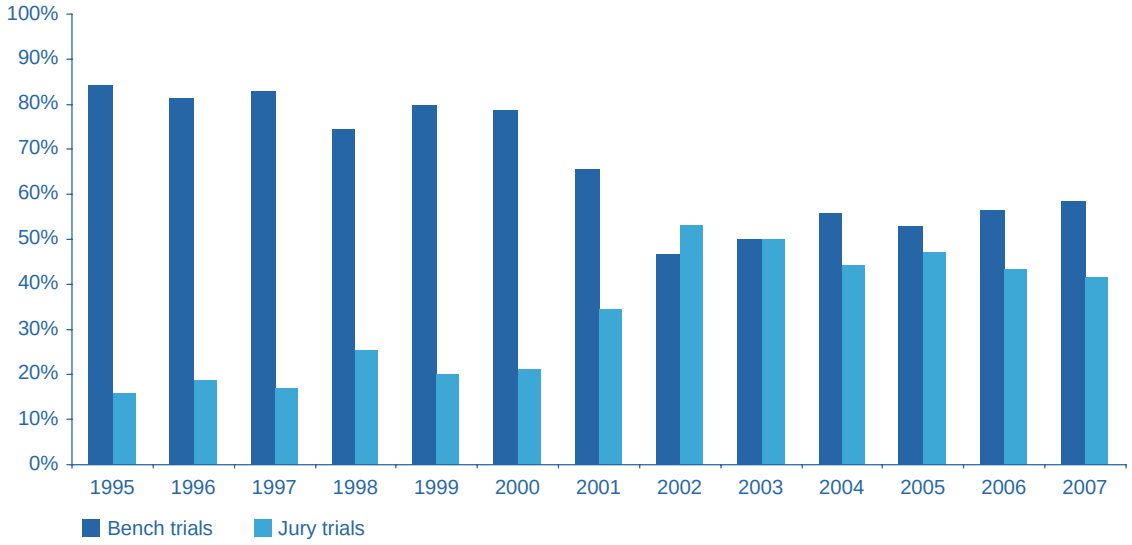
In 2007, the percent of jury trials (42%) versus bench trials (58%) was consistent with 2006 (jury trials 43% versus bench trials 57%). That said, there has been a marked increase in jury trials since the 1980s, with the shift becoming more evident since 1995. As shown in Chart 3A, prior to 2000, juries decided only 14% of the cases with damages awards during the 1980s and 22% during the 1990s. In this decade, juries have decided 43% of the cases with damages awards.

**Chart 3A: Use of Bench v. Jury Trials by Decade**



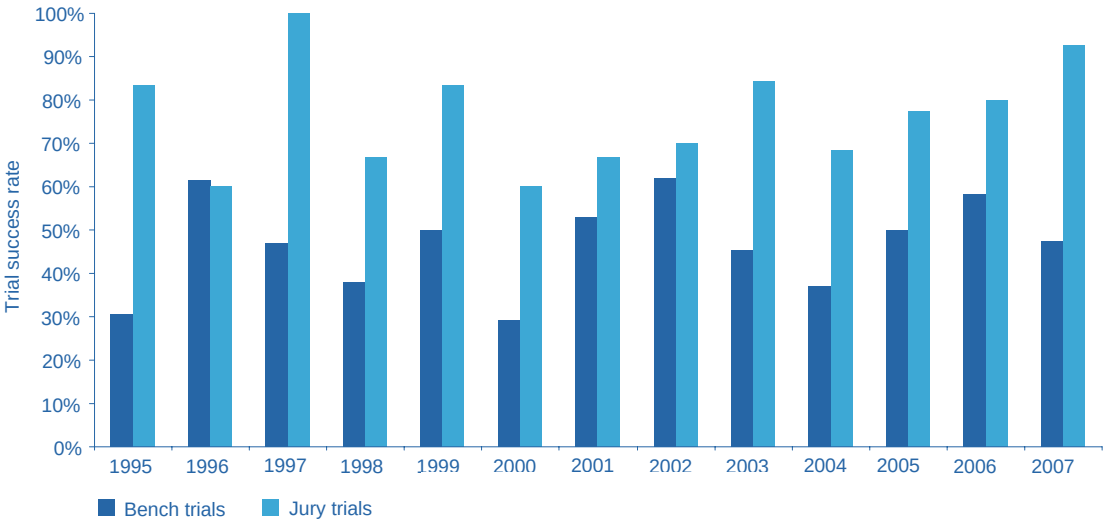
Focusing on the time period since 1995, Chart 3B shows that jury decisions have increased from 16% to 42%, briefly overtaking bench trials in 2002 as the preferred forum, before settling back in mid-40% range in the later 2000s.

**Chart 3B: Use of Bench v. Jury Trials: 1995 to 2007**



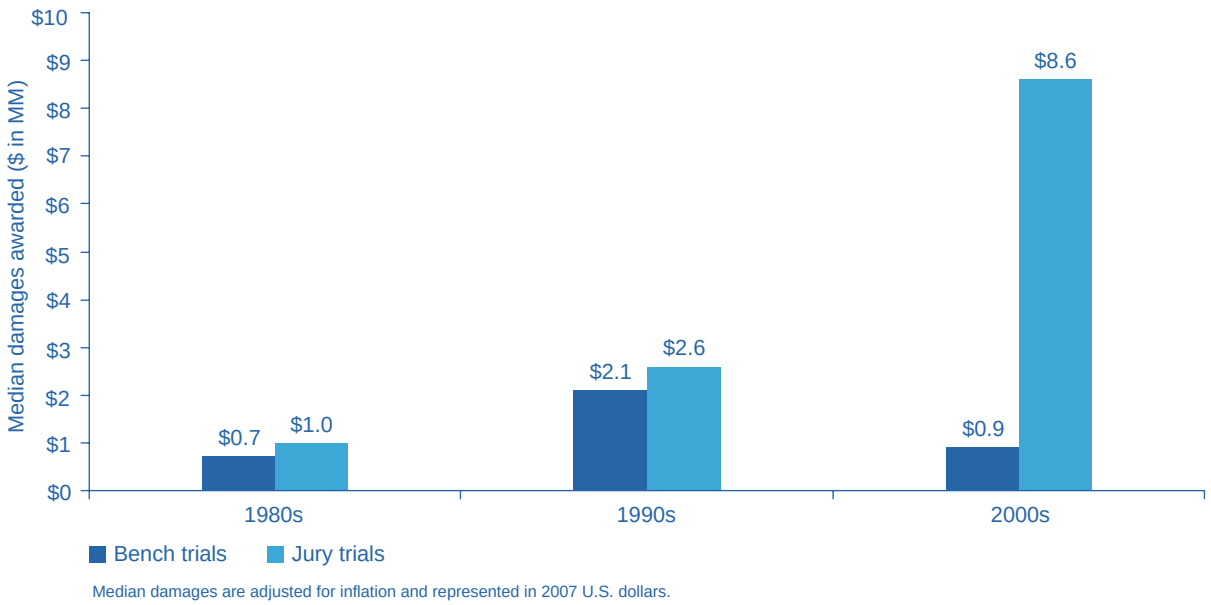

There are a number of factors contributing to the increased use of juries as the preferred forum for patent cases. Trial success rates show stark contrasts when decided by juries compared to bench trials. Jury success rates have consistently outperformed their bench counterparts for every year since 1995, as shown in Chart 3C.

**Chart 3C: Bench v. Jury Trials: Success Rates 1995 to 2007**



In addition, as shown in Chart 3D, the median damages awarded by juries are significantly larger than the median bench award.

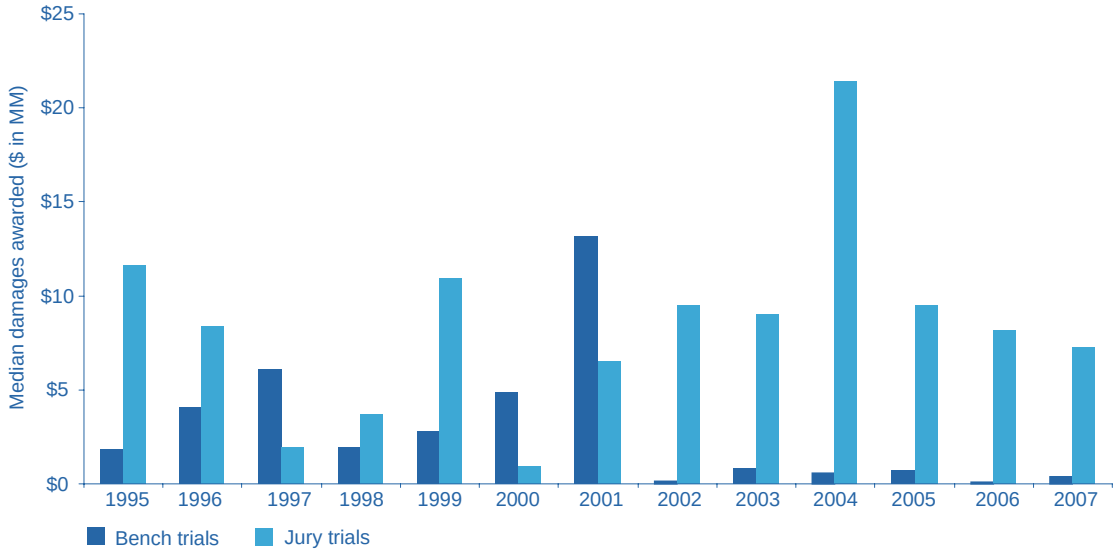
**Chart 3D: Bench v. Jury Trials: Median Damages Awarded by Decade**




Median damages are adjusted for inflation and represented in 2007 U.S. dollars.

Recent awards by juries have been running several multiples of the amounts awarded by judges. Chart 3E emphasizes the discrepancy in median awards since 2001. While jury awards have remained high, bench awards have decreased significantly.

**Chart 3E: Bench v. Jury Trials: Median Damages Awards 1995 to 2007**



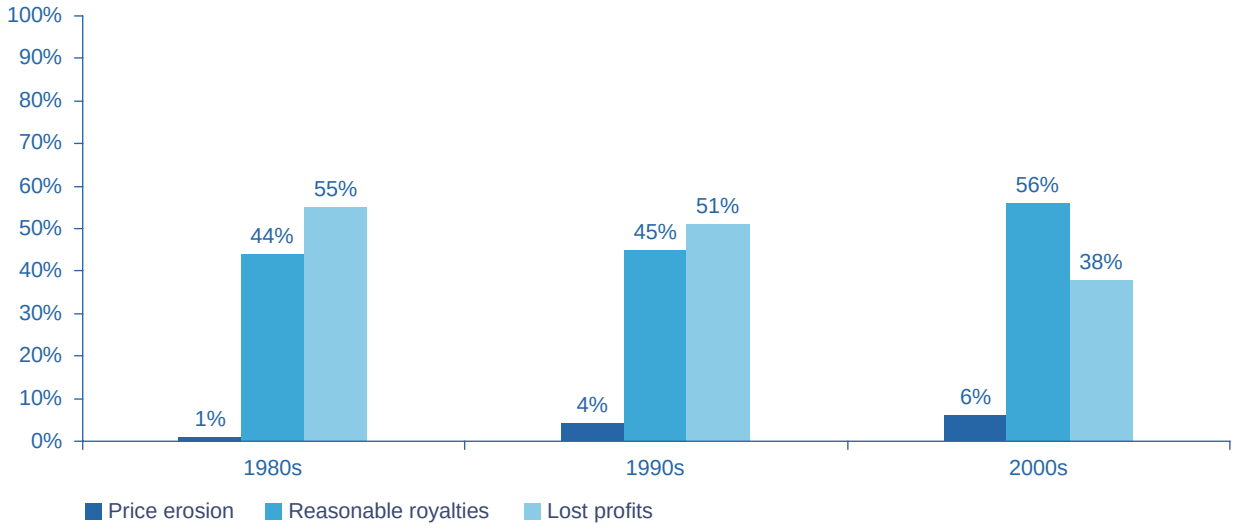

Median damages are adjusted for inflation and represented in 2007 U.S. dollars.

The increase in damages awarded by juries in patent cases may be due to several factors such as the increased volume of business at issue, increased research and development expenses invested in technology, greater risks involved in reaching commercial success, juries' reduced sensitivity to large dollar awards with public disclosures of larger profits and net worth from major company defendants, and plaintiffs with larger envisioned damages believing juries will look more favorably upon them than judges. Additionally, global competitive pressures have forced the hand of many domestic companies to protect their ideas and processes at all costs. Accordingly, juries have been more willing than ever to reward innovation and ingenuity.

## Reasonable royalties continue to be the predominant measure of damages awards.

As indicated in our past studies and once again in Chart 4, reasonable royalties have overtaken lost profits as the most frequent basis of damages awards in patent cases. Section 284 of the Federal Code governing equitable compensation sets a reasonable royalty as the minimum level of compensation due to the patent holder from an infringer. The royalty can take the form of a running percentage of revenues or profits, per unit amount, or lump sum amounts paid upfront or over time.

**Chart 4: Composition of Damages Awards by Decade**




Lost profits damages are losing favor for several reasons:

- The complexity and cost of such analysis is greater for determining lost profits than for reasonable royalties. Lost profits may be quantified based upon either actual damages arising from specific sales taken by the infringer from the patent holder, or an assessment of particular facts and circumstances in a "but for" situation. This assessment examines whether there is demand for the product tied to the claims under the patent in dispute, whether there is an absence of acceptable alternate substitutes, whether the patent holder has adequate manufacturing and marketing capabilities, and whether there is sufficient financial information to complete the analysis. Patent holders find the process of supporting such analysis either too obtrusive to their operations, or they do not want to risk disclosing proprietary cost and profit information—especially in light of new requirements regarding electronic discovery and record retention and greater access to information that results.
- Lost profits are more difficult to prove. The proliferation of competition in each US market sector from both domestic and internationally based businesses provides greater access to substitute products. The presence of these alternatives means that even without an infringer's products in the market, consumers may not automatically

buy the patent holder's products. Furthermore, the growing use of specialized distribution channels for reaching a specific consumer demographic increasingly supports an infringer's contention that its customers are different from those of the patent holder.

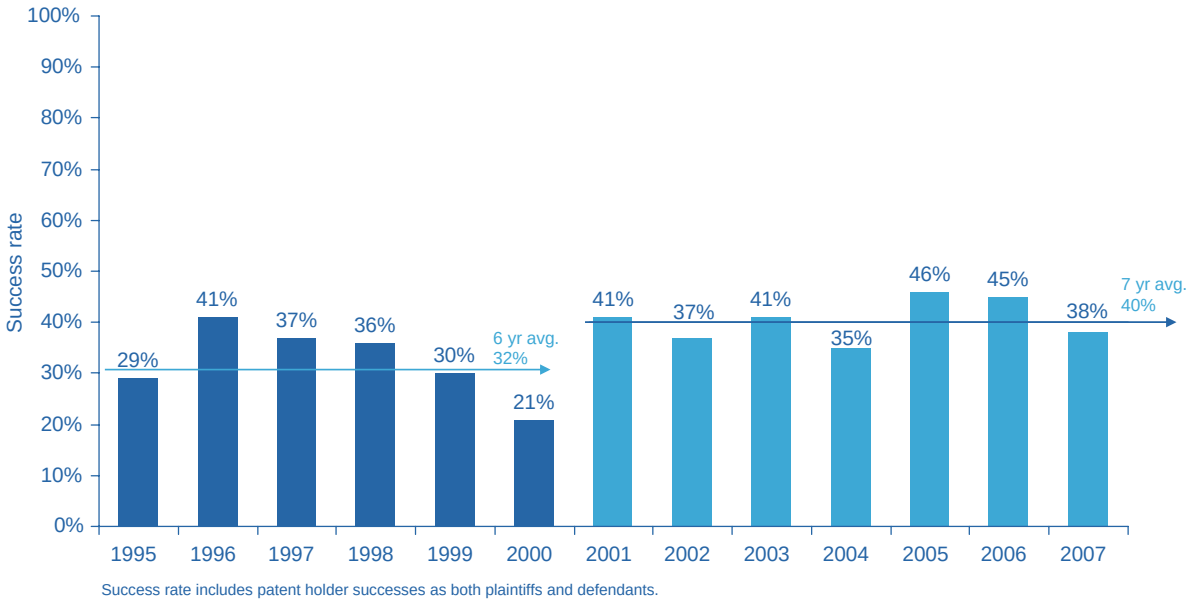
- More of these suits are brought by entities that own patent rights, but do not have any manufacturing or distribution capabilities. These patent holders cannot show that the infringer actually took any sales away from them.

## Patent holders have been successful 37% of the time overall, with a 19% win rate in summary judgments and a 57% win rate at trial.

To understand patent holder success rates since 1995, PwC studied 1,282 final decisions issued at two stages of the litigation life cycle: summary judgment (666 decisions) and trial (616 decisions). PwC did not study the continuation rates of summary judgments or settlements taken place prior to or after trial.

In combining summary judgment and trial decisions, Chart 5A demonstrates that overall patent holders were successful 37% of the time. The success rate slightly improved over the last seven years of our study, at a 40% average success rate, compared to the first six years, at an average of 32%.

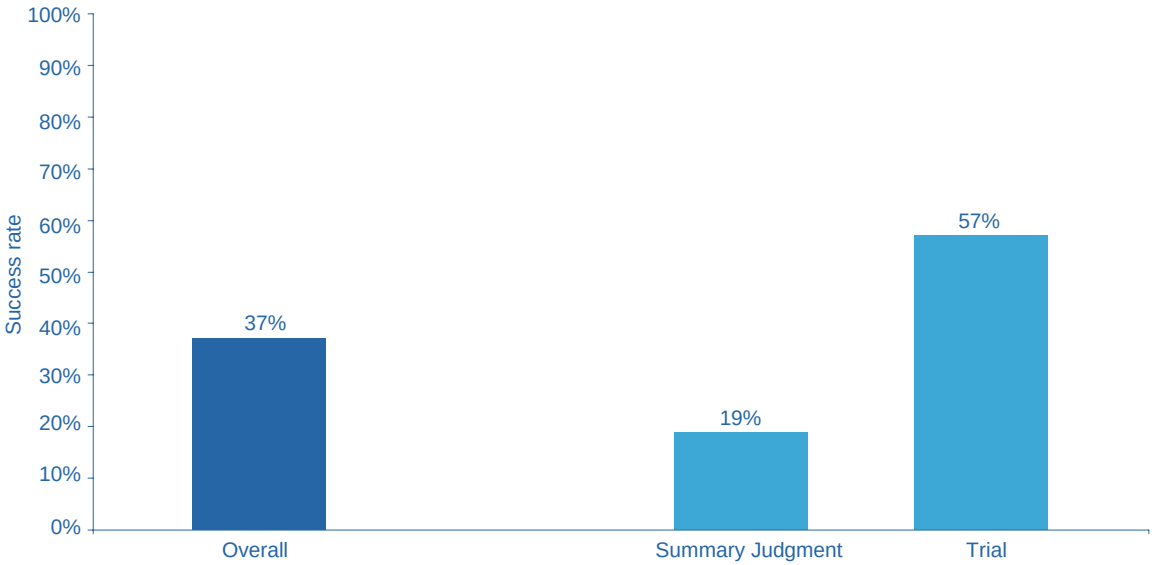
**Chart 5A: Patent Holder Overall Success Rates: 1995 to 2007**




Success rate includes patent holder successes as both plaintiffs and defendants.

Studying success rates at summary judgment versus trial sheds further insight. Since 1995, Chart 5B illustrates that patent holders only succeeded in 19% of summary judgments versus a 57% success rate at trial.

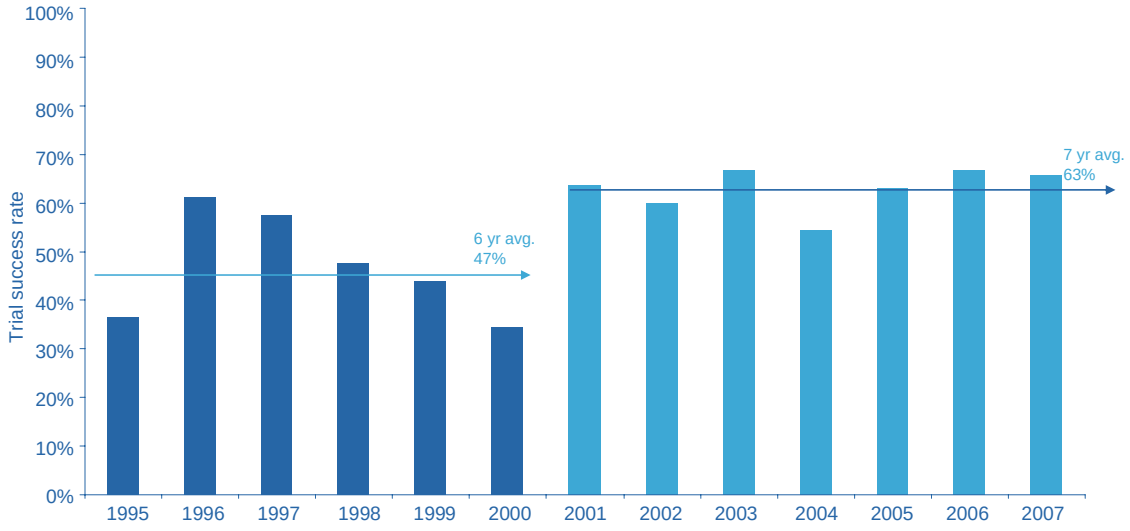
**Chart 5B: Patent Holder Success Rates: Case Stage Comparison**




Success rate includes patent holder successes as both plaintiffs and defendants.

Chart 5C shows that trial success rates have also increased significantly over the last seven years of our study, at an average of 63%, as compared to the first six years of our study, with a 47% average success rate.

**Chart 5C: Patent Holder Success Rates at Trial: 1995 to 2007**

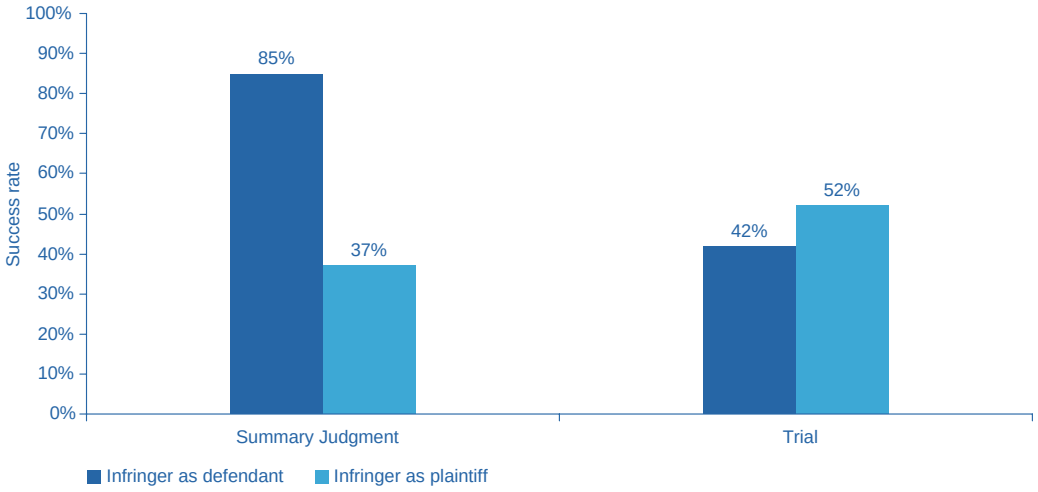



Success rate includes patent holder successes as both plaintiffs and defendants.

## Alleged infringers increase their trial success rates slightly when they are plaintiffs, but have not experienced the same increased success in summary judgments.

Declaratory judgments are not uncommon in patent litigation, representing 9% of all cases identified. The most frequent claims made in declaratory actions are non-infringement and patent invalidity. Chart 6 suggests that since 1995, while alleged infringers slightly improve their trial success rates when they are plaintiffs (52% versus 42% as defendants), the same is not true when a final decision is issued in summary judgment.

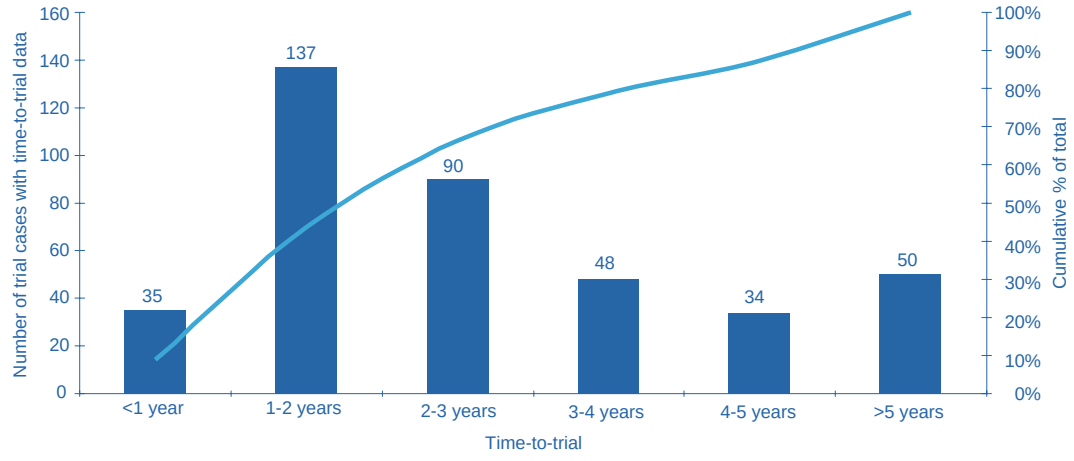
**Chart 6: Alleged Infringer Success Rates: 1995 to 2007**




## While the median time-to-trial has remained fairly constant since 1995, significant variations arise by jurisdiction and patent holder success rates tend to decrease with longer time-to-trial, up to a point.

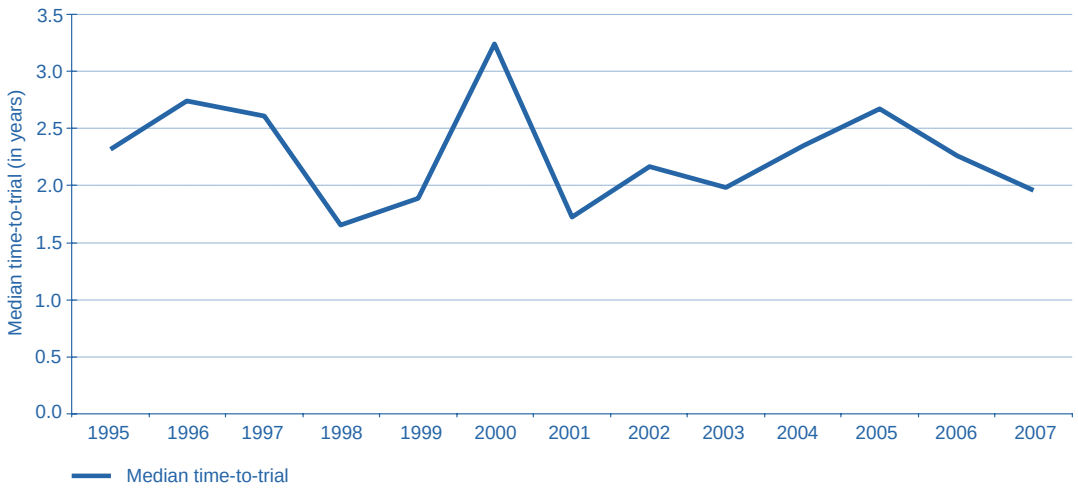
Data for time-to-trial was obtained for 394 trials in 65 different districts, using the court dockets for each matter. Time-to-trial was calculated from the complaint date to the first day of either the bench or jury trial for each case. In Chart 7A, the distribution of overall time-to-trial indicates that 66% of cases reached trial three years from the date the initial complaint was filed.

**Chart 7A: Time-to-Trial Distribution of Cases: 1995 to 2007**



There have been no marked up-ticks or delays in trial start dates. Chart 7B shows that the median of time-to-trial has maintained a fairly steady pace at just over two years from the complaint date to trial, even as the volume of cases has increased substantially since 1995.

**Chart 7B: Median Time-to-Trial: 1995 to 2007**




The industry sectors, mentioned previously, do not appear to vary widely regarding median of time-to-trial, with the differences between jurisdictions causing a more significant impact.

**Chart 7C: Median Time-to-Trial by Industry: 1995 to 2007**

| Industry | # of decisions | Median time-to-trial (in years) |
|---|---|---|
| Automotive | 7 | 1.65 |
| Biotechnology | 17 | 2.00 |
| Business services | 14 | 2.39 |
| Medical devices | 43 | 2.90 |
| Mining | 15 | 2.51 |
| Misc. manufactured goods | 9 | 2.20 |
| Office equipment | 11 | 1.85 |
| Pharmaceuticals | 55 | 2.20 |
| Software | 18 | 1.65 |
| Telecommunications | 34 | 2.00 |

The industry sectors in the table above represent 48% of the decisions with time-to-trial data included in the study.

Indeed, since 1995, there are significant variations in the median of time-to-trial across jurisdictions. To assess the lead time, PwC focused on the most active districts. Among the courts with the most activity, Chart 7D summarizes the median time-to-trial from 1995 to 2007. Based on the cases identified, Virginia Eastern and Wisconsin Western districts have the shortest time-to-trial.

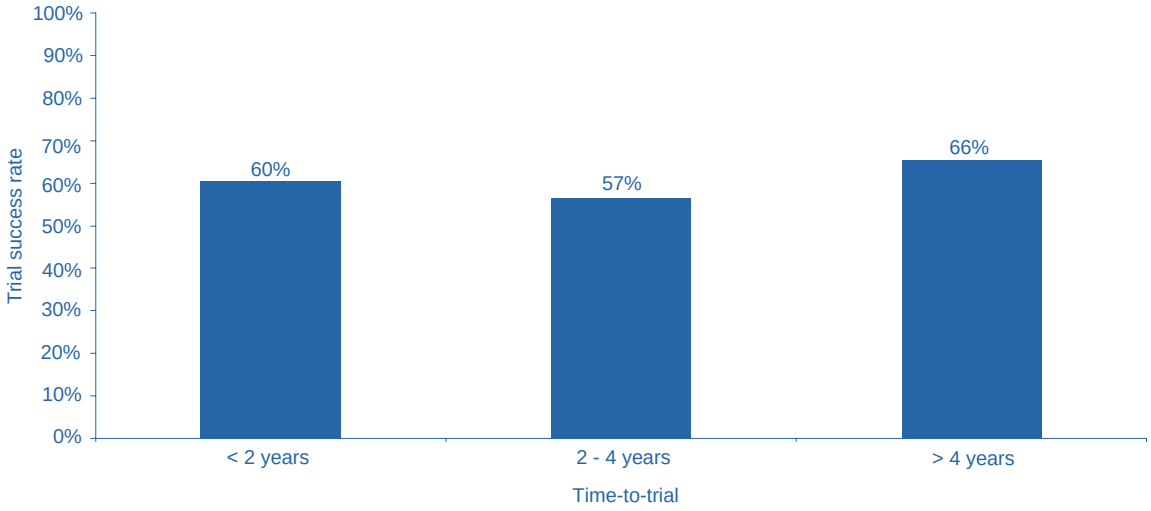
**Chart 7D: Median Time-to-Trial by District: 1995 to 2007**

| Rank | District | Median time-to-trial (in years) |
|---|---|---|
| 1 | Virginia Eastern | 0.88 |
| 2 | Wisconsin Western | 0.91 |
| 3 | California Central | 1.71 |
| 3 | Florida Middle | 1.71 |
| 5 | Texas Eastern | 1.79 |
| 6 | Delaware | 1.89 |
| 6 | Kansas | 1.89 |
| 8 | Pennsylvania Eastern | 1.91 |
| 9 | Texas Southern | 1.99 |
| 10 | Michigan Eastern | 2.03 |
| 11 | New York Southern | 2.10 |
| 12 | Minnesota | 2.32 |
| 13 | Florida Southern | 2.41 |
| 14 | Texas Northern | 2.41 |
| 15 | New Jersey | 2.73 |
| 16 | California Northern | 2.87 |
| 17 | Colorado | 2.99 |
| 18 | Illinois Northern | 3.42 |
| 19 | Massachusetts | 3.76 |
| 20 | Connecticut | 4.66 |
| | **Overall (all decisions identified)** | **2.16** |

The median time-to-trial for Wisconsin Western was based upon limited data.

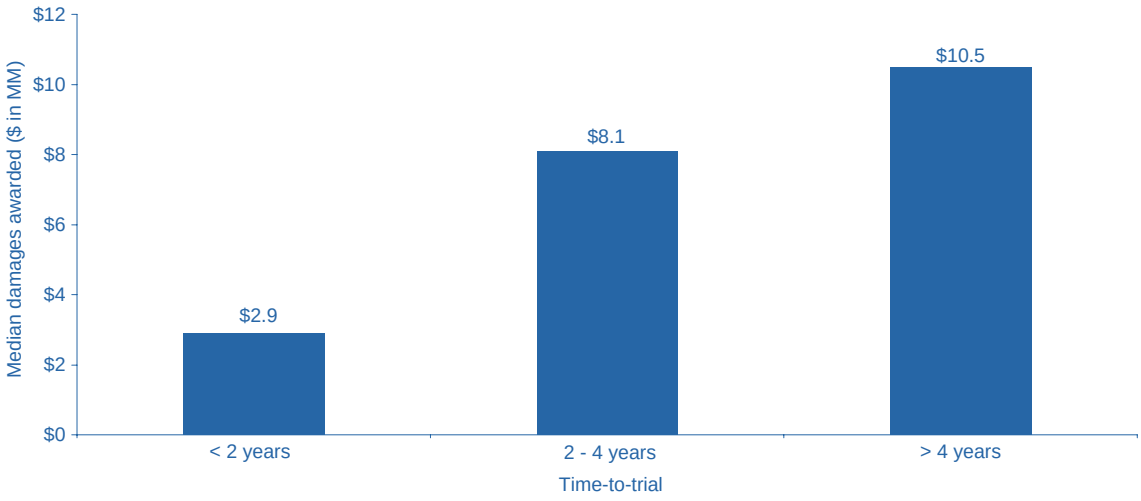
Combining the time-to-trial information with the patent holder trial success rates, Chart 7E shows that patent holders enjoy more success with shorter time-to-trial, up to a point. Beyond a four year time-to-trial, patent holder success rates seem to improve. One reason for the increased success at a relatively longer time-to trial may be the patents' added strength gained by withstanding reexaminations and the protracted scrutiny in the first stages of patent infringement litigation.

**Chart 7E: Success Rates by Time-to-Trial: 1995 to 2007**




The median damages awards increase as the time-to-trial lengthens, as shown in Chart 7F. Some of this increase may be attributed to elongated damages periods associated with the longer lead time in reaching trial. Additionally, the strengthening of a patent's position that results from withstanding reexamination and protracted scrutiny may ultimately increase the judicial determination of damages after a finding of liability.

**Chart 7F: Median Damages Awards by Time-to-Trial: 1995 to 2007**




Median damages are adjusted for inflation and represented in 2007 U.S. dollars.

## Certain federal district courts (particularly Virginia Eastern, California Central, and Pennsylvania Eastern) continue to be more favorable to patent holders, with shorter time-to-trial, higher success rates, and higher median damages awards.

After considering median time-to-trial, median damages awarded, summary judgment win rates and trial win rates, certain jurisdictions emerge as being more favorable venues for patent holders. The following charts focus on the districts with a minimum of 15 decisions issued from 1995 to 2007. Chart 8A presents the top 20 districts based on an average of their respective categorical rankings for each of the statistical measures mentioned above. Each categorical ranking was weighted equally, representing 25% of the overall rank.

**Chart 8A: District Court Rankings: 1995 to 2007**

| Overall rank | District | Median Time-to-trial (in years) | Rank | Median damages awarded | Rank | Trial success rate | Rank | SJ success rate | Rank |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Virginia Eastern | 0.88 | 1 | $25,431,763 | 2 | 68.4% | 5 | 26.4% | 4 |
| 2 | California Central | 1.71 | 3 | $10,000,777 | 8 | 68.0% | 6 | 34.6% | 2 |
| 2 | Pennsylvania Eastern | 1.91 | 7 | $22,148,019 | 4 | 75.0% | 1 | 18.2% | 7 |
| 4 | Wisconsin Western | 0.91 | 2 | $5,682,745 | 11 | 66.7% | 7 | 36.4% | 1 |
| 5 | Florida Middle | 1.71 | 3 | $335,612 | 21 | 75.0% | 1 | 33.3% | 3 |
| 6 | Texas Eastern | 1.79 | 5 | $19,689,237 | 6 | 71.9% | 3 | 8.3% | 16 |
| 7 | Delaware | 1.89 | 6 | $8,691,600 | 10 | 62.5% | 9 | 18.0% | 8 |
| 8 | Texas Southern | 1.99 | 8 | $10,185,534 | 7 | 60.0% | 11 | 12.5% | 11 |
| 9 | New Jersey | 2.73 | 14 | $21,634,708 | 5 | 50.0% | 16 | 25.8% | 5 |
| 10 | Colorado | 2.99 | 16 | $27,339.621 | 1 | 70.0% | 4 | 0.0% | 20 |
| 11 | Minnesota | 2.32 | 11 | $3,529,104 | 14 | 60.0% | 11 | 17.4% | 9 |
| 12 | California Northern | 2.87 | 15 | $8,696,631 | 9 | 57.5% | 13 | 12.5% | 11 |
| 12 | Indiana Southern | ------ | --- | $1,432,659 | 18 | 66.7% | 7 | 12.5% | 11 |
| 14 | Illinois Northern | 3.42 | 17 | $4,545,732 | 13 | 51.2% | 15 | 23.7% | 6 |
| 15 | Massachusetts | 3.76 | 18 | $2,960,620 | 15 | 62.5% | 9 | 16.7% | 10 |
| 15 | New York Southern | 2.10 | 10 | $4,967,481 | 12 | 52.0% | 14 | 8.3% | 16 |
| 15 | U.S. Court of Federal Claims | ------ | --- | $22,894,618 | 3 | 0.0% | 21 | 10.0% | 15 |
| 18 | Texas Northern | 2.41 | 12 | $1,620,359 | 17 | 44.4% | 19 | 11.1% | 14 |
| 19 | Florida Southern | 2.41 | 12 | $1,994,727 | 16 | 41.7% | 20 | 8.3% | 16 |
| 20 | Michigan Eastern | 2.03 | 9 | $651,034 | 20 | 50.0% | 16 | 0.0% | 20 |
| | **Overall (all decisions identified)** | **2.16** | | **$1,808,578** | | **57.0%** | | **18.9%** | |

Median damages are adjusted for inflation and represented in 2007 U.S. dollars. This study does not include time-to-trial information for Indiana Southern and the U.S. Court of Federal Claims. The ranking for these courts are based on their relative ranking for each of the remaining statistical measures. The median time-to-trial for Wisconsin Western was based upon limited data.

In combining summary judgment and trial decisions, Charts 8B and 8C include those districts with a minimum of 15 cases and ranks them according to overall success rates.

**Chart 8B: Top 5 Districts by Overall Success Rates: 1995 to 2007**

| | Top 5 districts | Overall success rate | Trial success rate | SJ success rate |
|---|---|---|---|---|
| 1 | Florida Middle | 66.7% | 75.0% | 33.3% |
| 2 | Texas Eastern | 54.6% | 71.9% | 8.3% |
| 3 | California Central | 51.0% | 68.0% | 34.6% |
| 4 | Virginia Eastern | 50.0% | 68.4% | 26.7% |
| 5 | Wisconsin Western | 50.0% | 66.7% | 36.4% |
| | **Overall (all decisions identified)** | **37.2%** | **57.0%** | **18.9%** |

**Chart 8C: Bottom 5 Districts by Overall Success Rates: 1995 to 2007**

| | Bottom 5 districts | Overall success rate | Trial success rate | SJ success rate |
|---|---|---|---|---|
| 1 | Connecticut | 15.8% | 50.0% | 6.7% |
| 2 | Michigan Eastern | 18.5% | 50.0% | 0.0% |
| 3 | Florida Southern | 25.0% | 41.7% | 8.3% |
| 4 | New York Southern | 30.6% | 52.0% | 8.3% |
| 5 | California Northern | 33.0% | 57.5% | 12.5% |
| | **Overall (all decisions identified)** | **37.2%** | **57.0%** | **18.9%** |

## 32% of summary judgment decisions are appealed, with 59% modified or reversed; while 43% of trial decisions are appealed, with 67% modified or reversed.

As the number of damages decisions in patent cases has increased over the last 25 years, so have the number of appeals decisions heard by the CAFC. Chart 9A illustrates that patent holders appeal their losses at much higher rates than alleged infringers after trials (57% versus 33%) and summary judgments (34% versus 23%). However, patent holders are more successful getting a modification or complete reversal of decisions from their appeals after trial than after summary judgments. Meanwhile, alleged infringers are more successful getting a modification or complete reversal of decisions after summary judgment than after trial. A modified decision is defined as a case that has had an appellate outcome that does not completely affirm or completely reverse the original decision. Affirmed and reversed decisions include those appellate outcomes in which the original decision was either completely affirmed or completely reversed.

**Chart 9A: Appellate Breakdown by Case Stage and Decision Rates: 1995 to 2007**

| | | | | | Of cases appealed | | |
|---|---|---|---|---|---|---|---|
| | | | Appeals identified | % appealed | Affirmed decision rate | Modified decision rate | Reversed decision rate |
| Decided at trial (616) | 353 | Patent holder wins | 117 | 33% | 39% | 38% | 23% |
| | 263 | Patent holder loses | 149 | 57% | 29% | 52% | 19% |
| | | | 266 | 43% | 33% | 46% | 21% |
| Decided at summary judgment (666) | 113 | Patent holder wins | 26 | 23% | 19% | 62% | 19% |
| | 553 | Patent holder loses | 189 | 34% | 44% | 43% | 13% |
| | | | 215 | 32% | 41% | 45% | 14% |

Chart 9B shows the appellate breakdown of trial cases based upon the trial forum and the resulting appellate outcomes. Jury trials are much more likely to be appealed than bench trials by the patent holders, and the reverse is true for appellants who are alleged infringers. Meanwhile, patent holders are slightly more successful in appeals of jury trials than bench trials, and alleged infringers are slightly more successful in appeals of bench trials than jury trials.

**Chart 9B: Appellate Breakdown by Trial Forum and Decision Rates: 1995 to 2007**

| | | | | | Of cases appealed | | |
|---|---|---|---|---|---|---|---|
| | | | Appeals identified | % appealed | Affirmed decision rate | Modified decision rate | Reversed decision rate |
| Decided by jury (190) | 151 | Patent holder wins | 40 | 26% | 53% | 32% | 15% |
| | 39 | Patent holder loses | 28 | 72% | 11% | 68% | 21% |
| | | | 68 | 35% | 36% | 47% | 17% |
| Decided by bench (364) | 170 | Patent holder wins | 70 | 41% | 34% | 60% | 6% |
| | 196 | Patent holder loses | 108 | 55% | 29% | 51% | 20% |
| | | | 178 | 49% | 31% | 55% | 14% |

554 cases were identified as either bench or jury cases. 62 cases were not identified as either bench or jury cases.

Chart 9C focuses on the modified and reversed decisions by exploring the leading reasons for a changed outcome.

**Chart 9C: Leading Reasons for Modified and Reversed Decisions: 1995 to 2007**

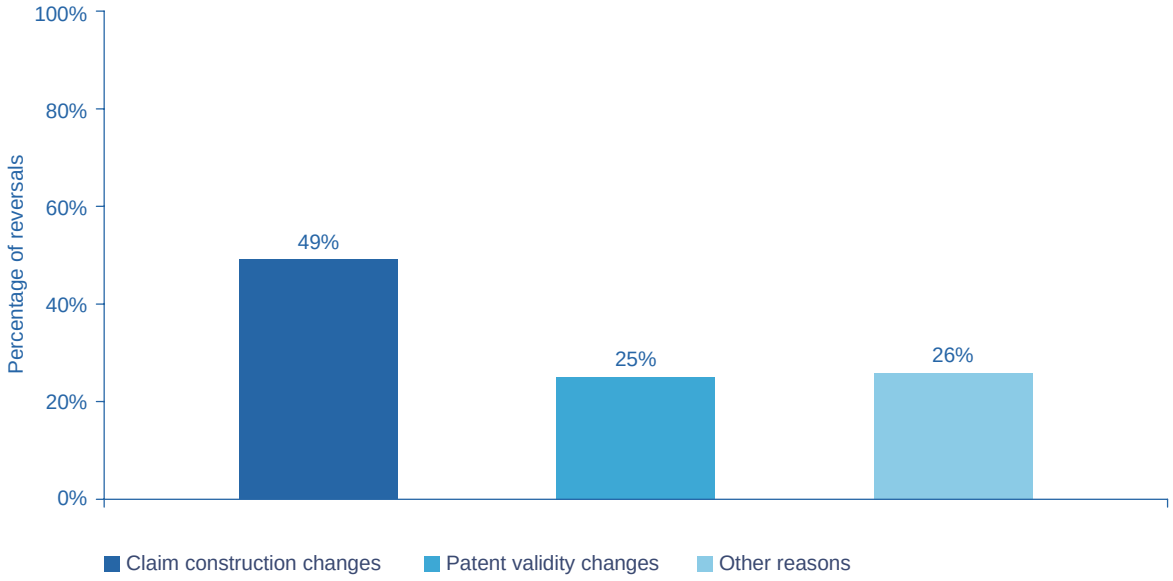



Chart 9D illustrates that among the districts with a minimum of 15 decisions issued from 1995 to 2007, Massachusetts, California Northern, and Illinois Northern have experienced the greatest percentage of trial and summary judgment cases appealed at 46%, 42%, and 41%. In addition, among all the districts, Illinois Northern has experienced the greatest percentage of cases being modified or reversed at 71%.

**Chart 9D: Districts with the Highest Appeal Rates: 1995 to 2007**

| District | # of decisions | # of appeals | **% appealed** | Affirmed decision rate | Modified decision rate | Reversed decision rate |
|---|---|---|---|---|---|---|
| Massachusetts | 54 | 25 | **46%** | 36% | 36% | 28% |
| California Northern | 88 | 37 | **42%** | 38% | 35% | 27% |
| Illinois Northern | 117 | 48 | **41%** | 29% | 33% | 38% |
| Delaware | 111 | 39 | **35%** | 54% | 36% | 10% |
| New York Southern | 98 | 33 | **34%** | 36% | 40% | 24% |

# What this means for your business

In light of the findings in this study, patent litigation appears to continue to be an effective protection and monetization path for patent holders. Although legislation is to be put in place that may influence patenting activities and the litigation process, for now, the courts appear to be increasingly protecting those patent holders proving the validity, enforceability, and infringement of their patents. With trial success rates at their highest level in history, patent holders appear to be winning with considerable awards of damages. The forum and the venue of a case can have a substantial impact on the outcome and should be carefully considered. The likelihood of success and the amount of damages awarded to the patent holder have been shown to vary dramatically between jury and bench trials and among federal districts. A shorter time-to-trial typically benefits a patent holder, but the probability of a success declines slightly after two years. However, if the time-to-trial exceeds four years, the trend seems to reverse due to the strengthening of a patent's position and the expansion of the damages period increasing the probability of success and a more significant damages award. Also, time-to-trial and success rates by district seem to go hand in hand. Finally, appellate outcomes vary depending on the stage of the case at the time of the decision (summary judgment versus trial) and the forum issuing the district court decision (bench versus jury), with claim construction changes representing the most common reason for modified and complete reversal of decisions.

# Methodology

To study the trends related to patent decisions, PricewaterhouseCoopers identified final decisions at summary judgment and at trial recorded in two WestLaw databases, Federal Intellectual Property - Cases (FIP-CS) and Combined Jury Verdicts and Settlements (JV-ALL). The study focuses on 666 summary judgment, 616 trial, and 481 unique CAFC patent decisions issued since 1995. Key definitions for certain terms used throughout the study are listed below:

- Cases decided at summary judgment included those district court patent infringement cases where a response to a motion that could affect the final decision on infringement (patent invalidity or non-infringement) was decided by a judge.
- Cases decided at trial included those district court patent infringement cases where an opinion was rendered by a judge or jury at trial.
- Appeals included only those appeals for cases where a final decision was made at summary judgment or at trial.
- A “Success” included instances where a liability and damages (if included) decision was made in favor of the patent holder.
- A “Loss” included instances where a liability and damages (if included) decision was made in favor of the alleged infringer.
- A “Modified decision” included those appellate outcomes that do not completely affirm or completely reverse the original decision.
- An “Affirmed decision” and a “Reversed decision” included those appellate outcomes in which the original decision was either completely affirmed or completely reversed.
- “Time-to-trial” was calculated from the complaint date to the first day of either the bench or jury trial for each case.

# About the authors

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**Vincent Torres** is a director in the Advisory Services practice of PricewaterhouseCoopers' Chicago office. Mr. Torres has over 10 years of management consulting experience advising clients on a broad range of strategy execution opportunities and challenges related to product and customer pricing and profitability, competitive positioning, and emerging business models. He has particular expertise in matters involving new technologies and business models in the high technology and entertainment and media industries, and in assessing value drivers in decisions involving intellectual assets. Over the years Mr. Torres has also worked with corporate executives, entrepreneurs and lawyers in support of commercial transactions, assessing damages in commercial litigation disputes, and evaluating and monitoring risks with respect to intellectual asset management processes. Mr. Torres holds a BA in economics from Duke University and an MBA from the Fuqua School of Business at Duke University.

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