2012 Patent Litigation Study

Litigation continues to rise amid growing awareness of patent value

1995–2011

pwc

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Introduction

Last year marked the most significant change to the US patent system in almost 60 years. President Obama signed the Leahy-Smith America Invents Act (AIA) into law on September 16, 2011, converting the patent system from a 'first to invent' to a 'first inventor to file' system. The new law also changed inter partes reexamination proceedings and instituted post-grant opposition, among other reforms.

Despite these resounding changes, the AIA does not address the calculation of damages in patent infringement matters. In last year's *2011 Patent Litigation Study*, we commented that the absence of reform guidance in this area suggested that Congress believed that the subject of patent damages is best left for the courts to address and regulate. We further posited that the elimination of the 25 percent rule of thumb, as well as rulings in a variety of other court decisions, demonstrated that the courts, rather than Congress, would continue to shape the future of patent law and play the primary role in how patent damages are determined.

The events of the first half of 2012 affirmed these beliefs. In particular, with the 25 percent rule of thumb removed from the practitioner's royalty assessment toolkit, a complex mathematical proof for determining royalty apportionment, known as the Nash Bargaining Solution, has recently appeared in some patentees' damages calculations, receiving mixed reviews from the courts. In *Oracle v. Google*, the Court excluded expert testimony partly because, "the Nash Bargaining Solution would invite a miscarriage of justice by clothing a fifty-percent assumption in an impenetrable facade of mathematics." The Court concluded that, "Instead, the normal Georgia-Pacific factors, which have been approved by the Court of Appeals for the Federal Circuit and which are more understandable to the average fact-finder, will guide our reasonable royalty analysis."

Conversely, in *Mformation Techs v. Research in Motion*, the Court did not exclude expert testimony that referenced the Nash Bargaining Solution, noting that the expert used the technique only as a reasonableness check against a royalty rate determined through analysis of the *Georgia-Pacific* factors, the time-tested standard approach. To date, the Court of Appeals for the Federal Circuit has not had the opportunity to squarely address use of the Nash Bargaining Solution in determining reasonable royalty damages.

The broader lesson of these decisions, among others issued in recent years, is that the courts have been applying greater scrutiny to damages assessments in patent infringement matters; we expect this to continue. Patent litigation counsel and parties should monitor ongoing rulings that could affect damages opinions and methodologies.

New to this year's study is an analysis of Abbreviated New Drug Application (ANDA) cases, which are increasingly prevalent in the dockets. The volume of such cases has increased substantially over the last five years, and the success rates experienced by the patent holders, or the brand drug manufacturers, have to date been higher than traditional patent actions.

2011 proved to be a historic year for strategic intellectual property acquisitions, particularly in the telecommunications sector, which saw two high-profile acquisitions of patent portfolios:

1) The 'Rockstar Group', a consortium of buyers including Apple, Microsoft, Research in Motion, and Sony, acquired the 6,000-patent portfolio of the defunct Nortel Networks for $4.5 billion in July 2011.

2) About a month later, Google acquired Motorola Mobility for $12.5 billion, reportedly for its extensive 17,000-patent portfolio to protect the Android operating system from patent lawsuits.

As the stakes for patent infringement litigation remain high, we expect such strategic patent acquisitions will continue to make headlines.

Summary of key observations

Recognizing these developments and business leaders' continuing deep interest in intellectual property matters, PwC maintains a database of patent damages awards extending from 1980 through 2011. We collect information about patent holder success rates, time-to-trial statistics, and practicing versus nonpracticing entity (NPE) statistics from 1995 through 2011. This year's study also includes data related to ANDA litigation.

Our analysis yields a number of observations that can help executives, legislators, and litigators assess their patent enforcement or defense strategies, as well as the impact of NPEs.

- Annual median damages awards (in 2011 dollars) ranged from $1.9 million to $16.1 million between 1995 and 2011. The median damages award from 2006 to 2011 was approximately $4.0 million.

- Damages awards for NPEs averaged almost double those for practicing entities over the last decade.

- The disparity between jury and bench awards continues to widen as the median jury award amounted to more than 20 times the median bench award between 2006 and 2011.

- Reasonable royalties remain the predominant measure of patent damages awards, representing more than 80% of awards over the last six years.

- NPEs have been successful 23% of the time overall versus 34% for practicing entities, due to the relative lack of success for NPEs at summary judgment. However, both have about a two-thirds success rate at trial.

- The median damages award in the telecommunications industry was significantly higher than that in other industries. Other industries with higher relative median damages awards include biotechnology/pharma, medical devices, and computer hardware/electronics.

- While the median time-to-trial has remained fairly constant, averaging 2.3 years since 1995, we see significant variations among jurisdictions.

- Certain federal district courts (particularly Virginia Eastern, Delaware, and Texas Eastern) continue to be more favorable to patent holders, with shorter time-to-trial durations, higher success rates, and larger median damages awards.

- The top five federal district courts (out of a total of 94) accounted for 38% of all identified decisions involving an NPE as the patent holder. The Eastern District of Texas accounted for 12% of NPE decisions.

- All NPEs are not created equal. While university/non-profit NPEs have the highest success rate among NPE litigants, their median damages award is considerably lower than the median award of company NPEs.

- While ANDA litigation continues to grow rapidly, success rates since 2006 have varied significantly, given the small number of cases that reach a dispositive court conclusion.

Patent actions rise dramatically, set record high

Chart 1

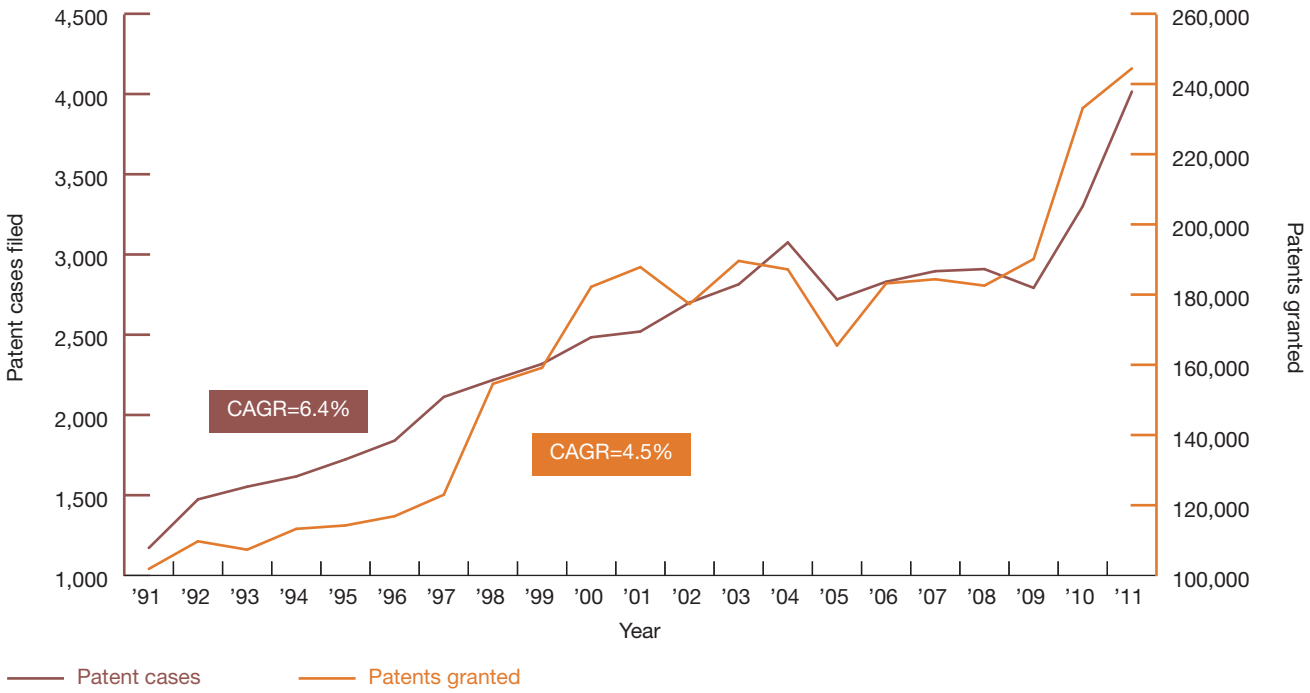
2011 saw continued growth in patent actions filed and patents granted

As Chart 1 illustrates, the annual number of patent actions filed has increased at an overall compound annual growth rate (CAGR) of 6.4% since 1991. We attribute this upswing in part to a 22% increase in the number of filings in 2011 over 2010. The number of patent actions filed reached 4,015 in 2011—the highest number of annual filings ever recorded.

Meanwhile, the number of patents granted by the United States Patent and Trademark Office (USPTO) has also grown steadily, increasing at a CAGR of 4.5% since 1991 and increasing by 5% in 2011 to 244,430. While this continues the upward trend in patents granted, it's moderated from the 23% growth rate we saw between 2009 and 2010, more closely paralleling the historical CAGR.

As the chart further shows, 2011 continued the trend of high correlation (approximately 96% since 1991) between patent cases filed and patents granted by the USPTO.

Chart 1. Patent case filings and grants



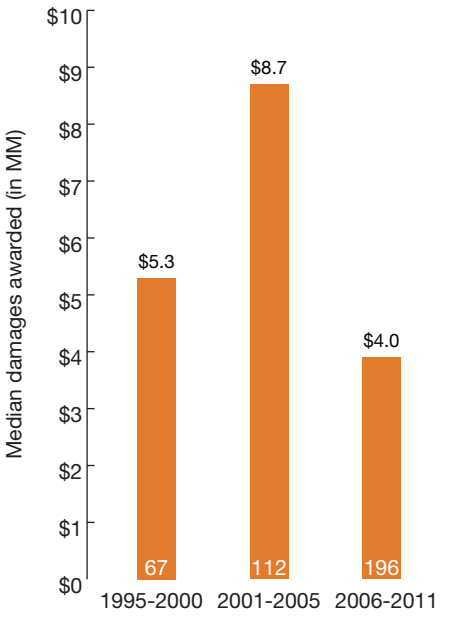
Years are based on September year-end
Sources: *US Patent and Trademark Office: Performance & Accountability Report and US Courts: Judicial Facts & Figures*

Median damages award declines

Chart 2a

Adjusting for inflation using the consumer price index (CPI), the annual median damages award ranged from $1.9 million to $16.1 million between 1995 and 2011, with an overall median award of $5.3 million over the last 17 years. As Chart 2a illustrates, when we segment the time period from 1995 through 2011 into approximate thirds, we see that the median damages award over the most recent period represents the lowest relative point, falling to less than half of the median award between 2001 and 2005.

Chart 2a. Patent holder median damages awarded



Median damages are adjusted for inflation and represented in 2011 US dollars.

The number of cases is indicated within the respective column.

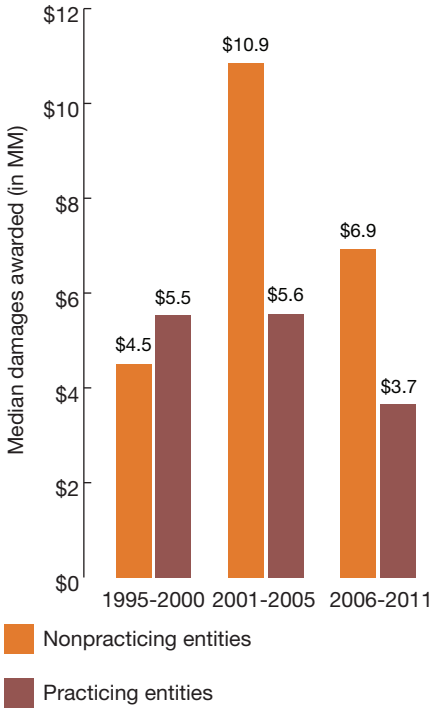
NPE awards outpace practicing entities

Chart 2b

Over the last decade, median damage awards for NPEs have significantly outpaced those of practicing entities.

Chart 2b shows the continuation of a trend that started in 2001: a wide variance (almost double in the last decade) in the damages awarded to NPEs compared to those awarded to practicing entities.

Chart 2b. Patent holder median damages awarded: nonpracticing entities vs. practicing entities



Median damages are adjusted for inflation and represented in 2011 US dollars.

The largest historical awards have rarely been upheld

Chart 2c

Enormous damages awards continue to garner headlines and keep corporate management keenly aware of the risks of potential infringement, as well as the rewards of enforcing patent rights. Chart 2c displays the top 10 damages awards in federal district courts since 1995. In 2011, one decision cracked the top 10 list: a $593 million damages award to Dr. Bruce Saffran against Johnson & Johnson. This award represents Dr. Saffran's second award in the top 10. Dr. Saffran had previously been awarded $432 million in damages against Boston Scientific, later settled for $50 million. It is important to note that the awards reflected in Chart 2c are those identified during initial adjudication; most of these awards have since been vacated, remanded, or reduced, while some remain in the appellate process.

Chart 2c. Top 10 largest initial adjudicated damages awards: 1995–2011

Year	Plaintiff	Defendant	Technology	Award (in MM)
2009	Centocor Ortho Biotech Inc.	Abbott Laboratories	Arthritis drugs	$1,848
2007	Lucent Technologies Inc.	Microsoft Corp.	MP3 technology	$1,538
2010	Mirror Worlds LLC	Apple Inc.	Operating system	$626
2011	Bruce N. Saffran M.D.	Jonhson & Johnson	Drug-eluting stents	$593
2003	Eolas Technologies Inc.	Microsoft Corp.	Internet browser	$521
2008	Bruce N. Saffran M.D.	Boston Scientific Corp.	Drug-eluting stents	$432
2009	Uniloc USA Inc.	Microsoft Corp.	Software activation technology	$388
2008	Lucent Technologies Inc.	Microsoft Corp.	Data entry technology	$368
2006	Rambus Inc.	Hynix Semiconductor Inc.	Memory chips	$307
2009	i4i Limited Partnership	Microsoft Corp.	Electronic document manipulation technology	$277

Jury trials are favored

Chart 3a

Juries have become the preferred trier of fact

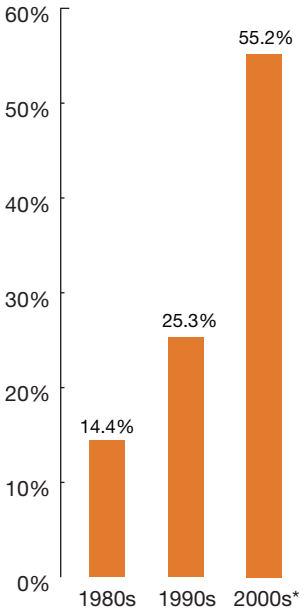
Unlike the 1980s and 1990s, the last decade has seen juries evolve as the preferred trier of fact in patent infringement litigation. This preference is probably linked to the higher median damages awarded by juries.

Patentees still winning with juries, and increasingly with bench

Chart 3b

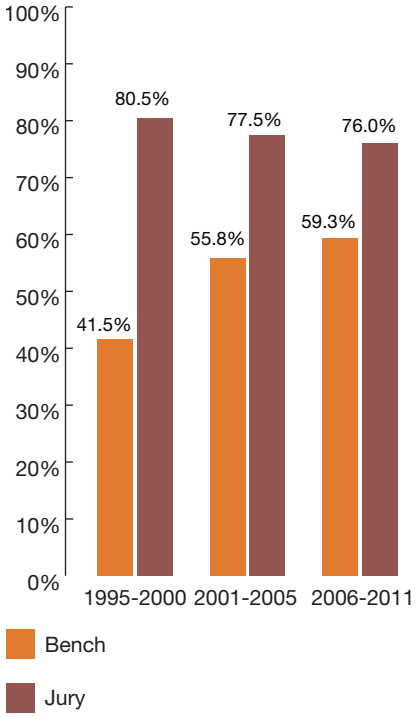
Numerous factors contribute to the increased use of juries as the preferred forum for patent cases. In general, over the last 17 years, trial success rates for patent holders are higher when decided by juries as compared to the bench. However, as Chart 3b shows, the margin in success rates has shrunk. Segmenting the 17-year period into approximate thirds illustrates a narrowing of the margin between bench and jury success rates, from 39% between 1995 and 2000 to 17% between 2006 and 2011.

Chart 3a. Use of jury trials by decade



*Includes 2010 and 2011

Chart 3b. Bench vs. jury trials: success rates



NPEs look to juries more often

Chart 3c

The increase in litigation involving NPEs over the last 17 years is most likely contributing to the increased use of juries. Since 1995, almost 56% of trials involving NPEs have been jury trials as compared to only 47% of trials involving practicing entities.

However, discrepancy in use of juries has shrunk

Chart 3d

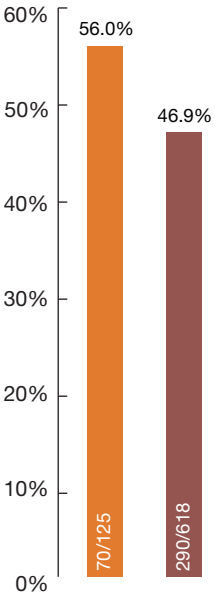
Analyzing jury use by time period shows that while NPEs use juries more frequently than practicing entities, the gap has diminished. As indicated in Chart 3d, the difference in jury use between NPEs and practicing entities shrunk between 2006 and 2011 to only 6%. In contrast, that difference was 21% from 2001 to 2005.

Median jury awards substantially outpace the bench

Chart 3e

Chart 3e illustrates the discrepancy in median damages awards over the last 17 years. The spread between bench and jury median awards has grown significantly, stemming from the combined effect of a sharp increase in the median jury award and a drop in the median bench award. As outlined in Chart 3e, median jury awards have represented multiples of 1.3x, 9.6x, and 21.8x of bench awards from 1995 to 2000, 2001 to 2005, and 2006 to 2011, respectively.

Chart 3c. Use of jury trials by type of entity: 1995 to 2011



The number of cases is indicated within the respective column.

Chart 3d. Use of jury trials by type of entity

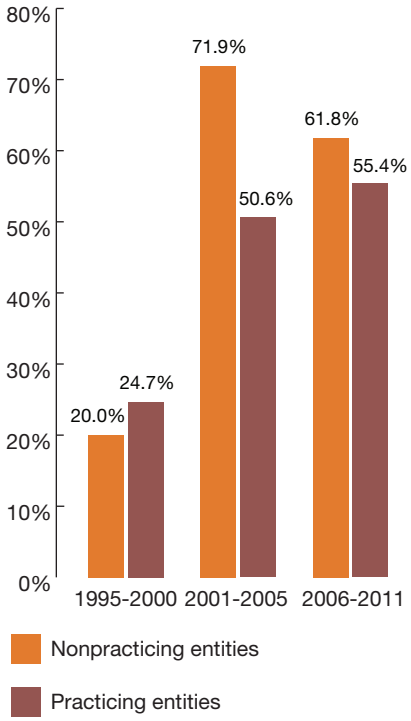
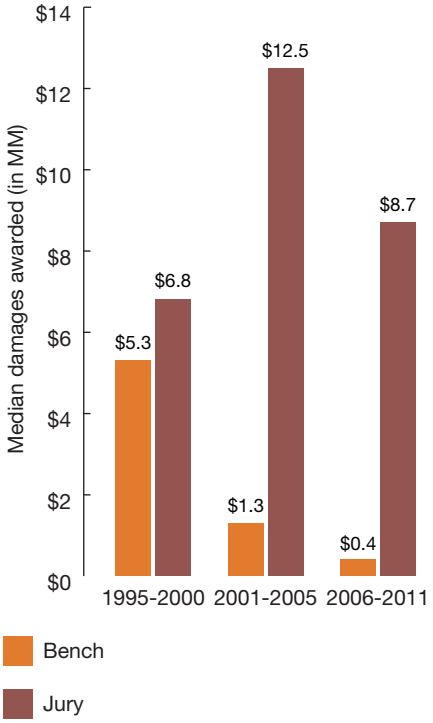


Chart 3e. Bench vs. jury trials: median damages awarded by period



Median damages are adjusted for inflation and represented in 2011 US dollars.

Reasonable royalties are the most prevalent damages

Chart 4

Reasonable royalties are the predominant measure of damages; price erosion is rare

As shown in Chart 4, reasonable royalties are the kind of damages most frequently awarded in patent cases, constituting a greater share with each passing year. Because some litigants receive lost profits and royalties, the totals exceed 100%. 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. While Chart 4 includes all identified decisions with damages, NPEs are generally not entitled to lost profits; if we omit NPE results from Chart 4, the proportion of damages awarded through reasonable royalties decreases by about 6%.

Lost profits damages are not as common as reasonable royalties for several reasons:

- NPEs, which bring an increased proportion of patent actions, are ineligible for lost profits damages because they do not sell products or services embodying their patents.

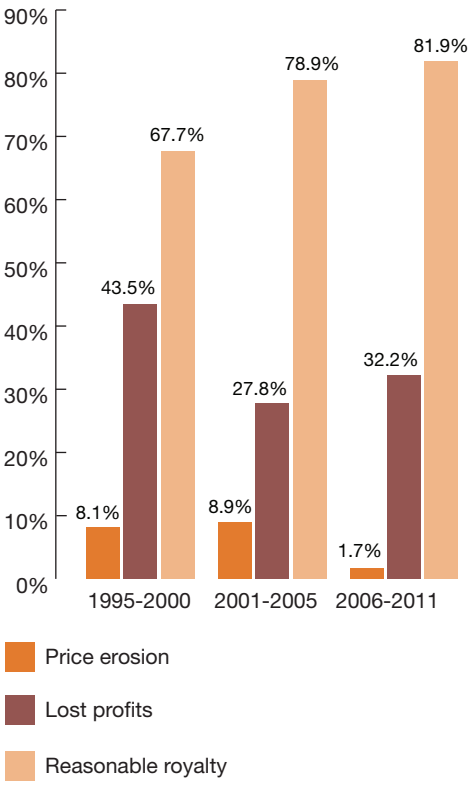
- Even in circumstances where the patentee may be eligible for lost profits awards, the entity might seek recovery through the reasonable royalty approach. The complexity and cost of the analysis for determining lost profits is usually greater than it is for reasonable royalties. Lost profits can be quantified by determining specific sales taken by the infringer from the patent holder or by assessing particular facts and circumstances in a 'but for' situation, taking into account the following questions:
  - Is demand for the product tied to the patent's claims?
  - Are acceptable non-infringing alternates available?
  - Does the patent holder have adequate manufacturing and marketing capabilities to have captured the defendant's sales?
  - Is sufficient financial information available to complete the quantification?

  In addition, market share data is often required to allocate the infringer's sales if the market consists of more than two participants. Patent holders can find the process of supporting such analysis distracting to their core operations or they might not want to risk disclosing proprietary cost and profit information.

- Lost profits entitlement can be more difficult to establish. The proliferation of competition provides greater access to substitute products. The presence of these alternatives means that even without an alleged infringer's products in the market, consumers may not have automatically bought the patent holder's products. Furthermore, the growing use of specialized distribution channels for reaching a specific consumer demographic may support an alleged infringer's contention that its customers are separate and distinct from those of the patent holder.

- Damages awards for price erosion claims have become almost non-existent over the last six years. Globalized competition, turbulent economic conditions, and the cost and complexity of price erosion analyses have reduced the recovery (and most likely pursuit) of price erosions claims.

Chart 4. Composition of damages awards to all entities



Assessing success rate factors

Chart 5a

Success rates vary considerably by year, type of entity (NPE versus practicing entity), and trier of fact

Chart 5a demonstrates that the overall success rate for practicing entities is almost 10% higher than that of NPEs over the last 17 years. In instances when a final decision is reached at summary judgment, NPEs are successful only 2% of the time, as opposed to almost 10% for practicing entities. Meanwhile, the trial success rate for practicing entities is only about 1% higher than that of NPEs.

NPEs see declining overall success rates

Chart 5b

As Chart 5b demonstrates, segmenting overall success rate data for NPEs and practicing entities across various time periods within the last 17 years reveals an interesting pattern. While the difference in overall success rates for NPEs versus practicing entities between 2001 and 2005 had shrunk to less than 2%, the gap widened over the last six years. Between 2006 and 2011, practicing entity overall success rates have outpaced those of NPEs by almost 14%. This difference is similar to the margin in overall success rates between 1995 and 2000.

Trial success rates: diverging results

Chart 5c

The growing gap in overall success rates between 2006 and 2011 results from an increase in practicing entity success paired with a decline in NPE success.

Consistent with last year's study, Chart 5c illustrates that since 1995, practicing entities and NPEs have been significantly more successful with jury than bench trials. The chart also captures an interesting divergence in success rates: while practicing entities enjoy a success rate almost 13% higher than NPEs with the bench, their success rates with juries are actually about 4% less than NPEs.

Chart 5a. Patent holder success rates: 1995 to 2011

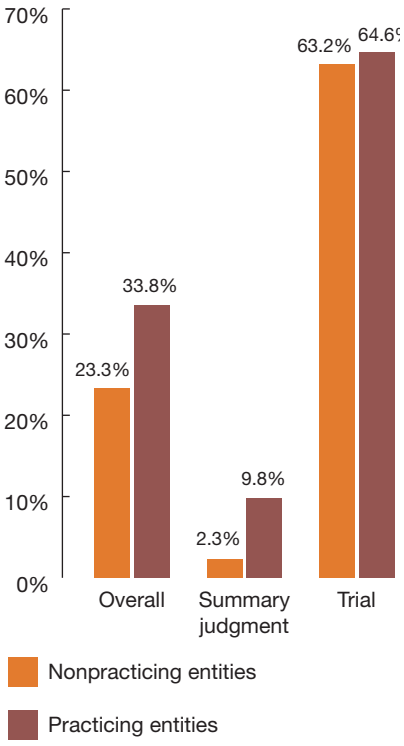


Chart 5b. Patent holder overall success rates

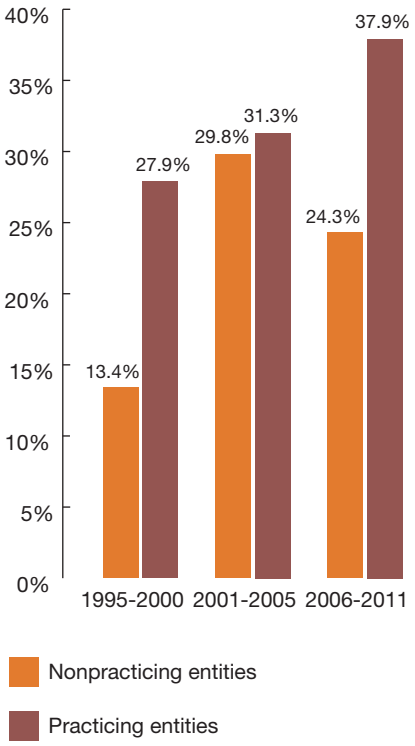
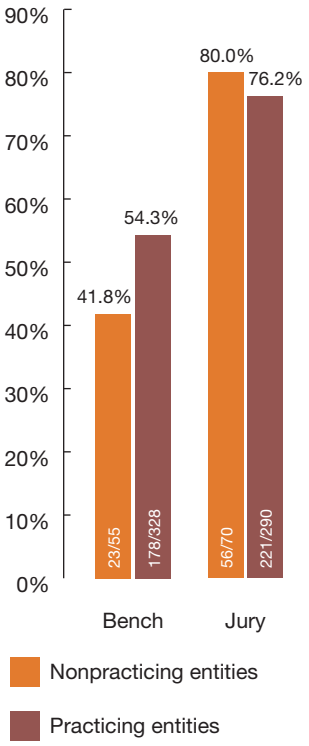


Chart 5c. Patent holder success rates at trial: 1995 to 2011



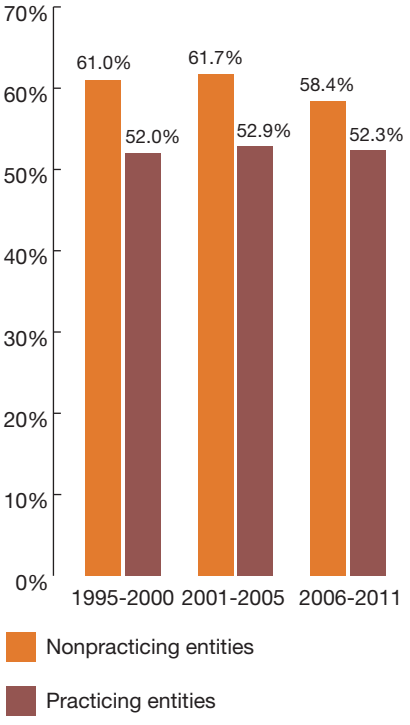
The number of cases is indicated within the respective column.

Summary judgment impact on NPEs

Chart 5d

In another interesting finding, we see a greater percentage of NPE cases decided at summary judgment than cases involving practicing entities. Chart 5d shows that across distinct time periods over the last 17 years, more NPE decisions consistently occur at summary judgment when compared to practicing entities. The gap in summary judgment decisions appears to have narrowed slightly since 2006. As previously noted, because their success rates at summary judgment are much lower than at trial, NPEs tend to experience a lower overall success rate than practicing entities when the total mix of summary judgment and trial decisions are considered.

Chart 5d. Percent of decisions at summary judgment



Consumer products technology leads in decisions

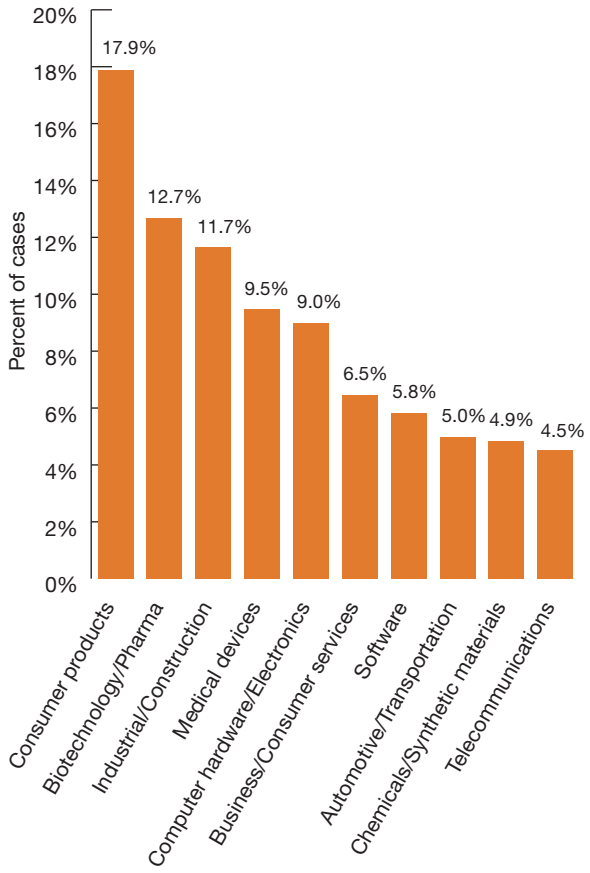
Chart 6a

Patent litigation trends diverge across industries

We mapped each decision to one of 20 industries, based on the nature of the technology embodied by the patent(s) at issue.

Chart 6a reflects the percentage of total identified decisions for the ten most active industry classifications, which collectively account for 88% of all patent case decisions. As the chart demonstrates, technology associated with the consumer products industry led in terms of the percentage of identified decisions from 1995 through 2011, representing 18% of the total decisions.

Chart 6a. Distribution of cases: top ten industries, 1995–2011



Biotechnology and information technology (computer hardware, software, Internet) cases on the rise

Chart 6b

Chart 6b provides additional insight into the number of identified decisions by industry from 1995 through 2011. While Chart 6a considers the entire period 1995 through 2011, by trifurcating the 17-year period, the consumer products industry ranks first in the percentage of decisions in each of the three time segments.

The number of decisions and relative ranking of the biotechnology/pharma industry have increased. In addition, the computer hardware/electronics, software, and Internet/online services industries experienced significant increases in identified decisions from 2006 through 2011. In fact, no identified decisions in Internet/online services occurred prior to 2006. This data reflects the increasing importance and size of biotechnology and information technology.

Chart 6b. Number of cases by industry

Overall rank	Industry	1995 - 2000 Cases	1995 - 2000 Rank	2001 - 2005 Cases	2001 - 2005 Rank	2006 - 2011 Cases	2006 - 2011 Rank	Total cases
1	Consumer products	82	1	80	1	151	1	313
2	Biotechnology/Pharma	40	4	70	2	112	2	222
3	Industrial/Construction	66	2	57	3	81	4	204
4	Medical devices	42	3	45	4	79	5	166
5	Computer hardware/Electronics	24	6	32	6	101	3	157
6	Business/Consumer Services	19	8	33	5	61	7	113
7	Software	14	10	23	8	65	6	102
8	Automotive/Transportation	24	7	25	7	38	10	87
9	Chemicals/Synthetic Materials	30	5	16	10	39	9	85
10	Telecommunications	14	11	22	9	43	8	79
11	Food/Beverages/Tobacco	15	9	8	12	16	12	39
12	Metals/Mining	12	12	10	11	10	17	32
13	Clothing/Textiles	11	13	8	13	12	14	31
14	Energy	7	14	7	15	11	15	25
15	Agriculture	5	15	8	14	11	16	24
16	Financial institutions/Investment management/Insurance	1	18	3	17	16	13	20
17	Internet/Online services	0	20	0	20	17	11	17
18	Aerospace/Defense	3	17	2	18	8	18	13
19	Media	5	16	4	16	4	20	13
20	Environment/Waste Management	1	19	2	19	6	19	9
	Total	**415**		**455**		**881**		**1,751**

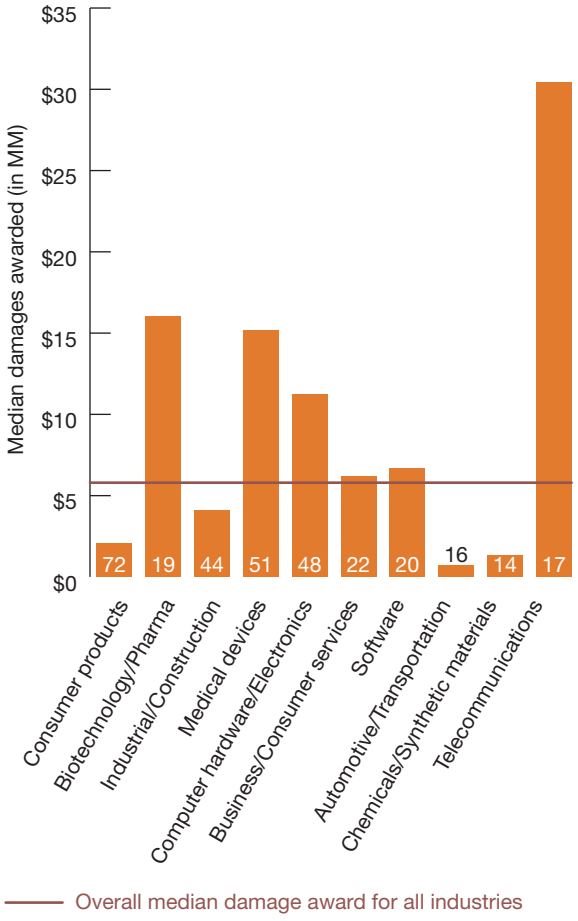
Median damages largest in tele-communications industry

Chart 6c

Chart 6c reflects that while technology associated with the consumer products industry represented the largest percentage of identified decisions, the median damages awarded were relatively low compared to the other top ten most active industries.

Consistent with last year's study, technology associated with the telecommunications, biotechnology/pharma, medical devices, and computer hardware/electronics industries experienced significantly higher median damages awards than other industries.

Chart 6c. Patent holder median damages awarded: top ten industries, 1995–2011



Median damages are adjusted for inflation and represented in 2011 US dollars.

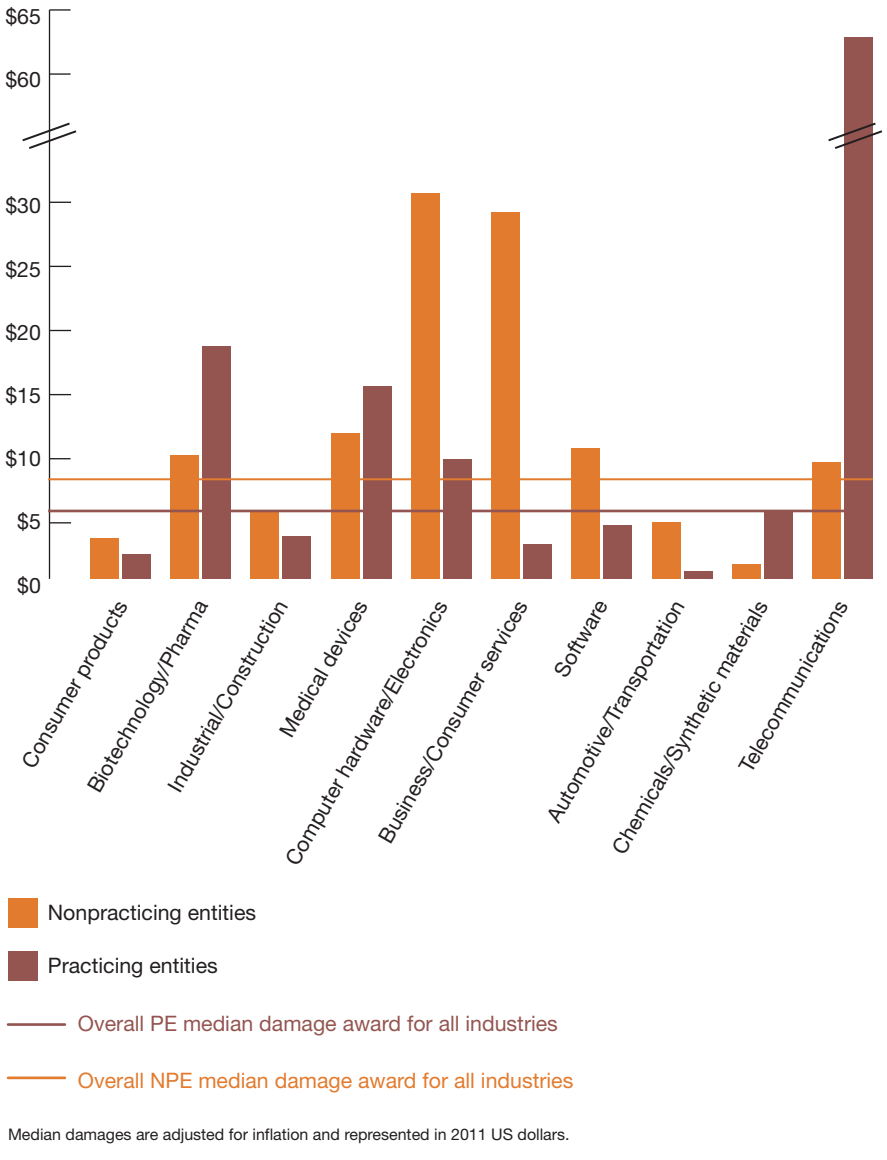
The number of cases is indicated within the respective column.

NPE versus practicing entity damages vary widely by industry

Chart 6d

Chart 6d separates the median damages awards for each of the top ten industries into practicing entity and NPE median damages. This chart demonstrates that the relationship between NPE and practicing entity damages is volatile across industry classification. The telecommunications and biotechnology/pharma industries have experienced significantly greater awards for practicing entities, while the computer hardware/electronics and business/consumer services industries reflect substantially higher awards for NPEs.

Chart 6d. Patent holder median damages awarded: top ten industries, 1995–2011



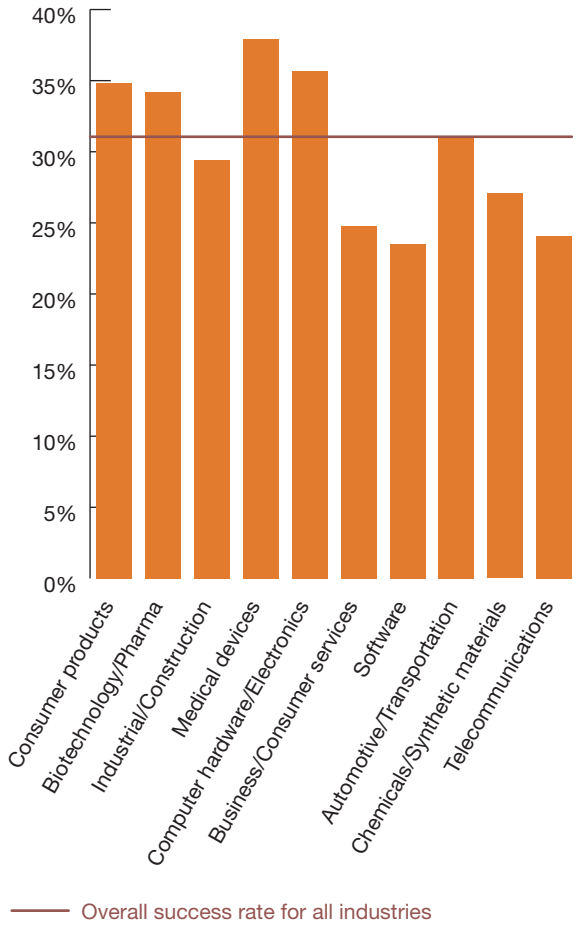
Median damages are adjusted for inflation and represented in 2011 US dollars.

Success rates by industry

Chart 6e

While the overall success rate (trial and summary judgment combined) for all industries during the period was approximately 32%, patent holders with technology that related to the consumer products, biotechnology/pharma, medical devices, and computer hardware/electronics industries achieved success rates higher than the overall median. Chart 6e also demonstrates that success rates across the top ten industries are relatively concentrated, falling within a band of +/- 15%.

Chart 6e. Patent holder success rate: top ten industries, 1995—2011

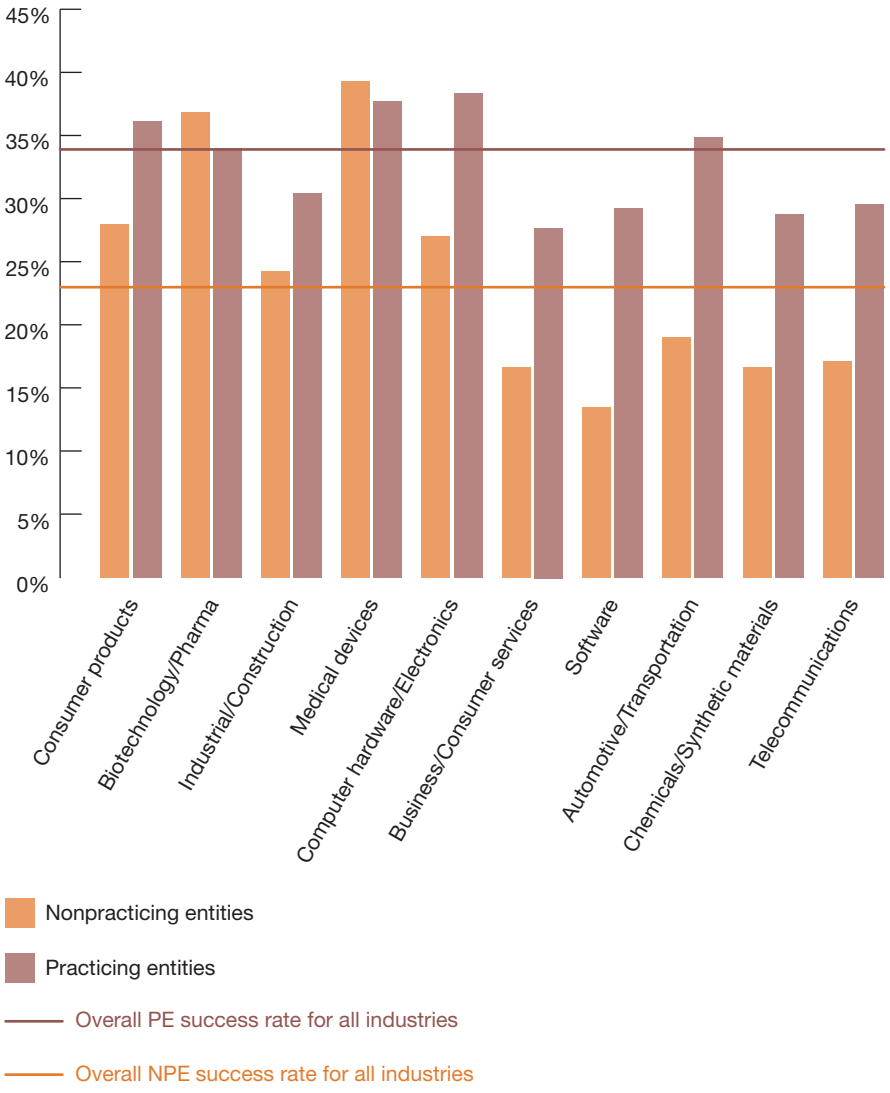


Practicing entity versus NPE success rates by industry

Chart 6f

Chart 6f expands on the analysis provided in Chart 6e by reflecting practicing entity versus NPE success rates by industry. The chart demonstrates that while the overall success rate is higher for practicing entities than for NPEs, the volatility of success rates for NPEs is very high across industries. The contrast between the high NPE success rates of the biotechnology/pharma and medical device industries and the low NPE success rates of the software and business/consumer services industries is particularly striking.

Chart 6f. Patent holder success rate: top ten industries, 1995–2011

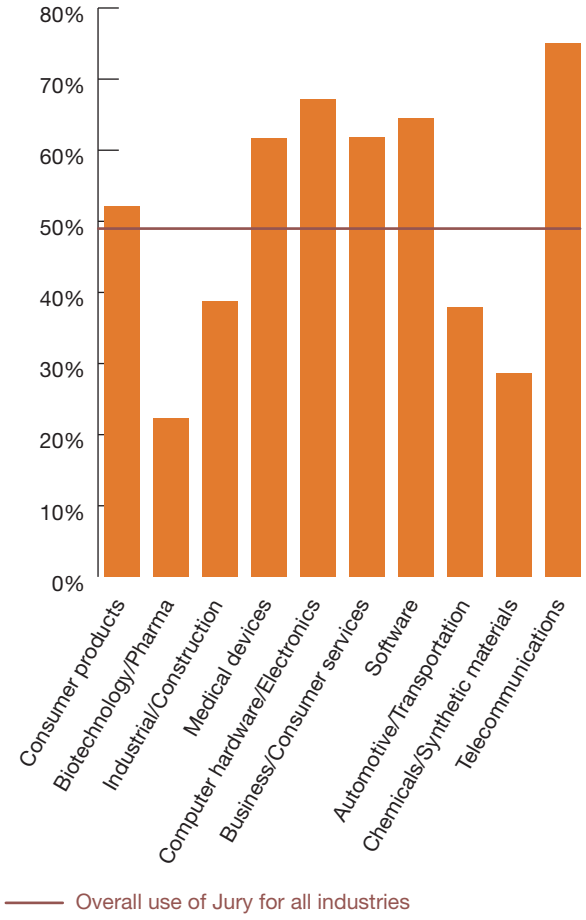


Telecommunications industry leads in jury use

Chart 6g

Use of jury trials varied widely by industry, as illustrated in Chart 6g. Highlighting the wide disparity of jury trials by industry are the telecommunications and chemicals/synthetic materials industries, with a margin in jury use of more than 40%. As previously noted, the telecommunications industry also had the highest median damages award by a significant margin. The biotechnology/pharma industry had a considerably lower use of jury trials than the other top 10 industries; this is partly due to the frequent incidence of ANDA-related litigations, which are tried primarily by the bench.

Chart 6g. Use of jury trials: top ten industries, 1995 to 2011



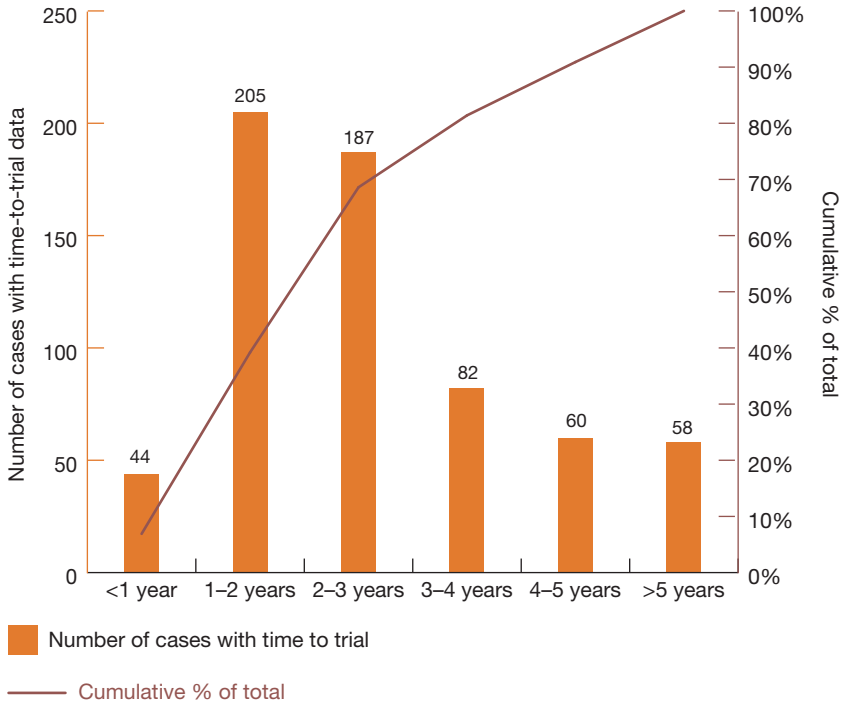
Most patent cases (70%) reach trial within three years

Chart 7a

While median time-to-trial has remained relatively consistent, significant variations exist across jurisdictions

We captured time-to-trial data for 636 cases in 68 districts, using the court dockets for each matter. We then calculated time-to-trial from the complaint date to the first day of trial for each case. In Chart 7a, the overall time-to-trial distribution indicates that about 70% of cases reached trial within three years from the filing of the initial complaint.

Chart 7a. Time-to-trial distribution of cases: 1995 to 2011

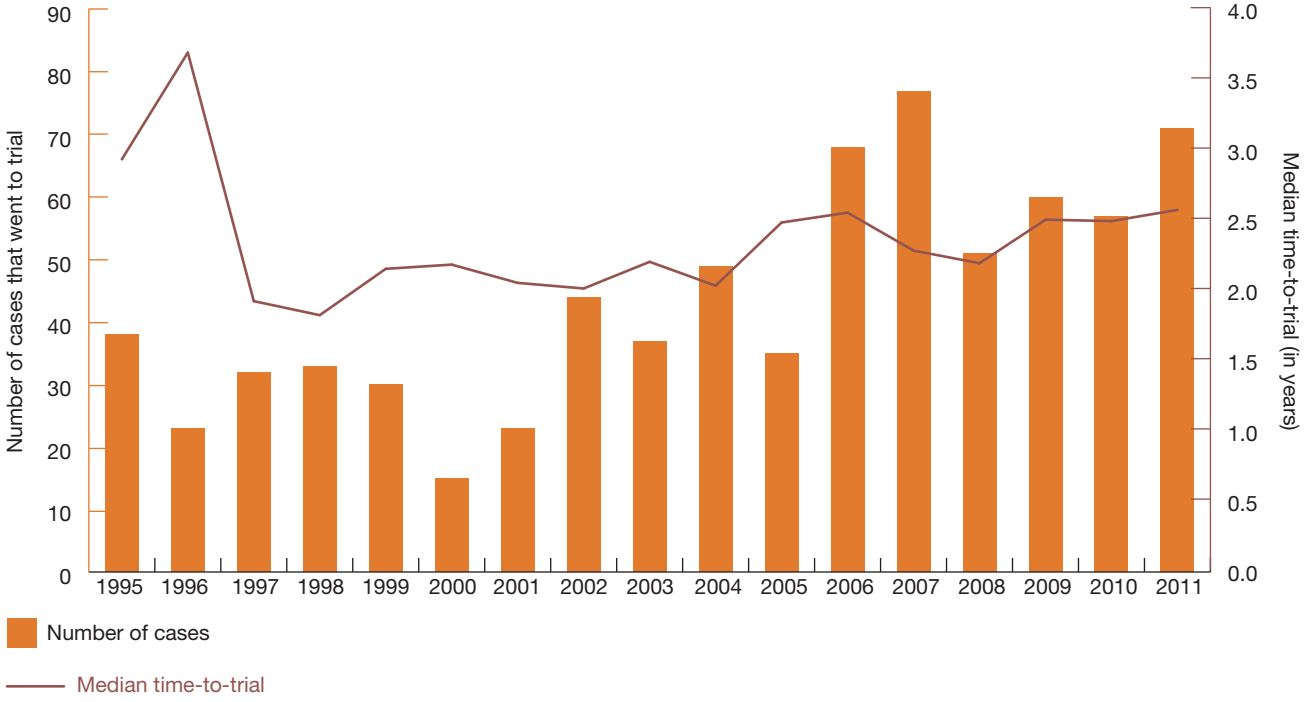


Average time-to-trial: approximately 2.5 years

Chart 7b

Overall, time-to-trial appears to have remained relatively steady at about 2.5 years since 2005, and no significant variations are noted since 1997. However, in recent years, as case volume has increased, time-to-trial has also risen slightly.

Chart 7b. Median time-to-trial

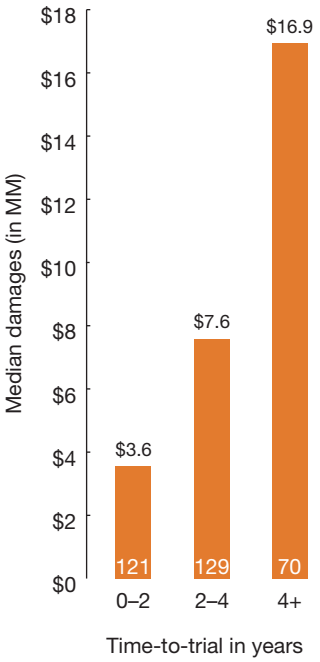


Median damages rise with time-to-trial

Chart 7c

Chart 7c reflects the direct relationship between the median damages award and the number of years to trial. Several factors might influence this relationship. Cases involving higher potential damages awards are more complex and, thus, take longer to reach trial. Also, increased time-to-trial provides a longer period over which sales can occur, thereby increasing the potential damages base.

Chart 7c. Median damages based on time-to-trial: 1995 to 2011



Median damages are adjusted for inflation and represented in 2011 US dollars.

The number of cases is indicated within the respective column.

Virginia Eastern District, Wisconsin Western District speediest in time-to-trial

Chart 7d

Since 1995, significant variations have occurred in the median time-to-trial across jurisdictions. To assess the lead time, we focused on the most active districts. Chart 7d summarizes the median time-to-trial among these courts from 1995 to 2011. As indicated, the Virginia Eastern and Wisconsin Western districts boast the shortest time-to-trial. Interestingly, the top five districts and overall median time-to-trial have remained consistent from our last study, with little change in the overall time-to-trial.

Chart 7d. Median time-to-trial by district from 1995 to 2011

Rank	District	Total # of Identified decisions with time-to-trial data	In Years
1	Virginia Eastern District Court	17	0.97
2	Wisconsin Western District Court	10	1.07
3	Florida Middle District Court	13	1.74
4	Delaware District Court	105	1.90
5	Texas Southern District/ Bankruptcy Courts	11	2.00
6	Texas Eastern District Court	80	2.17
7	California Central District Court	28	2.28
8	Florida Southern District Court	14	2.39
9	Texas Northern District Court	17	2.42
10	Minnesota District Court	11	2.58
11	New York Southern District Court	36	2.65
12	California Northern District Court	33	2.72
13	New Jersey District Court	21	2.73
14	Illinois Northern District Court	34	3.42
15	Massachusetts District Court	26	3.58
	Overall (all decisions identified)	**636**	**2.30**

Includes only the 15 most active districts for which time-to-trial data was available.

Certain districts are more favorable to patent holders

Chart 8

Considering median time-to-trial, median damages awarded, and overall success rates, certain jurisdictions (particularly Virginia Eastern, Delaware, and Texas Eastern) continue to be more favorable venues for patent holders, with shorter time-to-trial and higher success rates and median damages awards. Chart 8 presents the top 15 districts from 1995 to 2011 based on an average of their categorical rankings for each of the three statistical measures mentioned earlier. Interestingly, the overall rankings for district courts varied only slightly from last year's study, with Florida Southern moving up in ranking to 12 from 15, and Massachusetts, Minnesota, and Illinois Northern each dropping down by one spot.

Chart 8. District Court rankings: 1995 to 2011

Overall rank	District	Median time-to-trial (in years)	Rank	Overall success rate	Rank	Median damages awarded	Rank
1	Virginia Eastern District Court	0.97	1	34.1%	5	$36,025,989	1
2	Delaware District Court	1.90	4	41.7%	3	$20,636,247	2
3	Texas Eastern District Court	2.17	6	55.7%	2	$8,782,738	5
4	Wisconsin Western District Court	1.07	2	31.4%	7	$4,730,027	9
5	Florida Middle District Court	1.74	3	57.1%	1	$151,392	15
6	California Central District Court	2.28	7	32.4%	6	$6,728,379	7
7	Texas Southern District/ Bankruptcy Courts	2.00	5	20.5%	15	$11,042,883	4
8	Texas Northern District Court	2.42	9	38.7%	4	$1,756,750	13
9	New Jersey District Court	2.73	13	28.8%	11	$16,976,883	3
10	New York Southern District Court	2.65	11	29.3%	9	$3,269,254	11
11	California Northern District Court	2.72	12	22.6%	14	$7,848,405	6
12	Florida Southern District Court	2.39	8	23.1%	13	$2,836,043	12
13	Massachusetts District Court	3.58	15	30.6%	8	$4,088,947	10
14	Minnesota District Court	2.58	10	28.9%	10	$1,590,435	14
15	Illinois Northern District Court	3.42	14	24.8%	12	$5,768,892	8
	Overall (all decisions identified)	**2.30**		**31.6%**		**$5,302,861**	

Median damages are adjusted for inflation and represented in 2011 US dollars.

Federal district courts with most NPE cases

Chart 9a

Of NPE decisions, 38% were concentrated in five federal district courts

Cases with NPEs as patent holders were concentrated in a relatively smaller number of key districts: the top five districts (out of the total 94) with the most identified decisions accounted for 38% of all identified NPE cases and the top ten districts accounted for 56%. Of particular interest is that the two districts with the most identified NPE decisions, Illinois Northern and Texas Eastern, continue to present a dichotomy in relative NPE success rates. As seen in Chart 9a, Texas Eastern ranks second highest (46.5%), whereas Illinois Northern ranks thirteenth (12.9%) in terms of overall NPE success rates. Meanwhile, Delaware, which has the lowest percentage of identified decisions where the patent holder is an NPE, has an overall NPE success rate of 41.2%, which is among the highest and well above the average.

Chart 9a. District courts with most identified decisions with NPE as patent holder: 1995 to 2011.

Industry	Decisions involving NPEs	Total identified decisions	NPE % of total decisions	NPE success rate
Texas Eastern District Court	43	115	37.4%	46.5%
Illinois Northern District Court	31	129	24.0%	12.9%
New York Southern District Court	26	116	22.4%	15.4%
California Northern District Court	20	124	16.1%	15.0%
Delaware District Court	17	168	10.1%	41.2%
California Central District Court	15	74	20.3%	26.7%
Florida Southern District Court	14	39	35.9%	14.3%
Massachusetts District Court	14	72	19.4%	35.7%
Pennsylvania Eastern District Court	11	34	32.4%	18.2%
Minnesota District Court	10	45	22.2%	40.0%
Texas Southern District/ Bankruptcy Courts	9	44	20.5%	11.1%
US Court of Federal Claims	8	21	38.1%	12.5%
Virginia Eastern District Court	8	44	18.2%	25.0%
Colorado District Court	7	20	35.0%	28.6%
DC District Court	7	18	38.9%	0.0%
Florida Middle District Court	7	28	25.0%	57.1%
Kansas District Court	6	14	42.9%	0.0%
Maryland District Court	6	17	35.3%	0.0%
Michigan Eastern District Court	6	36	16.7%	0.0%
All identified decisions	**361**	**1,751**	**20.6%**	**23.3%**

Includes districts with more than five identified decisions involving an NPE as the patent holder.

Practicing entities and NPEs by the numbers

Chart 9b

Chart 9b reflects a summary of critical patent litigation statistics for practicing entities and NPEs. In the current and prior year, the median damage award for NPEs was significantly higher than that for practicing entities while practicing entities enjoyed higher success rates and slightly shorter median time-to-trial.

Chart 9b. Key statistics for practicing and nonpracticing entities: 1995 to 2011.

	Median time-to-trial (in years)	Overall success rate	Median damages awarded
Nonpracticing entity	2.55	23.3%	$8,000,000
Practicing entity	2.27	33.8%	$5,222,748

Median damages are adjusted for inflation and represented in 2011 US dollars.

NPEs see variety in median damages and success rates

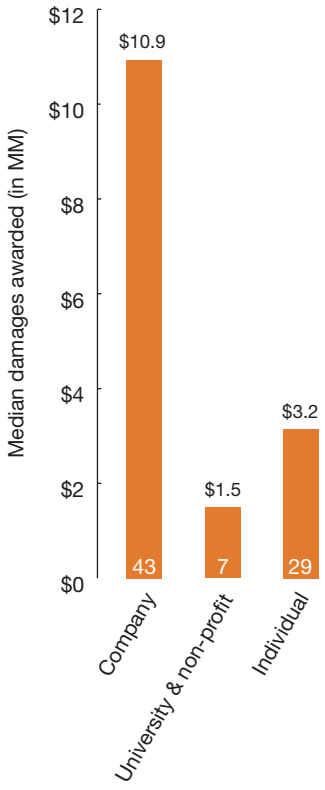
Chart 10a

Median damages awards and success rates vary significantly among NPEs

Charts 10a through 10c represent an analysis of NPE litigation by NPE type: (1) companies/for-profit organizations, (2) universities/ non-profit organizations, and (3) individuals/inventors.

Chart 10a illustrates that the median damages award for NPEs that are companies/for-profit organizations is significantly higher than that for university/non-profit and individual NPEs. Notably, while damages for university/non-profit organizations and individual/inventors remained relatively consistent with last year's findings, the median damages award for NPEs that are companies/for-profit organizations declined dramatically to $10.9 million from $18.4 million in last year's study.

Chart 10a. Patent holder median damages awarded by NPE type: 1995–2011



Median damages are adjusted for inflation and represented in 2011 US dollars.

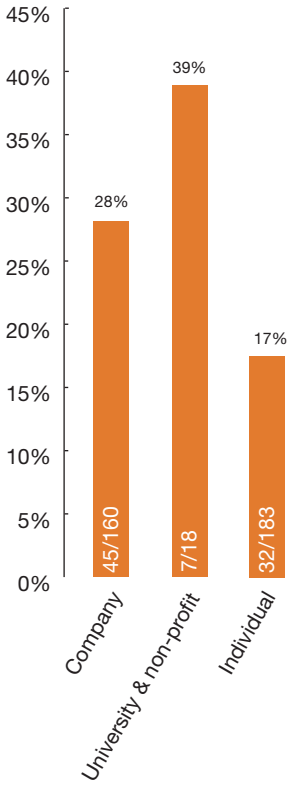
The number of cases is indicated within the respective column.

Individual NPEs experience lower success rates

Chart 10b

While company NPEs are awarded higher damages, university/non-profit NPEs have by far the highest success rate among NPEs. Individual NPEs lag far behind, as shown in Chart 10b. Each reading was consistent with the calculations in last year's study, with company and individual NPEs remaining constant and university/ non-profit NPEs edging down two points to a 39% success rate.

Chart 10b. Patent holder success rates by NPE type: 1995–2011



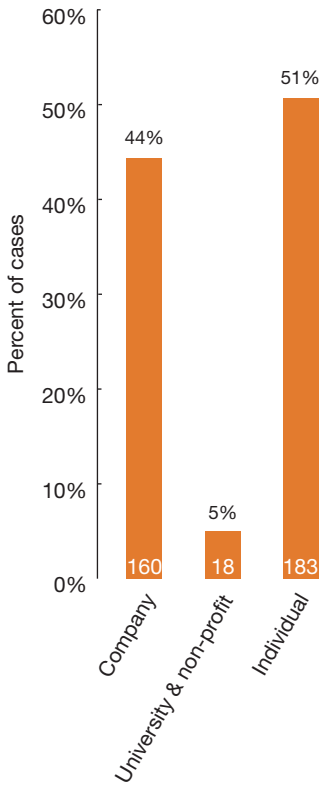
The number of cases is indicated within the respective column.

Vast majority of NPE litigation involves company and individual NPEs

Chart 10c

Chart 10c shows the distribution of NPE litigation over the last 17 years between the three NPE types. About 95% of NPE litigation involves company and individual NPEs. While individual NPEs have the lowest median damages award and success rate, they represent the most frequent kind of NPE litigant, accounting for more than half of identified NPE decisions.

Chart 10c. Distribution of cases by NPE type: 1995-2011



The number of cases is indicated within the respective column.

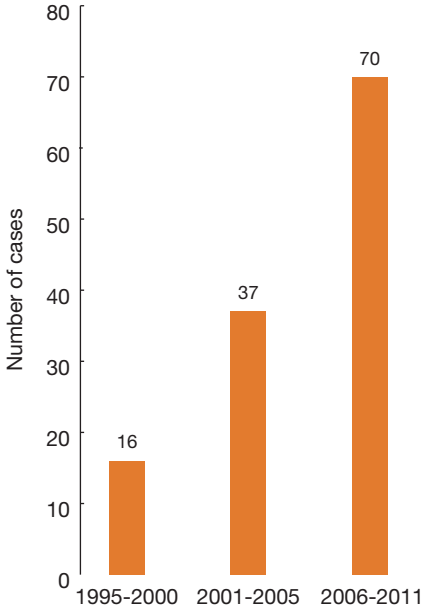
ANDA litigation trends upward

Chart 11a

A view of ANDA litigation is new to this year's study. This litigation results from a generic drug manufacturer's filing with the Food and Drug Administration (FDA) an ANDA paragraph IV certification, which effectively challenges a brand drug manufacturer's patent(s). Due to the nature of ANDA litigation, damages are rarely, if ever, awarded because the alleged infringer does not generally make any infringing sales prior to the filing of the litigation. However, the economic ramifications of ANDA litigation are significant due to the potential for lost patent protection of highly profitable brand name drugs. In addition, the first generic filer of a successful patent challenge is awarded a period of exclusivity in the generic drug market.

Chart 11a illustrates that the number of court decisions from ANDA litigation has grown substantially, consistent with the upward trend of overall patent litigation identified in Chart 1.

Chart 11a. ANDA cases



New Jersey and Delaware are favored ANDA districts

Chart 11b

Chart 11b reflects the top five most active judicial districts for ANDA litigation. Given the concentration of pharmaceutical companies in the New Jersey/New York area, it is not surprising that a large number of ANDA cases are brought in those districts and in Delaware, where many corporations are incorporated. These five districts comprise almost 70% of the ANDA cases during our study period.

Chart 11b. Top five districts with ANDA cases: 1995 to 2011

	Top five districts	Number of cases
1	Delaware District Court	27
2	New Jersey District Court	27
3	New York Southern District Court	13
4	Illinois Northern District Court	12
5	Florida Southern District Court	6

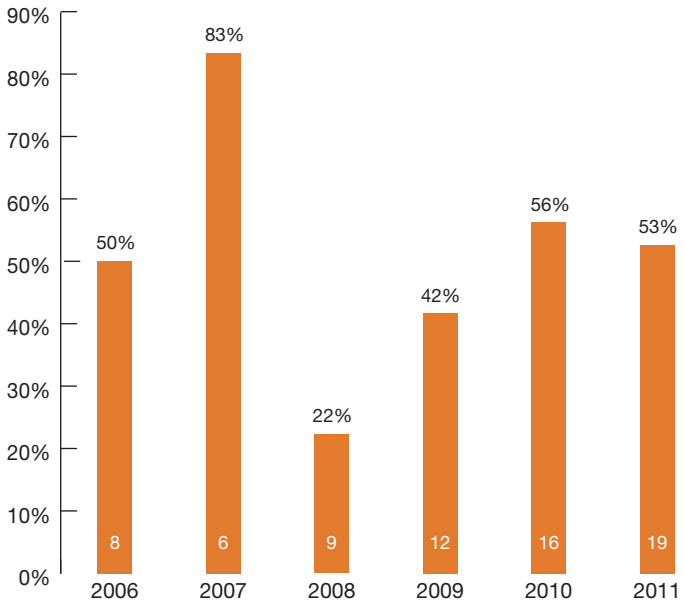
Historical ANDA success rates have varied significantly

Chart 11c

Chart 11c reflects ANDA success rates, which we have defined here as the patent holder's (the brand name drug manufacturer) success. Since 2006, ANDA litigation success rates have ranged from a low of 22% to a high of 83%. However, the sample size (the number of ANDA cases reaching a dispositive conclusion) in the earlier years was low, possibly explaining the wide swings in success rates. Because the majority of ANDA litigations continue to end in settlement, the adjudicated case sample size remains modest.

As the sample size increases, which appears to be the trend, it will be interesting to observe whether a pattern materializes, in which the 2010 and 2011 success rates of just over 50% repeats over time.

Chart 11c. ANDA success rates



The total number of cases are indicated within the respective column.

Top ANDA litigants

Chart 11d and 11e

Charts 11d and 11e represent the most active ANDA litigants, where plaintiffs are the proprietary drug makers and defendants are the generic drug manufacturers. More than half of identified ANDA decisions involve the five most active ANDA defendants. Not surprisingly, Teva, which is considered the world's largest generic drug manufacturer, tops the list.

On the other hand, approximately one-third of identified ANDA decisions involve the top five plaintiffs, or the branded drug manufacturers.

Chart 11d: Top five ANDA Defendants: 1995 to 2011

Defendant	Number of cases
Teva (including, Barr Laboratories, Cephalon & Novopharm)	29
Apotex	13
Mylan	11
Watson (including, Andrx Pharmaceutical)	6
Sandoz	5

Chart 11e: Top five ANDA Plaintiffs: 1995 to 2011

Plaintiff	Number of cases
Glaxo (including, SmithKline Beecham)	11
Pfizer (including Pharmacia & Upjohn, King, Warner-Lambert & Wyeth)	11
Johnson & Johnson (including, Alza, Janssen, McNeil-PPC, & Ortho-McNeil)	9
Abbott Laboratories	6
Astrazeneca	6

Our methodology

To study the trends related to patent decisions, PwC identified final decisions at summary judgment and trial recorded in two WestLaw databases, Federal Intellectual Property – District Court Cases (FIP-DCT) and Combined Jury Verdicts and Settlements (JV-ALL), as well as in corresponding Public Access to Court Electronic Records (PACER) system records.

The study focuses on 1,751 district court patent decisions issued from 1995 to 2011. Definitions for critical terms used throughout the study are listed here.

Term definitions

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.

Cases decided at trial include those district court patent infringement cases where an opinion was rendered by a judge or jury at trial.

A ***success*** includes instances where a liability and damages/permanent injunction (if included) 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.

A nonpracticing entity (NPE) is defined as an entity that does not have the capability to design, manufacture, or distribute products with features protected by the patent.

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