

# IP Litigation Risk Report

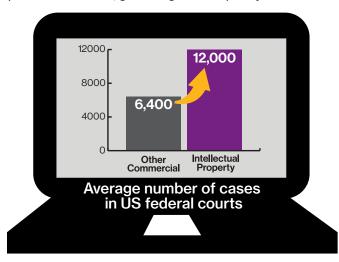
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## **Executive summary**

In the U.S. alone, an average of 12,000 intellectual property (IP) cases are filed in federal court each year; to put that into context, each year there are approximately 6.400 other commercial cases filed in federal court. But IP litigation is not limited to the U.S. For example, in China, the number of IP cases filed in the first instance courts doubled from 2013 to 2017,2 and the Global IP Project estimates 1,300 cases are filed each year in Germany.3 As individuals and organizations continue to develop intellectual property at increasingly high quantities and rates, global litigation frequency will also rise.



In fact, the number of patents granted nearly doubled from 2002 to 2016,4 as did the number of worldwide trademark registrations.5 What's more is that the countries in which companies receive IP rights are shifting; these shifts will impact where future IP cases are filed.

In today's competitive business arena, stakes are high and all property is valuable. It's just as likely that a company could defend itself against a patent infringement suit for a technology it uses to run its business (e.g. CRM or logistics software) as it is to be sued for a new-to-market technology or product that it develops. Not all suits are obvious, and not all are predictable. It isn't enough to simply manage and honor originality and integrity; you must also manage your risk and exposure.

While many companies appreciate intellectual property's value, they have not yet extended the IP management function to include IP risk management - and, as such, have not quantified their own IP risk. Risk Management, Legal, Finance and Human Resources may all touch on IP and risk in varying capacities, but they typically do not take a coordinated, comprehensive approach to fully managing IP risk itself. Instead, costs to manage that risk tend to be siloed in Legal and Research & Development departments. As a result, the full context and benchmarking data evade companies, preventing them from determining how much they truly spend managing various IP risks. This is a financially costly approach that leaves organizations vulnerable.

Case cause and severity will vary, but all cases share one commonality: costliness. In the U.S., between litigation expenses and damages or settlements, case costs can easily reach the six-figure range for smaller companies, with large organizations often facing case costs in the eight figures. These hard numbers do not factor in other indirect costs, such as lost productivity, lost customers or diminishing brand equity. Outside of the U.S., those numbers are typically lower, particularly in Europe where the threat of an injunction serves as leverage. However, IP damages awarded by Chinese courts are beginning to increase due to new IP policy initiatives.6

To better understand perceptions of IP litigation risks' financial impact, Willis Towers Watson examined data collected through in-house surveys, in collaboration with CPA Global, and sourced data to develop our first-ever Intellectual Property Litigation Risk Report, The report gauges existing perceptions of IP litigation risk and encourages an enterpriselevel understanding of the potential financial impact and how to manage and minimize it.



#### Survey respondent profile

The Intellectual Property Litigation Risk Report is based on recent in-house IP litigation cost survey results and sourced litigation frequency and severity data. Respondents represent companies of all sizes, global locations and diverse market sectors. The composite survey respondent profile is as follows:



Over **70%** generate between **\$100M-\$10B** in annual revenue



Nearly **90%** are for-profit, with **34%** public companies and **55%** private companies



**50%** are IT/Telecom + health care + manufacturing



Nearly half are domiciled in the U.S.

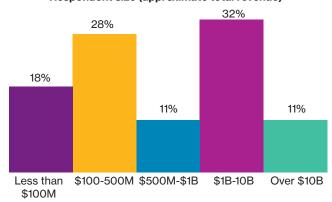


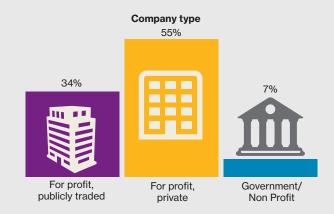
Nearly 90% do business in the U.S.

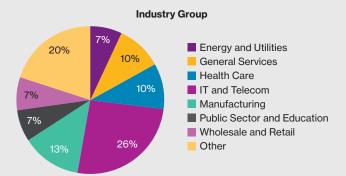


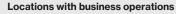
Over **90%** describe themselves as suppliers versus users of products/technologies/services.

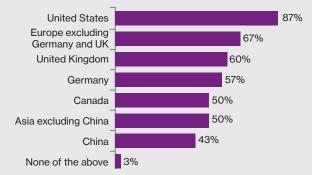
#### Respondent size (approximate total revenue)



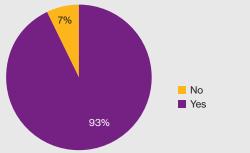






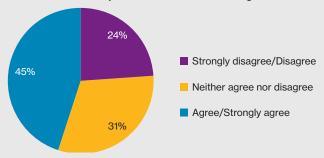


#### Is your organization a supplier of products/technologies/services?

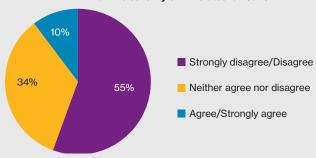


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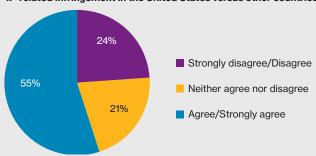
#### Our organization is most concerned about being sued by a competitor for an IP-related infringement.



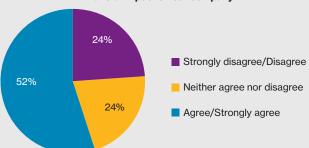
#### Our organization is more concerned about frequency than the severity of IP-related lawsuits.



#### Our organization is most concerned about being sued for an IP-related infringement in the United States versus other countries.



#### The costs associated with IP litigation could have a material financial impact on our company.



#### Perception versus reality

One of our primary goals in examining the data was to better understand IP litigation's perceived risks and financial impacts. Our report results show that many organizations need to consider global influences, rather than just competitors matching their own demographic profile. For example, nearly half of respondents stated that they were most concerned about being sued by a competitor, but since 2008, 50-70% of defendants sued for patent infringement in the U.S. have been sued by non-competitors.8 More than half of the companies sued for patent infringement by non-competitors are smaller companies,9 and most non-competitor patent litigation in the U.S. targets the e-commerce and software, consumer electronics and PCs, consumer products and networking technology sectors.10

While 55% of respondents were most concerned about being sued in the U.S. for IP infringement, over 40% do business in China where the number of IP cases eclipses that of the U.S.

As discussed below, the number of patent cases filed in China is increasing, while the number of patent cases filed in the U.S. is leveling off.

Through this report, we endeavor to provide in-depth analysis and insights into:

- The global financial impact of IP infringement litigation, including frequency and severity trends in key geographies and valuable benchmarking information; and
- Practical ways to mitigate and manage IP litigation risk, including a risk preparedness checklist.

## IP is everywhere . . . and so is IP risk

#### Mapping the exposures

We live in a world of protected brands, ideas and technologies. From the cup of Starbucks coffee that starts the day to the FitBit that tracks our steps, the Bluetooth that keeps us connected hands-free, the cloud-based CRM system we use at work and the Spotify app that streams music through our smartphones, we depend on IP-protected technology and use IP-protected products nearly every second of the day. Almost all countries have laws protecting "creations of the mind."

Use of technology and IP rights-protected products is not free. As the IP owner, you must protect your IP against loss or others taking or trespassing on your IP rights. As a maker or user of technology and products, you may be taking or trespassing on others' IP.

When you buy a house, you get insurance to protect that property against physical damage. When you buy a car, you must get insurance to protect it and its drivers. In many ways, IP is no different: As the below graphic illustrates, there are risks associated with IP ownership and IP infringement.

#### What is Intellectual Property (IP)?



Patents = inventions drug formulations, RFID, WiFi, GPS navigation



Copyrights = creative works © software, music, books, photographs, fabric patterns



Trademarks = distinguishing word, symbol, design ®™ brand names, logos, distinctive designs



Proprietary rights that confer a competitive advantage trade secrets (e.g., manufacturing processes, chemical formulas, know-how), customer contracts, customer lists, data, domain names, etc.

### **Property**

Loss of IP through theft, departing employees, successful legal challenges to IP

Costs to enforce IP, anti-counterfeiting costs, costs to defend IP against legal challenges, recruiting & retention costs

Injunction risk if found to infringe others' IP, settlement/damages costs, IP indemnification obligations

Costs to challenge asserted patents, costs to defend against infringement claims or theft of IP claims (such as by employees)

## Liability

#### Trespassing on third-party IP rights

Just as someone can physically trespass on real property by entering without permission, someone can trespass on another's IP rights by using those rights without permission.

	What is it	Potential damages
Patent	Patent infringement results from making, using, selling, offering to sell, or importing a technology, product, service, etc. covered by the invention claimed by a patent.	Calculated as no less than a reasonable royalty for use of the patented invention. Damages for lost profits also may be awarded. In some countries, such as the U.S., the damage award can be trebled if the infringement is willful.
Trademark	Trademark, trade dress, and design right infringement result when a confusingly similar mark, look and feel, or design is used to create a likelihood of confusion or mistake, or deception about a product or offering.	May be compensatory or statutory in the U.S. Statutory damages are calculated on a per infringement basis, so multiple intentional infringing acts can be quite costly.
Copyright	Copyright infringement is the unauthorized copying of copyrighted material.	Can include the infringer's profits, lost profits, loss of goodwill, and reasonable royalty. In the U.S., statutory damages and treble damages are available for use of a counterfeit mark.
Trade secret	Trade secret misuse or misappropriation occurs if a trade secret is improperly acquired, disclosed or stolen.vi	Misappropriation can include compensatory damages for the actual loss caused to the trade secret owner by the misappropriation as well as unjust enrichment gained by the misappropriation. Damages can be calculated as a reasonable royalty as well. Punitive damages are allowed in the U.S.

The financial impact of IP infringement extends beyond payment of damages for past infringement; the infringer may be required to pay a license fee going forward. Additionally, if a patent holder targets several of a supplier's customers, all of which the supplier has agreed to indemnify, then the supplier is faced with an aggregated risk problem.

Non-monetary remedies for infringement such as injunctions also are available.<sup>22</sup> An injunction awarded to a competitor against selling an infringing product can have a material financial impact on the infringer due to a decrease in expected revenue from sales of that product.

E.g., 35 U.S.C. § 271(a); WIPO Lex provides a global database of IP laws of WIPO Member States: http://www.wipo.int/wipolex/en/

ii E.g., 35 U.S.C. § 284.

E.g., Lanham Act, 15 U.S.C. §§ 1051 et seq.; WIPO Lex provides a global database of IP laws of WIPO Member States: http://www.wipo.int/wipolex/en/

<sup>&</sup>lt;sup>Iv</sup> E.g., 17 U.S.C. § 504. Under U.S. law, statutory damages are available only if the infringed work is registered with the U.S. Copyright Office.

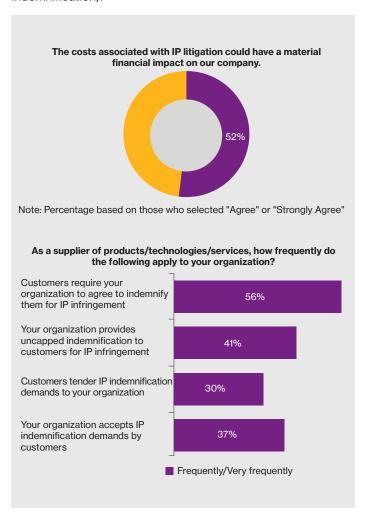
E.g., 17 U.S.C. § 501(a); WIPO Lex provides a global database of IP laws of WIPO Member States: http://www.wipo.int/wipolex/en/.

E.g., Uniform Trade Secret Act; see also the Defend Trade Secrets Act of 2016, 18 U.S.C. §§ 1836, et seq.; Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016, Article 4, available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016L0943.

## What is the financial impact of IP litigation?

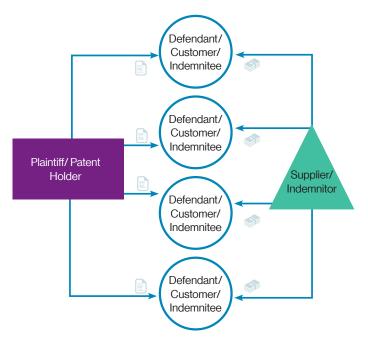
#### Survey says . . .

More than 50% of the respondents believed that IP litigation costs could have a material impact on their companies. However, to put that in context, most of the respondents were technology/products/services providers, not users. and therefore have both direct and indirect risk (via IP indemnification).



#### Example

Cumberland Systems acquired a password encryptionrelated patent from the inventor and has asserted it against over 20 organizations that provide password management platforms; these organizations are customers of Real-Time Innovations, ManageEngine, Keeper, Sookasa and LastPass. It was relatively easy to identify the providers' customers from customer success stories and other information on their websites. Assuming the password management platform providers agreed to indemnify their customers against IP infringement claims, each provider is now faced with indemnification demands from several customers.



#### Factors driving IP litigation volume

The number of patents granted nearly doubled from 2002 to 2016,23 as did the number of worldwide trademark registrations.<sup>24</sup> While most patents are not litigated, there tends to be a correlation between patents granted and patents litigated:25 More patents granted equals more patents litigated. Given the accelerating pace of innovation and grants of IP rights in an increasingly competitive global market, we can expect the IP litigation rate to grow.26

2015 in-force global IP rights = 53M 2016 in-force global IP rights = 58M<sup>21</sup>

#### Growing use of trade secrets

Companies often struggle with what to protect via patent versus trade secret. The U.S. Chamber of Commerce estimates that publicly traded U.S. companies own trade secrets worth \$5T.27 Companies around the globe are opting to use trade secrets to protect innovation;28 the growing use of trade secrets and their value could drive a higher number of trade secret cases to be filed annually.

### Publicly traded U.S. companies own trade secrets worth \$5 trillion

#### Geographic shifts in IP rights

There are shifts in where companies are receiving IP rights. which will influence where IP cases are filed in the future. For example, from 2015 to 2016, the patent grant rate in the European Patent Office (EPO) increased by 40%, while the share of worldwide patent grants in Asia nearly doubled to 57%.29 In 2016, China had the highest number of in-force trademark registrations (12.38 million), followed by the U.S. (2.12 million), Japan (1.85 million) and India (1.33 million).30 Overall, the top five jurisdictions for number of trademark registrations are China, the U.S., India, the Republic of Korea and the EUIPO.31

#### The secondary patent marketplace

Over the past approximately 15 years, a secondary patent marketplace has emerged. In this marketplace, patents are sold as business assets in their own right, rather than serving solely as a right to exclude others from practicing the claimed invention.32 An estimated 60% to 70% of the patents sold on the secondary patent market come from operating companies.33 Most of the patents transacted are in the software, hardware and communications technology sectors, although more aerospace and materials patents are being transacted.<sup>34</sup> A few patent transaction examples include:

- Dominion Harbor Enterprises (DHE) secured nearly 1,000 U.S. and foreign patent assets from Intellectual Ventures, a large patent-holding entity that acquired the patents from American Express. The inventions claimed in the patents cover a broad range of technologies such as contactless payments, POS terminals, security and fraud detection, and online advertising, among others. DHE plans to target companies in the financial, retail and ecommerce sectors to license the portfolio.35
- In December 2016, WiLAN, a subsidiary of publicly held Quarterhill, acquired from Eastman Kodak Company a portfolio of patents covering electrophotography and other printing technologies. Via its subsidiary Commercial Copy Innovations, WiLAN has asserted those patents against companies such as Ricoh, which recently agreed to take a license to the patents under confidential terms.36
- Kimberly-Clark Corporation sold a patent to Monument Patent Holdings (an affiliate of Dominion Harbor Enterprises), which asserted the acquired packaging patent against Keurig Green Mountain and Mars via its subsidiary All-American Packaging in November 2016.37

While most buyers in the secondary patent market likely seek to monetize the acquired patents, buyers could be other operating companies purchasing the patents for defensive reasons or to round out their portfolios. Regardless of the reason and type of buyer, more active patent buying and selling fuels uncertainty about patent ownership and use and may drive an increase in future litigation.

#### Greater mobility and access

Technology-driven mergers and acquisitions (M&A) are on the rise - particularly in the tech sector. New, innovative technologies continue to emerge in the artificial intelligence, cloud computing, cybersecurity, robotics and Internet of Things (IoT) arenas. Additionally, hybrid technology sectors (e.g., foodtech, fintech, autotech, medtech, construction tech) are emerging, and more companies are going public in growing markets such as China.38 M&A activity is increasingly technology driven, and patents, trade secrets and other IP rights are being transferred along with the technology.

With these technology acquisitions come both monetary gains and risk: AIG recently reported that 8% of its reps and warranties insurance claims between 2011-2015 were intellectual property-related.39

What's more is that the very nature of this tech-related growth leaves IP more vulnerable. Much of the

Greater IP mobility increases risk

innovation is tied to increased accessibility. For example, digitization and cloud-based storage make it easier for hackers, employees, independent contractors, etc. to access trade secret-protected information.40

#### How much IP litigation is there?

#### U.S. IP litigation

In the U.S., patents, copyrights, and trademarks primarily are governed by federal law, and because the U.S. federal court system makes case filings public, it is possible to track patent, trademark and copyright infringement litigation frequency in the U.S. While a federal trade secret statute went into effect in 2016, trade secret misappropriation cases can also be filed in state court, making such cases more challenging to track.

Patent infringement: According to Lex Machina, there were more than 31,000 patent infringement cases filed in U.S. federal courts between 2012-2017, which averages to nearly 5,200 cases per year.41

Historically, patent infringement has been used as a competitive weapon - to push new entrants out of a market, for example. Because patent holders are not required to commercialize their inventions, non-competitor patent holders (e.g., individual inventors, universities, design firms, research institutes, operating companies licensing non-core patent

assets, and failing/failed operating companies) can assert patents. As discussed above, patent buyers seeking to monetize their acquired patents often resort to litigation to force companies to take a license so the patent holder can earn a return on its investment in the patent asset. 42

As noted, 50% to 70% of patent infringement defendants are not competitors of the plaintiff. According to RPX Corporation, most of the defendants targeted in these cases are in the following sectors: retail, media content and distribution, telecommunications, software and related services, technology hardware and equipment, financial services and consumer electronics.<sup>43</sup> Of those, the highest case frequency is software and related services.

For competitor patent cases, more than 500 cases per year are filed against companies in the pharmaceutical and biotech sectors, making those higher-frequency sectors.44

**Trademark infringement:** According to Lex Machina, there were more than 28,000 trademark infringement cases filed in U.S. federal courts from January 2009 to March 2016, which averages to around 3,900 cases per year.45 That trend has shifted downward the last few quarters, but overall filings have held fairly steady. Most plaintiffs are fashion and luxury brands, such as Coach, and other companies with valuable trademarks, such as Microsoft. Most defendants are large retailers, such as Wal-Mart, Amazon and Target, along with John Does. More recently, WhoisGuard and Domains by Proxy, companies that offer anonymity and spam protection to domain name owners, have been sued in cybersquatting cases.46

Copyright infringement: According to Lex Machina, from January 2011 to September 2016, there were more than 15,000 copyright infringement cases filed in U.S. federal courts, which averages to around 2,200 cases per year;<sup>47</sup> this does not include internet file sharing cases. Excluding file sharing cases, the number of copyright cases filed has held steady over time. Typical plaintiffs are fashion, fabric, music, publishing and software-sector companies, while defendants are typically in the retail, music and publishing sectors.<sup>48</sup>

One notable trend is an uptick in textile pattern litigation led by Star Fabrics, Unicolors, L.A. Printex, and United Fabrics Int'l.49 Targeted defendants have included luxury department stores (e.g., Neiman Marcus), online retailers (e.g., Overstock. com), and discount retailers (e.g., SteinMart and Ross).

Trade secret misappropriation/misuse: From 1994 to 2012, an average of 147 trade secret cases were filed per year in federal court.<sup>50</sup> However, in the first year following the May 11, 2016 federal Defend Trade Secrets Act (DTSA) enactment. there were at least 530 complaints filed in federal district courts that included a DTSA cause of action.51

### Trade secret case filings increased nearly 4x following enactment of the DTSA

Since trade secret misappropriation is a matter of both state and federal law in the U.S., it is challenging to track trade secret cases. Trade secret theft is also considered a crime; therefore, both civil and criminal cases may be brought for the same incident. While the number of state and federal cases that include a cause of action for trade secret misappropriation appears to be lower than other IP cases, the number of cases is increasing.

Trade secret plaintiffs typically are the defendant's competitors or former employers. Conversely, defendants are typically former employees of the plaintiff or the former employee's new employer; however, the plaintiff's customers, suppliers, consultants or business partners are also common defendants. Trade secret cases tend to cut across a variety of market sectors.

#### IP litigation outside the U.S.

Around the globe, each country's court system tracks IP cases differently, making it difficult to draw direct comparisons. Most countries do not make case filings public, and their court systems are structured differently. Despite the system and transparency variances, we are able to provide the following insights into IP litigation frequency trends.

IP litigation in China: China historically records a notable number of IP cases - a number that is steadily increasing.53 During a February 2018 press conference, China's Supreme People's Court Vice President Tao Kaiyuan noted that the number of IP cases filed in the first instance courts doubled from 106,740 to 213,480 between 2013 to 2017.54

Number of IP cases filed in China doubled between 2013 to 2017

Filing and reporting laws and requirements make it difficult to determine the exact number of patent, copyright, trademark and trade secret cases filed annually, however, we do know that, as a whole, IP litigation is on the rise.

China combines infringement cases for all three types of patents (design, utility and invention)55 with other types of patent disputes, such as ownership, breach of license, etc.<sup>56</sup> In January 2018, the Chinese State Intellectual Property Office (SIPO) published Chinese patent statistics showing that 27,000 patent infringement disputes of all types and at all court levels were filed in 2017.57 Copyright cases represent the highest percentage and the steepest increase year over year, largely because of the rise of the internet and illegal file sharing. Trademark cases present the next highest percentage, although the increase in cases filed has not been as steep. Patent cases are a much lower percentage of the total; however, with the sharply increasing number of patent grants, the number of patent cases is expected to rise.58

Until recently, there was not a stand-alone trade secret law in China to bring trade secret misappropriation lawsuits. However, with the November 2017 changes to the Chinese Anti-Unfair Competition Law (AUCL), civil suits and criminal charges can now be filed for trade secret misappropriation.<sup>59</sup>

While aggregate data of the most commonly targeted industries for IP infringement is unavailable, in the past few years, standards-essential patents have been asserted against smartphone makers Apple and Samsung as well as technology giant Sony.60 The semiconductor sector has also seen an increase in patent litigation.61

**IP litigation in Germany:** As the largest market in the EU, Germany claims the third-highest number of patent cases filed annually behind China and the U.S.62 The German federal court system does not report annual patent litigation data; however, according to the Global IP Project, Germany saw just over 1,300 patent cases filed each year on average from 2008 to 2013, a number that has stayed fairly constant year over year.63

Top three countries for IP litigation:

- 1. China
- 2. U.S.
- 3. Germany



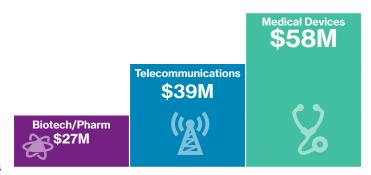
While some have expressed concern that patent monetizers are enforcing European patents, especially via the German court system, roughly 475 actual suits - about 5% of all filed patent cases - were filed in the last 10 years. 64 This number is quite small compared to that in the U.S. Most of the cases have been filed against large international companies, such as Vodafone, ZTE, Huawei, DT, Telefonica, Deutsche Telekom, LG, Samsung, Google and Apple.<sup>65</sup> Recently, Fundamental Innovation Systems International asserted USB charging patents acquired from BlackBerry against Samsung and others in both U.S. and German courts.66

#### How much does IP litigation cost?

Because most IP cases settle under confidential terms and because non-U.S. IP litigation records are not easily accessible, it is difficult to obtain IP litigation severity data. However, publicly available information and loss data noted in IP insurance applications show that costs can run into the ninefigure range. A few examples are:

- Loral/Space Systems paid \$100M to settle a patent infringement and breach of confidentiality agreement case with Viasat in 2014.67
- In the last two years, Finjan has received patent litigation settlements totaling over \$100M with six different software companies.68
- The Federal Circuit recently reversed a lower court ruling that Google's use of Oracle's copyrighted smartphone software code was fair use, which could mean a multi-billiondollar damages award for Oracle.69

US patent litigation: Most U.S. patent cases settle, with only 5% going through trial. Among cases where there is a dispositive ruling, less than 5% are awarded compensatory damages.<sup>70</sup> To put it in perspective, from 2009 to 2017, fewer than 1,400 cases - an average of 152 cases per year resulted in compensatory damages.71 In U.S. patent cases from 2012 to 2016, the median damage award to non-competitor plaintiffs was \$15.7 million, while the median damage award to competitor plaintiffs was \$4.1 million.72 From 1997 to 2016, the telecommunications, medical device and bio/pharma sectors saw the highest median damage awards.73



These awards do not factor in settlement after trial, appeals and remands after appeals.

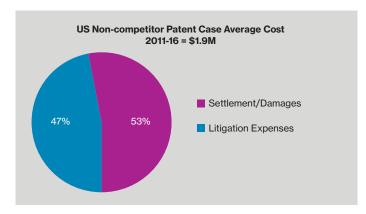
Competitor case settlements often involve injunctions, crosslicenses, ongoing royalties and other components that make analysis difficult. Aggregated settlement numbers for noncompetitor cases are more readily accessible; these case settlements tend to be paid-up licenses for which several factors, including defendant size and sector, drive severity. For example, the below illustrates severity by company size for U.S. cases resolved from 2011 to 2016:74

Company size	Overall average cost	Top 20% average
Under 100M	\$188K	\$656K
\$100-500M	\$389K	\$1.3M
\$500M-1B	\$755K	\$2.8M

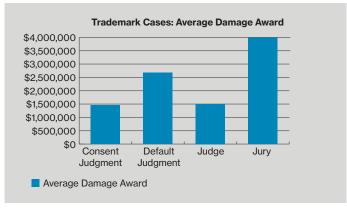
As the below chart illustrates, while the software sector experienced the most non-competitor patent litigation from 2011 to 2016, it experienced a lesser average severity.



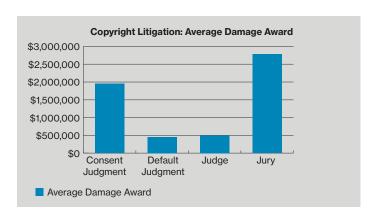
U.S. non-competitor patent litigation expenses are costly, making up nearly half of the total cost to resolve, as the below figure illustrates.75 This is due to several reasons, including the complexity of patent litigation, cases taking longer due to the lack of transparency around reasonable patent license costs, and parallel administrative proceedings used to challenge asserted patents.



**U.S. trademark litigation:** Approximately 60% of trademark infringement cases settle with the defendant's agreement to stop selling the allegedly infringing product.<sup>76</sup> Of those that do not, the most common terminating event is a default judgment, and 98% of the time, a Lanham Act violation is found.<sup>77</sup> Injunctions are commonly entered. The following chart shows the average damage amounts for cases terminated from January 2009 to March 2016:78



**U.S. copyright litigation:** Approximately 66% of copyright infringement cases settle.<sup>79</sup> Most non-settled cases terminate via default judgment and consent judgment. Injunctions are commonly entered and compensatory damages are awarded just 9% of the time. The average damage amounts for cases terminated from January 2009 to September 2016 are as follows:80



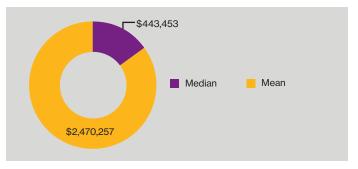
While not the most frequent filers, software companies such as Oracle and Synopsis have obtained some of the highest damage awards, with damages reaching eight figures.81

U.S. trade secret litigation: Most trade secret misappropriation cases settle, but a slightly higher percentage of trade secret cases – around 6% – go to trial than other types of IP cases.82 Among cases that go through trial, business information is the type of trade secret at issue around 50% of the time.83

Lawsuits asserting trade secret misappropriation often include other claims, and it can be difficult to apportion damages among the various asserted causes of action.84 In a dataset of trade secret cases that went through trial from 2000 to 2014, damages were awarded only about half the time; permanent injunctions with no damages were awarded 19% of the time.85

Unlike other types of IP cases, damages based on lost profits and unjust enrichment are awarded much more frequently than reasonable royalty damages.86 Punitive damages were awarded more than 30% of the time in a dataset of federal trade secret cases that went through trial from 2001 to 2015.87

One study of federal trade secret cases from 2001 to 2015 in which damages were awarded found the average and median damage amounts were as follows:88



Although minimal data about trade secret settlements is available, there are several publicly known trade secret case settlements. The following cases show that high severity can result from settled cases and that non-monetary terms are often negotiated as part of the settlement.

Date	Case	Amount
2018	Waymo v. Uber <sup>89</sup>	\$245M (.34% stake in Uber)
2017	Tesla Motors v. Anderson et al.90	\$100K + ongoing audit expenses
2015	DuPont Co. v. Kolon Industries <sup>91</sup>	\$275M + ongoing payments
2011	Starwood Hotels v. Hilton Hotels92	\$75M + permanent injunction + independent monitors

### The U.S. continues to be the highest severity jurisdiction for IP litigation

China trends: Aggregated Chinese IP litigation settlement data is not available, and companies will often reach global settlements involving litigation in various countries.

IP infringement damage awards in China are low among cases that reach a dispositive ruling in Chinese courts. However, in February 2018, the Chinese General Office of the Party and General Office of the Council issued new IP policy initiatives which include a proposed measure to encourage compensatory damages as well as punitive damages.93 Some of the specialized IP courts are already experimenting with awarding punitive damages for willful infringement.94

Standards-essential patent owners have recently found some success asserting their patents in Chinese courts. For example, in 2017, Huawei won \$11.6M in patent infringement damages against Samsung.95

The 2015 and 2016 damages information below is from the Beijing IP Court.96

Average Damage Amounts	RMB	Estimated USD
Patent Infringement	1.4M	203K
Trademark Infringement	1.7M	247K
Copyright Infringement	458K	66.5K

Because China only recently allowed trade secret suits, there is not yet sufficient severity data on trade secret cases filed in Chinese courts.

As China continues to emerge as a large market, and as patent issuances for Chinese and foreign companies continue to increase, damage awards will likely increase as well.

Western Europe/Germany trends: Aggregated German and/or EU IP litigation settlement data is unavailable, and companies will often reach global settlements involving litigation in various countries.97 As is the case in the U.S., most German patent cases settle prior to the court awarding damages.98

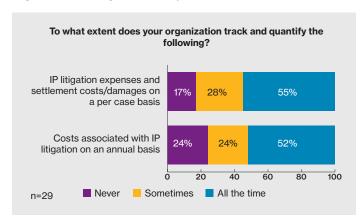
As of 2014, the largest patent infringement damage award in Germany was \$2.7M.99 Generally speaking, damage awards in European countries, including Germany, are less than in the U.S., with the threat of an injunction serving as leverage. Punitive damages for willful infringement are not available under German patent law.

European litigation expenses generally are lower than in the U.S. Like other European countries, Germany is a "loser pays" jurisdiction, which requires the losing party to pay the winning party's litigation expenses. However, in Germany, attorneys' fees are limited by statute to a percentage of the case's litigation value; generally, this calculation is lower than actual incurred attorneys' fees.100

## How can entities manage the financial impact of IP litigation?

#### Tracking costs and quantifying impact

Slightly more than half the survey respondents track what IP litigation is costing them on a per incident or annual basis.



#### Identifying gaps in other lines of coverage

Most general liability policies either exclude coverage for IP risks or provide a limited scope of coverage for only some IP exposures; this is particularly common in the U.S. Likewise, cyber/tech E&O/media policies generally limit the scope of IP coverage to certain insured activities and/or expressly exclude coverage for key IP exposures, such as patent infringement and trade secret misappropriation.

Exposures	General Liability	E&O/ Professional	Cyber	Media	Extortion/ Ransom	Reps & Warranties	Standalone IP Insurance
IP Liability Risks							
Patent Infringement						Limited to loss tied to rep	
Trade Secret Misappropriation						Limited to loss tied to rep	
Trademark/Trade Dress/ Trade Name Infringement	Limited to advertising injury	Limited to professional services	Limited to cyber event	Limited to content		Limited to loss tied to rep	
Copyright Infringement	Limited to advertising injury	Limited to professional services	Limited to cyber event	Limited to content		Limited to loss tied to rep	
Third party IP disclosure/ release (breach of NDA/ confidentiality agreement)		Limited to professional services	Limited to cyber event			Limited to loss tied to rep	
Breach of IP license agreement						Limited to loss tied to rep	Limited Availability
IP Ownership Risks							
IP ownership representations						Limited to loss tied to rep	
Loss of IP due to theft/ misappropriation/other loss						Limited to loss tied to rep	Limited Availability
IP Enforcement costs (litigation expenses)*						Limited to loss tied to rep	Limited Availability
Loss of IP due to legal challenge						Limited to loss tied to rep	Limited Availability

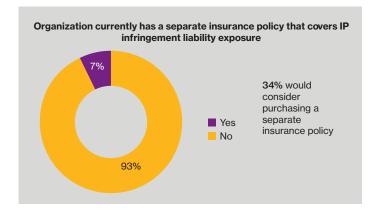


#### Understanding the risk transfer options

Interestingly, more than 50% of survey respondents agree that IP litigation costs could have a material impact on their businesses, yet less than 10% purchase IP insurance However, over a third of participants would consider purchasing stand-alone IP insurance.

#### 50% = IP litigation costs could have a material impact on our business

7% = Currently purchase IP insurance



IP insurance providers generally report steadily increasing interest in their offerings. We've secured data from two providers, Ambridge Partners and RPX Insurance Services, about the sectors in which most of their respective applicants and policyholders operate. The RPX policyholder sectors reflect that RPX provides patent infringement-only coverage primarily for non-competitor suits, which are prevalent in those sectors, whereas Ambridge provides all forms of IP infringement coverage.

Sector	RPX Policyholders	Ambridge Submissions
Retail	Х	Х
Media content and distribution	х	
Telecommunica- tions	х	
Software and related services	Х	х
Technology hard- ware and equipment	х	х
Healthcare		Х
Manufacturing		Х

The common denominator of the three overlapping sectors is high IP litigation frequency, especially patent litigation.

With respect to the IP insurance market, it's impossible to identify the number of IP insurance policyholders, annual gross written premium, loss ratios or market size. This is for several reasons, including:

- IP liability exposures, especially in Europe, are covered by not being expressly excluded in general liability forms
- IP coverage is sometimes endorsed onto cyber/media/tech E&O forms
- Providers are willing to manuscript IP coverage for larger policyholders with more leverage
- Some mutuals and other group captives for discrete industries such as education and shipping include IP liability coverage
- IP exposures are covered by captives and reinsured by commercial insurance markets

Regardless, several providers offer stand-alone IP insurance that has been specifically developed to cover IP exposures. While this coverage has been available for approximately 30 years, the market has been slow to develop. Initially, a lack of available data made it difficult to underwrite IP risk. Today, underwriting models are better developed but underwriters struggle with what is fortuitous versus business IP risk. As a result, IP insurance providers have varying appetites regarding territory (non-U.S., U.S. only, worldwide), size (SME, global), type of IP (patent, trade secret, trademark, copyright, design), IP exposures (property versus liability), scope of activities (software, hardware, operations), type of plaintiff (competitor, non-competitor), and sector (semiconductor, pharmaceutical, high tech, etc.).

The below lists specialist IP insurance providers.

#### Specialist IP insurance providers

RPX\* U.S.-based Scope of Coverages: Infringement defense costs and settlement: contractual liabilities; transactional risk; patent coverage only; includes patent risk management services, intel, and data

Capacity: Great American Territorial Coverage: U.S. only **Ambridge Partners** U.S.-based

Scope of Coverages: Infringement defense costs & damages/ settlement; contractual liabilities; transactional risk; no trade secret misappropriation coverage

Capacity: Lloyd's

Territorial Coverage: Worldwide

CFC\* London Scope of Coverages: Infringement defense costs & damages/settlement; contractual liabilities; enforcement costs; transactional risk; breach of license agreement; first party lost value & limited lost profit

Capacity: Lloyd's

Territorial Coverage: Worldwide

Tokio Marine Kiln\*† London

Scope of Coverages: Infringement defense costs & damages/ settlement; transactional risk; contractual liabilities; first party business interruption costs & lost value

Capacity: TMK Lloyd's syndicate Territorial Coverage: Worldwide

**IPISC** 

Scope of Coverages: Enforcement costs; infringement defense costs & damages/settlement; first party business interruption costs; IP collateral protection

Capacity: Lloyd's and Freedom Specialty

Territorial Coverage: Worldwide

Liberty Specialty<sup>†</sup> London

Scope of Coverages: Infringement defense costs & damage/ settlement: breach of license agreement; contractual liabilities; first party lost value

Capacity: Liberty's Lloyd's

syndicate

Territorial Coverage: Worldwide

**OPUS** London Scope of Coverages: Infringement defense costs & damages/ settlement; enforcement costs; first party lost value; smaller non-U.S. domiciled companies only

Capacity: Lloyd's

Territorial Coverage: Worldwide

†TMK and Liberty can also place coverage on company paper for European domiciled companies.

<sup>\*</sup>These providers also offer IP liability coverage endorsements to some of their other insurance offerings, such as cyber liability/media liability/tech E&O policies.

#### How insurance can be used to manage IP exposures

#### Business description

#### IP Risk Challenges

#### IP Risk Management Solution

A privately owned U.S.based e-commerce website and platform provider

Increased exposure to patent infringement directly and against their customers with whom they have IP indemnification agreements

Implemented solution that included (1) patent insurance to protect against claims brought against client and its customers, plus (2) access to patent and litigation data and intel

A U.S.-based private equity firm

Acquisition of companies in specific segment of food and beverage industry where trade secrets used to protect formulas and recipes

Developed and placed insurance policy providing trade secret misappropriation coverage for acquired companies

A global non-U.S. publicly held defense contractor

Claim acceptance issues due to confusion over wordings in several different policies, misalignment of coverage in policy wordings, plus interest in additional capacity above coverage provided by captive

Revised and harmonized IP coverage wordings & suggested combination captive/program structure

A U.S.-based publicly-held analytics solutions provider Growing company in cloud data management and analytics space where both frequency and severity of patent infringement are increasing

Provided advice regarding membership in a patent risk management network and placed U.S. patent infringement insurance policy

A large U.S. retailer with both brick and mortar and online presence

Acquired team management software and partnered with smaller vendors to support e-commerce and website functionality, which increased patent infringement risk

Provided advice on coverage needed and placed U.S. patent insurance policy

#### IP Liability "Risk Intelligent" checklist

The following high-level checklist may be helpful as you consider your organization's IP infringement liability risk and the potential financial impact.



Does your organization have a cross-functional, coordinated team responsible for IP risk that includes members from finance, risk management, legal, procurement, IT, marketing and sales?



Are your IP-related enforcement and infringement liability costs budgeted and tracked on an individual and annual basis?



In light of your current projects, partnerships and joint ventures, how is intellectual property risk managed and quantified?



Is IP risk identified and quantified as part of M&A due diligence and deal negotiation?



Is insurance considered to cover deal-related IP exposures?



Have you quantified your IP indemnification risk on an aggregated basis and explored whether insurance in lieu of or behind indemnification obligations makes sense?



Have you assessed and quantified IP risk, determined your risk tolerance and explored available risk transfer options?



Have you performed a gap analysis to determine if your current insurance coverage addresses potential IP exposures across all business areas?



Have you considered stand-alone IP insurance for your underinsured and uninsured IP liability exposures?

Consider your own organization against the above checklist: Have you put up the appropriate financial safeguards against IP liability exposures? How do your answers align with those of survey participants?

As IP litigation frequency is expected to rise, it's important to understand the potential risk and severity as well as global variances. The best way organizations can protect themselves against IP litigation risk is to be prepared.

<sup>1</sup> Lex Machina 2017 Commercial Litigation Report at 1.

<sup>2</sup> http://www.chinadaily.com.cn/a/201803/01/ WS5a976911a3106e7dcc13edb6.html.

- 3 Global patent lit report at S-12; see also https://thelawreviews.co.uk/ chapter/1151081/germany.
- <sup>4</sup> World Intellectual Property Indicators 2017 at 37, Figure 7 (WIPO).
- <sup>5</sup> Id. at 106-07, 111 at Figure B4.
- 6 https://chinaipr.com/2018/03/11/february-27-march-5-2018developments/.
- <sup>7</sup> For purposes of this report, intellectual property includes legally protected forms of IP, such as patents, trademarks/trade dress, design rights, copyrights and trade secrets. The legal protections afforded to these forms of IP vary slightly from country to country. See World Intellectual Property Indicators 2017 (WIPO 2017 Geneva) at 209-11; http://www.wipo.int/wipolex/en/ survey conducted with the assistance of CPA Global.
- 8 See https://www.rpxcorp.com/2018/01/02/2017-in-review-a-yearof-transition/#lit volume. These percentages vary depending on whether you add in ITC cases and IPR proceedings challenging non-competitor patents. To avoid issues with counting what amounts to the same incident or dispute multiple times, we prefer the RPX methodology, which focuses on incident by defendant rather than by case and does not separately count related ITC and IPR matters.
- 9 https://www.rpxcorp.com/2017/01/03/rpx-data-update-patentlitigation-volatility-persists-as-strategies-shift/
- 10 https://www.rpxcorp.com/2017/01/03/rpx-data-update-patentlitigation-volatility-persists-as-strategies-shift/
- 11 E.g., 35 U.S.C. § 271(a); WIPO Lex provides a global database of IP laws of WIPO Member States: http://www.wipo.int/wipolex/en/. 12 E.g., 35 U.S.C. § 284.
- <sup>13</sup> E.g., Lanham Act, 15 U.S.C. §§ 1051 et seq.; WIPO Lex provides a global database of IP laws of WIPO Member States: http://www.wipo. int/wipolex/en/.
- <sup>14</sup> E.g., 15 U.S.C. § 1117.
- 15 15 U.S.C. § 1117(b), (c).
- <sup>16</sup> E.g., 17 U.S.C. § 501(a); WIPO Lex provides a global database of IP laws of WIPO Member States: http://www.wipo.int/wipolex/en/.
- <sup>17</sup> E.g., 17 U.S.C. § 504. Under U.S. law, statutory damages are available only if the infringed work is registered with the U.S. Copyright Office.
- <sup>18</sup> E.g., Uniform Trade Secret Act; see also the Defend Trade Secrets Act of 2016, 18 U.S.C. §§ 1836, et seq.; Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016, Article 4, available at http://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:32016L0943.
- 19 Uniform Trade Secrets Act § 3(a) (amended 1985); 18 U.S.C. § 1836(b)(3)(B).
- 20 UTSA § 3(a).
- 21 UTSA § 3(b); 18 U.S.C. § 1836(b)(3)(C).

- 22 UTSA § 2; 18 U.S.C. § 1836(b)(3)(A).
- <sup>23</sup> World Intellectual Property Indicators 2017 at 37, Figure 7 (WIPO).
- <sup>24</sup> Id. at 106-07, 111 at Figure B4.
- <sup>25</sup> PwC, 2017 Patent Litigation Study, Figure 1 at 4.
- <sup>26</sup> Compare WIPO IP Facts and Figures 2016 at 9 to WIPO IP Facts and Figures 2017 at 9.
- <sup>27</sup> U.S. Chamber of Commerce, "The Case for Enhanced Protection of Trade Secrets in the Trans-Pacific Partnership Agreement" at 10. <sup>28</sup> United States International Trade Commission, U.S. International Trade Commission's Trade Secrets Roundtable: Discussion Summary, Journal of International Commerce and Economics (November 2016) at 4; Protecting Innovation Through Trade Secrets and Patents: Determinants for European Union Firms (July 2017), Table 4 at 28; Trade Secret Law in China: 3 Highlights from 2017, Law360 (January 26, 2018).
- <sup>29</sup> World Intellectual Property Indicators 2017 at 37-38 and 49 at Figure A13.
- 30 ld. at 106.
- 31 Id. at 117, Figure B16.
- 32 Cynthia Lopez Beverage, "Surviving in the Secondary Patent Marketplace," at 1.
- 33 "Inside the 2016 Brokered Patent Market," Issue 81, January/ February 2017 IAM at 43-44. Sellers may have more nuanced motives for selling other than generating revenue. For example, the European Commission has observed that in the telecommunications sector, patent assertion entities are used by owners of standards-essential patents because they've not been successful licensing directly with alleged infringers in the sector. European Economics; Patent Assertion Entities in Europe; Eds: Nikolaus Thumm, Garry Gabison (Joint Research Centre), EUR 28145 EN; doi:10.2791/134702 at 49. 34 Id. at 36, Figure 4, and 37.
- 35 http://dominionharbor.com/press-release-dominion-harboracquires-prestigious-american-express-patent-portfolio-intellectualventures/.
- 36 http://www.wilan.com/news/news-releases/news-releasedetails/2016/WiLAN-Acquires-Patent-Portfolio-from-Eastman-Kodak/default.aspx; http://www.wilan.com/news/news-releases/ news-release-details/2018/WiLAN-Subsidiary-Enters-into-License-Agreement-with-Ricoh/default.aspx.
- 37 http://www.prweb.com/releases/2016/11/prweb13823620.htm.
- 38 Baker McKenzie Sector Report, 2018 Global Transactions Forecast, Technology and Telecommunications.
- 39 AIG Global M&A Claims Study 2017 at 4.
- 40 https://www.bna.com/trade-secret-cases-n73014450731/
- <sup>41</sup> Lex Machina 2017 Patent Litigation Year in Review, Figure 1 at 1.
- <sup>42</sup> For purposes of this paper, we distinguish between types of patent plaintiffs by using the terms competitor and non-competitor. However, the terms "patent troll", non-practicing entity (NPE), and patent assertion entity (PAE) are often used to describe non-competitor

plaintiffs. A non-competitor is an entity that does not sell the any of the same products or services in any of the same geographic markets to any of the same customers.

- <sup>43</sup> Information provided pursuant to Request for Information from Willis Towers Watson.
- 44 Calculated using RPX Insight patent litigation search tool; RPX identified 3,118 cases filed against defendants in the biotech and pharmaceutical sectors between 2012-17.
- <sup>45</sup> Lex Machina 2016 Trademark Litigation Report, Figure 29 at 14.
- 46 Id., Figure 32 and Figure 33 at 17.
- <sup>47</sup> Lex Machina Copyright Litigation Report 2016, Figure 1 at 1.
- <sup>48</sup> Id., Figures 8 and 10 at 6 and 7.
- <sup>49</sup> Id. at 3. Textile pattern cases more than doubled in number from 2011 to 2015.
- 50 Elizabeth A. Rowe, "Unpacking Trade Secret Damages," 55 University of Houston Law Review 155, 167 footnote 75 (2017).
- <sup>51</sup> https://www.fr.com/fish-litigation/the-defend-trade-secrets-act-theyear-in-numbers/.
- <sup>52</sup> E.g., GE v. Volkswagen (competitor; automotive); Dalmatia v. Foodmatch (distributor; food and beverage); Viasat v. Loral (customer; communications); Starwood v. Hilton (former employees/competitor; hotel/travel); ZeniMax v. Oculus (business partners; VR technology); see also John Elmore, "A Quantitative Analysis of Damages in Trade Secrets Litigation," Forensic Analysis Insights (Spring 2016), www. willamette.com, Exhibit 1 at 88.
- 53 https://www.limegreenipnews.com/2016/05/the-big-picture-on-iplitigation-in-china/.
- 54 http://www.chinadaily.com.cn/a/201803/01/

WS5a976911a3106e7dcc13edb6.html.

- <sup>55</sup> Chinese law provides for three different patent categories: invention, utility, and design. Invention patents are comparable to U.S. utility patents. Design and utility patents are not examined prior to issuance and cases asserting design and utility patents are the majority of total patent infringement cases filed in China. Bian, Patent Infringement Litigation in China, at 30-31.
- <sup>56</sup> Annual Global Patent Litigation Report 2014 at S9. In addition, the Chinese figures combine invention, utility, and design patents. Id. at S7.
- 57 http://www.lindapatent.com/en/info\_news/708.html.
- 58 http://en.naipo.com/Portals/0/web\_en/Knowledge\_Center/Feature/ IPNE\_170526\_0703.htm.
- 59 "Trade Secret Law in China: 3 Highlights from 2017," Law360 (January 26, 2018).
- 60 http://www.ipwatchdog.com/2016/11/10/china-increasinglypreferred-venue-patent-litigation/id=74585/.
- 61 E.g., https://www.nasdag.com/article/umc-files-patent-infringementlawsuit-against-chinabased-micron--quick-facts-20180112-00089.

- 62 Annual Global Patent Litigation Report 2014 at S-9.
- 63 ld. at S-12; see also https://thelawreviews.co.uk/chapter/1151081/
- 64 DARTS-IP, "NPE Litigation in the European Union" Figure 2, at 6; see also http://www.iam-media.com/blog/Detail.aspx?g=84c119aa-7ec3-453b-bb4e-efca499f88a7.
- 65 DARTS-IP, "NPE Litigation in the European Union" Table 2, at 8.
- 66 March 25, 2018 RPX News "Fundamental Innovation's USB Charging Campaign Proceeds in Europe".
- 67 Loral v. Space Systems/Loral Amended Complaint; see also "Loral Agrees to Pay ViaSat \$100M to Settle Patent Suit, SpaceNews (September 7, 2014).
- 68 "Finjan Signs Deal with Symantec for Up to \$110M", RPX Patent Risk Digest (March 2018).
- 69 Oracle America, Inc. v. Google LLC, Case No. 17-1118, Federal Circuit opinion decided March 27, 2018.
- <sup>70</sup> Lex Machina 2017 Patent Litigation Year in Review at 29-33. 71 Id., Figure 57 at 33.
- 72 PWC 2017 Patent Litigation Study 'Change on the horizon?', Figure 11 at 16. In competitor cases, the bigger financial risk is typically the imposition of a permanent injunction, not damages.
- 73 Id., Figure 16 at 19.
- 74 RPX provided data.
- <sup>76</sup> Lex Machina Trademark Litigation Report, Figure 15 at 7.
- <sup>77</sup> Id., Figure 12 at 5.
- 78 Id., Figure 18 at 9.
- 79 Lex Machina Copyright Litigation Report 2016 at iii.
- 80 Id., Figure 24 at 17.
- 81 Id., Figure 26 at 18.
- 82 Elizabeth A. Howe, "Unpacking Trade Secret Damages," 55 University of Houston Law Review (2017) at 167.
- 83 "Business information" includes information for internal business use, customer lists, and marketing information. Elizabeth A. Howe, "Unpacking Trade Secret Damages," 55 University of Houston Law Review (2017), 190, Figure 5 at 186; John Elmore, "A Quantitative Analysis of Damages in Trade Secrets Litigation," Forensic Analysis Insights (Spring 2016), www.willamette.com, Figure 3 at 87.
- 84 Elizabeth A. Howe, "Unpacking Trade Secret Damages," 55 University of Houston Law Review (2017) at 169.
- 85 ld. at 171.
- 86 ld. at 175.
- 87 John Elmore, "A Quantitative Analysis of Damages in Trade Secrets Litigation," Forensic Analysis Insights (Spring 2016), www.willamette. com, Figure 5 at 90.
- 88 Id., Exhibit 3 at 91.
- 89 https://www.reuters.com/article/us-alphabet-uber-trial/waymoaccepts-245-million-and-ubers-regret-to-settle-self-driving-car-

dispute-idUSKBN1FT2BA.

- $^{\rm 90}$  http://tsi.brooklaw.edu/cases/tesla-motors-v-anderson-et-al.
- <sup>91</sup> http://tsi.brooklaw.edu/cases/ei-dupont-de-nemours-and-co-v-kolon-industries-inc.
- <sup>92</sup> http://tsi.brooklaw.edu/cases/starwood-hotels-resorts-worldwide-v-hilton-hotels-corporation.
- <sup>93</sup> https://chinaipr.com/2018/03/11/february-27-march-5-2018-developments/.
- <sup>94</sup> https://www.lexology.com/library/detail.aspx?g=72c4bd95-9bb0-4afe-b767-4d4dd9e90975.
- 95 http://www.ecns.cn/business/2018/01-12/288099.shtml.
- <sup>96</sup> http://en.naipo.com/Portals/0/web\_en/Knowledge\_Center/Feature/IPNE\_170526\_0703.htm.
- <sup>97</sup> https://www.arelaw.com/downloads/ARElaw\_PatLit\_Mapping\_ PracticeNote.pdf (discusses several examples of global patent litigation).
- 98 https://www.meissnerbolte.de/uploads/media/IP-Litigation\_in\_ Germany.pdf.
- 99 Global IP Report 2014, S13 and Figure 12 at S-18.
- <sup>100</sup> https://www.meissnerbolte.de/uploads/media/IP-Litigation\_in\_Germany.pdf.

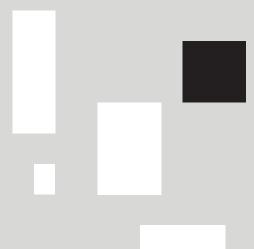
#### **Contact**

Kimberly Cauthorn, J.D.

Intellectual Property Leader

+1 512 338 5522

kimberly.cauthorn@willistowerswatson.com



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