

Special theme

An overview of patent litigation systems across jurisdictions

Introduction

The ability of patent right holders to enforce their intangible property rights when those rights are infringed is an important aspect of the patent system. The value of patents will diminish if right holders are unable to enforce their patent rights. During the past decade, patent disputes have generated news headlines, and attracted considerable attention from both practitioners and policymakers. This is partly due to widely publicized, protracted litigation between well-known technology companies; most notably litigation involving Apple, Huawei, Samsung and Qualcomm. For example, after seven years of litigation, Apple and Samsung settled their patent disputes in 2018.¹ Furthermore, patent litigation has also involved patent assertion entities (PAEs), and there have been a number of litigations involving standard essential patents, all of which have put the functioning of the patent litigation systems in the spotlight.

Apart from the high-profile cases reported in the media, many jurisdictions lack systematic data on patent litigations. Enhancing data availability by effectively monitoring the functioning of the patent litigation system would facilitate evidence-based policymaking. The rise in patent litigation in the United States of America (U.S.) over the past years is well-documented (Cook, 2007; Meurer and Bessen, 2013).² However, for other jurisdictions, data on patent litigation activity is either incomplete or unavailable. For example, in the U.S., comprehensive data on court cases are available through both public and private sources, allowing detailed analysis of litigation; while in Germany and the Republic of Korea, only incomplete data are available.

While the patent system in general makes enormous amounts of information and data available to the public, patent litigation has occurred largely out of sight, in the privacy of the court system. As a result, it is often difficult to gauge the magnitude of patent litigation in the various jurisdictions. There have been individual efforts by researchers to compile and analyze litigation data, but these efforts were conducted on an ad hoc basis (Cremers *et al.*, 2016a; Helmers and McDonagh, 2013).

There have been a number of attempts to address this issue outside of the U.S. and substantial progress

has been made in some jurisdictions, notably in China where all decisions by courts are supposed to be made publicly available online. However, in practice, coverage is below 100 percent and the data cover infringement decisions only. Commercial data providers have, nevertheless, tapped into this market and made significant investments to improve the existing data infrastructure covering many jurisdictions.

The objective of this section is to explore how one might statistically capture patent litigation activity.³ It compares patent litigation systems across jurisdictions and documents the challenges involved in collecting comprehensive and comparable patent litigation data. It also presents selected statistics available within the United Kingdom (U.K.) and the U.S.⁴

An overview of patent litigation systems

The main objective of patent litigation is to allow patent owners to enforce their patent claims against potential infringers. As in any type of litigation, the judicial system deals with disputes that could not be settled by the parties out of court and which therefore require adjudication. While the structure of patent litigation proceedings in court is similar across jurisdictions, there are nevertheless important differences. It is therefore useful to review the basic structure common to all patent litigation systems and highlight some of the ways in which systems differ around the world.

One of the most important differences in the various jurisdictions of patent litigation systems is whether they follow a unified or a bifurcated system. In a unified system, infringement and invalidity are dealt with within the same proceedings, where invalidity is usually raised as a defense by the defendant to the infringement claim by the plaintiff. The judge will assess both claims simultaneously, which implies that a patent that is found to be invalid cannot be infringed. In a bifurcated system, there are separate proceedings in different venues to establish infringement and invalidity. In this system, invalidity is not usually an admissible defense to an infringement claim. The defendant will concentrate on a non-infringement defense while potentially attempting to invalidate the patent in parallel at the competent venue. Since the question of validity has a direct effect on infringement proceedings, courts have the option to stay infringement proceedings until validity has been decided.

In most jurisdictions, validity is decided not only by the courts but also administratively by the intellectual property (IP) office. Such administrative validity challenges can take the form of a post-grant opposition that allows third parties to challenge validity within

a certain period after the grant. For example, at the European Patent Office (EPO), opposition to the granting of a patent can be filed within nine months of the mention of the grant in the *European Patent Bulletin*. Whether infringement and validity are dealt with in a unified or bifurcated system has a number of important effects on patent litigation behavior and outcomes. For example, depending on the design of the bifurcated system, it is possible for the infringement decision to be made before the invalidity decision. This implies that a patent may be found to be infringed that is eventually invalidated (Cremers *et al.*, 2016b). Bifurcation may also have a direct effect on litigation behavior. Evidence from Germany and the U.K. suggests that a bifurcated system, in which infringement is usually decided first, leads to fewer validity challenges than a unified system. Moreover, infringement actions are more likely to be settled (Cremers *et al.*, 2016b).

The number of courts which are competent to hear patent cases differs significantly across jurisdictions. In the U.S., 94 federal district courts are competent to hear patent cases. Patent infringement claims can also be brought before the International Trade Commission (ITC), but the ITC cannot award monetary damages. In Germany, 12 regional courts are competent to hear first-instance patent infringement claims. In other jurisdictions, such as France or the Netherlands, there is only a single court competent to hear patent cases. In the U.K., there are two courts that hear patent cases,

with one (the Intellectual Property Enterprise Court – IPEC) hearing cases that are less complex and of a lower value than the other (the Patents Court – PHC). In Germany, some regional courts have specialist chambers that hear patent cases. In the U.S., the Court of Appeals for the Federal Circuit (CAFC) is a specialized court, while first-instance district courts are not. The availability of different courts in which to file a claim may provide the opportunity to engage in forum shopping; that is, to make a strategic choice of court venue. This type of behavior may have an impact on the litigation statistics.

The costs associated with patent litigation vary significantly between jurisdictions. For example, in France, cost estimates for each party range between USD 60,000 and USD 250,000 while in Germany they range from USD 90,000 to USD 250,000 (Cremers *et al.*, 2016a). These costs are low in comparison to other jurisdictions, such as the U.K. or the U.S. where costs are commonly well over USD 1 million (Helmers and McDonagh, 2013; AIPLA, 2017). Such large disparities are explained by a number of factors, including the extent of pre-trial discovery and the role of expert witnesses, as well as the length and complexity of the trials themselves.

Table S1 provides an overview of the main characteristics of patent litigation systems for selected jurisdictions.

S1. Overview of the main characteristics of major patent litigation systems

Characteristics	Jurisdiction							
	China	France	Germany	Japan	Netherlands	Republic of Korea	U.K.	U.S.
Bifurcated	Yes	No	Yes	Yes	No	Yes	No	No
Administrative post-grant review	No	Yes (EPO)	Yes (EPO, DPMA)	Yes	Yes (EPO)	Yes	Yes (EPO)	Yes
Jury trial	No	No	No	No	No	No	No	Yes
Preliminary injunction	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Criminal liability	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Average duration in first instance (months)	6–18	18–24	14	12–15	12	10–18	24–36	18–42
Level of damages	Low	Average	Average	Low	Low	Low	High	High
Punitive damages	No	No	No	No	No	No	No	Yes
Fee shifting	Limited	Limited	Limited	Limited	Full	Limited	Full (item-based)	Limited
Average costs in first instance ('000' USD)	20–150	60–250	90–250	300–500	70–250	150–400	1,000–2,000	1,000–6,000*
Number of courts first instance	18 specialized + regular courts	1	12 (+1 validity)	2	1	5	2	94
Specialized court/ judges first instance	Partly	Yes	Yes	Yes	Yes	Partly	Yes	No
Specialized court of appeal	Yes	No	No	Yes	No	Yes	No	Yes
Separate trial for damages	No	No	Yes	Yes	No	No	Yes	No
Utility models	Yes	No	Yes	Yes	No	Yes	No	No
Design patents	Yes	No	No	No	No	No	No	Yes

* indicates median.

Note: EPO is the European Patent Office. DPMA is the Deutsche Patent- und Markenamt.

Source: AIPLA (2017), Clark (2011), Cremers *et al.* (2016a), Graham and van Zeebroeck (2014) and Thomson Reuters Practical Law.

Challenges associated with compiling and analyzing patent litigation data

Compiling and analyzing patent litigation data is an extremely difficult task for the following reasons:

- (a) patent litigation is considered one of the most complex forms of civil litigation,
- (b) litigation settled before reaching the court system is not publicly documented,
- (c) private information exchanged between parties is not revealed to the court or, even if revealed, it is not recorded,
- (d) information on cases is not centrally collated in many jurisdictions (i.e., information has to be accessed from individual courts), and
- (e) there are also substantial differences between jurisdictions that affect the interpretation of observed litigation data and make any direct comparison of litigation across jurisdictions challenging.

In most jurisdictions, no official aggregate statistics of patent litigation activity are available. Consequently, it is difficult to verify the completeness of any case-level data set unless the data were collected directly from court records. Collecting court records and converting them into a statistical database of patent litigation is a resource-intensive task.

One of the most frequently used patent litigation indicators is the number of cases. However, there is enormous heterogeneity in court cases, as well as in administrative post-grant reviews, even within the same jurisdiction. This creates challenges when constructing case counts and comparing those counts between jurisdictions. For example, in a bifurcated jurisdiction, court cases will be predominantly infringement claims. Invalidity challenges are recorded as separate cases, even when the validity challenge occurred as a direct response to an infringement action. In a unified system, an infringement action with an invalidity defense would show up only as a single case. One way to account for such heterogeneity is to count cases by type of claim.

Another source of heterogeneity is the number of asserted patents. Plaintiffs may assert claims relating to a single patent or to multiple patents in a case, and courts may decide either to split a case that involves several patents into separate actions or to consolidate separate actions into a single proceeding. A similar problem also arises in post-grant reviews. Multiple parties can file a post-grant administrative validity challenge on the same patent. At the EPO, for example, if several parties oppose a given patent, these multiple oppositions are consolidated into a single proceeding at the end of the nine-month opposition period. In the U.S., in contrast, multiple challenges in the form of an *inter partes* review (IPR) at the Patent Trial and Appeal

Board (PTAB) start off as separate petitions that may be joined at some point in the process. This means that a simple count of IPR petitions and a direct comparison with EPO oppositions might be misleading.

Court cases may involve different patent types. For example, court cases in China, Germany or the Republic of Korea may involve utility models; in China or the U.S. they may involve design patents. To facilitate comparability across time, courts, and jurisdictions, it is important to distinguish cases according to the type of patent involved.

The number of patent case counts is often not particularly informative, especially when compared over time or across jurisdictions. To facilitate comparison, litigation rates are often used. The main challenge in constructing these rates is determining their denominator; that is, the measure that is used to weigh the litigation case count. Cremers *et al.* (2016a), for example, use the following:

- (a) annual patent filings in a given jurisdiction,
- (b) the total number of patents in force in a given jurisdiction,
- (c) gross domestic product in a given jurisdiction, and
- (d) gross domestic research and development (R&D) spending in a given jurisdiction.

A problem common to these different ways of constructing litigation rates is that their interpretation is unclear. If a rate is low, does that mean that there are fewer underlying disputes, or does it mean that a smaller share of disputes makes it to court, either because they are settled before reaching court or because patent owners decide not to enforce their rights?

Interpreting the outcome of a court case is not straightforward either. In a validity challenge, often only a subset of claims is challenged and invalidated. Depending on the jurisdiction, it may also be possible for the patent owner to amend the claims of the patent during the proceedings and thereby keep the patent alive, albeit with a narrower scope. During infringement proceedings, it is equally possible that infringement is found only with respect to a subset of asserted claims. This means that often the outcome of a case is not as clear cut as is required for a binary coding (win or loss) of the outcome. This situation is further complicated by the appeals process. Depending on the jurisdiction, appeals that could result in first-instance decisions being overturned can be relatively common. Moreover, first-instance decisions may be only partly overturned, further adding to the complexity of the overall case outcome.

Only court cases are observed. Any disputes that are resolved or dropped before the plaintiff files the

complaint with a court remain undocumented.⁵ This poses a challenge for empirical work as it is practically impossible to account for this type of selection since no information on the underlying set of all patent disputes is available. Some cases are dropped or settled immediately following the filing of the complaint. For these disputes, often the only information available in the case docket is the information provided in the complaint together with the fact that the case did not proceed. If the case is pursued further, more information will be recorded, for example documenting a motion. Parties have the opportunity to settle at any point in the proceedings. This means that the amount of information available regarding a specific case depends on whether and when the parties settled the case. Only in the event that a case proceeds sufficiently for a summary judgment to be available, or if the judge or jury hands down a verdict, is the actual outcome of the case observed. It is important to emphasize that the set of cases decided by a court represents highly selected subsets of cases and is not representative of all the patent disputes filed with the court, and even less so of all the patent disputes that never reach a court. Cases that are decided on appeal are even more highly selected subsets of patent cases and are clearly not representative of patent disputes more generally.

The analysis of litigation data is also challenging due to frequent changes in the law and its application. The U.S., for example, has seen a number of landmark Supreme Court decisions in the past few years that have had a significant impact on litigation behavior.⁶ In addition, institutional changes, such as the introduction of opposition procedures in Japan and the Republic of Korea in 2015 and 2017, respectively, or the comprehensive reform of the Patents County Court and its reconstitution as IPEC in the U.K. between 2010 and 2013, are likely to have impacted litigation behavior. The same is true for sweeping legislative changes, such as the one brought about by the America Invents Act (AIA) in the U.S. in 2011. From a policy perspective, studying the effect of such changes on litigation behavior and outcomes is worthwhile in its own right. However, it also means that any analysis of litigation data will have to take the impact of those changes on litigation behavior into account. This is of particular concern with regard to court decisions and institutional changes that, at first glance, may not affect litigation directly, such as changes to post-grant review systems.

Data availability

The main challenge in the analysis of patent litigation lies in the limited availability of case-level information from the courts. However, even when detailed records are available, transforming these records into a sta-

tistical database is fraught with difficulties. Data on administrative post-grant validity challenges are more easily accessible and, to some degree, less complex, as only validity is at issue.

In the U.S., court data are made available by the Administrative Office of the Courts on the Public Access to Court Electronic Records (PACER) system to any registered user. PACER offers access to all cases heard by district courts, the CAFC and the Supreme Court. The data provided through PACER are considered to provide complete coverage of all patent cases in the U.S. from the mid-2000s onward (Schwartz and Sichelman, forthcoming). However, PACER is not designed to generate data that lend themselves easily to statistical analysis. The United States Patent and Trademark Office (USPTO) has recently made the PACER data available for download (Marco *et al.*, 2017). The resulting USPTO Patent Litigation Docket Reports Data cover the period from 1963 to 2015, although the coverage of the pre-2000 data is probably incomplete as not all records are available in electronic format. Data on PTAB proceedings are also publicly available from the USPTO website. While all documents can be downloaded free of charge, the data are not made available for download in a format that facilitates statistical analysis. Unified Patents also offers free access to the data in a more user-friendly format, but there is no bulk download functionality.⁷

In Germany, case-level data are available from official court websites. However, there are a number of problems associated with these publicly available data. There is no court diary or case index that allows verification that all cases filed with a given court are recorded. Moreover, case documents may be redacted; for example, patent numbers or the names of litigating parties are frequently missing from the publicly available documents. Despite the limitations, publicly available data for Germany have been used in research (e.g., Elsner and Zingg, 2018).

In the U.K., basic information on cases listed for a hearing is available from the official court diary. The diary lists all cases for which a claim form has been filed by the plaintiff and the court has scheduled some type of hearing or application. The diary contains basic information on the case, including the case number, the names of the plaintiff and defendant, and the date of the hearing. The diary may also include information on the status of a case – for example, if it has been discontinued due to a settlement. The website of the British and Irish Legal Information Institute (BAILII) contains court records, including published judgments, where court documents for cases listed in the court diary can be found. Alternative online resources are Lexis Nexis and the Thomson Reuters Westlaw database. In the U.K., these documents usually contain

unredacted information on court cases. However, often only a single document on a case is available online, which may not provide all of the relevant information for a given case. The fact that usually not all court records for a given case are observed when the data are assembled from publicly accessible online sources means that the analysis will necessarily be limited. For example, it may not be possible to determine whether specific motions (e.g., for a stay or summary judgment) were filed during proceedings, especially in the event that they were unsuccessful. Such motions may have impacted the parties' litigation behavior, but it is not possible to determine the extent of their effect from the data. Moreover, BAILII does not publish every court record; decisions that are deemed to be more important are more likely to be posted online, creating selection bias in any data set constructed solely from records available on BAILII.

Data on EPO oppositions are available in EPO's Patent Register, which is offered as a data set designed for the purposes of statistical analysis. The ready availability of these data has led to a relatively large amount of research on EPO oppositions.

Since 2014, all decisions by courts in China are publicly available on the China Judgments Online website. In practice, coverage is still well below 100 percent. Moreover, the data only cover infringement decisions as invalidity challenges are decided exclusively by the China National Intellectual Property Administration (CNIPA).

In the case of Japan, the IP High Court provides an online database of court decisions for all courts competent to hear patent cases in Japan.

There have been a number of efforts by academic researchers to collect data directly from the courts. For example, Cremers *et al.* (2016a) collected data directly from the three most important German regional courts (*Landgerichte* – LG) for the period 2000 to 2008. For France, Dumont (2015) collected data from the first-instance court in Paris for the period between 2008 and 2013. Helmers *et al.* (2016) collected case-level data from the two courts competent to hear IP cases in the U.K. – the IPEC and the PHC – for the period from 2007 to 2013.

A large number of commercial data providers and law firms offer access to patent litigation data covering different jurisdictions. However, access to those databases is generally expensive. In addition, information on data coverage and methodology is not always clear.

The USPTO post-grant review statistics

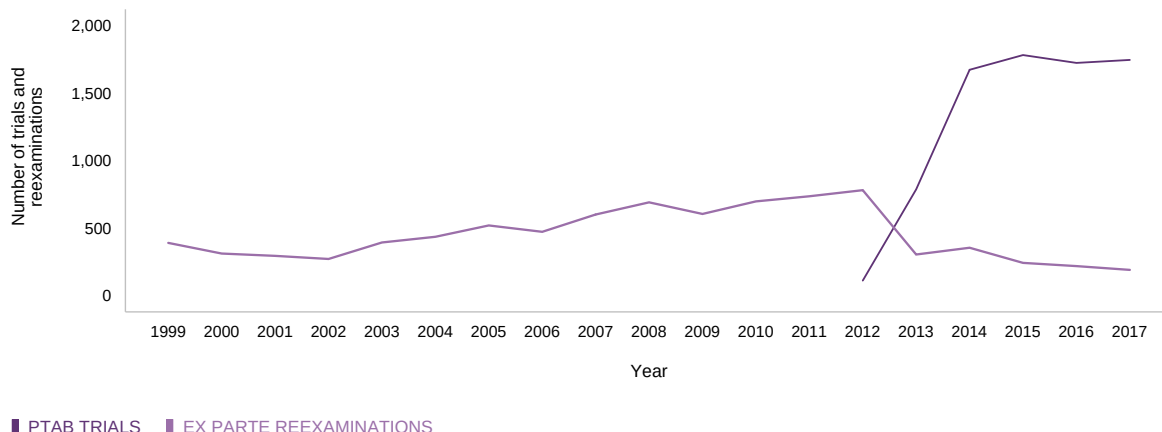
Since the introduction of the AIA in the U.S. in 2011, it has been possible to challenge the validity of patents granted by the USPTO through four different avenues: post-grant review, *inter partes* review, covered business method and *ex parte* reexamination. There has been a dramatic increase in PTAB trials since the implementation of the AIA (see figure S2). In contrast, *ex parte* reexamination has declined. However, the decrease in *ex parte* reexamination has been far less substantial than the increase in PTAB trials. This implies that the total number of post-grant challenges at the USPTO has risen substantially.

As mentioned above, not all IPRs are reviewed by PTAB. Only those IPRs that have a reasonable likelihood of success are instituted and reviewed by PTAB. Figure S3 shows both the total number of petitions and the number of petitions instituted, which follows a similar trend. However, starting in the third quarter of 2014, the share of instituted petitions dropped and continued to hover around 55 percent of total petitions for the remaining period. On average, PTAB made decisions on approximately 75 percent of all petitions instituted between 2012 and 2015. The decrease in the number of decisions since 2015 is due to data truncation.

Figure S4 shows a breakdown of petitions and institution decisions by technology area for the period from 2012 to 2016.⁸ The largest number of petitions was in the field of computer technology (670), followed by telecommunications (308) and digital communication (248). The share of petitions instituted varied from 94.4 percent in surface technology to 38 percent in other consumer goods. Among the top five technologies with the largest number of petitions, telecommunications has the highest institution rate (61.7 percent), followed by computer technology (55.2 percent), medical technology (52.9 percent), digital communication (51.6 percent) and audio-visual (51.2 percent).

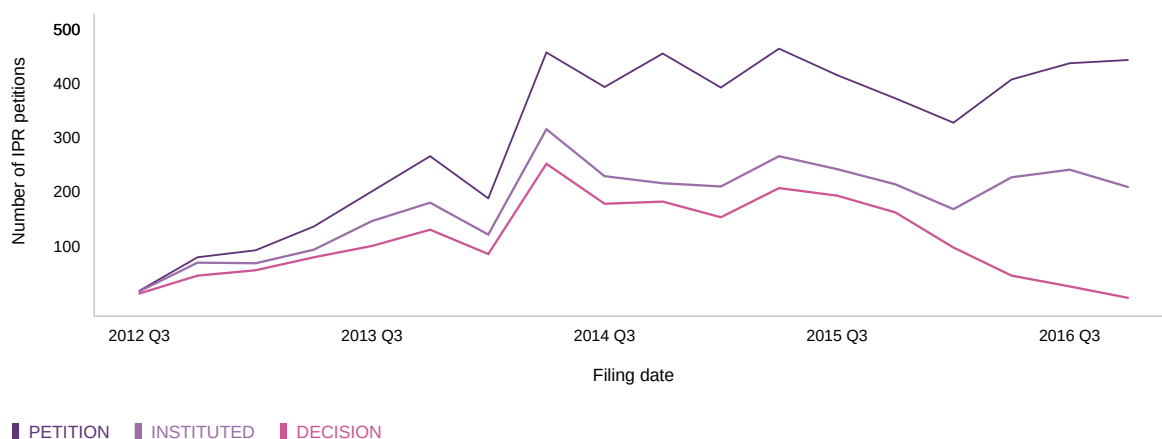
Figure S5 shows the PTAB decisions for all IPRs instituted for the period from 2012 to 2016. For the majority of the fields of technology, the invalidation rate was over 80 percent. Among the top five fields of technology with the largest number of decisions, electrical machinery (84 percent) had the highest invalidation rate, followed by transport (81.3 percent), telecommunications (80.2 percent) and computer technology (79.2 percent).

S2. Post-grant PTAB trials and *ex parte* reexaminations, 1999–2017



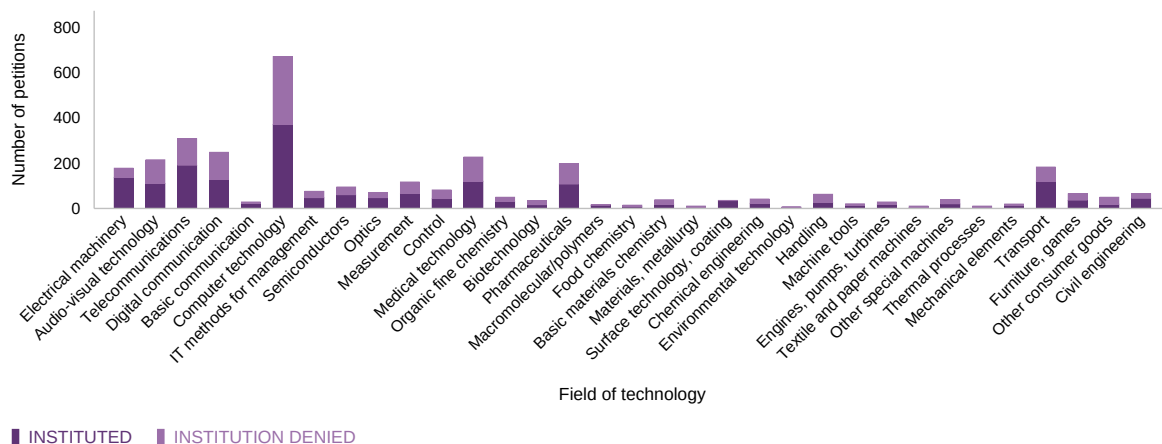
Source: <https://ptabdataui.uspto.gov/#/documents>.

S3. Total number of IPR petitions



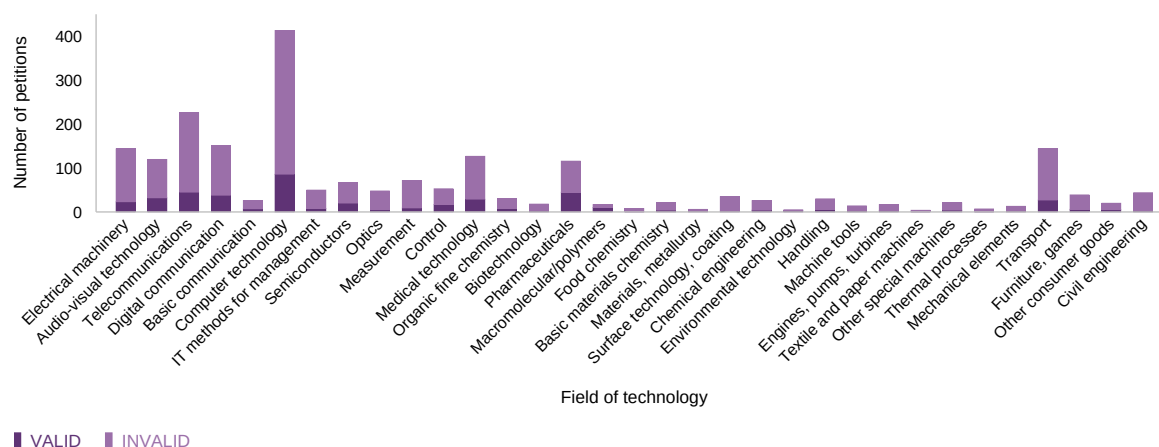
Source: Helmers (2018).

S4. IPR petition decisions by field of technology, 2012–2016



Source: Helmers (2018).

S5. IPR institution decisions by field of technology, 2012–2016

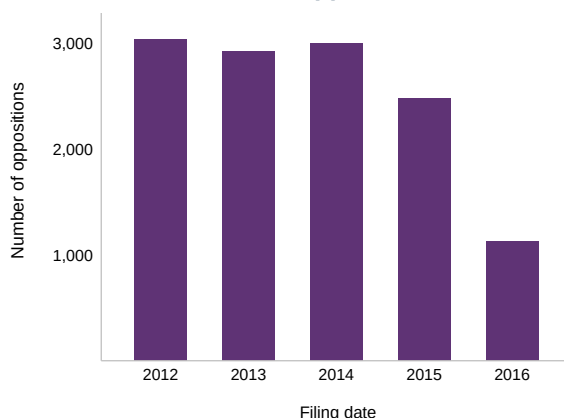


Source: Helmers (2018).

The EPO post-grant opposition statistics

At the EPO, oppositions can be filed within nine months of the mention of the grant in the *European Patent Bulletin*. All oppositions that are filed during that time period are combined at the end of the nine-month period before oppositions proceedings begin. This means that the number of oppositions is not directly comparable to the number of IPRs because separate petitions for IPR for the same patent can be filed but are not necessarily combined into a single proceeding. Figure S6 shows that the number of oppositions held relatively steady, at around 3,000 per year, between 2012 and 2014. The decline during 2015 and 2016 is due to truncation of the available data.

S6. Total number of EPO oppositions, 2012–2016



Source: Helmers (2018).

The outcome of the EPO opposition proceedings by field of technology is presented in figure S7. Opposition to the granting of an EPO patent can result in the pat-

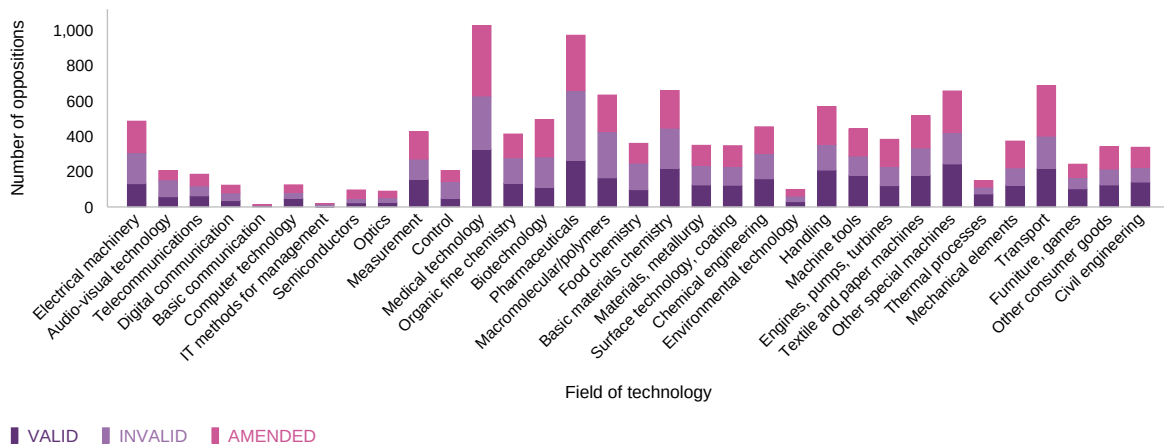
ent being invalidated, maintained in its current form or maintained in amended form. Patents related to medical technology attracted the largest number of oppositions (1,029), followed by pharmaceuticals (974), transport (689) and basic materials chemistry (660). In contrast, there were relatively few oppositions in computer technology, telecommunications and digital communication, which is probably explained by differences in the granting practices of software-related patents between the USPTO and the EPO. The distribution of outcomes is fairly even across technology areas; on average around 32 percent of opposed patents were invalidated, 32 percent were upheld and 36 percent were upheld in amended form.

U.K. and U.S. patent litigation statistics

The number of patent litigation cases filed in the U.S. grew gradually between 1999 and 2009. However, between 2009 and 2013 there was a period of considerable growth in the number of cases filed (see figure S8). A similar trend is observed for the U.K., where significant growth in the number of cases filed occurred between 2010 and 2012 (see figure S10). The strong growth in the number of cases filed in both the U.K. and the U.S. occurred during the so-called “global patent wars.”

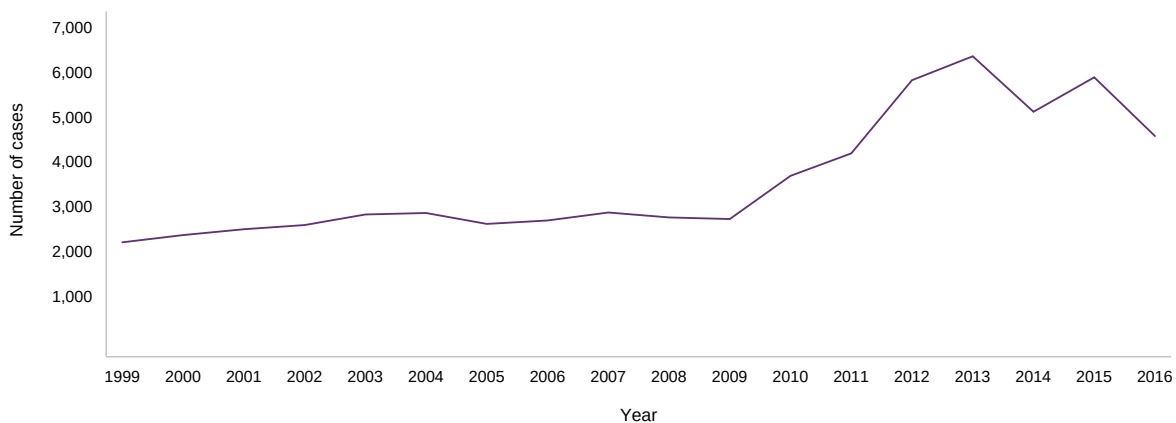
As mentioned above, cases count data are often normalized using the number of filings, patents in force, gross domestic product, etc. Figure S9 presents data on the number of cases filed in the U.S. district courts normalized by patent grants and patents in force. Normalized cases count data follow the same overall trend – significant growth between 2009 and 2013 with a decline thereafter.

S7. EPO opposition outcomes by field of technology, 2012–2016



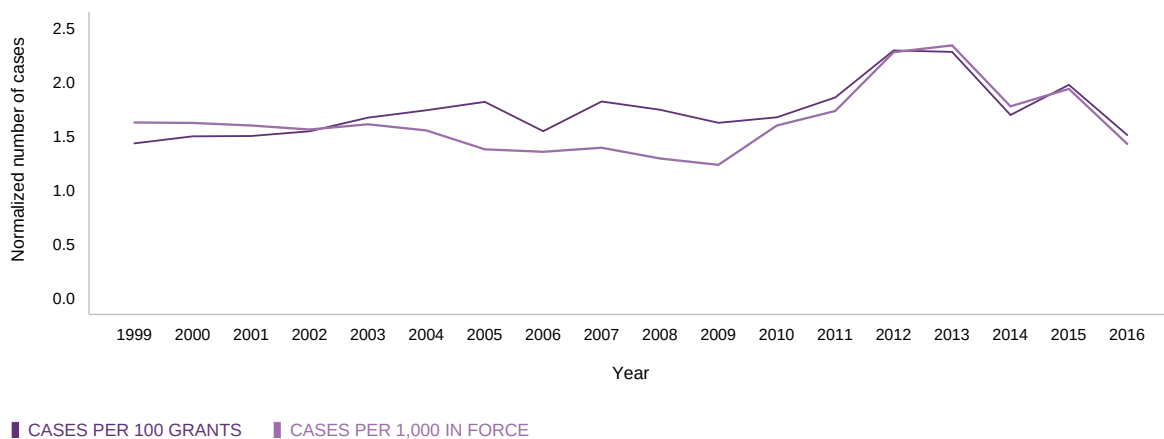
Source: Helmers (2018).

S8. Number of patent infringement cases filed in the U.S. district courts, 1999–2016

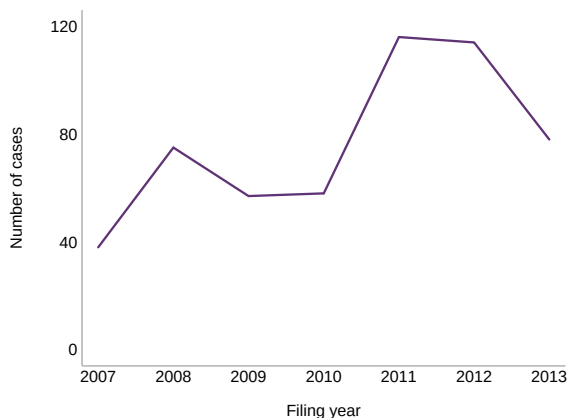


Source: USPTO Patent Litigation Docket Reports Data.

S9. Number of patent cases filed in the U.S. district courts per 100 patent grants and 1,000 patents in force, 1999–2016



Source: USPTO Patent Litigation Docket Reports Data and Historical Patent Data Files.

S10. Number of patent cases filed in the U.K. patents court and IPEC, 2007–2013

Source: Helmers (2018).

S11. Outcome of cases filed in the U.K. and the U.S.

U.K. patents court and IPEC, 2007–2013

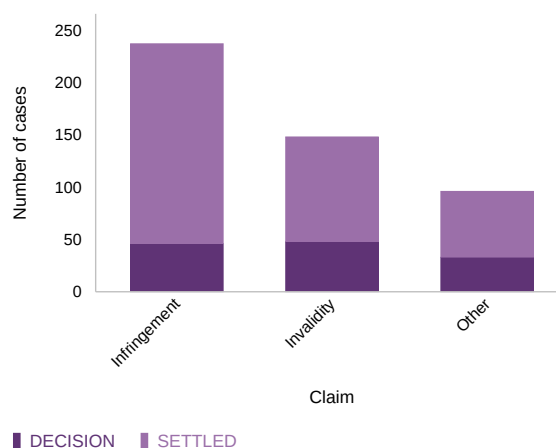
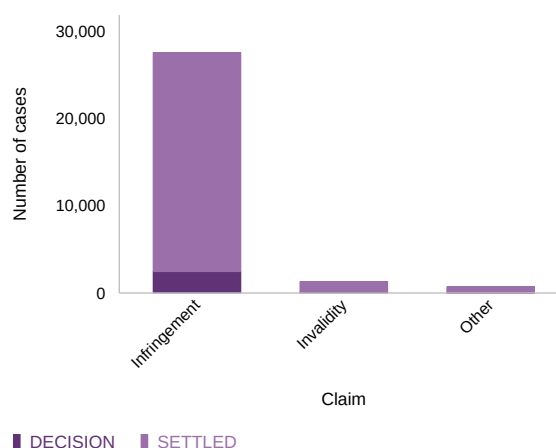


Figure S11 provides data on cases broken down by types of complaint: infringement, invalidity and other. The “other” category contains a range of patent-related claims, such as disputes regarding inventor- or ownership, false patent marking, licensing contracts, etc. The figure also distinguishes between cases that ended with a decision by the court or a settlement/dismissal. In both jurisdictions, the share of cases determined by court decision is very small. For example, in the U.S. around 10 percent of cases were decided in some way by the courts, while in the U.K. the figure was around 26 percent. Complaints in the U.S. almost all allege infringement of a patent, while a small share of total cases relates to an allegation of invalidity. In contrast, around 30 percent of cases in the U.K. start with a validity challenge. The share of cases decided by the courts in the U.K. is larger for validity challenges (32 percent) than for infringement claims (20 percent).

U.S. district courts, 2010–2016



Source: Helmers (2018).

Figure S12 presents data on the interaction between litigation in court and administrative post-grant reviews. Interaction occurs when a patent that is litigated in court is challenged through an IPR in the U.S. or an opposition at the EPO. The figure shows the number of court cases that have a parallel administrative validity challenge at the EPO for U.K. patents and at the USPTO for U.S. patents. In the U.S., parallel IPRs are filed mainly in infringement cases by the defendant in an attempt to invalidate the patent administratively and thereby achieve a dismissal of the infringement case in court. In the U.K., a relatively large number of cases that challenge a patent’s validity in court also challenge the patent’s validity administratively at the EPO. Because courts in the U.K. often do not stay proceedings if an opposition is pending at the EPO, this strategy allows the plaintiffs to use all available venues to invalidate a patent.

Conclusions

This chapter has provided an overview of patent litigation systems across jurisdictions. It has documented common aspects applicable to court proceedings in different jurisdictions and outlined how the patent litigation systems differ. It has also outlined the challenges involved in collecting comprehensive and comparable patent litigation data from the various jurisdictions. It is important to understand the litigation system in order to properly interpret the data.

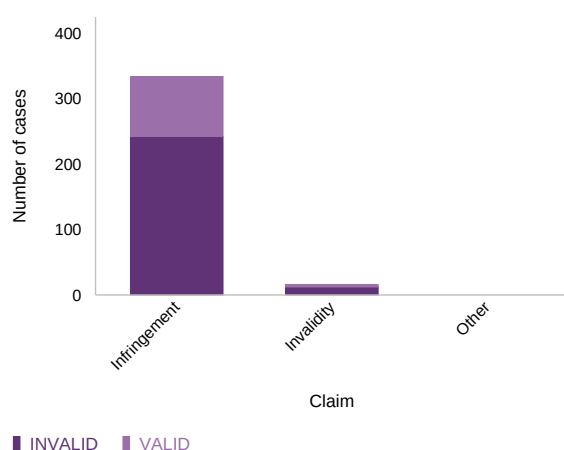
To monitor the functioning of the patent litigation system, data availability is crucial for evidence-based policymaking. However, data availability and access remain a major obstacle to the analysis of the patent litigation system. The U.S. has made significant efforts

S12. Parallel IPRs (U.S.) and EPO oppositions (U.K.)

U.K. patents court/IPEC and EPO oppositions, 2007–2013



U.S. district courts and PTAB IPRs, 2012–2016



Source: Helmers (2018).

to make patent litigation data available to researchers and policymakers. For example, the efforts of the USPTO (Marco *et al.*, 2017) provide a useful illustration of how to make patent litigation data available for statistical analysis. Beyond the U.S., there is a lack of publicly available official data. As an initial step, patent offices could develop statistical databases of administrative procedural information (e.g., detailed information on oppositions, invalidation, reexamination, etc.). With regard to court records, developing infrastructure to maintain a register of all patent-related cases could be a worthwhile route to take.

- 1 See www.nytimes.com/2018/06/27/technology/apple-samsung-smartphone-patent.html for more details.
- 2 See https://obamawhitehouse.archives.gov/sites/default/files/page/files/201603_patent_litigation_issue_brief_cea.pdf and <https://bits.blogs.nytimes.com/2010/03/04/an-explosion-of-mobile-patent-lawsuits/> for examples.
- 3 This section is based on a paper prepared by Professor Christian Helmers of Santa Clara University. For further details, see WIPO's *Economic Research Working Paper No. 48*.
- 4 The U.K. consists of three distinct jurisdictions: England and Wales, Northern Ireland and Scotland. Throughout the remainder of this chapter, we refer to the jurisdiction of England and Wales as the U.K.
- 5 Lemly *et al.* (2017) estimate, based on survey results for the U.S., that approximately 70 percent of patent infringement claims are resolved out of court.
- 6 For an overview, see <https://writtendescription.blogspot.com/p/patents-scotus.html>
- 7 See <https://portal.unifiedpatents.com>.
- 8 See www.wipo.int/export/sites/www/ipstats/en/statistics/patents/pdf/wipo_ipc_technology.pdf for details on technology classification.

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