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## Patent Litigation: Data Access and Construction

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# Patent Litigation: Data Access and Construction

Bernhard Ganglmair    Christian Helmers    Brian J. Love

11 September 2019

# Overview

- **Sources and access to patent litigation data:**
  - Availability and accessibility of litigation data differs greatly across jurisdictions
  - Available data not designed for quantitative analysis
  - Difficult to verify whether data complete or non-random sample (in most jurisdictions no official aggregate statistics available)
- **Challenges in the data construction:**
  - Process and extract relevant qualitative information
  - Convert qualitative information into data for quantitative analysis
  - Substantial heterogeneity among court cases
  - Complexity of patent litigation
  - **Balancing act between complexity inherent in legal process and simplification/abstraction required for quantitative analysis**

# Data sources and access



# Data sources and access



# Data sources and access

**Patent Library** ▾

**Custom Search**  
Generate a list of Cases, Documents (or several other Custom Search types) that match the filters you select.

**Quick Profiles**  
Generate a detailed report on a specific Case, Court, Patent, Judge, Firm, or Party.

Jump directly to a detailed report about a specific Case, Court, Patent, Judge, Firm or Party and instantly view analytics and search results for that item. For example, to view docket entries for a then click on the "Docket Entries" tab once the Quick Profile loads.

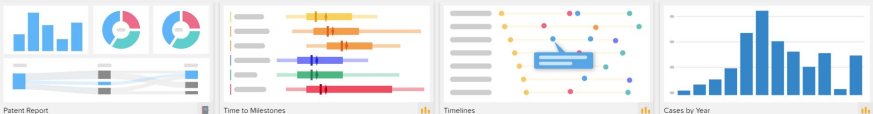
Patent Enter a patent number	Case Enter a case number	Party Enter a party name
Firm Enter a firm name	Judge Enter a judge name	Court Enter a court name

**Comparison Reports**

No Reports Found

**Analytics**  
Visualize large data sets with customized charts that reveal trends and provide insights for improved decision-making.

A Custom Search generates a table of data. Analytics uses the same search interface to generate a chart instead of a table of data. For example, to view the success rates of particular types of motions, select Motion Success.



Patent Report

Time to Milestones

Timelines

Cases by Year

# Data sources and access: Overview

- Availability and access to data varies a lot across jurisdictions
- When information available, amount and quality of available information varies a lot across jurisdictions
- In general, 3 types of data access:
  - Public
  - Commercial
  - Academic data collection from courts

## Data sources and access: U.S.

- By far the most comprehensive access to case-level data
- All court documents available in **electronic format in publicly searchable database**
- Direct access to all relevant court records
- Large number of commercial data providers offer data in more user-friendly formats and in combination with other information/databases (often granting free academic access)



# Data sources and access: U.S.

- **Publicly available data:** courts
  - Court data available on Public Access to Court Electronic Records (**PACER**) system by the Administrative Office of the Courts to any registered user
  - PACER gives access to all cases heard by district courts, CAFC, and Supreme Court
  - PACER provides complete coverage of all patent cases in the U.S. from the mid-2000s onward
  - But PACER is not designed to generate data for statistical analysis
  - RECAP online archive provides access ([www.courtlistener.com](http://www.courtlistener.com))
  - USPTO makes PACER data available for download
  - USPTO Patent Litigation Docket Reports Data cover period 1963-2015 (but pre-2000 data incomplete)

# Data sources and access: U.S.

- **Publicly available data:** PTAB
  - PTAB data available from [USPTO website](#), but system not designed to generate data for statistical analysis
  - PTAB data available from Unified Patents in more user-friendly format, but no bulk download functionality

# Data sources and access: U.S.

- **Commercial data providers:**

- Large number of commercial data providers
- Commercial providers offer PACER data in more user-friendly format
- Examples: PACERPro, DocketAlarm, Docketbird, Lexis Courtlink, Thomson Reuters Court Express, or Bloomberg Law
- IP specific data providers: Docket Navigator, Lex Machina, MaxVal, Clarivate Analytics' Derwent LitAlert, RPX
- Providers cater to data needs of practitioners (=main clients)
- Usually no bulk downloads permitted but free access for academics (but can be purchased to some extent)

# Docket Navigator

Apple Inc. v Samsung Electronics Co. Ltd., et al. CAND-5-11-cv-01846		
FILTERS    OPTIONS    VIEW    PRINT		Docket Entries
Date	#	Description
Apr. 15, 2011	1	COMPLAINT (with jury demand) against Samsung Electronics America, Inc., Samsung Electronics Co. Ltd., Samsung Telecommunications America, LLC (Filing fee \$ 350, receipt number 3461056762). Filed by Apple Inc. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7, # 8 Exhibit 8, # 9 Exhibit 9, # 10 Exhibit 10, # 11 Exhibit 11, # 12 Exhibit 12, # 13 Exhibit 13, # 14 Exhibit 14, # 15 Exhibit 15, # 16 Exhibit 16, # 17 Exhibit 17, # 18 Exhibit 18, # 19 Exhibit 19, # 20 Exhibit 20, # 21 Exhibit 21, # 22 Civil Cover Sheet(s)). COURT STAFF (Filed on 4/15/2011) (Entered: 04/19/2011)
Apr. 15, 2011	2	Certificate of Interested Parties by Apple Inc. (c). COURT STAFF (Filed on 4/15/2011) (Entered: 04/19/2011)
Apr. 15, 2011	3	Disclosure Statement by Apple Inc. (c). COURT STAFF (Filed on 4/15/2011) (Entered: 04/19/2011)
Apr. 15, 2011	4	Summons Issued as to Samsung Electronics America, Inc. (c). COURT STAFF (Filed on 4/15/2011) (Entered: 04/19/2011)
Apr. 15, 2011	5	Summons Issued as to Samsung Telecommunications America, LLC. (c). COURT STAFF (Filed on 4/15/2011) (Entered: 04/19/2011)
Apr. 15, 2011	6	Summons Issued as to Samsung Electronics Co. Ltd. (c). COURT STAFF (Filed on 4/15/2011) (Entered: 04/19/2011)
Apr. 15, 2011	7	ADR SCHEDULING ORDER: Case Management Statement due by 9/1/2011. Case Management Conference set for 9/8/2011 10:30 AM in Courtroom 4, 3rd Floor, Oakland. (Attachments: # 1 Standing Order)(c). COURT STAFF (Filed on 4/15/2011) (Entered: 04/19/2011)
Apr. 19, 2011	8	REPORT on the filing of an action regarding Trademark and Patent (cc: form mailed to register). (c). COURT STAFF (Filed on 4/19/2011) (Entered: 04/19/2011)
Apr. 19, 2011	9	Declaration to Proceed Before a U.S. Magistrate Judge by Apple Inc. (Bartlett, Jason) (Filed on 4/19/2011) (Entered: 04/19/2011)
Apr. 19, 2011	10	MOTION to Expedite Discovery filed by Apple Inc. (Bartlett, Jason) (Filed on 4/19/2011) (Entered: 04/19/2011)
Apr. 19, 2011	11	Declaration of Jason Bartlett in Support of 10 MOTION to Expedite Discovery filed by Apple Inc. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7, # 8 Exhibit 8, # 9 Exhibit 9, # 10 Exhibit 10, # 11 Exhibit 11, # 12 Proposed Order Proposed Order(related documents) 10) (Bartlett, Jason) (Filed on 4/19/2011) (Entered: 04/19/2011)
Apr. 19, 2011	12	MOTION to Shorten Time for Briefing and Hearing on Plaintiff's Motion to Expedite Discovery filed by Apple Inc. (Bartlett, Jason) (Filed on 4/19/2011) (Entered: 04/19/2011)
Apr. 19, 2011	13	Declaration of Jason Bartlett and (Proposed) Order in Support of 12 MOTION to Shorten Time for Briefing and Hearing on Plaintiff's Motion to Expedite Discovery filed by Apple Inc. (Attachments: # 1 Proposed Order Proposed Order(related documents) 12) (Bartlett, Jason) (Filed on 4/19/2011) Modified on 4/20/2011 (c). COURT STAFF. (Entered: 04/19/2011)
Apr. 20, 2011	14	CERTIFICATE OF SERVICE by Apple Inc. re 11 Declaration in Support, 10 MOTION to Expedite Discovery, 12 MOTION to Shorten Time for Briefing and Hearing on Plaintiff's Motion to Expedite Discovery, 13 Declaration in Support. (Taylor, Jennifer) (Filed on 4/20/2011) (Entered: 04/20/2011)
Apr. 21, 2011	15	CLERK'S NOTICE of Impending Reassignment to U.S. District Judge. (s). COURT STAFF (Filed on 4/21/2011) (Entered: 04/21/2011)
Apr. 21, 2011	16	Amendment to 14 Certificate of Service by Apple Inc. (Taylor, Jennifer) (Filed on 4/21/2011) Modified on 4/22/2011 (c). COURT STAFF. (Entered: 04/21/2011)
Apr. 21, 2011	17	*** FILED IN ERROR. PLEASE SEE DOCKET # 20. *** SUMMONS Returned Executed by Apple Inc. Apple Inc. served on 4/21/2011, answer due 5/12/2011. Re Samsung Telecommunications America, LLC (Taylor, Jennifer) (Filed on 4/21/2011) Modified on 4/22/2011 (lewn, COURT STAFF). (Entered: 04/21/2011)
Apr. 21, 2011	18	SUMMONS Returned Executed by Apple Inc. Samsung Electronics America, Inc. served on 4/21/2011, answer due 5/12/2011. (Taylor, Jennifer) (Filed on 4/21/2011) (Entered: 04/21/2011)
Apr. 22, 2011	19	ORDER REASSIGNING CASE. Case reassigned to Judge Hon. Lucy H. Koh for all further proceedings. Magistrate Judge Laurel Bewler no longer assigned to the case. Signed by the Executive

# Data sources and access: U.S.

- **Other databases:**

- Ancillary databases that can be combined with litigation and PTAB data
- NPE databases: RPX, Patent Freedom, Stanford NPE Litigation Dataset
- Stanford dataset freely available for bulk download
- Standard essential patents (SEPs): Searle Center Database, Disclosed Standard Essential Patents (dSEP) database

# Data sources and access: Europe

- **Publicly available data:** courts
- **Germany:**
  - Case-level data available from official court websites
  - But no court diary or case index to verify data availability (best guess: data highly incomplete)
  - Case documents often redacted (e.g. no patent numbers, names of litigating parties)

## Landgericht Düsseldorf, 4b O 51/14

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**Datum:** 19.01.2016  
**Gericht:** Landgericht Düsseldorf  
**Spruchkörper:** 4b. Zivilkammer  
**Entscheidungsart:** Schlussurteil  
**Aktenzeichen:** 4b O 51/14  
**ECLI:** ECLI:DE:LGD:2016:0119.4B.O51.14.00

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**Tenor:** I.

Die Beklagten werden verurteilt,

der Klägerin Auskunft darüber zu erteilen, in welchem Umfang sie seit dem 13. Dezember 2013

# Data sources and access: Europe

- **Publicly available data:** courts
- **Germany:**
  - Case-level data available from official court websites
  - But no court diary or case index to verify data availability (best guess: data highly incomplete)
  - Case documents often redacted (e.g. no patent numbers, names of litigating parties)
- **UK:**
  - Basic information on cases listed for a hearing available from official court diary
  - Diary contains basic case information (e.g. case number, the names of parties, sometimes status of a case)
  - Website of the British and Irish Legal Information Institute (BAILII) provides court records (selected subset of published judgments)
  - Documents usually unredacted but often only a single document on a case is available online





## 2018 England and Wales High Court (Patents Court) Decisions

You are here: [BAILII](#) >> [Databases](#) >> [England and Wales High Court \(Patents Court\) Decisions](#) >> 2018 England and Wales High Court (Patents Court) Decisions  
URL: <https://www.bailii.org/ew/cases/EWHC/Patents/>

### 2018 England and Wales High Court (Patents Court) Decisions

#### January

- [Lifestyle Equities CV & Anor v Sportsdirect.Com Retail Ltd & Ors \[2018\] EWHC 252 \(Pat\)](#) (31 January 2018)

#### February

- [Cantel Medical \(UK\) Ltd v ARC Medical Design Ltd \[2018\] EWHC 345 \(Pat\)](#) (23 February 2018)
- [L'Oréal Société Anonyme RN Ventures Ltd \(Rev.1\) \[2018\] EWHC 173 \(Pat\)](#) (05 February 2018)

#### March

- [Edwards Lifesciences LLC v Boston Scientific SCIMED, Inc & Ors \[2018\] EWHC 664 \(Pat\)](#) (27 March 2018)
- [Illumina, Inc. & Anor v Premaitha Health Plc & Anor \[2018\] EWHC 615 \(Pat\)](#) (19 March 2018)

#### April

- [Anan Kasei Co. Ltd & Anor v Mojycorp Chemicals & Oxides \(Europe\) Ltd \[2018\] EWHC 843 \(Pat\)](#) (23 April 2018)
- [Bose Corporation v Freebit AS \[2018\] EWHC 889 \(Pat\)](#) (24 April 2018)
- [Conversant Wireless Licensing SARL v Huawei Technologies Co. Ltd & Ors \[2018\] EWHC 808 \(Pat\)](#) (16 April 2018)

#### May

# Data sources and access: Europe

- **Publicly available data:** courts
- **Belgium:** [juridat.be](http://juridat.be)
- **Netherlands:** [rechtspraak.nl](http://rechtspraak.nl)
- **France (IP only):** [inpi.fr/fr/base-jurisprudence](http://inpi.fr/fr/base-jurisprudence)

# Data sources and access: Europe

- **Publicly available data:** EPO oppositions
  - EPO oppositions available in EPOs Patent Register available as dataset designed for purposes of statistical analysis

# Data sources and access: Europe

- **Data collection directly from the courts:**

- Data collected by academic researchers directly from courts
- **Germany:** three most important German LGs for 2000-2008 (Cremers et al., 2016)
- **France:** first instance court in Paris for 2008-2013 (but only decided cases) (Dumont, 2015)
- **UK:** PHC and IPEC 2007-2013 (Helmets et al., 2016)
- Ideal for analysis but requires access to courts and very (!) resource intensive

# Data collection directly from the courts: UK

	A	B	C	D	F	G	H	I	J	
1	variables		Questionnaire for England & Wales - PATENT CASES						Completed: 03/07/2014	
2										
3								core information	additional information	
4										
5										
6	cr_phc			High Court (Patents Court) – Citation				HC13B04226, HC13F04399 & HP13F04807 - Teva UK Limited		
7	cr_ca			Court of Appeals – Citation				no		
8	cr_hl			House of Lords – Citation				no		
9	cr_cjeu			Reference to CJEU				no		
10										
11										
12										
13	proc_cmc			Type of court record	Case management			no		
14	proc_injun				Application for Injunction			no		
15	proc_discl				Application for disclosure of information/documents			no		
16	proc_apportion				Other application (e.g. stay of application)			yes	04.Nov.13 Defendant's application to	
17	proc_judge				Judgment			yes	27.NOV.13 Judgment handed down (	
18	proc_costdam				Cost order/Damages			yes	29.Nov.13 The defendant pay the cla	
19	proc_other				Other (give details)			yes	29.Nov.13 It is ordered that the defen	
20	proc_datehear1			Date of (oral) hearing	date 1			21.Nov.13		
21	proc_datehear2				date 2					
22	proc_heardays			Number of hearing days						
23	proc_begin			Beginning of the proceedings (date of issue of the claim form)				19.Sep.13		
24				if stay granted (see application)				no		
25	proc_staybegin				Beginning					
26	proc_stayend				End					
27	proc_end			Conclusion of the proceedings (date of judgment)				27.Nov.13	The last document in the file is the or	
28	proc_datecostdam			Date of cost order						
29				Date of damages order						
30										
31										
32										
33	claimant_name			Claimant	Name			Teva UK Limited		
34	claimant_legal				Legal form			LLC		
35										
36										
37										
38	claimant_coname				Co-claimants			no		
39	claimant_corel					Relationship				
40	claimant_country				Foreign entity (Country)					
41					Entitlement to sue:					
42	claimant_entit_owner					Owner of the Patent		no		
43	claimant_entit_exlc					Exclusive licensee		no		

# Data sources and access: Europe

- **Commercial data providers:**

- Several commercial data providers: Lexis Nexis, Thomson Reuters Westlaw database
- But coverage incomplete (e.g. for UK mostly data from BAILII)
- More complete data on various European jurisdictions: Darts-ip
- But Darts-ip does not provide useful information on coverage of database for a given jurisdiction (potential selection problem!)

# Data sources and access: Asia

- **Japan:**

- IP High Court offers an online database that provides court decisions for all courts competent to hear patent cases

- **China:**

- Since 2014, all decisions by courts in China publicly available on the China Judgments Online website
- Coverage is still well below 100% and data only cover infringement
- A number of commercial data providers and law firms offer data: China IP Litigation Analysis database (CIELA) by the IP consulting firm Rouse; IPHouse

- **Korea:**

- Patent Court makes decisions on appeal publicly available, Supreme Court publishes decisions
- No comprehensive database of 1st instance decisions

# Data construction

- **Litigation data very complex**
- Complexity due to:
  - Complexity of the patent system
  - Complexity of litigation
- Added complexity due to:
  - Infringement and validity claims specific to patent litigation
  - Non-binary outcome: infringed/valid, not-infringed/valid, invalid
  - Litigation usually about specific claims
  - Potential interaction with other institutions (e.g. patent office)
  - Multiple claims and patents asserted
  - Multiple defendants
  - Cases can change (parties, patents, claims, etc.)



# Data construction

- **Available information:**

- Potentially big gap between information available to parties, court, and public (researchers)
- Courts primarily focused on communicating with the parties
- What happens in oral hearings often hard or impossible to determine from written record
- Parties often seal documents (with varying levels of court oversight) so documents partially or totally redacted.

# Data construction

- **Heterogeneity among court cases along different dimensions:**
  - Type of complaint filed by the plaintiff
  - Response by the defendant (in bifurcated system parallel validity challenge needs to be identified)
  - Number of asserted patents and claims
  - Number of defendants (infringement can generally be alleged up and down the supply chain, plaintiff often can elect to sue smaller number of manufacturers, or larger number of sellers, or users, or all together across a number of cases)
  - Case consolidation
  - Patent types (invention, utility, design)
  - Other types of IP asserted as well (e.g. trademark, copyright)
  - Sequential decisions: judgment, costs, damages,...
  - Differences in litigation stakes/strategy across industries
  - Intervening changes in law (e.g. in U.S. recently series of changes due to legislation and due to Supreme Court cases)

# Data construction

- **Example 1:** UK patent cases HC08C02525 and HC08C03143:
  - In HC08C02525, Nokia sued IPCom to challenge the validity of 2 patents
  - In HC08C03143, IPCom sued Nokia for infringing the same 2 patents
  - Cases are substantively indistinguishable from a set of claim(s) and counterclaim(s) litigated in a single case
  - Should be consolidated for analysis if court does not consolidate
  - Happens frequently in the US because venue is so important: D that has been sued for infringement will race to file a declaratory judgment action in a different, more favorable district. D then tries to have case filed by P transferred to the court it selected – these cases will be consolidated or one will be dropped

# Data construction

- **Example 2:** UK patent cases HC12A03340, HC12E02962, HP13B04212, HP13E04604, HP13B05505, HP14D00753:
  - Medis (generic pharmaceutical company) filed 6 separate cases against 6 subsidiaries of Actavis (a branded pharmaceutical company), seeking declaration of non-infringement of the same patents
  - All six cases were eventually consolidated by the court

# Unit of analysis

- What is the “appropriate” unit of analysis?
- What defines a “case”?
- Often “case number” uniquely identifies a case
- But case numbers often generated by court system due to different types of events: new case number generated by events that occur during ongoing dispute e.g. case transfer, severance of a party etc.
- Often borders between cases ambiguous or non-existent:
  - Multiple cases filed, but then consolidated into one case (and sometimes later un-consolidated)
  - One case may be filed, but then severed into many
  - A case may be filed, but then stayed pending the outcome of another related case
  - There be changes over time in what is permissible to include in a single case (e.g. U.S. AIA)
- In most cases it is necessary to **break down case by party, patent, and even claim**

# Unit of analysis

- **Example 3:** Realtime Data
- On 5/8/2015, Realtime filed 3 suits (among many more) asserting the same 5 patents against data storage/compression services:
  - Realtime Data v. Teradata, 6:15-cv-00470 (ED Tex)
  - Realtime Data v. Dell Riverbed Technologies, 6:15-cv-00468 (ED Tex)
  - Realtime Data v. HP Oracle, 6:15-cv-00467 (ED Tex)
- On 2/26/2016, Realtime sued Dell and HP again, but asserted different patents and added different co-defendants:
  - Realtime Data v. Dell EMC, 6:16-cv-00089 (ED Tex)
  - Realtime Data v. HP Silver Peak Systems, 6:16-cv-00086 (ED Tex)

# Unit of analysis

- On 10/11/16, Dell severed from the 2015 case (15-468) in which it had been sued
- On 11/17/16, HP was severed from the 2015 case (15-467) in which it had been sued.
- The Dell and HP severed cases were then consolidated into 16-89 and 16-86, respectively
- Realtime Data's 2015 case (15-470) against Teradata was transferred on 4/7/2016 to California, where it became 3:16-cv-01836 (ND Cal)
- Realtime also separately sued Teradata again on 4/21/2016, but asserted newer patents: 2:16-cv-02743 (CD Cal)
- Realtime eventually dropped the transferred case (16-1836) in May 2016, but...
- ...the patents asserted in the transferred case were simultaneously added to an amended complaint filed in 16-cv-02743.

# Unit of analysis

- Set of infringement claims originally filed in 3 cases in 2015 (in one district) that wound up being spread across a total of 9 case numbers, 6 of which have 2016 filing dates, spread across 3 districts:
  - 3 original EDTX 2015 cases +
  - HP severance in EDTX 2016 +
  - Dell severance in EDTX 2016 +
  - HP consolidation in EDTX 2016 +
  - Dell consolidation in EDTX 2016 +
  - Teradata transfer to ND Call 2016 +
  - Teradata “consolidation” (dropped case + amended complaint in newer 2016 CD Cal case)



# Case outcome

- Widespread (mis)perception in the economic literature that outcome is binary “win” or “loss” conditional on not settling
- Patent cases often much more complex
- Judgments are the exception, settlements are by far the most frequent outcome (>90% in U.S.)

# Case outcome

- When there is **no decision** by the court:
  - Definition of settlement unclear
  - Parties may not notify court of settlement
  - When parties notify the court of settlement, no additional information revealed
  - How to interpret cases that were dropped by plaintiff
  - How to interpret default judgments (no response from defendant)
  - How to interpret judgments when parties agree
  - How to interpret cases dismissed by the court
  - Parties may enter bankruptcy
  - In sequential trials, settlements may occur in combination with judgments (e.g. infringement followed by costs/damages)

## Case outcome

- **Settlement example 1:** “The case is settled. The agreement is in a sealed envelope.”
- **Settlement example 2:** “The parties agreed to settle. With the order dated XX/XX/XX the action is by consent discontinued”
- **Settlement example 3:** “Claimant and first defendant shall enter into a distribution agreement; defendant shall not unless expressly authorised to do so offer/dispose/import articles which would amount to infringement of either of Claimant’s patents; Defendant shall not challenge the validity of the patents; Second Defendant may sell any remaining stock of the products at issue but shall not acquire any new stock of the products at issue”
- **Settlement example 4:** “Claimant agrees that use of [...] with [...] like the Defendant’s does not fall within the claims of Claimant’s patent; Defendant undertakes not to use [...] which are covered by the patent after XX/XX/XX; Defendant agrees to pay Claimant £XX,000 by XX/XX/XX.”

# Case outcome

- When there is a **decision** by the court:
  - What does the decision cover?
  - Usually only subset of claims asserted and validity challenged
  - Proving infringement of one claim, of one patent, may be sufficient for plaintiff win substantially the same damages as proving infringement of all claims of all asserted patents
  - Patent owner may be able to amend claims of patent during proceedings
  - Claims/counterclaims may change during litigation
  - Appeals, not only of final outcome – may end up overturning 1st instance decision only in part
  - If multiple unrelated defendants, outcomes often differ by defendant
  - Cases may be merged and jointly decided
  - From the perspective of a lawyer, winning and losing are probably keyed more to the size of the eventual (unobservable) settlement and how much was spent to reach that settlement (unobservable as well)

# Case outcome

- **Dates and timing:**
- Coding of termination date of proceedings may not be clear:
  - Court not notified of settlement
  - Settlement usually occurred before court generates corresponding record
  - Additional hearings after judgment on e.g. costs/damages
  - Appeals
- Data needs to allow for sufficiently long lag for cases to conclude to avoid selection of cases that resolved faster

# Litigating parties and patents

- If names of **litigating parties** available:
  - Establish relationship between co-plaintiffs and co-defendants
  - Merge with firm-level databases to obtain detailed company information (Compustat, Bureau van Dijk Orbis and Amadeus)
  - Allows taking into account business group structure
  - Sometimes only name of first plaintiff and/or defendant available in data – if independent firms appear as co-defendants this creates selection problem
- If **patent numbers** available:
  - Merge with EPO's Patstat database to extract detailed bibliographic information
- Parties and patents can change during litigation

# Summary

- Access to data varies enormously across jurisdictions
- If you want easy access, use U.S. litigation data
- Still, construction of dataset far from straightforward
- Unit of analysis: case-party-patent
- Take information on motions etc. into account (not just start and end points)
- Think carefully about what you consider as a settlement
- Complex cases are the norm not the exception!
- Degree to which complexity matters depends on your research question
- Always remember: garbage in, garbage out!

# References

- Cremers Katrin, Fabian Gaessler, Dietmar Harhoff, Christian Helmers, and Yassine Lefouili (2016): Invalid but Infringed? An Analysis of the Bifurcated Patent Litigation System, Journal of Economic Behavior Organization, Vol. 131, pp. 218-242.
- Dumont Beatrice (2015): Does Patent Quality Drive Damages in Patent Lawsuits? Lessons from the French Judicial System, Review of Law and Economics, Vol. 11(2), pp. 355-383.
- Helmers Christian, Yassine Lefouili, Brian Love, and Luke McDonagh (2016): The effect of fee shifting on litigation: evidence from a court reform in the UK, TSE Working Paper 16-740.