



Patent Families

Lutz Mailänder
Head, Patent Information Section
Global IP Infrastructure Sector

Kuala Lumpur
29 November 2011

Agenda

- Families – why
- Families – which
 - Types
 - Unity of patents
- Families – implications for examination
 - External results, worksharing
 - Prior art
- Families – where

Resources

- WIPO Handbook:
<http://www.wipo.int/standards/en/pdf/08-01-01.pdf>
- EPO:
<http://www.epo.org/searching/essentials/patent-families.html>
- PIUG:
<http://wiki.piug.org/display/PIUG/Patent+Families>
- Landon IP:
http://www.intellogist.com/wiki/Patent_Families

Origin of patent families

- Patent protection for particular invention is territorial
 - **Office of first filing (OFF)** is usually in country of residence of inventor or applicant
 - Subsequent filings of improvements at OFF
- Applicants seek protection abroad (extensions)
 - **Office of second filing (OSF)**
 - Parallel with OFF (cost)
 - Deferred, delayed
- All filings/applications for “same invention” constitute a **patent family**

Types of patent families

Claiming priorities

- National families
- Filings abroad: Paris convention (&TRIPS) family
- Filings abroad: PCT system family

Without priorities

- Technical families
- Domestic families
- PCT

National second filings

Patent of addition

- Improvement of original invention of parent patent
- **Unity** with parent patent to be given; i.e. as if further independent claim of parent patent
- Depends on validity of parent patent
- Request possible up to 18 months after filing of parent patent

Unity of patents

- Invention is a solution for a technical problem
- Unity of patents: Combination of diverse inventive subject matter is not admissible
- Main claim defines inventive subject matter
- Further independent claims define other inventive subject matter, e.g.
 - Product and process
 - Different solution
- Unity is given as long as inventive subject matters are linked to same problem
- Lack of unity: solvable by divisional application

National second filings

Division

- E.g. for healing a lack of unity
- Possible usually anytime until grant enters into force

„Continuation in part“

- New national application claiming priority of one or several previous national application
- Up to 12 months after filing date of claimed priority

National and domestic families

National family

- Any national patent applications having at least one priority in common, e.g. additions, divisions, continuations

Domestic family

- Subsequent publications of same application, i.e. with different kind codes (A1, B1,...; see WIPO Standard ST.16: <http://wipo.int/export/sites/www/standards/en/pdf/03-16-01.pdf>)

Second filings abroad

Paris Convention of 1883

- Covers patents, designs, trademarks,..
- Equal protection to nationals and foreigners
 - Foreigners: nationals and residents of Union country
- Mutual recognition of (Paris Convention) priority rights:
 - at OSF: Treatment of application as if filed on date of first filing, i.e. same prior art
 - 12 month period to claim priority
- Permits combination of **multiple priority rights** (same or different countries)
- As long as national definition of **unity** is met

TRIPS agreement

- Provides for “derived” Paris Convention priority
- Members to TRIPS agreement need not sign Paris Convention but need to apply respective paragraphs on priority rights

Patent Cooperation Treaty - PCT

- „One-stop shop“ for parallel filing in several states
- Filing with „receiving office“
- Paris priority may be claimed or not
- **International phase** administered by WIPO: preliminary search and examination by selected ISAs (International Searching Authority; eg EP, AT, SE, US, JP)
- **National phase** administered by national IPOs:
 - Decision on entry into national phase at the latest 30 months after filing/priority date
 - National granting procedures,
- National patents/publications constitute family



14

Filing a patent application abroad

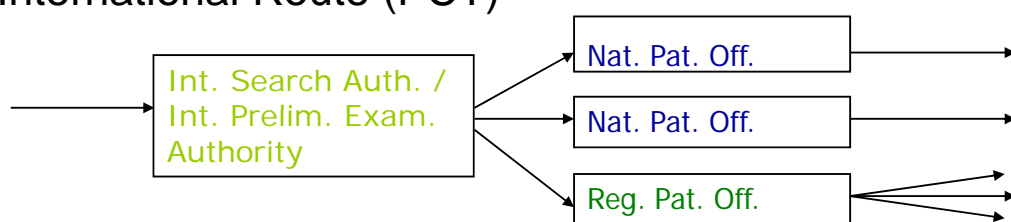
1. National Route



2. Regional Route



3. International Route (PCT)



[International phase]

[National phase]



Timelines to be observed for OSF filing

Options for extension to other jurisdiction:

- Paris convention: 12 months
- PCT: 30 months
- Without priority claim: until first publication of OFF
(e.g. 18 month where OFF publishes applications)

Family concepts

- Claiming multiple and different priorities in and from different countries may lead to complex family structures
- Various concepts / rules exist for constructing families
- Largely built on the principle of shared priorities
- WIPO Handbook definitions

Simple family

All documents have same priority or priorities: “Equivalents”

Document D1	Prio P1		
Document D2	Prio P1	Prio P2	
Document D3	Prio P1	Prio P2	
Document D4		Prio P2	Prio P3
Document D5			Prio P3

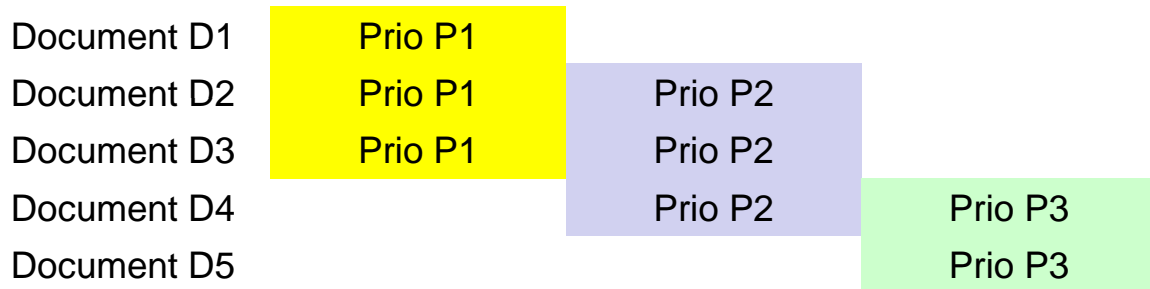
Simple family

All documents have same priority or priorities: “Equivalents”

Document D1	Prio P1		
Document D2	Prio P1	Prio P2	
Document D3	Prio P1	Prio P2	
Document D4		Prio P2	Prio P3
Document D5			Prio P3

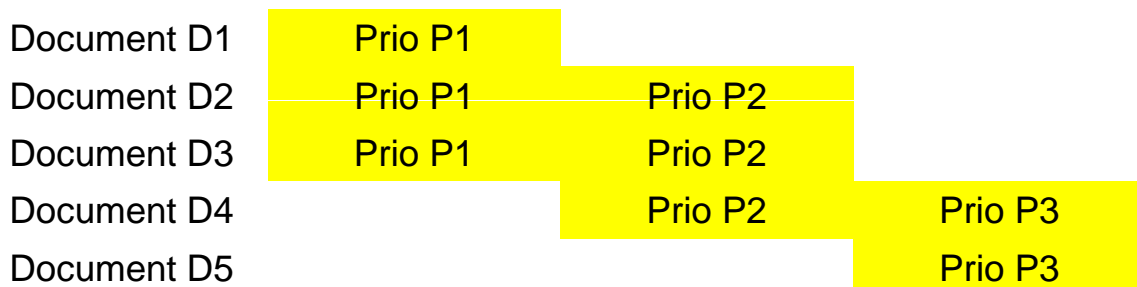
Complex family

All documents share at least one priority



Extended family

All members share at least one priority with another member



Technical/artificial/intellectual family

- No priorities claimed explicitly but still same or similar invention, e.g. filings abroad after 12 months Paris period
- Can only be determined intellectually:
 - Same inventor
 - (Same applicant)
 - Same or similar title, abstract
 - Same drawings

Sources of family information

- Espacenet (simple and extended families) based on EPO's INPADOC database
 - Other free patent information databases, like Patentscope, Depatis
 - Commercial database, e.g.
 - Thomson/Derwent: WPI family
 - Questel/Orbit: Fampat family
 - CAS
- Using widely INPADOC data, additional sources, and applying proprietary family construction rules

Family information in Espacenet

- INPADOC family data
 - extended families
 - 80+ countries
 - Update weekly but depending on data supply from IPOs
- Simple families
 - “also published as” equivalents
 - Used for document reclassification after IPC revisions

- [DE19830566](#)
- [DE19833712](#)

Legal status information in Espacenet

- INPADOC data comprises family information and legal status information
- Legal status data permits the assessment of examination status and an estimate for availability of final results

Use of family information for examination

Passive outsourcing/worksharing:

- Using external results of family members
- Options:
 - Use of final results obtained for family members, i.e. granted claims, rejections
 - Use search/examination reports, in particular prior art
- Also enables the planning/scheduling of active worksharing between IPOs, e.g. to avoid duplication of work

Use of family information for examination

Using external results of family members:

- Use of final results obtained for family members, i.e. granted claims, rejections
 - Use search/examination reports, in particular prior art
 - Combination of multiple priorities and different national definitions of unity may lead to differently worded claims and different subject matter
 - Since searches are mostly focused on claims, search results may be different because of scope of searches was different
- > Compare claims when using external results !

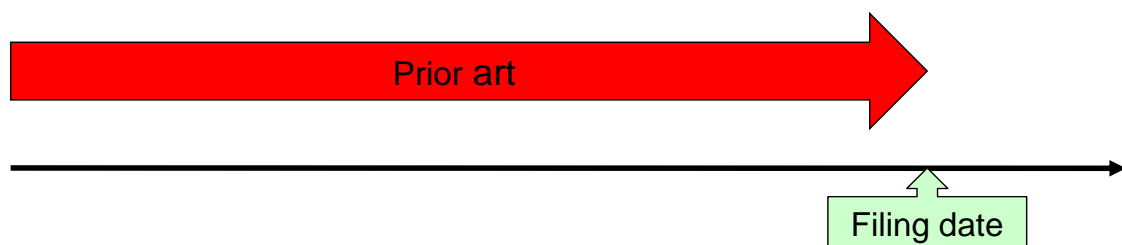
Use of priority information for examination

Relevant prior art (own or external search results):

- Multiple priorities may imply multiple priority dates
- Requires application of different dates for assessing relevant prior art

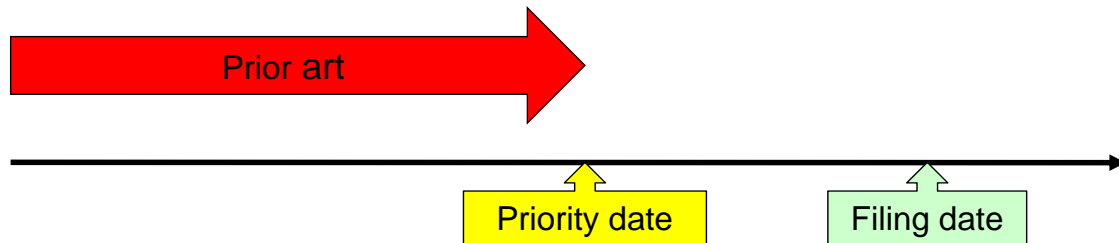
Difficulties with multiple priorities

- No priority



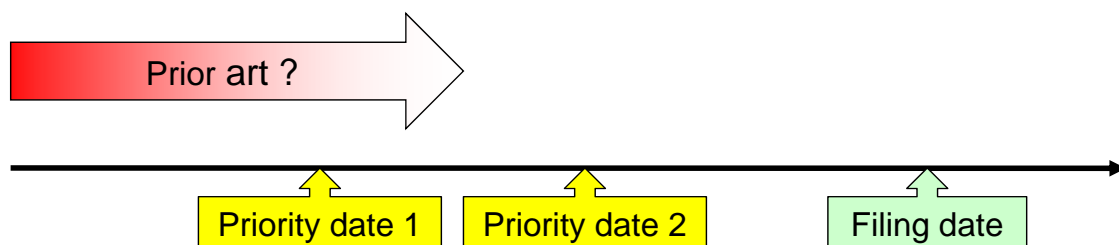
Difficulties with multiple priorities

- Single priority



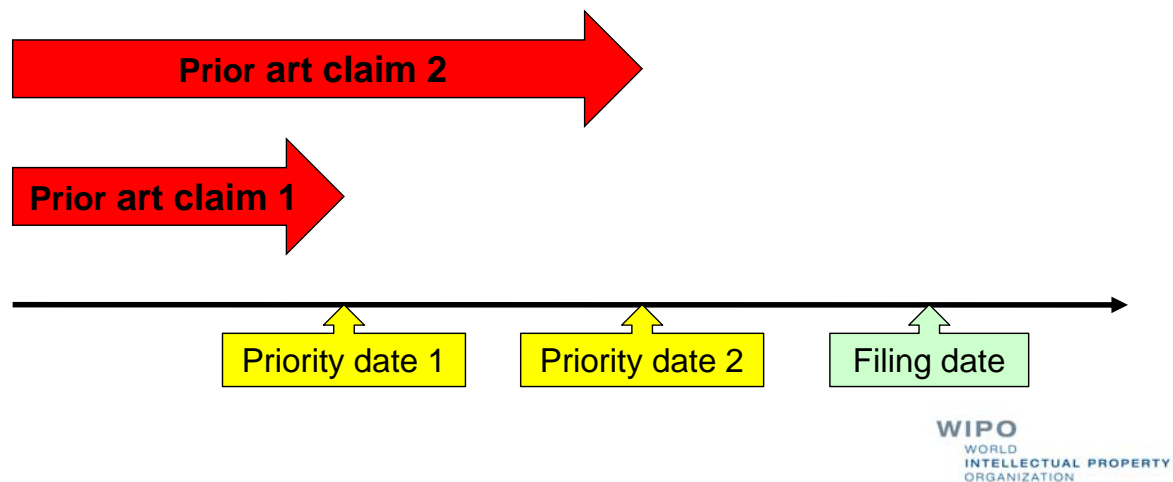
Difficulties with multiple priorities

- Different priority dates > different prior art



Difficulties with multiple priorities

- For each claim check which inventive subject matter is disclosed in which priority ?
- If elements from different priorities, latest respective priority date applies



Thank you