



Topic 3: Patent Families

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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

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 same number but with different **kind codes**, e.g.
 - A1: Publication of application (18 months after filing date)
 - B1: Publication of granted patent
 - Various national publication policies
 - see WIPO Standard ST.16 for kind codes:

<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

- Agreement on Trade Related Intellectual Property Rights
- Provides for “derived” Paris Convention priority, termed “convention priority”
- Members to TRIPS agreement need not sign Paris Convention but need to apply respective paragraphs on priority rights

Patent Cooperation Treaty - PCT

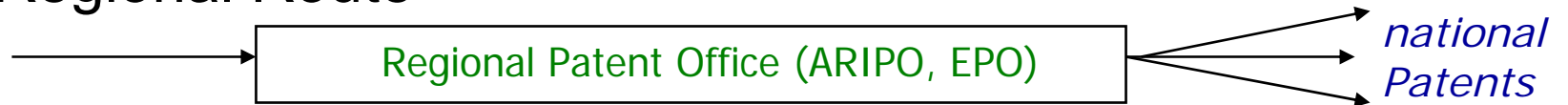
- „One-stop shop“ for parallel filing in several states
- Filing with „receiving office“
- Paris priority may be claimed or not
- **International phase** administered by WIPO: preliminary search and examination by selected ISAs (International Searching Authority; eg EP, AT, SE, US, JP)
- **National phase**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

Summary: Filing patents abroad

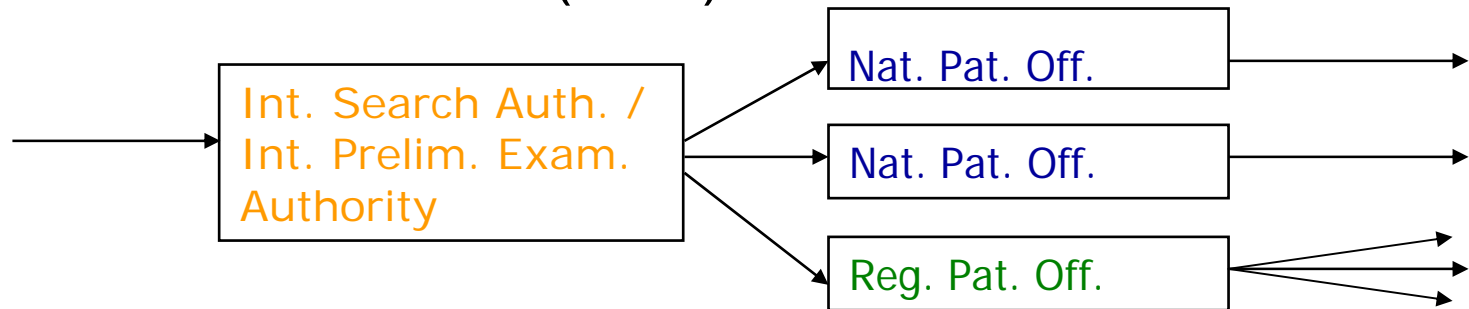
1. National Routes



2. Regional Route



3. International Route (PCT)



[International phase]

[National phase]

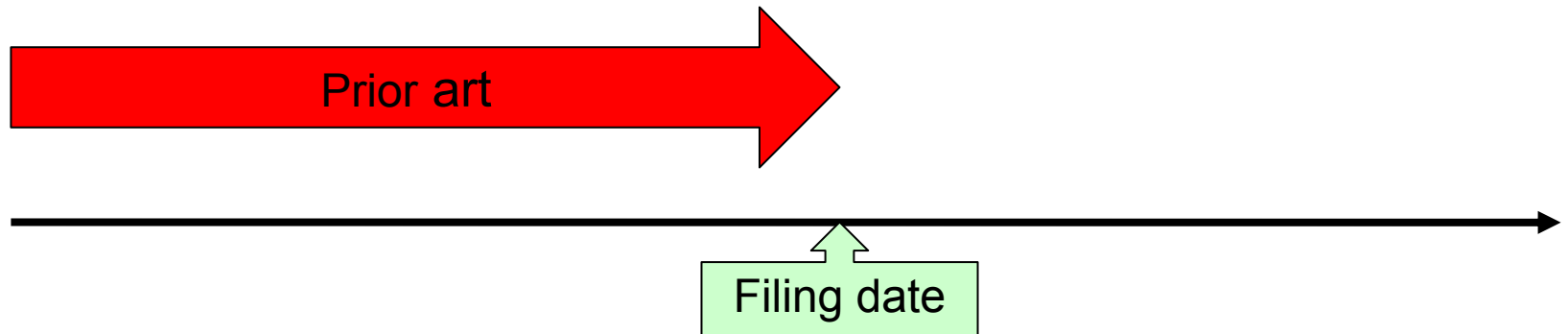
Timelines to be observed for OSF filing

Options for extension to other jurisdiction, i.e. to Offices of Second Filing (OSF):

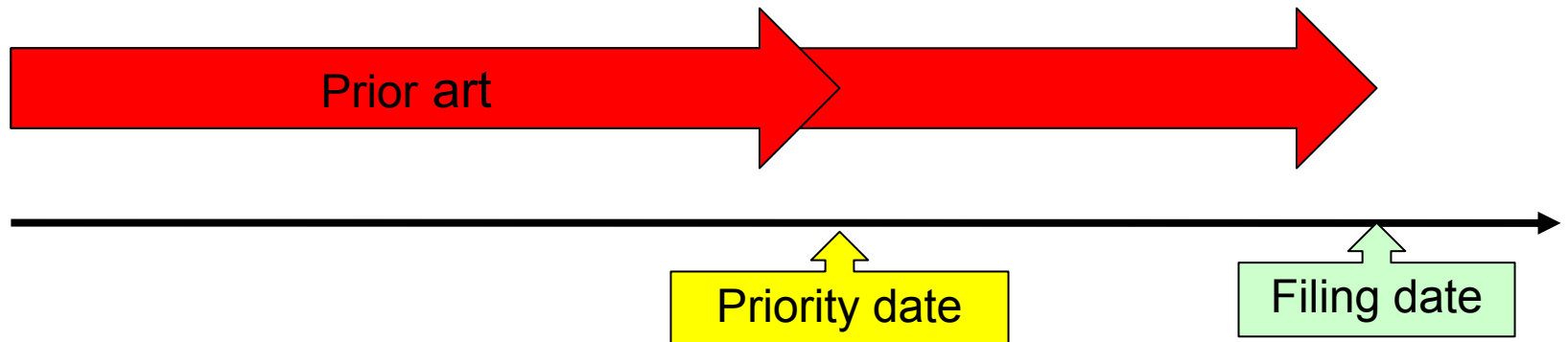
- Paris convention, TRIPS : 12 months
- PCT : 30 months
- Without priority claim : effectively until first publication of OFF upon which first filing becomes prior art
(e.g. 18 month where OFF publishes applications)

Difficulties with later second filings

■ OFF



■ OSF



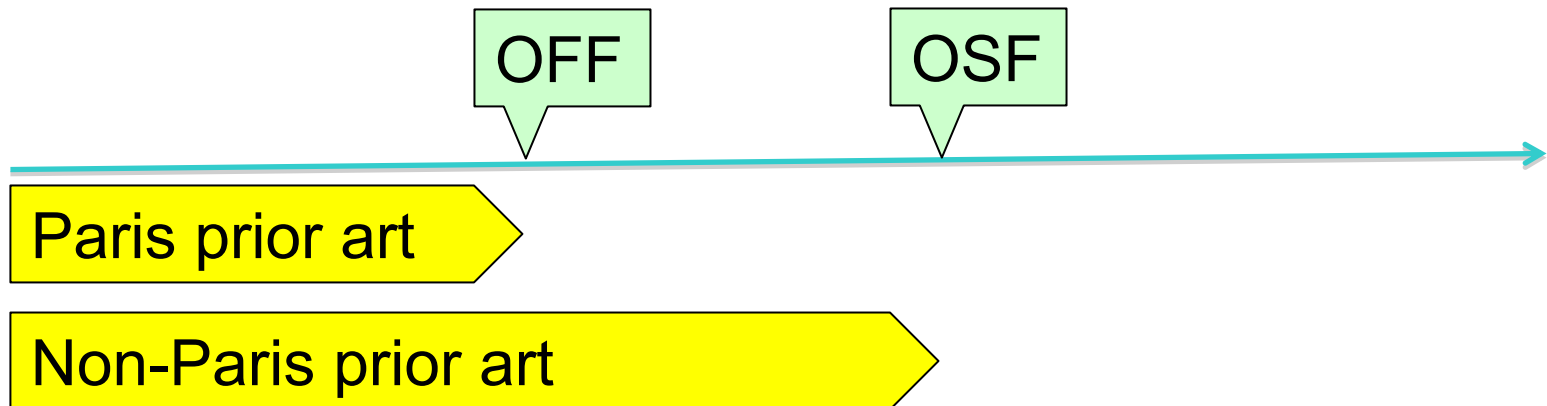
Technical families

- Applications filed for the same invention filed in different countries **without claiming priority** constitute a technical family
- Indicators:
 - Inventor name
 - Drawings
 - Title
 - (Claims)

Technical families

- Risk of not claiming Paris priority:

Later filing date implies different prior art, i.e. publications between OFF and OSF filing date are included



- Supplementary to-up searches may reveal more prior art than other search reports obtained for family members using the priority

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

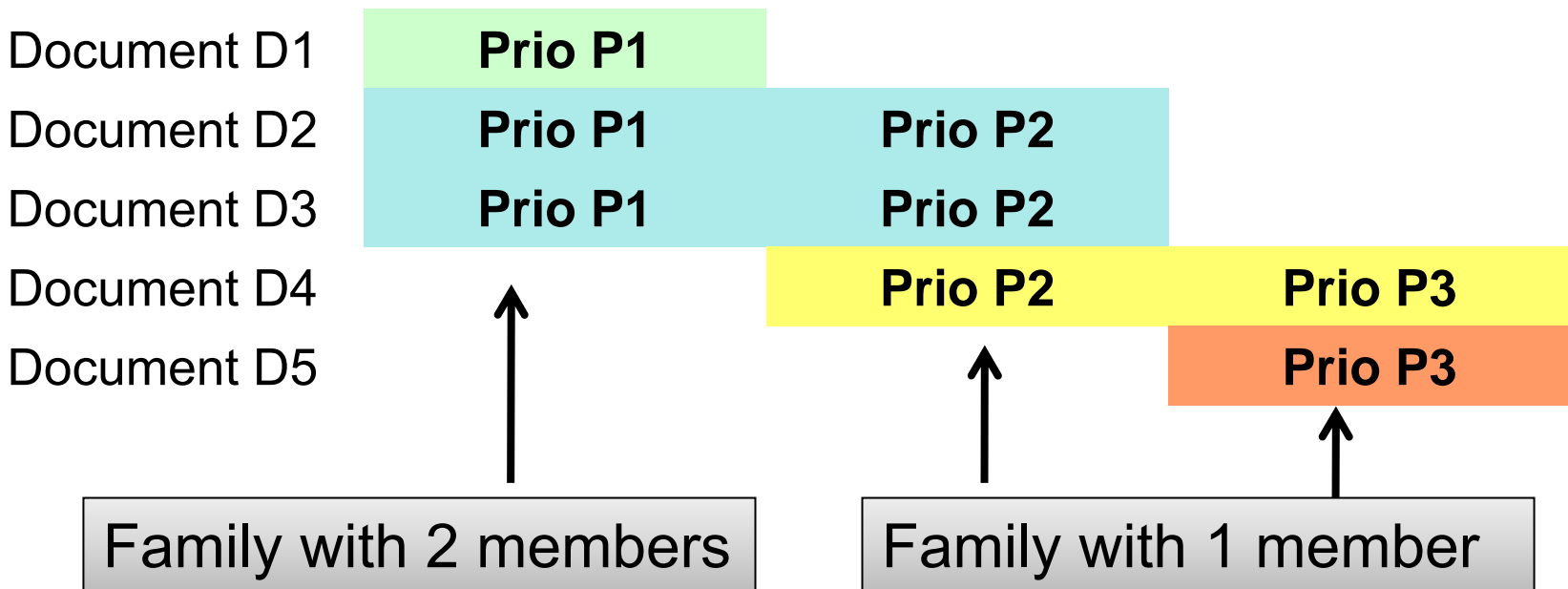
Samples

| | | | |
|-------------|----------------|----------------|----------------|
| 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

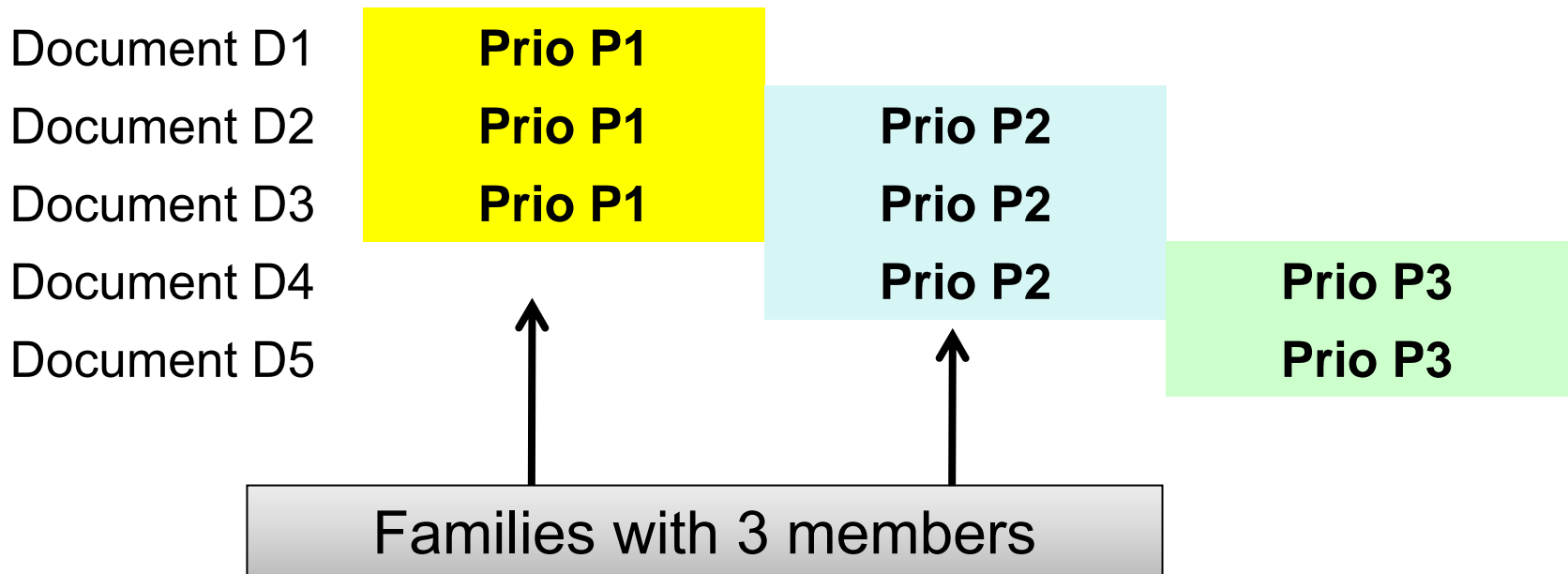
All members of a family have same priority or priorities

→ “Equivalents”



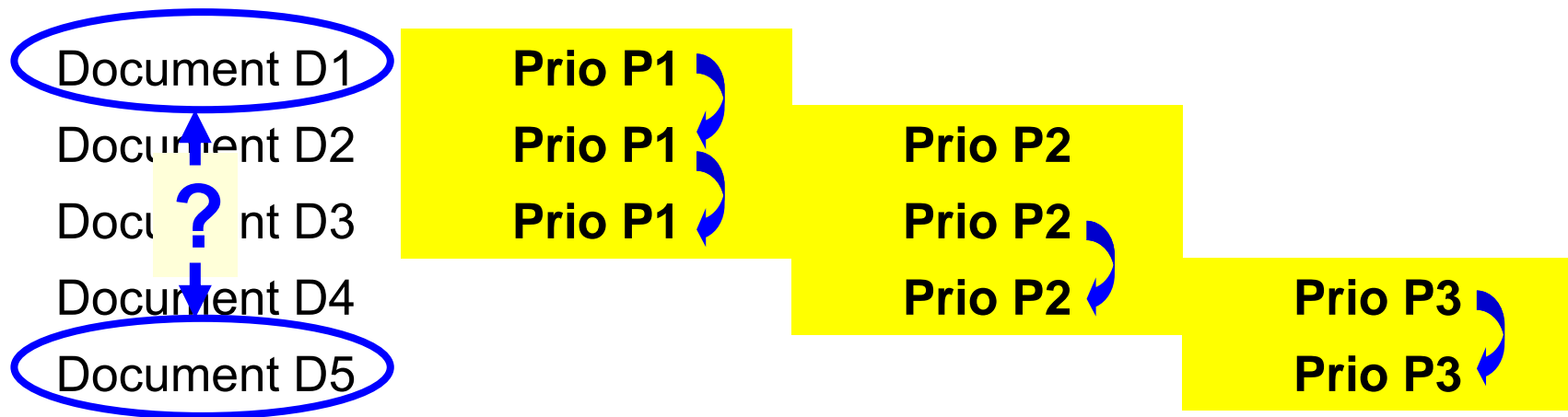
Complex family

All members of a family share at least one priority



Extended family

Any member shares at least one priority with at least one other member



All documents in same family

Simple – extended families ?

- Simple family: same invention; certain improvements of invention are admissible
- Extended families: Similar technical area but potentially larger diversity because two family members with different priorities may cover different inventions.
- Patent laws usually stipulate unity of invention for any patent application, ie for any claimed invention (not for description)

Sources of family information

- Family information has to be constructed from priority data
- EPO's INPADOC database is major source of such family information, retrievable through:
- EPO's CCD & Espacenet (simple and extended families)
- 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 > 2 members, is national, domestic, simple
- DE19833712

Technical/artificial/intellectual family

- No priorities claimed explicitly but still same or similar invention, e.g. filings abroad after 12 months Paris period
- Has to be determined intellectually:
 - Same inventor
 - (Same applicant)
 - Same or similar title, abstract
 - Same drawings
- Is therefore usually not recorded in any database (Inpadoc to some extent if detected by EPO examiner)

Use of family information for examination

▶ **Passive outsourcing/worksharing:**

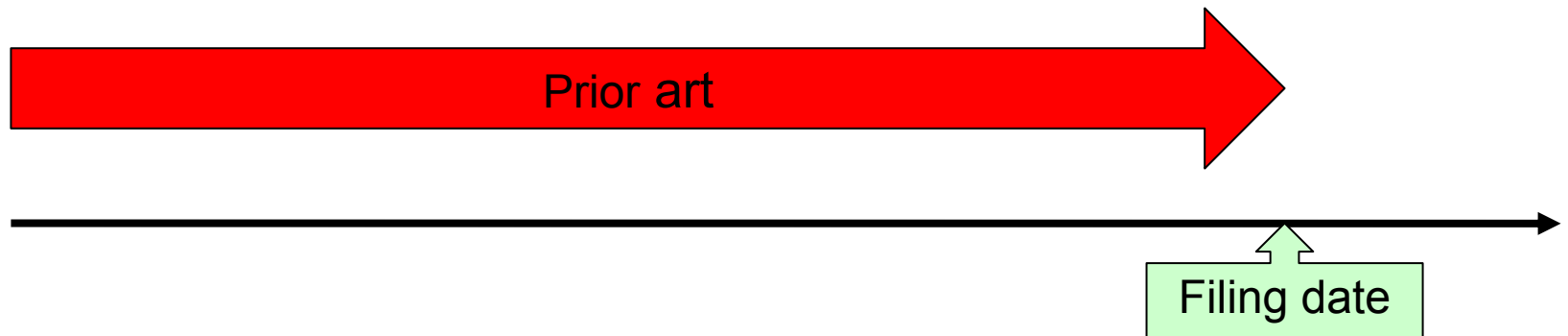
- Using external results of family members:
 - Final result, i.e. granted claims, rejections
 - Temporary results, i.e. search/examination reports, in particular prior art
- Planning/scheduling of active worksharing between IPOs, e.g. to avoid duplication of work
 - INPADOC data comprises family information and legal status of family members
 - Legal status data permits the assessment of examination status and an estimate for availability of final results

Use of priority information for examination

- ▶ Filing or priority date (s) determine 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
 - Examiner to determine which of the dates has to be applied for the technical features of each claim
 - To be stated in examination report if different dates apply

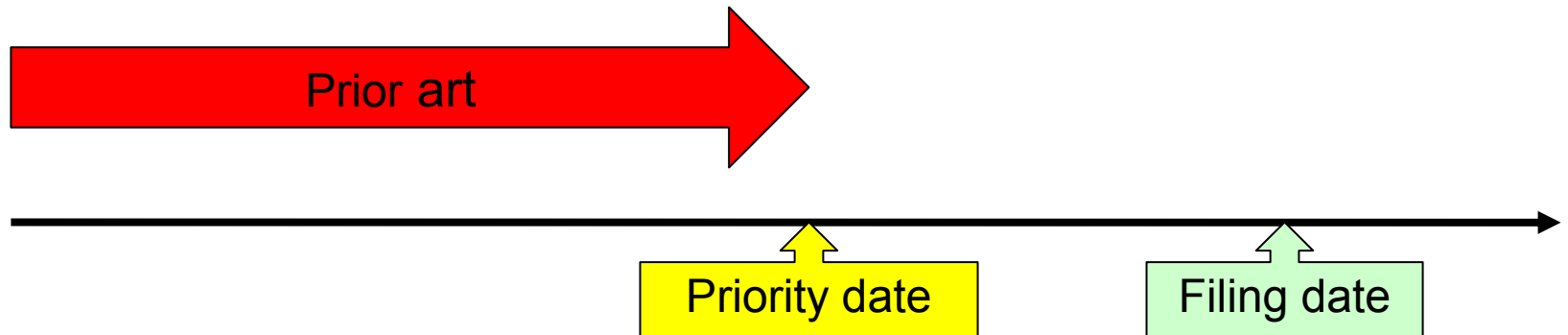
Difficulties with multiple priorities

- No priority, OFF



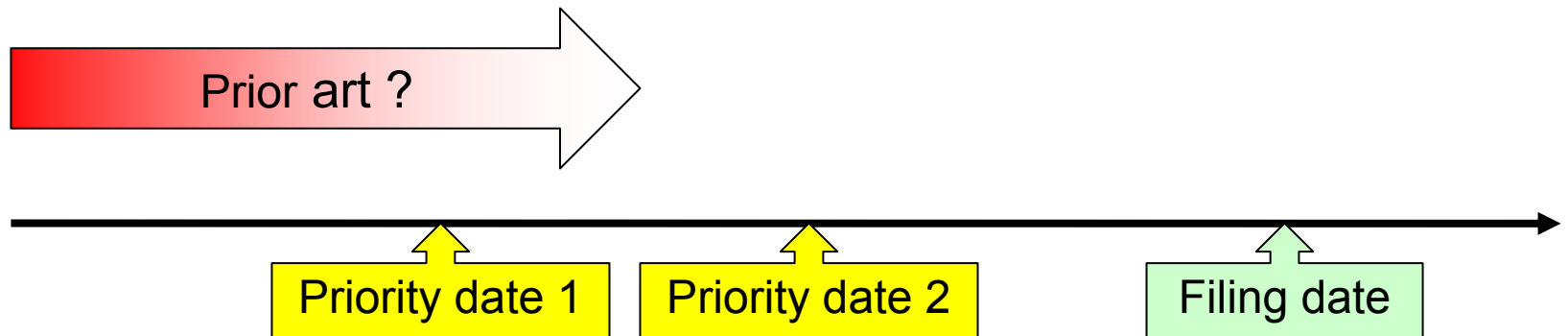
Difficulties with multiple priorities

- Single priority



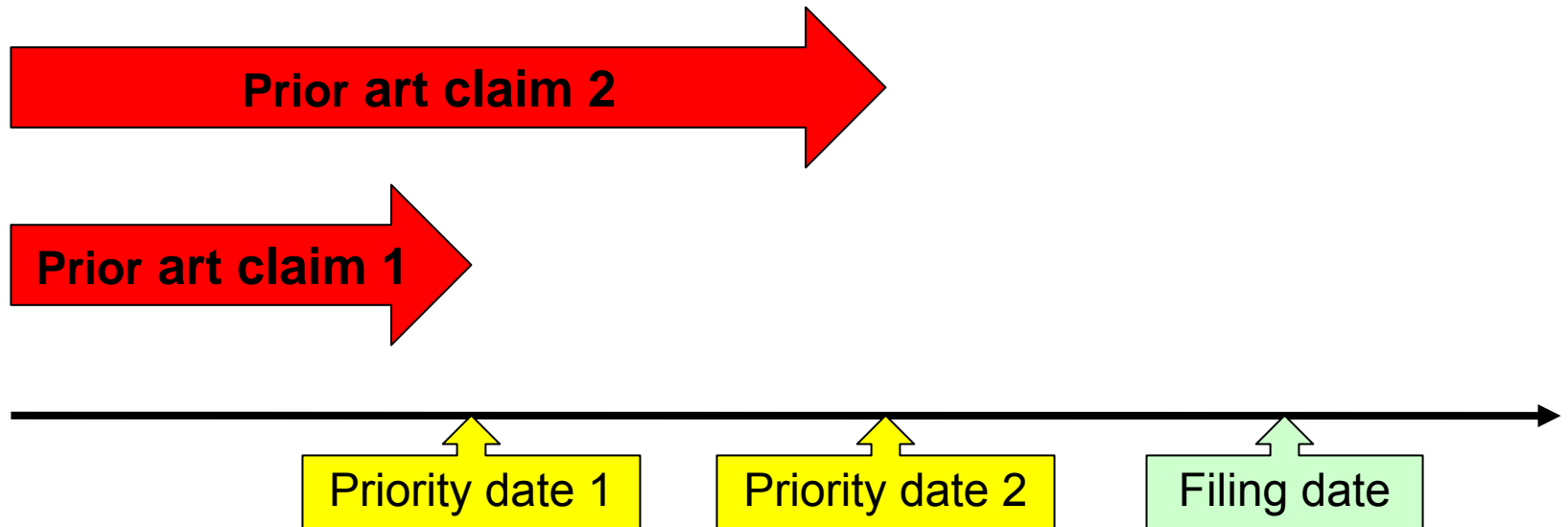
Difficulties with multiple priorities

- 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



Summary

- Various family concepts: simple extended technical
- Depending on priorities
- Relevant prior art depends on applicable dates

Thank you