



Topic 10: Patent Families: Concepts and Family Information Resources

Lutz Mailänder

Head, International Cooperation on Examination and Training Section

Pretoria
16 March 2016

Agenda

- Families – **why**
 - Priority rights
- Families – **which**
 - Types
- Families – **where**
 - Sources of family information

Further reading on families

- 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

Overview of patent families

There are **various family relations** between **distinct patent applications**

- Filed in the same jurisdiction,
- Filed in different foreign jurisdictions
- some are based on claimed priorities of other earlier filings
- some are not
- (technical family, national family, simple family, extended family,..)

There are also family relations between **distinct publications** related to a **single application** (domestic family).

Origin of patent families - reasons

There are **various reasons** for patent family relations between **distinct applications**/filings:

- A. Patent protection is territorial, i.e. inventors/investors may have to seek protection in different jurisdictions (“extensions”)
- B. An application may have certain deficiencies (e.g. lack of unity,...); a subsequent application seeks to heal them
- C. Further improvements of an invention; a subsequent application includes additional further improvements, i.e. new art is added
- D. (Modification/amendment of claims without adding new art)

These reasons may co-occur, i.e.

- a later foreign filing may include added art and/or new claims
- a subsequent domestic filing may include both corrections and added art!

Origin of patent families - priorities

- Subsequent domestic filings (at same office for reasons B and C) usually claim a **domestic/internal priority** of an earlier filing
 - Claiming of domestic priority rights is regulated by respective national legislation
- Subsequent foreign applications usually claim **foreign priorities** of earlier applications filed in other IPOs according to
 - Paris Convention
 - TRIPS agreement
 - (PCT)
- **Priorities create (legal) family relations between respective earlier and later filings**
- **Family relations may exist also without claiming priorities (so called technical families)**

Overview of types of patent families

Family relations based on priorities

- National families (national/internal/domestic priority)
- Filings abroad:
 - Using Paris convention (or TRIPS) priority only
 - PCT filing using Paris (TRIPS) convention

Family relations **not** based on priorities

- Technical families
- Domestic families
- (Continuations/Divisions)
- First filings with PCT

Families within one jurisdiction

- National families
- Domestic families
- Covers national, regional, PCT jurisdictions

Domestic/internal priorities PCT

PCT Rule 4.10 *Priority Claim*

(a) Any declaration referred to in Article 8(1) (“priority claim”) may claim the priority of **one** or **more** earlier applications and shall indicate:

...

(v) where the earlier application is an international application, the **receiving Office** with which it was filed.

Domestic/internal priorities EPC

EPO Examination Guidelines

6.2 Applications giving rise to a right of priority

Applications giving rise to a right of priority referred to in A-III, 6.1(i) are those filed at **industrial property offices**:

- (a) of or **acting for States party to the Paris Convention for the Protection of Industrial Property**,
- (b) of or **acting for any member of the World Trade Organisation (WTO)**, or....

> EPO is such 'IPO acting for... ', i.e. priorities of earlier EPO applications may be claimed

Domestic second filings

„Continuation (in part)“

- New national/local application claiming priority of one or several previous national/local applications
- "in part": Technical subject matter **additions to initial disclosure** of parent (priority) application are permitted, and usually intended, only part of the new application originates in earlier application
- (Up to 12 months after filing date of claimed priority)

Patent of addition (in some jurisdictions)

- 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 patent patent

Domestic second filings

Division (US continuations)

- E.g. for healing a lack of unity: **mandatory division** Paris Art. 4 G (1)
- Permits filing of an application with new set of claims based on previously filed disclosure (i.e. **no additions to initial disclosure** permitted): **voluntary division** Paris Art. 4 G (2)
- Initial disclosure may comprise several inventions
- Lack of unity only if different inventions are "claimed", i.e. if covered explicitly by claims
- Strategic approach by some applicants
- Possible usually anytime as long as parent application is pending (EPC: only within 24 months after 1st office communication)
- Retains application date and claimed priorities; no explicit priority claim type relation to parent application

Domestic families

A Domestic Family comprises all **subsequent domestic publications** of the **same application** at different prosecution stages, e.g. publication of

- unexamined application (usually 18 months after filing date)
- search report
- granted patent specification
- modified grant after opposition

Publications are usually distinguished by different **kind codes**, e.g.

- EP123456 A1: Publication of application
- EP123456 B1: Publication of granted patent
- See overview of kind code use:

<http://www.wipo.int/export/sites/www/standards/en/pdf/07-03-02.pdf>

Some countries, e.g. US, additionally use different publication numbers

Second filings abroad

- Simple family
- Extended family

Second filings abroad

Patent protection for a particular invention is territorial, i.e. inventors may have to seek protection in different additional jurisdictions abroad (“extensions”)

- **Office of first filing (OFF):** where an invention is filed for the first time; usually in the country of residence of inventor or applicant
- **Office(s) of second/subsequent filing (OSF):** where the invention is filed subsequently again to get geographically extended protection ("extensions"), either
 - With claiming priority of OFF, or
 - Without claiming priority rights

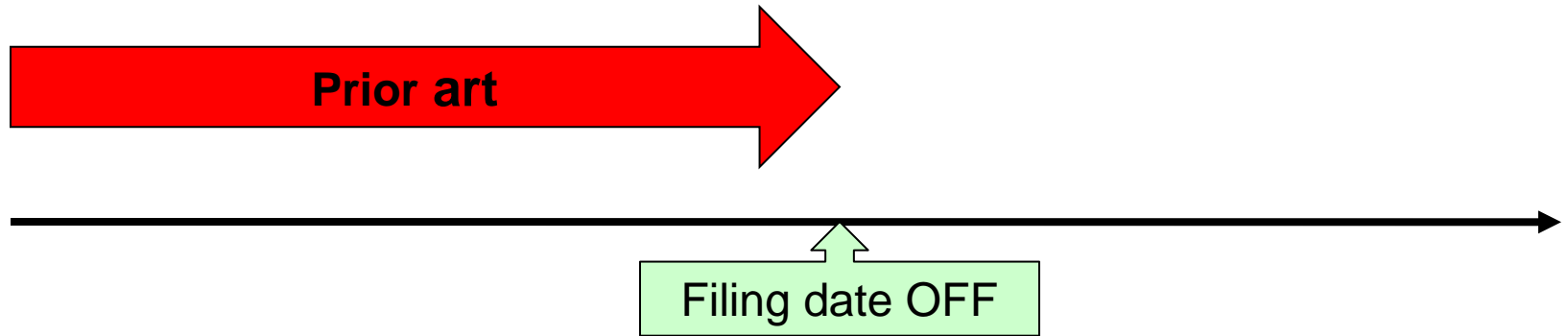
All filings/applications including the “same invention” or parts thereof constitute a **patent family**, e.g. the applications for one invention filed in different countries

Priorities: Paris Convention of 1883

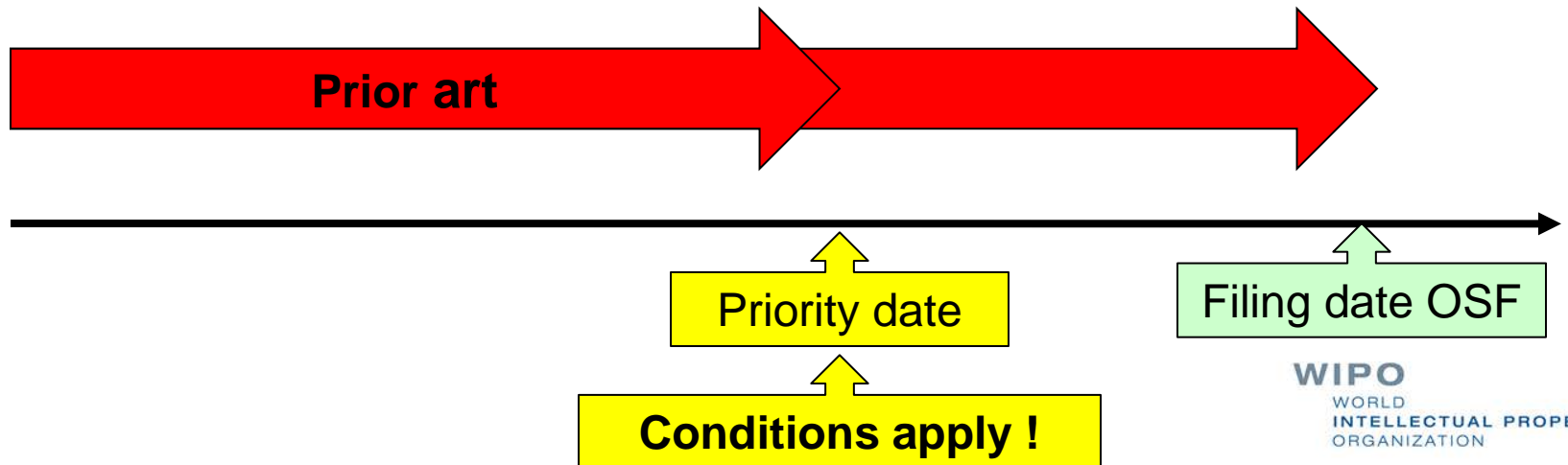
- Covers patents, designs, trademarks,..
- Facilitates second/subsequent filings abroad
- Equal protection to nationals and foreigners
 - Foreigners: nationals and residents of Union country
- Mutual recognition of (Paris Convention) **priority rights**:
 - at OSF: Treatment of application as if filed on date of first filing, i.e. same prior art for **identical** subject matter
 - 12 month period to claim priority
- Permits combination of **multiple priority rights** (same or different countries) Art. 4 F
- Permits **additions of technical subject matter**
- As long as national definition of **unity** is met

Priorities: Benefits of claiming priorities

■ OFF



■ OSF (OFF if domestic or priority)



Conditions

Conditions for claiming priority date

- Application filed within 12 months after **first** filing (Art. 4 C (1))
- Explicit statement for claiming priority of earlier filing
- Time limits for claiming priority
 - Usually to be claimed with filing
 - Sometimes grace period
- **Certified copy of first filing** (+ translation)
- Paris Convention: no explicit conditions apply for
 - Inventor and applicant names
 - **Additions of subject matter**

Conditions

- Why certified copy?
 - Some priority applications are never published, e.g. withdrawn before they are published
 - Comparison of disclosure in priority application and in application claiming the priority
- There are further **conditions for acknowledging validity of priority date** for examination, i.e. whether priority date determines relevant prior art.

> Topic 4

Article 4 F Paris Convention

No country of the Union may refuse a priority or a patent application on the ground

that the applicant claims **multiple priorities**, even if they originate in **different countries**, or on the ground

that an application claiming one or more priorities contains **one or more elements that were not included** in the application or applications whose priority is claimed, provided that, in both cases, there is **unity of invention within the meaning of the law of the country**.

With respect to the elements not included in the application or applications whose priority is claimed, the filing of the subsequent application shall give rise to a right of priority under ordinary conditions.

■ For additions disclosed solely in the later application the priority of the later application can be claimed in further applications

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 provisions on priority right (Art. 2 (1))

Patent Cooperation Treaty - PCT

- „One-stop shop“ for parallel filing in several states
- Filing with „receiving office“
- **Paris convention priority may be claimed or not**
- **First filings with PCT are possible**
- **International phase** administered by WIPO: preliminary search and examination by selected ISAs; optional preliminary examination of amended claims by IPEA
- **National phases** administered by national IPOs:
 - Decision on entry into national phase at the latest 30 months after filing/priority date
 - National granting procedures/laws/regulations apply
- Total of national patents/publications of PCT application constitute **family** > opportunities for efficient national procedures

Obtaining patent protection abroad

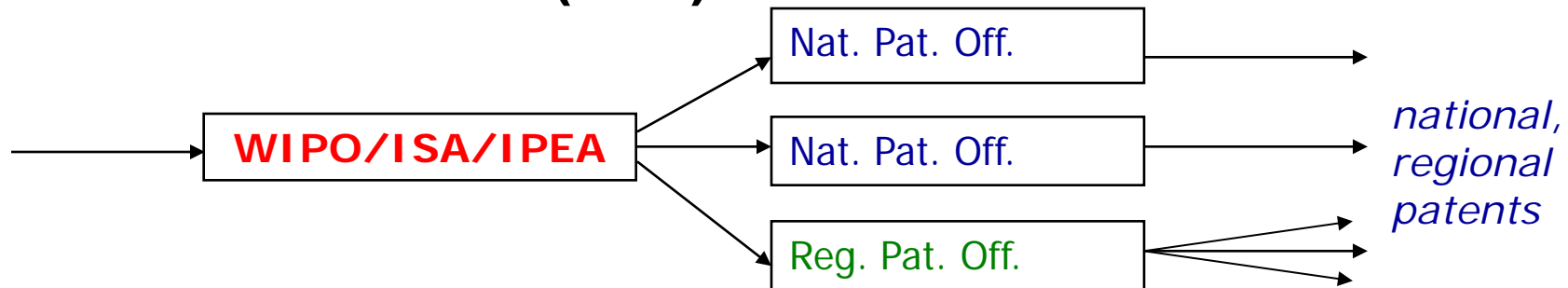
1. National Routes



2. Regional Route



3. International Route (PCT)



[International phase]

[National phases]

Timelines to be observed for OSF filing

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

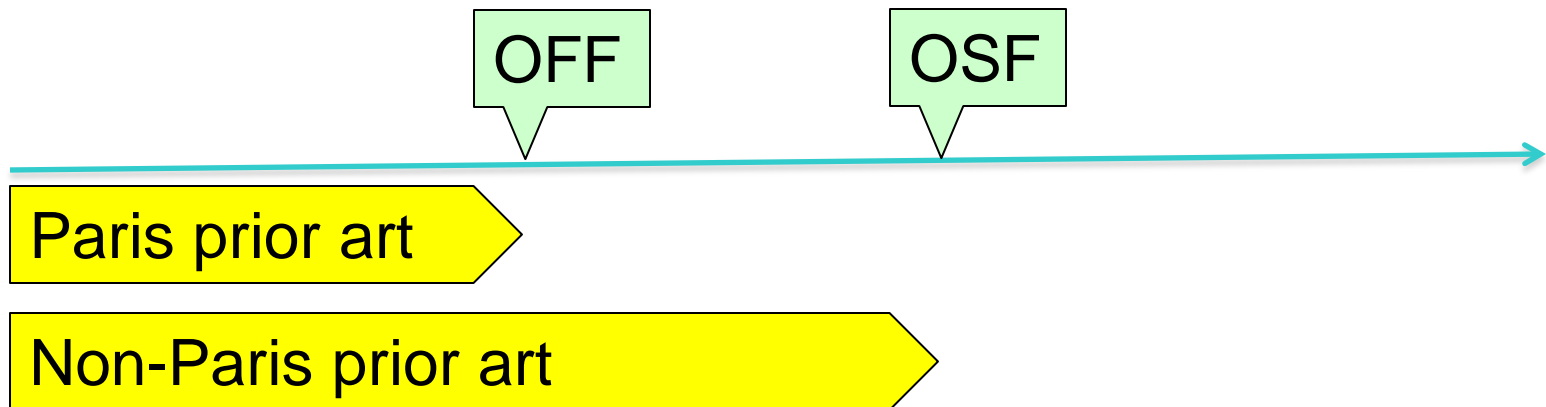
- Paris convention & TRIPS: 12 months
- PCT: 30 months
- Without priority claim: anytime,
but effectively impossible after first publication of OFF since
published **first filing becomes prior art**
(e.g. 18 month where OFF publishes applications)

Technical families

- Applications for the same invention filed in different countries **without claiming priority** constitute a technical family
- Indicators:
 - Inventor name(s) (should be the same)
 - Same or similar drawings
 - Same or similar title
 - (Same applicant)
 - (Claims)
- Usually not recorded in any database (Inpadoc to some extent if detected by EPO examiner)

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

Families without Paris Priorities

- Technical families
- PCT national phase entries when international application was filed for the first time ever with the PCT, i.e. without claiming of any priority, i.e OFF was the competent Receiving Office as per applicant nationality(ies)

Family concepts

- Paris Convention permits claiming of multiple priorities
- Claiming multiple and different priorities in and from different countries may lead to complex family structures, e.g.:

OFF: two applications, e.g. JP-xx, JP-yy

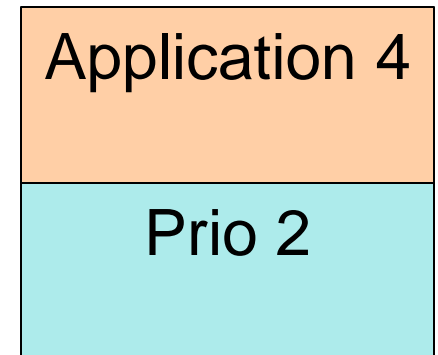
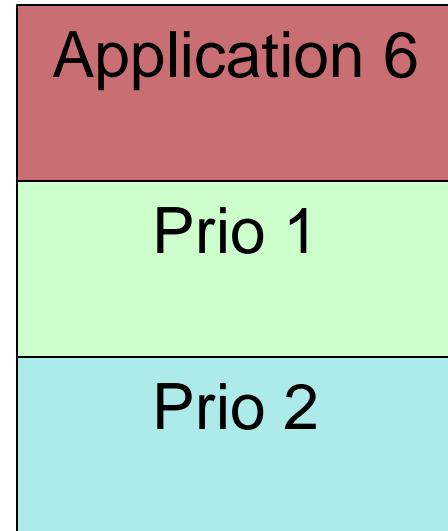
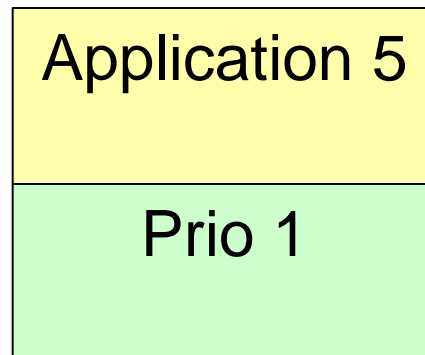
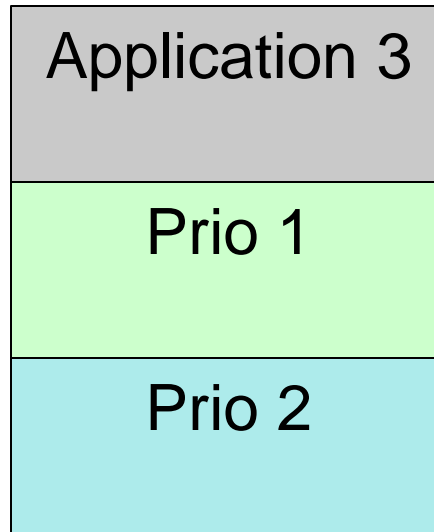
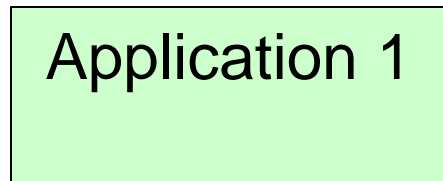
OSF1: single application claiming priorities of JP-xx + JP-yy

OSF2: single application claiming priorities of JP-xx only

OSF3: single application claiming priorities of JP-xx + DE-zz

- Various concepts / rules exist for constructing family relations
- Largely built on the principle of shared priorities
 - Direct sharing, complete sharing
 - Indirect sharing

Multiple priorities



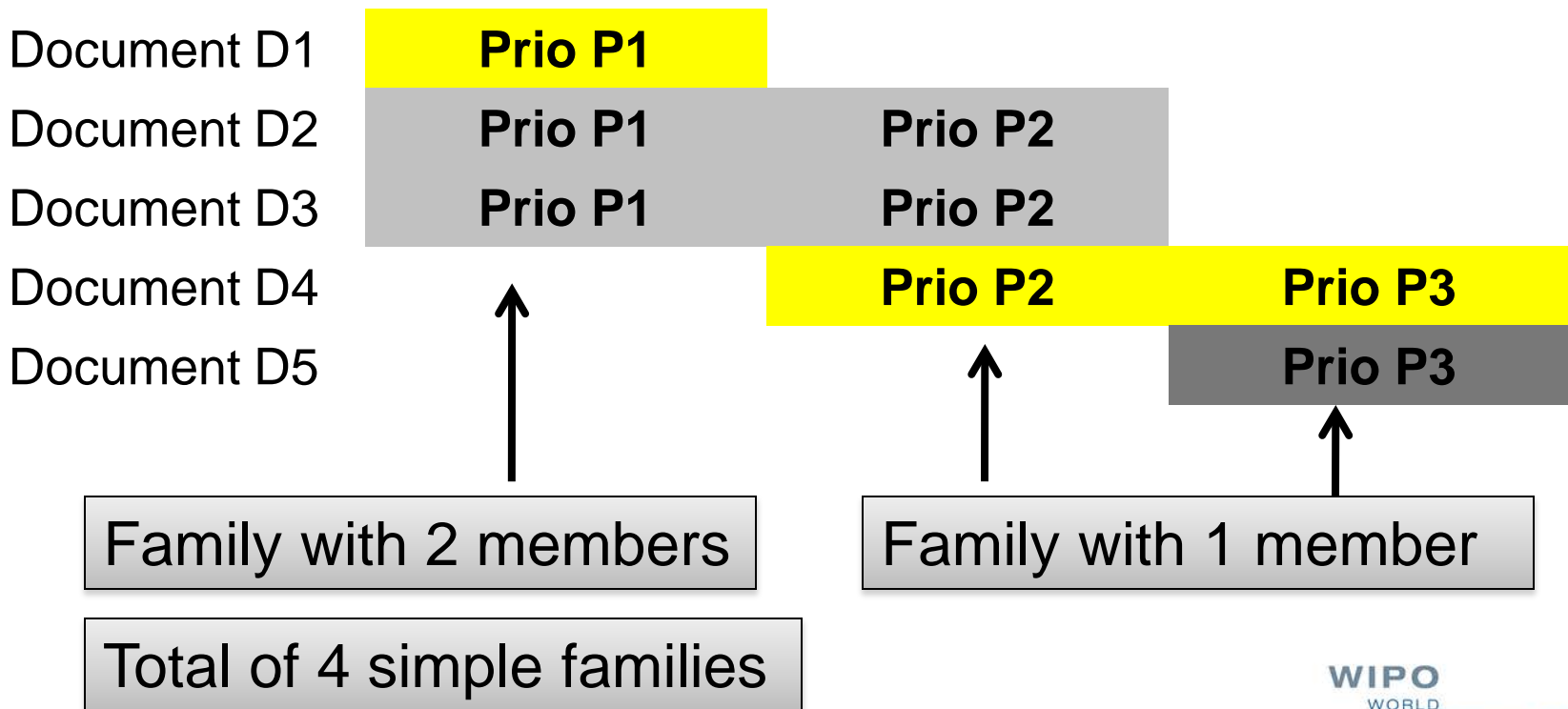
Samples

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

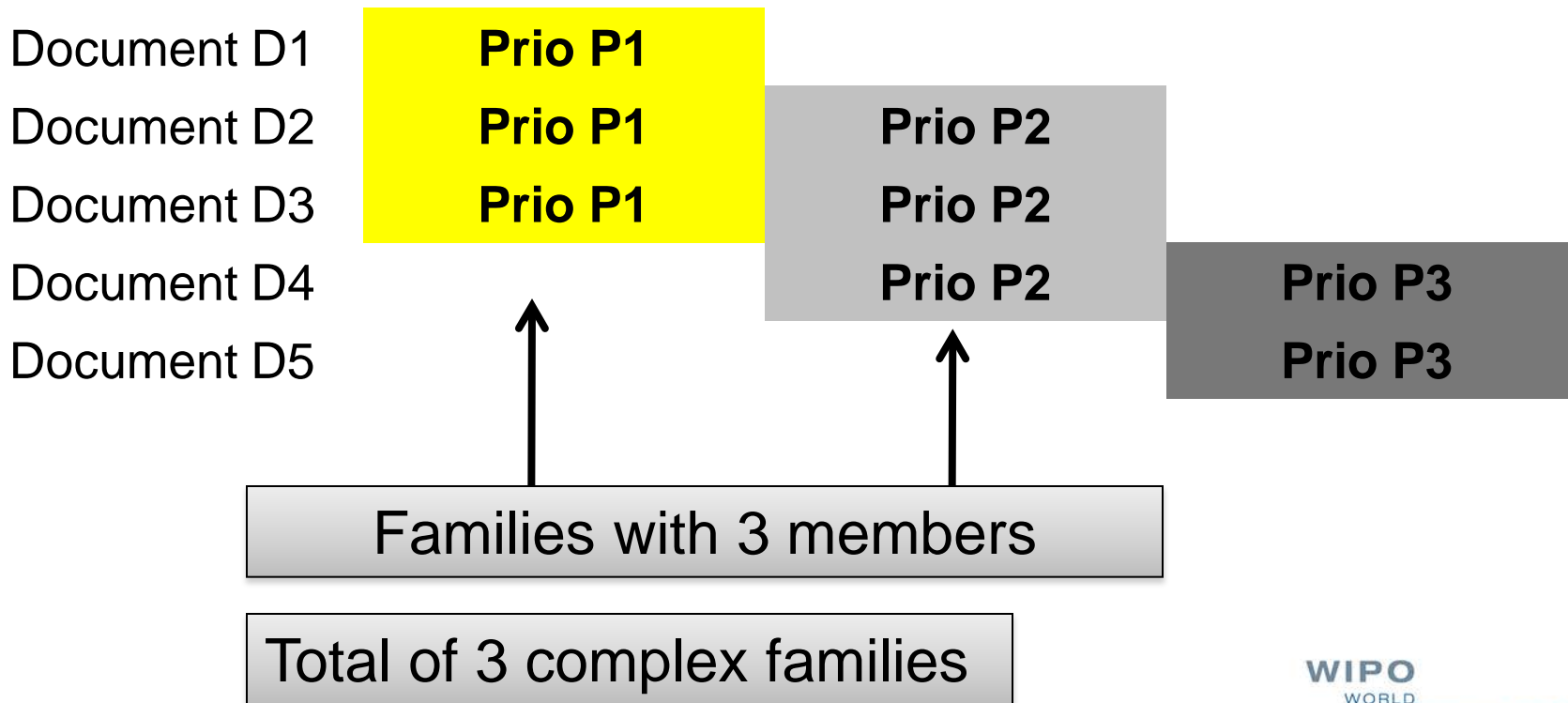
All members of a family have same priority or priorities

→ “Equivalents”



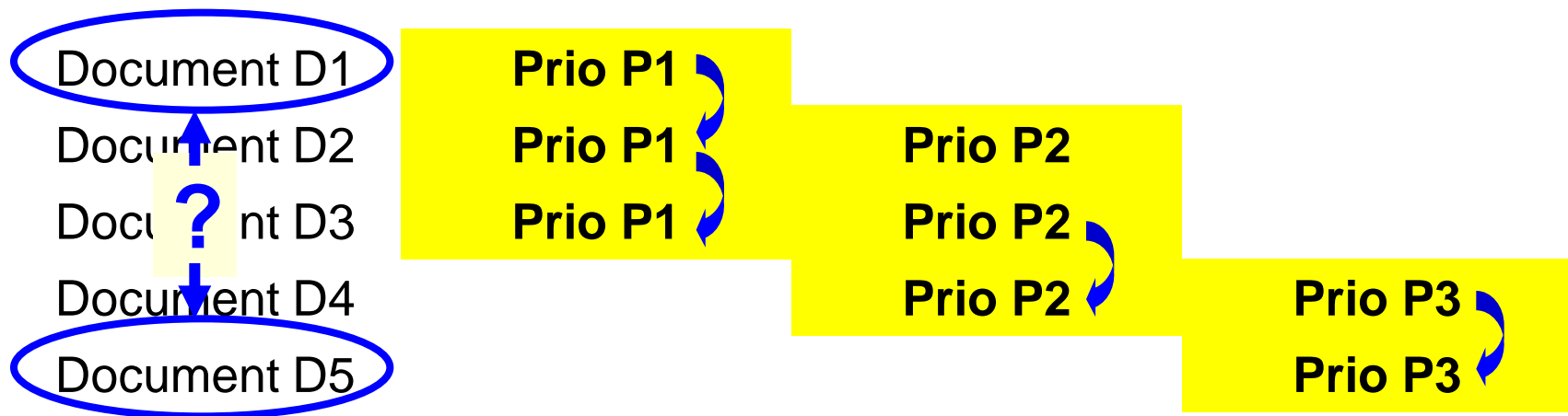
Complex family

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

Total of 1 extended family

Extended family

- In the above example, the one extended family comprises
 - 4 simple families
 - 3 complex families

Samples

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

Samples

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

Samples

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

Simple families

- Classical simple family: one original invention/application filed in other countries; single priority
- Same invention, similar or same claims
 - No guarantee that no subject matter was added
 - No guarantee that same claims
- Espacenet: **family reduction** of search results is therefore based on simple family concept
- Used by EPO also for **database maintenance**, i.e. some data are stored and maintained on the family level, e.g. classification data

Similarity of invention in family members

- Simple family: family members include basically same inventive subject matter
- Extended family: family members are in similar technical area; but potentially larger diversity because two family members with different priorities may cover different inventions
- I.e. while patent laws usually stipulate unity of invention for patent applications, **unity is usually not given for different members of an extended patent family**
- Divisions often claim different subject matter while disclosure is same as parent application, i.e.
 - search reports established for them may be different

Summary

- Extended families are the largest possible families and may include
 - Several simple families
 - Several domestic families
 - Several national families
- A single application belongs at the same time to
 - One domestic family
 - One national family
 - One simple family
 - One extended family
- A simple family may include
 - Several domestic families
 - Several national families
- Families may have only a single member


Sources of family information

- Family information has to be derived from priority/continuation 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 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 includes only information on published family members!

Sources of family information



Europäisches Patentamt
European Patent Office
Office européen des brevets

Espacenet

Patent search

Deutsch English Français

Contact

Change country ▾

◀ About Espacenet Other EPO online services ▾

Search Result list **★ My patents list (0)** Query history Settings Help

WO2007111918 (A2)

Bibliographic data

- Description
- Claims
- Mosaics
- Original document
- Cited documents
- Citing documents
- INPADOC legal status
- INPADOC patent family**

Bibliographic data: WO2007111918 (A2) — 2007-10-04

★ In my patents list → EP Register → Report data error Print

HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE

Page bookmark [WO2007111918 \(A2\) - HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE](#)

Inventor(s): **Inpadoc family (extended)**

Applicant(s): ... DIANE R [US] ±

Classification: - international: **A61B19/02; A61L11/00; A61M5/32; B09B3/00**

- cooperative: **A61B19/0288; A61L11/00; B09B3/0075; B09B3/0083; A61B2019/0213; A61B2019/0229; A61B2019/024; A61B2019/0294; A61B2019/0295; A61B2019/0296; A61M5/3278**

Application number: WO2007US07071 20070322

Priority number(s): [US20060785512P](#) [20060322](#) - [US20060785518P](#) [20060322](#)

Also published as: [WO2007111918 \(A3\)](#) → [UY30238 \(A1\)](#) [US2007224077 \(A1\)](#) [TW200812650 \(A\)](#) → [PE12992007 \(A1\)](#) → more

Abstract of WO2007111918 (A2)

Translate this text into [patenttranslate](#) powered by EPO and Google

Various embodiments of systems and methods for collection and disposal of infectious and medical waste are disclosed. An embodiment includes a system with a body having a chamber that receives a container of medical waste. The chamber may include a canister that has limited access to the interior of the

Quick help

- What does A1, A2, A3 and B stand for after a European publication number?
- What happens if I click on "In my patents list"?
- What happens if I click on the "Register" button?
- Why are some sidebar options deactivated for certain documents?
- How can I bookmark this page?
- Why does a list of documents with the heading "Also published as" sometimes appear, and what are these documents?
- Why do I sometimes find the abstract of a corresponding document?
- What happens if I click on the red "patent translate" button?

Simple family ("equivalents")

> Topic 7A

WORLD INTELLECTUAL PROPERTY ORGANIZATION

Espacenet: Extended (Inpadoc) family

Patentamt
European Patent Office
Office européen des brevets

Espacenet
Patent search

Deutsch English Français
Contact
Change country

← About Espacenet Other EPO online services

Search Result list My patents list (0) Query history Settings Help

Welcome back to Espacenet. If some time has passed since your last access, you may experience reduced navigation until you [repeat your query](#).

WO2007111918 (A2)

Bibliographic data
Description
Claims
Mosaics
Original document
Cited documents
Citing documents
INPADOC legal status
INPADOC patent family

Family list: **WO2007111918 (A2) — 2007-10-04**

Select all (0/14) Compact

14 application(s) for: WO2007111918 (A2)

Sort by Sort order show citations

1. HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
	BIOMEDICAL TECHNOLOGY SOLUTION [US]	A61B19/0288 A61B2019/0213 A61B2019/0229 (+8)	(IPC1-7):A61L11/00	AR060092 (A1) 2008-05-21	2006-03-23

2. Heat processing systems, apparatuses, and methods for collection and disposal of infectious and medical waste

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
COX DONALD G GORDER DIANE R	BIOMEDICAL TECHNOLOGY SOLUTION	A61B19/0288 A61B2019/0213 A61B2019/0229 (+8)	A61B19/02 A61L11/00 A61M5/32 (+1)	AU2007231591 (A1) 2007-10-04	2006-03-23

3. HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
COX DONALD G [US] GORDER DIANE R [US]	BIOMEDICAL TECHNOLOGY SOLUTION [US]	A61B19/0288 A61B2019/0213 A61B2019/0229 (+8)	A61B19/02 A61L11/00 A61M5/32 (+1)	CA2646350 (A1) 2007-10-04	2006-03-23

4. Heat processing systems, apparatuses, and methods for collection and disposal of infectious and medical waste

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
	BIOMEDICAL TECHNOLOGY SOLUTION [US]		A61L11/00	CN101448531 (A) 2009-06-03	2006-03-23

5. HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE

Quick help

- Can I export this list?
- What happens if I click on "Download covers"?
- Can I sort the list?
- What happens if I click on the star icon?
- What is a patent family?
- What happens if I tick the "show citations" box?
- What is an INPADOC patent family?
- Are all the documents in an INPADOC family equivalents?
- Why is the same document published several times in the same country?

WIPO
WORLD INTELLECTUAL PROPERTY ORGANIZATION

domestic families

Family information in Espacenet

- INPADOC family data
 - Inpadoc families are extended families
 - 80+ countries
 - Update weekly but depending on data supply from IPOs
- Simple families
 - “also published as” **equivalents**
 - Family reduction of search results
 - Used for document reclassification after IPC revisions
- [DE19830566](#) > 2 members, is national, domestic, simple
- [DE19833712](#)

EP-Register

	US78551206	23.03.2006
Type	M Patent family member	
	Publication No.	Date
	➤ ZA200808077	30.09.2009
	Priority number	Date
	US78551206	← 23.03.2006
Type	E Equivalent	
	Publication No.	Date
	➤ AR060092	21.05.2008
	Priority number	Date
	US78554806	← 23.03.2006
	US78551206	← 23.03.2006

Family information for WO2007US07071

- Extended (Inpadoc) family includes 14 domestic families
 - AR, AU, CA, CN, DO, EA, EP, JP, PE, TW, US, UY, WO, ZA
 - Only EA granted a patent (EA-B1 publication)

<input type="checkbox"/> 6. HEAT PROCESSING SYSTEMS, APPARATUSES AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE					
★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
COX DONALD, G, GORDER DIANE, R	BIOMEDICAL TECHNOLOGY SOLUTIONS, INC	<u>A61B19/0288</u> <u>A61B2019/0213</u> <u>A61B2019/0229</u> (+8)	A61B19/02 A61L11/00 A61M5/32 (+1)	EA200802033 (A1) 2009-02-27 EA014731 (B1) 2011-02-28	2006-03-23
<input type="checkbox"/> 7. HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE					
★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
COX DONALD G [US] GORDER DIANE R [US]	BIOMEDICAL TECHNOLOGY SOLUTION [US]	<u>A61B19/0288</u> <u>A61B2019/0213</u> <u>A61B2019/0229</u> (+8)	A61B19/02 A61L11/00 A61M5/32 (+1)	EP1996241 (A2) 2008-12-03	2006-03-23

- Simple family does not include CN, ZA

Sources of family information: CCD

The screenshot shows the Trilateral - CCD interface. At the top, the search bar contains the number **US6565803**, which is circled in red. Below the search bar, the main content area is divided into two panes. The left pane, titled "CCD Viewer", displays a table of family members. The right pane, titled "Inspector: classifications and fields searched", shows the classification details for the selected family member.

#	CC	Cat.	Citation details	Claims
1	US		Application N° US19990300325 (US09300325) - 27 April 1999	
2	AR		Application N° AR2000P102013 (ARP000102013) - 27 April 2000	
3	AU		Application N° AU20000044961D (AU4496100) - 27 April 2000	
4	BR		Application N° BR20000010600 (BR0010600-3) - 27 April 2000	
5	CA		Application N° CA20002372427 (CA002372427) - 27 April 2000	
6	CN		Application N° CN20008008324 (CN008008324) - 27 April 2000	
7	EP		Application N° EP20000926432 (EP00926432) - 27 April 2000	

The right pane shows the following classification details:

```
US
IPC  A61L2/10, C02F1/32
UC   210/748.11, 422/23
EC   A61L2/10, C02F1/32

CA
IPC  A61L2/10, C02F1/32
EC   A61L2/10, C02F1/32

CN
IPC  A61L2/10, C02F1/32
EC   A61L2/10, C02F1/32

EP
IPC  A61L2/10, C02F1/32
```

At the bottom of the interface, there are two buttons: "Simple families: 3" and "Get all family members". Both buttons are circled in red.

Simple family ("equivalents")
Family members are identified through **application numbers**

Estimated number of simple families in extended family

Retrieve extended family

Sources of family information: CCD

Trilateral - CCD Search ? Help

Number: US6565803 Search examples: EP1612402, US2006000447A1, JP20090214944

US19990300325

Hide CCD viewer Double inspector Timeline

CCD Viewer Inspector: classifications and fields searched

Citations only view Expand view Sort by country Filter

#	CC	Cat.	Citation details	Claims
1	US		Application N° US19990300325 (US09300325) - 27 April 1999	
2	AR		Application N° AR2000P102013 (ARP000102013) - 27 April 2000	
3	AU		Application N° AU20000044961D (AU4496100) - 27 April 2000	
4	BR		Application N° BR20000010600 (BR0010600-3) - 27 April 2000	
5	CA		Application N° CA20002372427 (CA002372427) - 27 April 2000	
6	CN		Application N° CN20008008324 (CN00808324) - 27 April 2000	
7	EP		Application N° EP20000926432 (EP00926432) - 27 April 2000	
8	AR		Application N° AR1998P105591 (ARP980105591) - 5 November 1998	
9	AT		Application N° AT19980949742T (AT98949742) - 1 October 1998	
10	AU		Application N° AU19980096001 (AU9600198) - 1 October 1998	
11	AU		Application N° AU19980096001D (AU9600198) - 1 October 1998	
12	BR		Application N° BR19980015240 (BR9815240-8) - 1 October 1998	
13	CA		Application N° CA19982305762 (CA002305762) - 1 October 1998	
14	CN		Application N° CN19988009985 (CN98809985) - 1 October 1998	
15	CZ		Application N° CZ20000001256 (CZ2000 1256) - 1 October 1998	
16	DE		Application N° DE19986014122T (DE69814122) - 1 October 1998	
17	DK		Application N° DK19980949742T (DK98949742) - 1 October 1998	
18	EP		Application N° EP19980949742 (EP98949742) - 1 October 1998	
19	AT		Application N° AT19990921674T (AT99921674) - 5 May 1999	
20	AU		Application N° AU19990038819 (AU3881999) - 5 May 1999	

Classifications & fields searched

Classifications

US
IPC A61L2/10, C02F1/32
UC 210/748.11, 422/23
EC A61L2/10, C02F1/32

AU
IPC A61L2/10, C02F1/32
EC A61L2/10, C02F1/32

CA
IPC A61L2/10, C02F1/32
EC A61L2/10, C02F1/32

EP
IPC A61L2/10, C02F1/32
EC A61L2/10, C02F1/32

Fields searched

Simple families: 201 Total family members: 575

Simple family

Simple family

Simple family

> Topic 7B

Depatisnet



DEPATISnet

Search **IPC**

Beginner Expert Ikofax Family PIZ support

> DEPATISnet-Home > Search > Beginner > Result list

Result list Beginner's search

Search query:

EP000001996241/PN

[Back to search](#) [Remove family members](#) [Replace family members](#)

For more information about family members, please refer to the [Help pages](#)







RESULT LIST: HITS: 1 (TOTAL HITS: 1) [DOWNLOAD RESULT LIST](#) ([CSV](#), [XLS](#))

No.	Publication number	Title	Original document	Searchable text	Patent family search
1	EP000001996241A2	[DE] WÄRMEVERARBEITUNGSSYSTEME, VORRICHTUNGEN UND VERFAHREN ZUR SAMMLUNG UND ENTSORGUNG VON INFEKTIÖSEM UND MEDIZINISCHEM ABFALL [EN] HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION ...			Search

[|<](#) [<](#) [>](#) [>|](#) [Print](#) [Back to search](#)

Depatisnet

RESULT LIST: HITS: 16 (TOTAL HITS: 16) [DOWNLOAD RESULT LIST](#) ([CSV](#), [XLS](#))

No.	Publication number ▲	Title	Original document	Searchable text	Patent family search
1	AR000000060092A1	[ES] SISTEMAS APARATOS Y METODOS DE PROCESAMIENTO POR CALOR, PARA LA RECOLECCION Y ELIMINACION DE DESECHOS INFECCIOSOS Y MEDICOS			Search
2	AU002007231591A1	[EN] Heat processing systems, apparatuses, and methods for collection and disposal of infectious and medical waste			Search
3	CA000002646350A1	[EN] HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE [FR] SYSTEMES, APPAREILS ET PROCEDES DE TRAITEMENT THERMIQUE POUR LA COLLECTE ET L'ELIMINATION ...			Search
4	CN000101448531A	[EN] Heat processing systems, apparatuses, and methods for collection and disposal of infectious and medical waste			Search
5	DOOP2007000056A	[ES] SISTEMAS PARA PROCESAR CALOR, APARATOS Y MÉTODOS PARA COLECTAR Y ELIMINAR DESECHOS MÉDICOS E INFECCIOSOS			Search
6	EA000200802033A1				Search
7	EA000000014731B1	[EN] HEAT PROCESSING SYSTEMS, APPARATUSES AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE			Search
8	EP000001996241A2	[DE] WÄRMEVERARBEITUNGSSYSTEME, VORRICHTUNGEN UND VERFAHREN ZUR SAMMLUNG UND ENTSORGUNG VON INFEKTIOSEM UND MEDIZINISCHEM ABFALL [EN] HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION ...			Search
9	JP002009530106A				Search
10	PE000012992007A1	[ES] SISTEMAS, APARATOS Y METODOS DE PROCESAMIENTO TERMICO PARA LA RECOLECCION Y ELIMINACION DE DESECHOS INFECCIOSOS Y MEDICOS			Search
11	TW000200812650A	[EN] Heat processing systems, apparatuses, and methods for collection and disposal of infectious and medical waste			Search
12	US020070224077A1	[EN] Heat Processing Systems, Apparatuses, and Methods for Collection and Disposal of Infectious and Medical Waste			Search
13	UY000000030238A1	[ES] SISTEMAS, APARATOS Y METODOS DE PROCESAMIENTO POR CALOR PARA LA RECOLECCION Y ELIMINACION DE DESECHOS INFECCIOSOS Y MEDICOS			Search
14	WO002007111918A3	[EN] HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE [FR] SYSTEMES, APPAREILS ET PROCEDES DE TRAITEMENT THERMIQUE POUR LA COLLECTE ET L'ELIMINATION ...			Search
15	WO002007111918A2	[EN] HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE [FR] SYSTEMES, APPAREILS ET PROCEDES DE TRAITEMENT THERMIQUE POUR LA COLLECTE ET L'ELIMINATION ...			Search
16	ZA000200808077A	[EN] Heat processing systems, apparatuses, and methods for collection and disposal of infectious and medical waste			Search

Sources of family information

- National registers (e.g. US PAIR) include patent family information on national level (domestic families, national families (continuation in part), continuations)
- This information may be shared with other databases but those databases may still apply their own family building, so the family information may be inconsistent
- AIPN **> Topic 7C**
- WIPO CASE **> Topic 7D**

US-PAIR: national family/divisions



11/689,638		Heat Processing Systems, Apparatuses, and Methods for Collection and Disposal of Infectious and Medical Waste				57015-340945		
Select New Case	Application Data	Transaction History	Image File Wrapper	Continuity Data	Published Documents	Address & Attorney/Agent	Display References	
Parent Continuity Data								
Description	Parent Number	Parent Filing or 371(c) Date	AIA(First Inventor to File)	Parent Status	Patent Number			
This application Claims Priority from Provisional Application	60/785,512	03-23-2006	-	Expired	-			
Claims Priority from Provisional Application	60/785,548	03-23-2006	-	Expired	-			
Child Continuity Data								
No Child Continuity Data Found								

Thank you

lutz.mailander@wipo.int