



Topic 2: Patent Family Concepts and Sources for Family Information

Lutz Mailänder

Head, Cooperation on Examination and Training Section

PCT International Cooperation Division

Cybercity
October 19, 2021

Agenda

- Families – **why**
 - Priority rights
 - PCT filings without priority
- Families – **which**
 - Types (PCT, simple, extended)
- Families – **when**
 - Do we need to pay attention to different types of families?
 - 10% of families have more than one PCT application as member
- Families – **where**
 - Sources of family information

Further reading on families

- WIPO Handbook:

<http://www.wipo.int/standards/en/pdf/08-01-01.pdf>

- EPO:

<https://www.epo.org/searching-for-patents/helpful-resources/first-time-here/patent-families.html>

- PIUG:

<http://wiki.piug.org/display/PIUG/Patent+Families>

- OECD:

<https://www.oecd.org/sti/inno/44604939.pdf>

Source of family information: Espacenet

Europäisches Patentamt
European Patent Office
Office européen des brevets

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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

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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
Applicant

Inpadoc ('extended') family

Classification: - international: [A61B19/02](#); [A61L11/00](#); [A61M5/32](#); [B09B3/00](#)
- cooperative: [A61B19/0288](#); [A61L11/00](#); [B09B3/0075](#); [B09B3/0083](#); [A61B19/024](#); [A61B2019/0294](#); [A61B2019/0295](#); [A61B2019/0296](#)

Application number: [WO2007US07071](#) [20070322](#)

Priority number(s): [US20060785512P](#) [20060323](#); [US20060785548P](#) [20060323](#)

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

Priorities (here 2 US) create family relations

Abstract of WO2007111918 (A2)

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Simple family ('equivalents')

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

WORLD INTELLECTUAL PROPERTY ORGANIZATION
WIPO PUBLIC

Espacenet: Extended (Inpadoc) family

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WO2007111918 (A2)

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

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?

Family list: **WO2007111918 (A2) — 2007-11-18**

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14 application(s) for WO2007111918 (A2)

Sort by Priority date Sort order Descending Sort 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

Number of family members (counting distinct national applications)

1st family member (AR)

2nd family member (AU)

3rd family member (CA)

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Families and Work-Sharing

Family table (PCT family)

PCT/xx	to be examined in national phase			
CN	CN-A/B Publications	CN Dossier	CN Citations	}
EP	EP-A/B Publications	EP Dossier	EP Citations	
JP	JP-A/B Publications	JP Dossier	JP Citations	
KR	KR-A/B Publications	KR Dossier	KR Citations	
US	US-A/B Publications	US Dossier	US Citations	
AU	AU-A/B Publications	AU Dossier	AU Citations	
CA	CA-A/C Publications	CA Dossier	CA Citations	
IN	IN-A/B Publications	IN Dossier	IN Citations	
...				

IP5

Families issues for Work-Sharing

Family table (PCT family)

PCT/xx to be examined in national phase

CN	CN-A/B Publications	CN Dossier	CN Citations
EPa	EP-A/B Publications	EP Dossier	EP Citations
EPb	JP-A/B Publications	JP Dossier	JP Citations
KR	KR-A/B Publications	KR Dossier	KR Citations
USa	US-A/B Publications	US Dossier	US Citations
USb	AU-A/B Publications	AU Dossier	AU Citations
CA	CA-A/C Publications	CA Dossier	CA Citations
IN	IN-A/B Publications	IN Dossier	IN Citations
...			

Families issues for Work-Sharing

Family table (PCT family)

PCT/xx	to be examined in national phase		
CN	CN-A/B Publications	CN Dossier	CN Citations
EPa	EP-A/B Publications	EP Dossier	EP Citations
EPb	JP-A/B Publications		Citations
KR	KR-A/B Publications		Citations
USa	US-A/B Publications		Citations
USb	AU-A/B Publications		Citations
CA	CA-A/C Publications		Citations
PCT/yy			
...			

Which work products are useful? And to what extent?

Homework Topic 2 will present examples

Origin of patent families

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 various different jurisdictions (“**extensions**”)
 - B.
-
- Foreign applications usually claim **priorities** of earlier applications filed in other jurisdictions based on
 - Paris Convention
 - TRIPS agreement
 - **Family relations because applications share priorities**
 - PCT applications can be filed without claiming priorities
 - **Family relations because applications share PCT application number**
 - **PCT family**

Priority claims - sample

Bibliographic data: WO2008004425 (A1) — 2008-01-10

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PANTS-TYPE WEARING ARTICLE

Page bookmark [WO2008004425 \(A1\) - PANTS-TYPE WEARING ARTICLE](#)

Inventor(s): KENMOCHI YASUHIKO [JP]; KINOSHITA AKIYOSHI [JP]; AOYAGI NATSUKO [JP]; TANAKA KAYOKO [JP] ±

Applicant(s): UNI CHARM CORP [JP]; KENMOCHI YASUHIKO [JP]; KINOSHITA AKIYOSHI [JP]; AOYAGI NATSUKO [JP]; TANAKA KAYOKO [JP] ±

Classification: - international: [A61F13/49](#); [A61F13/496](#); [A61F13/56](#)

- cooperative: [A61F13/15](#); [A61F13/15756](#); [A61F13/56](#)

Application number: WO2007JP62104 20070615

Priority number(s): [JP20060187165](#) 20060706

1 priority

Also published as: 📄 [US2008009816 \(A1\)](#) 📄 [US7833207 \(B2\)](#) → [UA91294 \(C2\)](#) 📄 [TW200819114 \(A\)](#) 📄 [TWI336619 \(B\)](#) → [more](#)

Priority claims - sample

Bibliographic data: WO2008035580 (A1) — 2008-03-27

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PLANT CULTIVATION SYSTEM

Page bookmark [WO2008035580 \(A1\) - PLANT CULTIVATION SYSTEM](#)

Inventor(s): OKAMOTO AKIHIRO [JP]; FUJII MANABU [JP]; YOSHIOKA HIROSHI [JP]; MORI YUICHI [JP] ±

Applicant(s): MEBIOL INC [JP]; OKAMOTO AKIHIRO [JP]; FUJII MANABU [JP]; YOSHIOKA HIROSHI [JP]; MORI YUICHI [JP] ±

Classification: - international: **A01G1/00; A01G13/00; A01G25/00; A01G27/00; A01G7/00**

- cooperative: **A01G31/02; Y02P60/216**

Application number: **WO**2007JP67578 20070910 ⓘ [Global Dossier](#)

Priority number(s): [JP20060254439 20060920](#) ; [JP20070144202 20070530](#)

2 priorities

Also published as: 📄 [EP2064942 \(A1\)](#) 📄 [EP2064942 \(A4\)](#) 📄 [US2010186298 \(A1\)](#) 📄 [US8001721 \(B2\)](#) → [UA93268 \(C2\)](#) → [more](#)

Priority claims - sample

The more priorities are claimed, the more complex the family relations may be!

Bibliographic data: WO2008060725 (A3) — 2008-07-10

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SECURE UNIVERSAL TRANSACTION SYSTEM

Page bookmark [WO2008060725 \(A3\) - SECURE UNIVERSAL TRANSACTION SYSTEM](#)

Inventor(s): FRANCHI JOHN FRANCO [GB] ±

Applicant(s): FRANCHI JOHN FRANCO [GB] ±

Classification: - international: *H04L9/00*
- cooperative: [G06F21/32](#); [G06F21/34](#); [G06Q20/12](#); [G06Q20/4014](#)

Application number: WO2007US74327 20070725

Priority number(s): [US20060532580 20060918](#) ; [EP20060256440 20061219](#) ; [GB20060025304 20061219](#)

Also published as: 📄 [WO2008060725 \(A2\)](#) 📄 [WO2008060725 \(A8\)](#) 📄 [EP1901248 \(A1\)](#) → [ZA200901870 \(B\)](#) 📄 [US2011125613 \(A1\)](#)
→ [more](#)

Different types of families depending on whether

- all priorities are shared
- only some priorities are shared

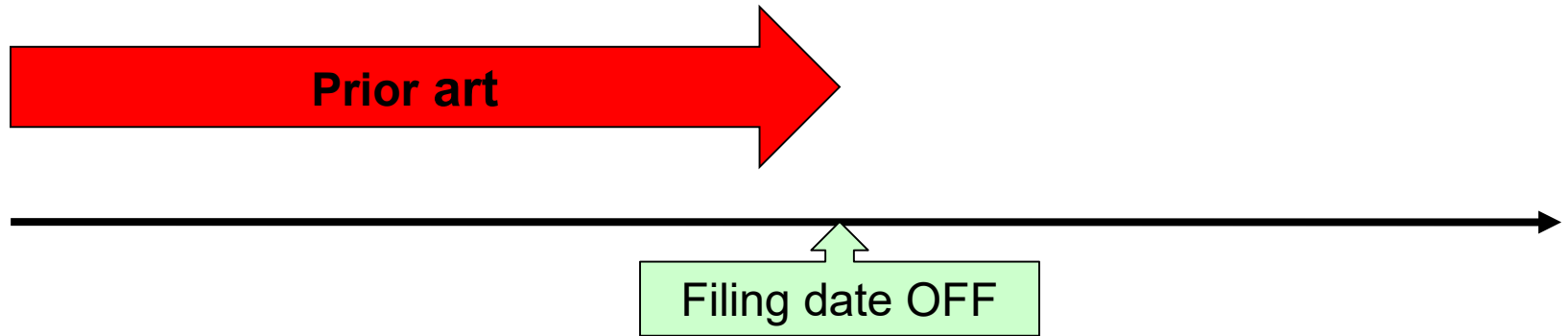
3 priorities
3 countries

Priorities: Paris Convention of 1883

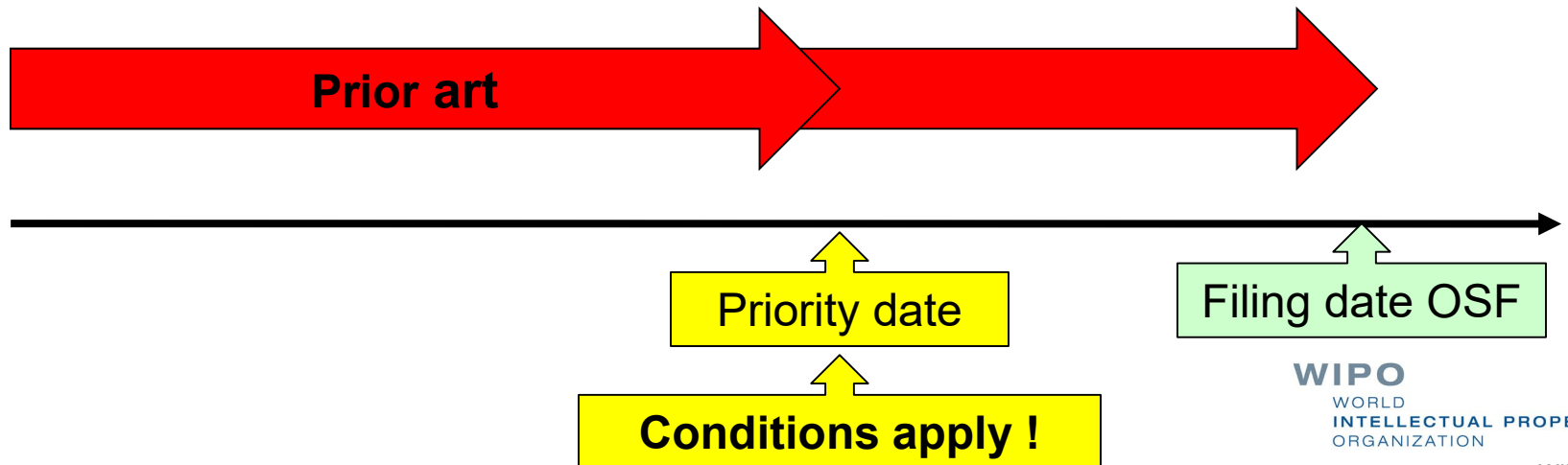
- Covers patents, designs, trademarks,..
- Facilitates second/subsequent filings abroad
- Equal protection to nationals and foreigners (non-discrimination)
 - Foreigners: nationals and residents of any Union country
- Mutual recognition of (Paris Convention) **priority rights**:
 - at OSF: Treatment of application as if filed on date of first filing, i.e. same prior art is to be applied if claimed subject matter is fully disclosed in priority
 - 12 month period to file an application claiming the priority of an earlier application (Art. 4 C (1))
- Permits combination of **multiple priority rights** (same or different countries) (Art. 4 F)
- Permits **additions of technical subject matter** (Art. 4 F)
 - As long as national definition of **unity** is met

Priorities: Benefits of claiming priorities

■ OFF (Office of First Filing)



■ OSF (Office of Second Filing)



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."

PCT application without priority

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 September 2009 (03.09.2009)

(10) International Patent No.
WO 2009/000451

no priority
first filing with IB

(51) International Patent Classification:
C07C 46/02 (2006.01)

(21) International Application Number:
PCT/IB2008/000451

(22) International Filing Date:
29 February 2008 (29.02.2008)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **LABORATOIRE MEDIDOM S.A.** [CH/CH]; Enetriederstrasse 44, CH-6060 Sarnen (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DI NAPOLI, Guido** [CH/MC]; 8, Lacets Saint-Leon, MC-98000 Monaco (MC). **DI NAPOLI, Alessandro** [CH/CH]; Chemin du Vent-Debout 18, CH-1245 Collonge Bellerive (CH).

(74) Agent: **REUTELER & CIE, S.A.**; Chemin de la Vuarpillièrre 29, CH-1260 Nyon (CH).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ,

EC, EE, EG, ES, FI, FR, GB, GR, HR, HU, ID, JP, KR, LA, LU, LV, MA, MK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))



PCT application without priority

Bibliographic data: WO2009106910 (A1) — 2009-09-03

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PROCESS FOR THE PREPARATION OF ALOE-EMODIN

Page bookmark [WO2009106910 \(A1\) - PROCESS FOR THE PREPARATION](#)

Inventor(s): DI NAPOLI GUIDO [MC]; DI NAPOLI ALESSANDRO [CH] ±

Applicant(s): MEDIDOM LAB [CH]; DI NAPOLI GUIDO [MC]; DI NAPOLI ALESSANDRO [CH] ±

Classification:
- international: **C07C46/02**
- cooperative: **C07C46/02** → [more](#)

Application number: WO2008IB00451 20080229

Priority number(s): WO2008IB00451 20080229

Also published as: 📄 [AR072768 \(A1\)](#)

NO priority
first filing with IB
Espacenet repeats
application number among
priority numbers!

PCT family

- 'PCT family' includes the international application and all its national phase entries
- Linked through the PCT application number
- Linked as well through the priorities - if any were claimed – which the national phase entries inherit from the international application

PCT family – simple family

- 'PCT family' includes the international application and all its national phase entries
- Linked through the PCT application number
- Linked as well through the priorities - if any were claimed – which the national phase entries inherit from the international application
- There may be **additional applications** in the simple family **which are not PCT NPEs because country is not PCT member state**, linked through priorities
 - For example, a GCC application filed through the Paris route and claiming the same priorities like the PCT application
 - For example, a foreign application filed in JM
- It may also happen that a simple family includes **several distinct PCT families**; for example PCT/DK2006/000477

PCT/KR2012/001812: 2 x WO in family

33. AUCTION METHOD AND SERVER

★	Inventor: LEE JEONG GAB [KR]	Applicant: LEE JEONG GAB [KR]	CPC: <u>G06Q30/08</u>	IPC: G06Q30/08	Publication info: US2013066737 (A1) 2013-03-14  Global Dossier	Priority date: 2011-09-14
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34. AUCTION METHOD AND AUCTION SERVER

★	Inventor: LEE JEONG-GAB [KR]	Applicant: LEE JEONG-GAB [KR]	CPC: <u>G06Q30/08</u>	IPC: G06Q30/08 	Publication info: WO2013039284 (A1) 2013-03-21  Global Dossier	Priority date: 2011-09-14
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35. AUCTION METHOD AND AUCTION SERVER

★	Inventor: LEE JEONG-GAB [KR]	Applicant: LEE JEONG-GAB [KR]	CPC: <u>G06Q30/08</u>	IPC: G06Q30/08 	Publication info: WO2013039294 (A2) 2013-03-21 WO2013039294 (A3) 2013-05-10  Global Dossier	Priority date: 2011-09-14
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36. AUCTION METHOD AND SERVER

★	Inventor: LEE JEONG-GAB [KR]	Applicant: LEE JEONG-GAB [KR]	CPC: <u>G06Q30/08</u>	IPC:	Publication info: ZA201504960 (B) 2016-07-27	Priority date: 2011-09-14
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Article 4 F Paris Convention

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

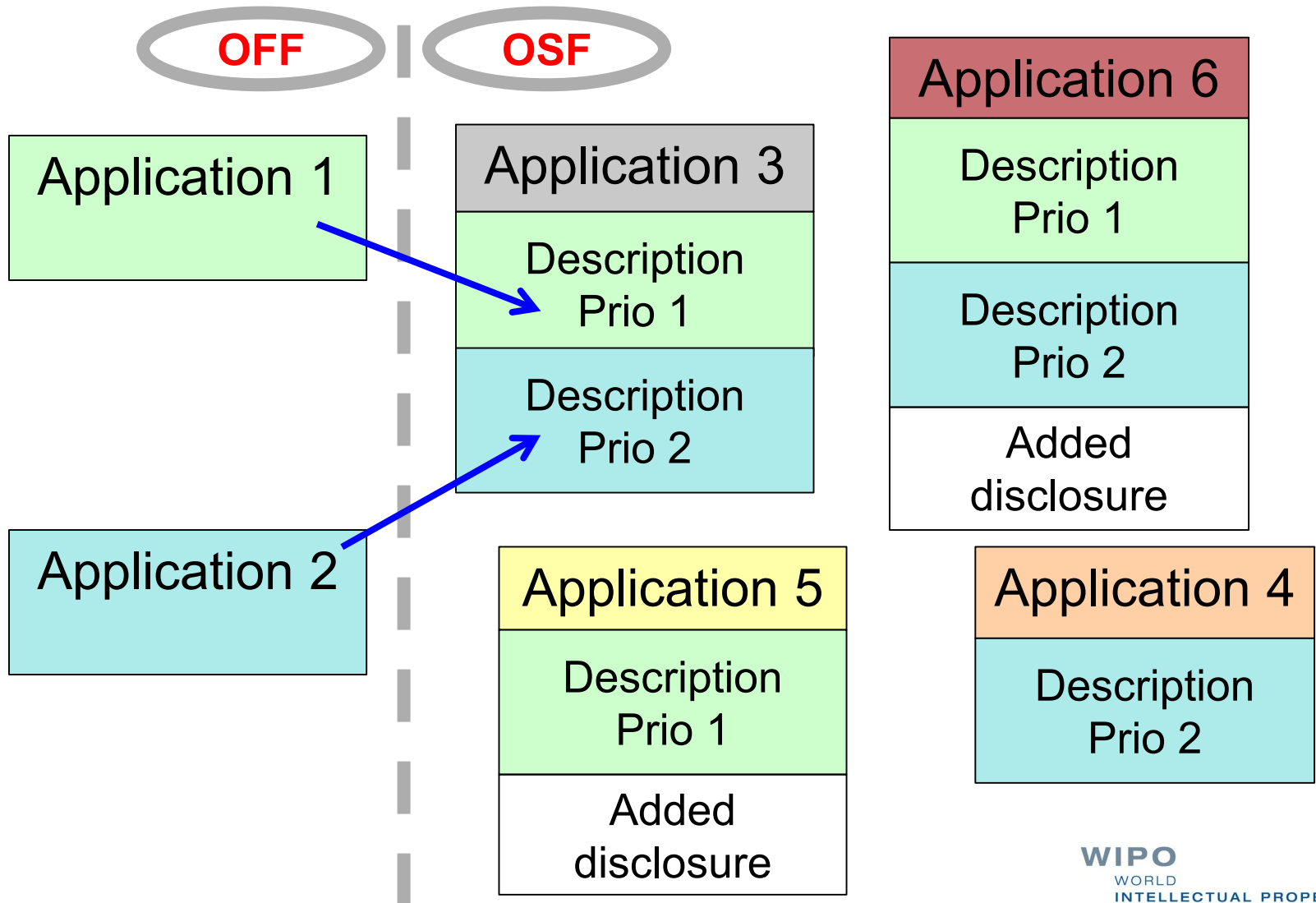
that the applicant claims multiple priorities, even if they originate in different countries, or on the ground

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."

Combining multiple priorities



Technical disclosures of family members

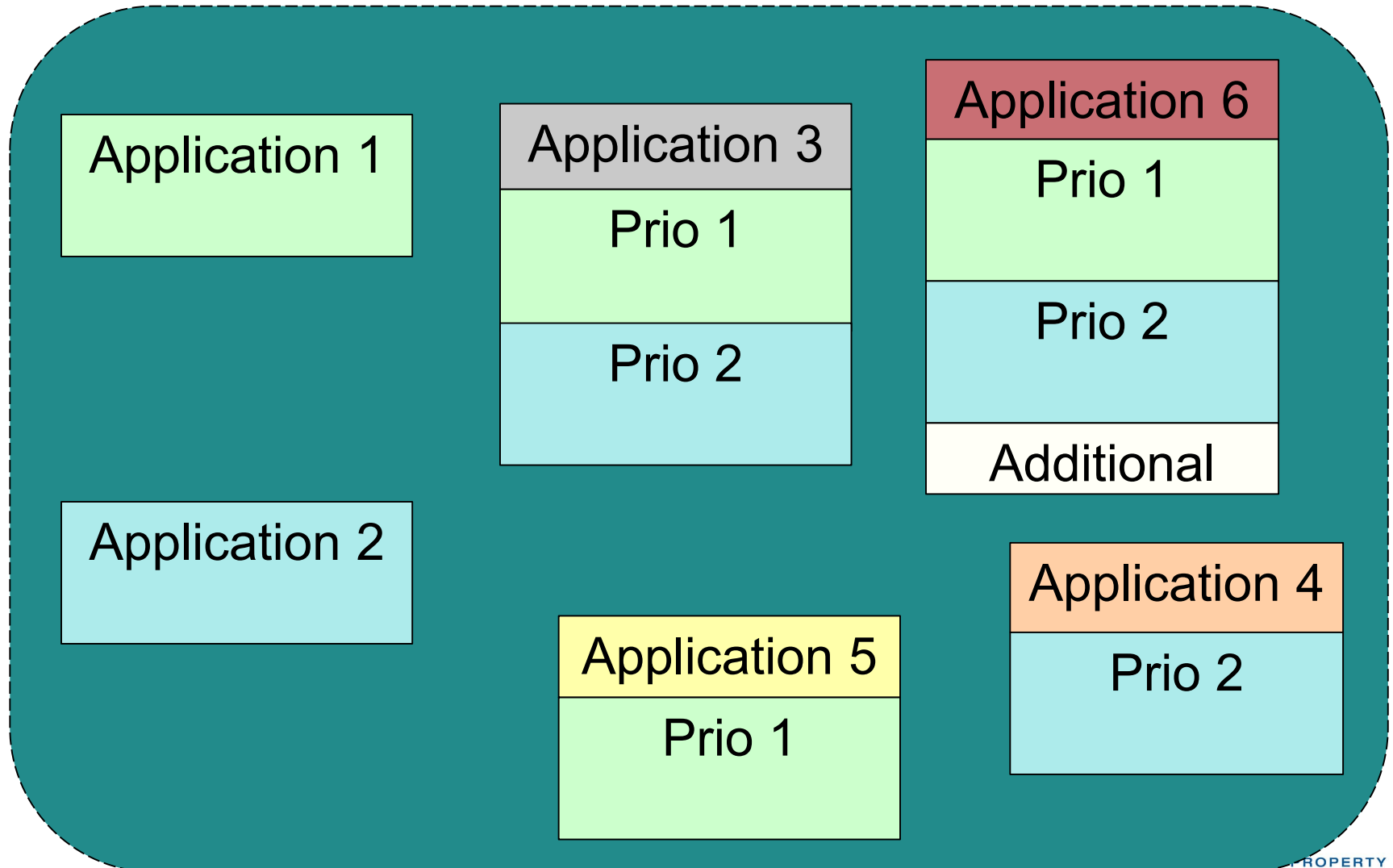
- Even though priorities are claimed, technical disclosure (descriptions and drawings) may differ:
 - Combinations of different sets of descriptions
 - Parts of descriptions may be removed
 - Technical subject matter may have been added
- Claims may also be different since claims need to be supported by description
- Differences are revealed only by comparing descriptions
- Applicants are not obliged to reveal modifications when making a new application
- When are differences least likely?
 - When all claimed priorities are the same

Permitted by
Paris
Convention

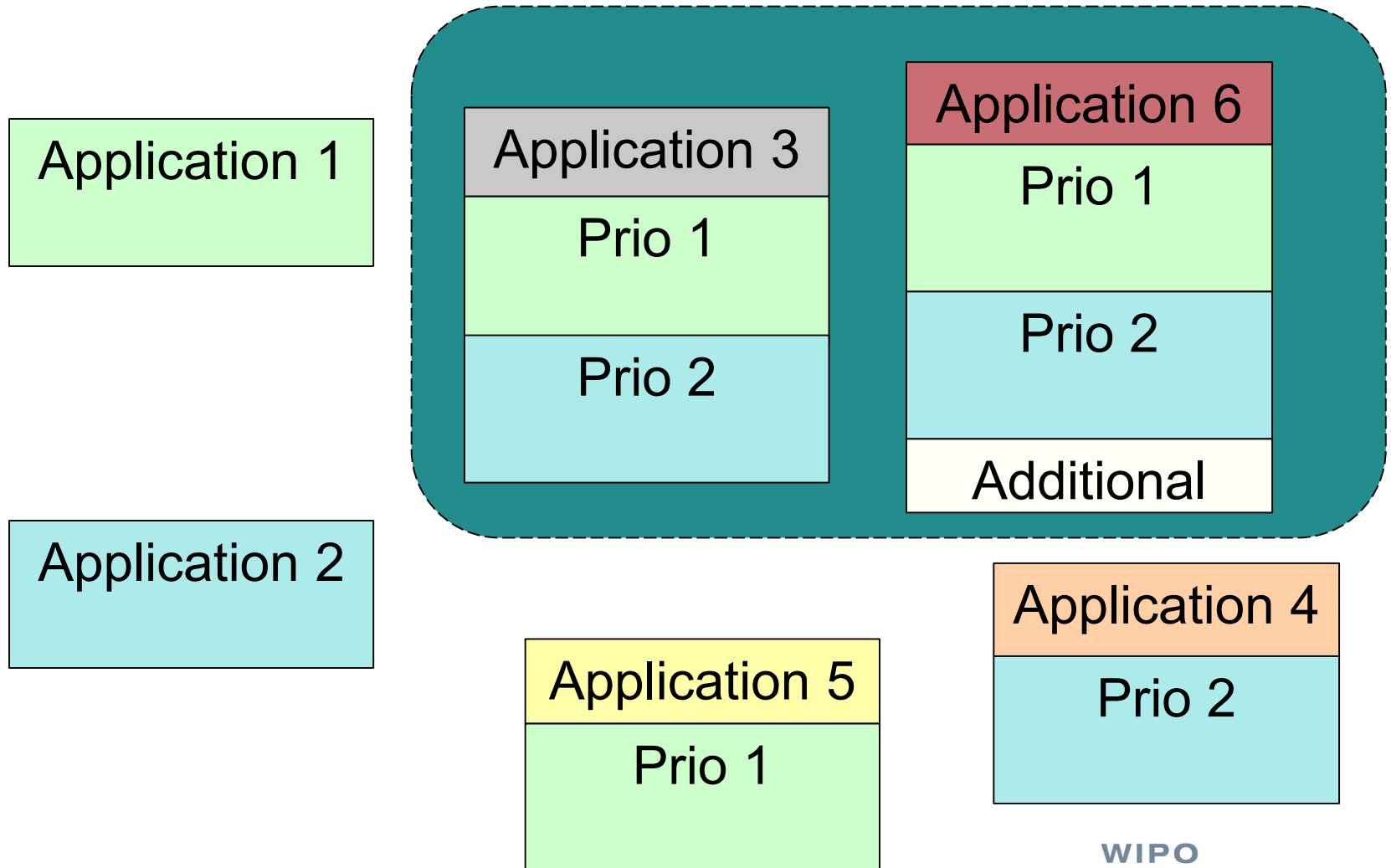
Family concepts based on priorities

- Simple family:
 - All members of the family have exactly the same priority or priorities
- Complex family:
 - All members of the family share at least one priority
- Extended family:
 - Any member shares at least one priority with at least one other member
 - Covers indirect sharing of priorities; is therefore the **biggest possible family**

Extended family



Simple family



Simple – extended family?

- **Simple family:** all members share the same priorities
- **Simple family (PCT w/o priority):** all members share the same PCT application number
 - It is very likely that descriptions of family members are equal or very similar
 - "Equivalents", "also published as"
 - Ideally, family members are just translations in other languages
 - However, Paris Convention permits additions of subject matter
 - "same invention" or group of very similar inventions
- **Extended (Inpadoc) family:** biggest possible family, includes applications sharing priorities indirectly
 - It is quite likely that descriptions are different
 - More likely that they cover different but related inventions in same area of technology

Family building in databases

- Comparing priority numbers
and/or
- Comparing PCT application numbers

Sources of family information

- **EPO's INPADOC database** is major source of such family information, accessible through:
 - Espacenet, EP-Register and CCD (simple and extended families; domestic families)
 - Other free patent information databases, like Depatis, [Google Patents](#), ..
- **WIPO PATENTSCOPE**
 - aggregates **national phase entry data reported from Designated/Elected Offices** (obligation as from July 1, 2017; rule 95)
 - Proprietary family building (since 2021)
- **WIPO CASE** with proprietary family building based on application data shared by 'providing offices'; families are complex families (i.e. share at least one priority)
- **Commercial** patent databases obtain and use widely INPADOC data, and apply proprietary family building rules and data cleaning, e.g.
 - Clarivate/Derwent: WPI family
 - Questel/Orbit: Fampat family
 - ...
- Other specialized platforms, e.g. WIPO's [Pat-Informed](#) or MPP [MedsPal](#)
- India Form 3

Source of family information: Espacenet

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INPADOC legal status
INPADOC patent family

Bibliographic data: WO2007111918 (A2) — 2007-10-04
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HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE

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- cooperative: [A61B19/0288](#); [A61L11/00](#); [B09B3/0075](#); [B09B3/0083](#); [A61B19/024](#); [A61B2019/0294](#); [A61B2019/0295](#); [A61B2019/0296](#)

Application number: [WO2007US07071](#) [20070322](#)

Priority number(s): [US20060785512P](#) [20060323](#); [US20060785548P](#) [20060323](#)

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

Priorities (here 2 US) create family relations


Simple family ('equivalents')

Abstract of **WO2007111918 (A2)**
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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

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☆ **WO2007111918A2** HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE

Available in v

Bibliographic data
Description
Claims
Drawings
Original document
Citations
Legal events
Patent family

Simple family
INPADOC family
Latest legal events

Publication ^	Application number ^	Title ^	Publication date ^	Applicants ^
AR060092A1	ARP070101214A	SISTEMAS APARATOS Y METODOS DE PROCESAMIENTO POR CALOR, PARA LA RECOLECCION Y ELIMINACION DE DESECHOS INFECCIOSOS Y MEDICOS	2008-05-21	BIOMEDICAL TECHNOLOGY SOLUTION [US]
AU2007231591A1	AU2007231591A	Heat processing systems, apparatuses, and methods for collection and disposal of infectious and medical waste	2007-10-04	BIOMEDICAL TECHNOLOGY SOLUTIONS INC [U
CA2646350A1	CA2646350A	HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTION AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE	2007-10-04	BIOMEDICAL TECHNOLOGY SOLUTION [US]
CL2007000747A1	CL2007000747A	Sistema de procesamiento termico de desechos medicos que comprende un cuerpo con una camara para recibir un contenedor, al menos un calentador de placa y aletas a un costado para refrigerar la camara; y metodo para el procesamiento termico de desechos medicos.	2008-01-18	BIOMEDICAL TECHNOLOGY SOLUTIONS INC [U

Family table in Global Dossier (USPTO)

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Global Dossier

Home Public Pair Common Citation Document Current Service Status Service Hours Help Email Us

Office WIPO Type PCT Application PCT/US2014/052705

★ Collections 0 ↻ History 1

PCT/US2014/052705 12 Members in Patent Family (12 currently shown)

Office	Application	Applicant	Title	App. Date	Priority #	Pub. #	Pub. Date	Action
PE	0002862016			08/26/2014	US 61870089	PE 03542016 A1	05/11/2016	
MX	2016002410			08/26/2014	US PCT/US14/52705 US 61870089	MX 2016002410 A	05/31/2016	
EA	201690475			014	US PCT/US14/52705 US 61870089	EA 201690475 A1	06/30/2016	
AR	P140103202			014	US 61870089	AR 097461 A1	03/16/2016	
AU	2014311324 View Dossier	1) Red Leaf Resources, Inc.,	Gas barrier	014	US PCT/US14/52705 US 61870089	AU 2014311324 A1 AU 2014311324 B2	04/07/2016 11/10/2016	(2) Add to ★
AP	201609052			014	US PCT/US14/52705 US 61870089	AP 201609052 D0	02/29/2016	
US	14469062 View Dossier	1) Patten, James W. 2) Bunger, James W. 3) Seely, Dan	GAS COM	014	US 61870089 US 14469062	US 20150053269 A1	02/26/2015	(1) Add to ★
CA	2922019			08/26/2014	US PCT/US14/52705 US 61870089	CA 2922019 A1	03/05/2015	

Domestic families

Extended family, no option to select simple family

PATENTSCOPE: built family information

1. WO2015031359 - GAS TRANSPORT COMPOSITE BARRIER

PCT Biblio. Data Description Claims Drawings National Phase Notices Documents

PermaLink Machine translation ▾

Publication Number

WO/2015/031359

Publication Date

05.03.2015

International Application No.

PCT/US2014/052705

International Filing Date

26.08.2014

IPC

B01D 19/00 2006.01 C10G 1/00 2006.01

C10G 31/00 2006.01

CPC

Title

(EN) GA

(FR) B

National phase entries may offer access to further dossiers

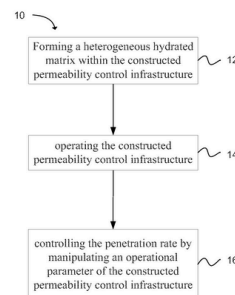


FIG. 1

Patent family (proprietary built)

Inventors

PATTEN, James, W.
BUNGER, James, W.
SEELY, Dan

Agents

ERICKSEN, Erik, S.

Priority Data

61/870,089 26.08.2013 US

Publication Language

English [EN]

Filing Language

English [EN]

Designated States

Abstract

(EN)

A method [10] of minimizing vapor transmission from a constructed permeability control infrastructure can comprise forming [12] a heterogeneous hydrated matrix within the constructed permeability control infrastructure, the constructed permeability control infrastructure comprising a permeability control impoundment defining a substantially encapsulated volume. The heterogeneous hydrated matrix includes a particulate solid phase and a continuous liquid phase which is penetrable by a vapor having a permeation rate. The constructed permeability control infrastructure is operated [14] to control the permeation rate by manipulating [16] an operational parameter of the constructed permeability control infrastructure. Additionally, the vapor can be impeded during operating sufficient to contain the vapor within the constructed permeability control infrastructure.

(FR)

La présente invention concerne un procédé [10] de réduction au minimum de la transmission de vapeur depuis une infrastructure de contrôle de perméabilité construite qui peut comprendre la formation [12] d'une matrice hydratée hétérogène dans l'infrastructure de contrôle de perméabilité construite, l'infrastructure de contrôle de perméabilité construite comprenant une barrière de contrôle de perméabilité définissant un volume sensiblement encapsulé. La matrice hydratée hétérogène comprend une phase solide particulaire et une phase liquide continue qui est pénétrable par une vapeur ayant un taux de perméation. L'infrastructure de contrôle de perméabilité construite est mise en œuvre [14] pour contrôler le taux de perméation par manipulation [16] d'un paramètre opérationnel de l'infrastructure de contrôle de perméabilité construite. De plus, la vapeur peut être retenue pendant un fonctionnement suffisant pour contenir la vapeur dans l'infrastructure de contrôle de perméabilité construite.

Also published as

AU2014311324 BR112016003861 CA2922019 CL2016-410 CL2016000410 CN105492095 EA201690475 EP3038726 GE14072 GE14072/1 ID2017/08000 IDIDP00201601115 IL244235 IN201627006520 MA38846 MGMGB20164 MX2016002410 MYPI2016700460 PE2016-0354 TN2016000047 UaA201603059

PATENTSCOPE: National phase entries

1. W01999007319 - A MULTI-FUNCTION DISPOSABLE ABSORBENT ARTICLES

PCT Biblio. Data Description Claims Drawings National Phase Notices

National application numbers reported by designated/elected offices

PermaLink

Available information on National Phase entries [\[more information\]](#)

Office	Entry Date	National Number	National Status
Israel	29.07.1998	132595	Published: 19.03.2001 Granted: 11.02.2005
Canada	03.11.1999	2289029	
		1020007001251	
		PA/a/2000/001381	

Hyperlinked to national registers where possible

Sharing NPE data **mandatory** as from July 2017

Family table in WIPO CASE

WIPO CASE

Application Number *** pct/kr2007/002479** Extended Simple e.g.: (PCT/JP2013/081486, PCT/US2013/071150) Compare History Maximize Close all tabs

PCTKR2007002479

Time Line **Tabular View** Family Citations Discussion

Application/Priority #	Filing/National Entry Date	Publications	PCT Application #
KR1020070049340	2007-05-21	KR 1020070112725.B1.2007-11-27, KR 1020070112725.A.2007-11-27	
US12/301,700	2007-05-22	US 20090163574.B2.2009-06-25	
AU2007252371	2007-05-22	AU 2007252371.B2.2013-07-25	
KR1020060045715			
KR1020070049340			
CA2653124			
KR1020060045715			
KR1020070049340	2007-05-21		
EP2007746627	2007-05-22	EP 2019664.B1.2009-02-04	
KR20060045715	2006-05-22		
KR20070049340	2007-05-21		
MY2008004753	2007-05-22	MY PI20084753.A.2013-09-30, MY PI 20084753.A.2008-11-22, MY PI 20084753.A.2008-11-22	
KR1020060045715	2006-05-22		
KR1020070049340	2007-05-21		
IL195459	2007-05-22	IL 195459.A.2009-08-03	PCT/KR2007/002479.2007-05-22
KR1020060045715	2006-05-22		
KR1020070049340	2007-05-21		

Family table

Does **NOT** mean simple and extended family CASE families are complex families

Legal obligations for disclosing family information

- Some jurisdictions, for example India, systematically require applicants to disclose and update family information
- Disclosure to be found in IN dossier as 'Form 3'
- Represents up to now the most comprehensive source of family information
- Can be retrieved by searching IN application number in Indian register inPASS

Form 3 of IP India

PCT/EP2017/056134

UPDATED ANNEXURE TO FORM 3

Details of Foreign Applications corresponding to
 INDIAN PATENT APPLICATION NO. 201817038931 FILED ON 15 October 2018
 in the name of SOLVOTRIN THERAPEUTICS LTD
 Corresponding PCT Application No. : PCT/EP2017/056134 Dated 15 March 2017

COUNTRY	APPLN. NO.	PCT FILING DATE	STATUS Such as pending, accepted, refused, abandoned, withdrawn, opposed etc.	GRAN PATF
United Arab Emirates	P6001293/2018	15/03/2017	Pending	
ARIPO	AP/P/2018/011052	15/03/2017	Abandoned	
Australia	2017232266	15/03/2017	Pending	
Bahrain	167/2018	15/03/2017	Pending	
Brazil	BR112018068571-2	15/03/2017	Abandoned	
Canada	3,017,556	15/03/2017	Pending	
Chile	2018002632	15/03/2017	Abandoned	
China	2017800245532	15/03/2017	Response due by 11 February 2021	
Colombia	CO2018010940	15/03/2017	Response filed on 1 October 2020	
Costa Rica	2018-000488	15/03/2017	Pending	
Cuba	2018-0108	15/03/2017	Abandoned	
Djibouti	DJ/B/2018/0002	15/03/2017	Abandoned	
Algeria	180499	15/03/2017	Pending	
Eurasia	201892065	15/03/2017	Response to be filed by 21 March 2021	
Ecuador	2018-77068	15/03/2017	Abandoned	
Egypt	1439/2018	15/03/2017	Pending	
EPO	17710019.5	15/03/2017	Pending	

India: Obligation for applicants to disclose all PCT national phase entries and submit respective examination results (Rule 12)

47 national phase entries

Only 22 recorded in INPADOC

Accessible via patent register of India **inPASS**

Family coverage of different sources

(PCT/IB2014/02991)

- Consolidated family (Espacenet, WIPO CASE, PATENTSCOPE, India Form 3) (97+10)

AG, AO, AP, AR, AU, BB, 2xBD, BI, BN, BO, BR, BS, BT, BZ, CA, CG, CL, CN, CO, CR, CU, DJ, DK, DM, DO, DZ, 2xEA, EC, 2xEG, EP, ES, GC, GD, GE, GT, HK, HN, HT, HR, HU, ID, IL, IN, IQ, IR, JM, JO, JP, KH, KN, KP, 2xKR, LA, LB, LC, LK, LT, LY, MA, ME, MG, MO, MN, MU, MX, MY, NG, NI, NP, NZ, OA, PA, PE, PG, PH, PK, PL, PT, RS, PY, RW, SC, SG, SI, SV, SY, TH, TN, TO, TT, TW, UA, 3xUS, UY, UZ, VC, VE, VN, WO, WS, YE, ZA

- India Form 3 (96+0) in dossier of IP India (provided by applicant)

AG, AO, AP, AR, AU, BB, 2xBD, BI, BN, BO, BR, BT, BZ, CA, CG, CL, CN, CO, CR, CU, DJ, ~~DK~~, DM, DO, DZ, 2xEA, EC, 2xEG, EP, ~~ES~~, GC, GD, GE, GT, HN, HK, HT, ~~HR~~, ~~HU~~, ID, IL, IN, IQ, IR, JD, JM, JP, KH, KN, KP, 2xKR, LA, LB, LC, LK, ~~LT~~, MA, ~~ME~~, MG, MO, MN, MU, MX, MY, NG, NI, NP, NZ, OA, PA, PE, PG, PH, PK, ~~PL~~, ~~PT~~, ~~RS~~, PY, RW, SC, SG, ~~SI~~, SV, SY, TH, TN, TO, TT, TW, UA, 3xUS, UY, UZ, VC, VE, VN, ~~WO~~, WS, YE, ZA

- Espacenet (32+10) (family building based on priority and PCT application numbers)

AG, AO, AP, AR, AU, BB, 2xBD, BI, BN, BO, BR, BS, BT, BZ, CA, ~~CG~~, CL, CN, ~~CO~~, CR, CU, ~~DJ~~, DK, ~~DM~~, DO, ~~DZ~~, 2xEA, ~~EC~~, 2xEG, EP, ES, ~~GC~~, ~~GD~~, GE, GT, ~~HN~~, HK, ~~HT~~, HR, HU, ~~ID~~, ~~IL~~, ~~IN~~, ~~IQ~~, ~~IR~~, JM, JO, JP, KH, KN, KP, 2xKR, LA, LB, LK, LT, LY, MA, ME, MG, MO, MN, MU, MX, MY, NG, NI, NP, NZ, OA, PA, PE, PG, PH, PK, PL, PT, RS, PY, RW, SC, SG, SI, SV, SY, TH, TN, TO, TT, TW, UA, 2xUS, UY, UZ, VC, VE, VN, WO, WS, YE, ZA

Family coverage of different sources

- **PATENTSCOPE** national phase entry data (26+1) (provided by designated/elected offices)

~~AG, AO, AP, AR, AU, BB, 2xBD, BI, BN, BO, BR, BT, BZ, CA, CG, CL, CN, CO, CR, CU, DJ, DK, DM, DO, 2xEA, EC, 2xEG, EP, ES, GC, GD, GE, GT, HN, HK, HT, HR, HU, ID, IL, IN, IQ, IR, JO, JM, JP, KH, KN, KP, 2xKR, LA, LB, LK, LT, MA, ME, MG, MO, MN, MU, MX, MY, NG, NI, NP, NZ, OA, PA, PE, PG, PH, PK, PL, PT, RS, PY, RW, SC, SG, SI, SV, SY, TH, TN, TO, TT, TW, UA, 3xUS, UY, UZ, VC, VE, VN, WO, WS, YE, ZA~~

- **PATENTSCOPE** family build (43+5) (based on priority and PCT application numbers)

~~AG, AO, AP, AR, AU, BB, BD, BI, BN, BO, BR, BT, BZ, CA, CG, CL, CN, CO, CR, CU, DJ, DK, DM, DO, 2xEA, EC, 2xEG, EP, ES, GC, GD, GE, GT, HN, HK, HT, HR, HU, ID, IL, IN, IQ, IR, JO, JM, JP, KH, KN, KP, 2xKR, LA, LB, LK, LT, MA, ME, MG, MO, MN, MU, MX, MY, NG, NI, NP, NZ, OA, PA, PE, PG, PH, PK, PL, PT, RS, PY, RW, SC, SG, SI, SV, SY, TH, TN, TO, TT, TW, UA, 2xUS, UY, UZ, VC, VE, VN, WO, WS, YE, ZA~~

- **WIPO CASE** (33) (based on priority and PCT application numbers)

~~AG, AO, AP, AR, AU, BB, BD, BI, BN, BO, BR, BS, BT, BZ, CA, CG, CL, CN, CO, CR, CU, DJ, DK, DM, DO, 2xEA, EC, 2xEG, EP, ES, GC, GD, GE, GT, HN, HK, HT, HR, HU, ID, IL, IN, IQ, IR, JM, JO, JP, KH, KN, KP, 2xKR, LA, LB, LK, LT, MA, ME, MG, MO, MN, MU, MX, MY, NG, NI, NP, NZ, OA, PA, PE, PG, PH, PK, PL, PT, RS, PY, RW, SC, SG, SI, SV, SY, TH, TN, TO, TT, TW, UA, 3xUS, UY, UZ, VC, VE, VN, WO, WS, YE, ZA~~

Challenges

- Don't worry – IP5 family members are included in all sources plus many other major jurisdictions
- Limitations exist mostly for regional cooperation because many medium and smaller IPOs don't share bibliographic data with database hosts
- No source that permits to select only PCT family
- Essential for work-sharing (to be able) to identify the members of the PCT family
- Family members linked to other PCT applications are less useful or not useful at all

Families within one jurisdiction

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

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
 - Lack of unity
 - Flaws or gaps of the disclosure (description, drawings)
- C. Further improvements of an invention

Domestic second filings

„Continuation (in part)“

- New national/local application claiming priority of one or several earlier national/local applications
- "in part": **Additions of technical subject matter to initial disclosure** of parent (priority) application or other amendments 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)
 - Remedy for flaws in first application
 - Opportunity to specify further improvements of an invention

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 parent patent

Domestic second filings

Division (and US 'continuations')

Paris Art. 4 G (1)

- E.g. for healing a lack of unity: **mandatory division**
- 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 (parent application) may comprise several inventions
- Lack of unity is given only if different inventions are "claimed", i.e. if covered explicitly by claims
- Strategic approach by some applicants
- Divisions are 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

Further sources of family information

- National registers (e.g. EP-Register, US PAIR) include patent family information on national level (domestic families, national families (continuation in part, **divisions**; US continuations)

EP-Register - divisions

Parent application(s) 

EP04771314.4 / ➤ [EP1651658](#)



Divisional application(s)

EP14194507.1 / ➤ [EP2896397](#)



The date of the Examining Division's first communication in respect of the earliest application for which a communication has been issued (EP20040771314) is 20.10.2011

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								

Summary: multiple family members from same country

- When do we have multiple family members from same jurisdiction? In case of:
 - Divisional applications (US continuations)
 - Continuations in part
 - Several PCT applications in same family
- These reasons may co-occur!
- You need to understand/identify the reason(s) and select the proper family members for work-sharing purposes
- Don't worry: only some 10-20% of PCT applications are affected
- Temporary problem until comprehensive PCT families can be selected in family tables

Thank you

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