



Topic 1: **Growing transparency of examination in the PCT National Phases**

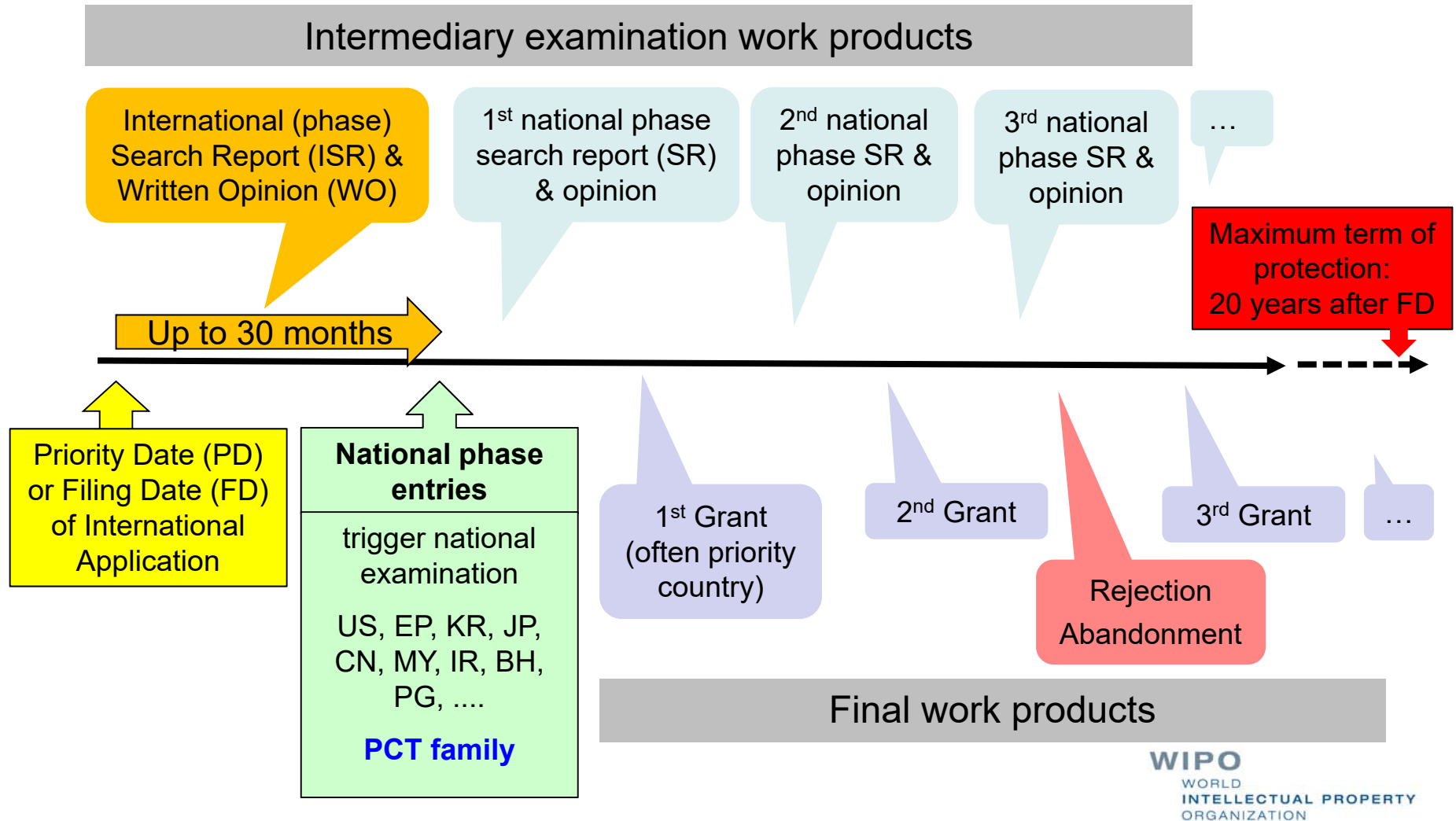
Dr. Lutz Mailänder
Head, Cooperation on Examination and Training Section
PCT International Cooperation Division

Moscow
September 16, 2019

Agenda

- Growing transparency because of work-sharing platforms
 - Diversity of examination work-products
 - Visible for other examiners
 - Visible for third parties
- Opportunities and implications for national phase examination
 - Enhancing efficiency and improving quality
 - Regional cooperation - cooperative examination
 - Monitoring of quality:
 - Has an examiner seen what he could have seen?**

Life cycle of a PCT application patent family



Work-Sharing through patent families

- **Patent family**: same or similar invention was **filed in several IPOs**, e.g. a PCT application entered several national phases
- **PCT family**: all applications linked through same PCT application number
- **Simple family or extended family**: may include more than one PCT family (e.g. WO2014136037 has WO2014136055 in SF; WO2015058464 has 31 WO in EF)
- Examination results/work products for members of the patent family may be utilized for improving **efficiency** and **quality** of examination
 - Opportunities for small/under-resourced IPOs

Types of examination work products

- **Intermediary or pre-grant** work products
 - Search reports
 - basic list of citations (cited by examiner, by applicant)
 - enriched search reports (citation category X, Y, ...; relevant claims;...)
 - **Search strategies**
 - Written opinions, examination reports
 - Communications from applicant to examiner
 - Protocols of hearings
 - Third party observations
- **Final** work products/results
 - Granted claims; claims after opposition
 - Rejections; withdrawals following substantive reports; abandoned claims
- **Post-grant** work products/results
 - Additional prior art from opposition/re-examination/invalidation
 - Restricted claims
 - Communications between involved parties (3+)



4. A METHOD FOR RECOVERING HYDROCARBON COMPOUNDS AND A HYDROCARBON RECOVERY APPARATUS FROM A GASEOUS BY-PRODUCT

★ Inventor: TASAKA KAZUHIKO [JP]	Applicant: JAPAN OIL GAS & METALS JOGMEC [JP] INPEX CORP [JP] (+4)	CPC: B01D3/00	IPC: C10G2/00	Publication info: CA2752839 (A1) 2010-09-02 CA2752839 (C) 2014-02-18	Priority date: 2009-02-27
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Grant

5. Method for collecting hydrocarbon compound from gaseous by-product and apparatus for collecting hydrocarbon

★ Inventor: KAZUHIKO TASAKA	Applicant: JAPAN OIL GAS & METALS JOGMEC INPEX CORP (+4)	CPC: B01D3/00	IPC: C10G2/00	Publication info: CN102333846 (A) 2012-01-25 CN102333846 (B) 2014-01-29 Global Dossier	Priority date: 2009-02-27
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Grant

6. METHOD FOR COLLECTING HYDROCARBON COMPOUNDS FROM GASEOUS BY-PRODUCT AND APPARATUS FOR COLLECTING HYDROCARBON

★ Inventor: Тасака, Казухико	Applicant: ДЖЭПЭН ОЙЛ, ГЭЗ ЭНД МЕТАЛЗ НЭШНЛ КОРПОРЕЙШН, ИНПЕКС КОРПОРЕЙШН, (+4)	CPC: B01D3/00	IPC: C10G2/00	Publication info: EA201170995 (A1) 2012-02-28 EA018772 (B1) 2013-10-30	Priority date: 2009-02-27
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Grant

7. METHOD FOR COLLECTING HYDROCARBON COMPOUND FROM GASEOUS BY-PRODUCT AND APPARATUS FOR COLLECTING HYDROCARBON

★ Inventor: TASAKA KAZUHIKO [JP]	Applicant: JAPAN OIL GAS & METALS JOGMEC [JP] INPEX CORP [JP] (+4)	CPC: B01D3/00	IPC: B01D53/14	Publication info: EP2402418 (A1) 2012-01-04 EP2402418 (A4) 2012-11-21 Global Dossier	Priority date: 2009-02-27
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No grant

8. METHOD FOR COLLECTING HYDROCARBON FROM FT GAS COMPONENT AND APPARATUS FOR COLLECTING HYDROCARBON

★ Inventor: TASAKA KAZUHIKO	Applicant: JAPAN OIL GAS & METALS JOGMEC INPEX CORP (+4)	CPC: B01D3/00	IPC: C10G2/00	Publication info: JP2010202677 (A) 2010-09-16 JP5301318 (B2) 2013-09-25 Global Dossier	Priority date: 2009-02-27
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Grant

publication kind
code for grants
B or C
(sometimes A)

publication date

WO2010098129

Status EP family member



European Patent Register

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Smart search

Advanced search

Help

EP2402418

European procedure

About this file

Legal status

Federated register

Event history

Citations

Patent family

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All documents: EP2402418

Dossier alert:



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Email



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Selected documents



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Espacenet



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All documents(38)

Search



Date



Document type



18.09.2017

[Closing of application](#)



07.06.2017

[Application deemed to be withdrawn \(translations of claims/payment missing from 01-04-2012\)](#) ←



04.04.2017

[Notice drawing attention to the payment of the renewal fee and additional fee](#)



21.12.2016

[Bibliographic data of the European patent application](#)



21.12.2016

[Communication about intention to grant a European patent](#) ←



21.12.2016

[Intention to grant \(signatures\)](#)



21.12.2016

[Text intended for grant](#)



21.12.2016

[Text intended for grant \(clean copy\)](#)

What is needed for work-sharing?

- Comprehensive patent family information, detailed as
 - Simple family (all priorities are the same; descriptions are very likely equivalent)
 - Distinguishing PCT families
 - Extended family (largest possible family)
- Examination (legal) status information
- **Access to examination work products/dossiers**
- Platforms which integrate this information user friendly
- Translation tools for work products
- Tools for comparing work products
 - Citations (search reports)
 - Claims
- Information on differing national practices (naming and content of work products; important case law; exclusions; ..)

Sources of family information

- **Family building:** family relations are derived from priority and PCT application data
- EPO processes bibliographic data of all publications included in its database and obtained from offices sharing publication data with the EPO (90+ jurisdictions)
- **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's PATENTSCOPE** aggregates **national phase entry data reported from Designated/Elected Offices** (obligation as from July 1, 2017; rule 95)
- **WIPO CASE** performs 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

Source of family information: Espacenet

Europäisches Patentamt
European Patent Office
Office européen des brevets

Espacenet
Patent search

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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
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: ORDER DI
Applicant: ORDER DI

Classification:
- international: **A61B19/02; A61L11/00; A61M5/32; B09B3/00**
- cooperative: **A61B19/0288; A61L11/00; B09B3/0075; B09B3/0083; A61B19/0294; 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

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

WORLD INTELLECTUAL PROPERTY ORGANIZATION

Inpadoc ('extended') family

Priorities (here 2 US) create family relations

Simple family ('equivalents')



National phase entries in Patentscope

The screenshot shows the WIPO Patentscope interface. At the top, the WIPO logo and 'PATENTSCOPE' are visible. Below the search bar, there are navigation tabs: Search, Browse, Translate, Options, News, and Login. The main content area displays the title '1. (WO1999007319) A MULTI-FUNCTIONAL FASTENER FOR DISPOSABLE...'. Below the title, there are tabs for PCT Biblio. Data, Description, Claims, National Phase, Notices, Drawings, and Documents. The 'National Phase' tab is selected and circled in red. Below the tabs, there is a section titled 'Available information on National Phase entries (more information)' which is circled in green. This section contains a table with the following data:

Office	Entry Date	National Number	National Status
Australia	07.03.2000	86022/98	Granted: 12.07.2001
Canada	03.11.1999	2289029	
European Patent Office	07.03.2000	1998937274	Published: 24.05.2000 Granted: 15.12.2004
Israel	29.07.1998	132595	Published: 19.03.2001 Granted: 11.02.2005
Republic of Korea	07.02.2000	1020007001251	Published: 26.03.2001 Granted: 27.04.2006
Mexico	Not_Available		

National application numbers

Hyperlinked to national registers

Sharing NPE data mandatory as from July 2017
Currently some 60 jurisdictions

NPEs in Patentscope/Espacenet compared

	Patentscope NPE	Espacenet Inpadoc/simple fam
WO2011162752	CA, CN, EP, IN, JP, KR, MX	AU, CA, CN, EP, JP, KR, MX, ZA
WO2011162753	-	2xUS
WO2011162754	US	US
WO2011162755	CA, CN, CO , EP, JP, MX, PH , RU, SG, TH , US	AU, BR , CA, CN, EP, JP, MX, RU, SG, TW , US
WO2011162756	CA, CN, CO , EP, IN, JP, MX, PH , RU, TH , US	AU, BR , CA, CN, EP, HK, JP, MX, RU, TW , 2xUS
WO2011162757	CA, CN, MX	BR , CA, CN, MX, RU, US
WO2011162758	CA, CN, CO , EP, IN, JP, MX, RU, TH	AU, BR , CA, CN, EP, JP, MX, RU, TW , US
WO2011162759	US	US
WO2011162760	-	-
WO2011162761	CN, EP, IN	BR , CN, EP

Bold: not in other database

WIPO CASE family table

WIPO CASE

Application Number 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

Patent family 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 Search: PCT/US2014/052705

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

Domestic families

Extended family, no option to select simple family

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	

Comparison of family data of 4 samples

Status as of Aug 22, 2018	EPO Inpadoc	USPTO GD	Patentscope NPE	WIPO CASE
PCT/KR2007/002479 stable composition	26: AU, BR, CA, CN, CR, EA, EC, EP, ES-T, GE, GT, HK, IL, JP, 2xKR, MA, MX, MY, NZ, SV, TN, UA, US, ZA	= Inpadoc	15: AU, CA, CN, CO, EA, EG, EP, GE, IN, JP, MX, NZ, PH, US	21: AU, BR, CA, CN, EC, EP, GE, ID, IL, IN, JP, KR, MA, MN, MY, MX, SG, SV, VN, US
PCT/JP2010/001325 collecting hydrocarbon compound	12 : AU, BR, CA, CN, EA, EP, JP, MY, 2xUS, ZA	= Inpadoc	7: AU, CA, CN, EA, EP, US	13: AU, BR, CA, CN, EP, ID, JP, MY, TH, VN, 2xUS
PCT/US2014/052705 composite barrier	12 : AR, AU, CA, CN, EA, EP, MA, MX, PE, TN, US	= Inpadoc + IL	13: AU, CA, CN, EA, EP, GE, ID, IL, MA, MX, PE, UA	11: AR, AU, CN, EA, EP, ID, IN, MA, MX, MY
PCT/IB2016/000305 mercury based compound	19: AR, AU, CA, CL, CN, CO, CR, CU, DO, EA, EP, JP, KR, MX, PE, PH, SG, TW	= Inpadoc + IL	16: AU, CA, CN, CO, EA, EP, GE, IL, KR, MX, 2xNI, PE, PH, SG	15: AR, AU, CN, CU, DO, EA, EP, ID, IN, KR, MX, MY, PE, PH
	Green Bold: present in all 4 databases Black Bold: present only in one database Counts include PCT applications			

Other platforms including family information

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Patent Information Initiative for Medicines

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INN	Participant	Patents
Sofosbuvir, Velpatasvir, Voxilaprevir		COMPOSITIONS AND METHODS FOR TREATING HEPATITIS C VIRUS
		ANTIVIRAL COMPOUNDS
		INHIBITORS OF HEPATITIS C VIRUS
		NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
		SYNTHESIS OF A MACROCYCLIC HCV NS3 INHIBITING TRIPEPTIDE
		NUCLEOSIDE PHOSPHORAMIDATES
		CONDENSED IMIDAZOLYLIMIDAZOLES AS ANTIVIRAL COMPOUNDS
		COMBINATION FORMULATION OF TWO ANTIVIRAL COMPOUNDS
Sofosbuvir, Velpatasvir		COMPOSITIONS AND METHODS FOR TREATING HEPATITIS C VIRUS
		ANTIVIRAL COMPOUNDS
		NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
		NUCLEOSIDE PHOSPHORAMIDATES

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COMBINATION FORMULATION OF TWO ANTIVIRAL COMPOUNDS

In order to contact Gilead Sciences about this patent,

Participant:

Disclosed are pharmaceutical compositions (I); and an effective amount of said crystalline. Also disclosed are methods...

DISCLAIMER: Pat-INFORMED is not intended as a replacement for... analysis, is not free of errors, and should not be relied upon as a comprehensive inventory of patents... pending applications are not listed, and in certain cases licensing arrangements or other factors may prevent... from listing patents. Use of Pat-INFORMED is subject to its [Term of Use and Disclaimers](#).

<p>Jurisdiction: WO - WIPO</p> <p>Publication number: WO2015030853</p> <p>Publication date: 2015/03/05 (4 years ago)</p> <p>Open in PATENTSCOPE</p>	<p>Jurisdiction: AU - Australia</p> <p>Publication date: 2017/09/14 (a year ago)</p> <p>Grant number: 2014311827</p> <p>Open in PATENTSCOPE</p>
<p>Jurisdiction: NZ - New Zealand</p> <p>Publication date: 2017/06/30 (a year ago)</p> <p>Grant number: 716840</p> <p>(Country not covered by PATENTSCOPE.)</p>	<p>Jurisdiction: US - United States</p> <p>Publication number: 2017-0095499</p> <p>Publication date: 2017/04/06 (2 years ago)</p> <p>Grant number: 9757406</p> <p>Open in PATENTSCOPE</p>

OPERTY

Family members as reported by patent owner

Corresponding Inpadoc family information

WO2015030853 (A1)

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

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Family list: WO2015030853 (A1) — 2015-03-05 RSS: family dossiers

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20 application(s) for: WO2015030853 (A1)

Sort by Priority date Sort order Descending Sort show citations

1. COMBINATION FORMULATION OF TWO ANTIVIRAL COMPOUNDS

★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
GORMAN ERIC [US] MOGALIAN ERIK [US] (+4)	GILEAD PHARMASSET LLC [US]	A61K2300/00 <u>A61K31/4188</u> (+8)	A61K31/4188 A61K31/513 A61K9/16 (+1)	WO2015030853 (A1) 2015-03-05 Global Dossier	2013-08-27

2. FORMULACIÓN DE COMBINACIÓN DE DOS COMPUESTOS ANTIVIRALES

★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
ERIC GORMAN [US] REZA OLIVAI [US] (+4)	GILEAD PHARMASSET LLC [US]		A61K31/4184 A61K31/4709 A61K31/501 (+5)	AR095133 (A1) 2015-09-30	2013-08-27

3. Combination formulation of two antiviral compounds

★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
GORMAN ERIC MOGALIAN ERIK (+4)	GILEAD PHARMASSET LLC	A61K2300/00 <u>A61K31/4188</u> (+8)	A61K31/4188 A61K31/513 A61K9/16 (+1)	AU2014311827 (A1) 2016-03-03 AU2014311827 (B2) 2017-09-14	2013-08-27

4. Combination formulation of two antiviral compounds

★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
GORMAN ERIC MOGALIAN ERIK (+4)	GILEAD PHARMASSET LLC	A61K2300/00 <u>A61K31/4188</u> (+8)	A61K31/4188 A61K31/513 A61K9/16 (+1)	AU2017276223 (A1) 2018-01-18	2013-08-27

5. COMBINATION FORMULATION OF TWO ANTIVIRAL COMPOUNDS

★ Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
GORMAN ERIC [US] MOGALIAN ERIK [US] (+4)	GILEAD PHARMASSET LLC [US]	A61K2300/00 <u>A61K31/4188</u> (+8)	A61K31/4188 A61K31/513 A61K9/16 (+1)	CA2921160 (A1) 2015-03-05	2013-08-27

ACTUAL PROPERTY
IZATION

What is available for work-sharing?

- Primary sources: **National Patent Registers** are **authoritative** sources for
 - national **legal status** (!),
 - national family relations (divisions, continuations)
 - national publications,
 - access to national **dossiers** (public file inspection).
- For some countries, national registers are accessible online and therefore useful for work-sharing:
 - legal status only: AP, AR, CL, GC, ID, MY, PH, SA, ZA, ...
 - dossier as well: AU, BR, **CA**, CN, DE, EP, FI, GB, IL, IN, JP, KR, MX, SE, TW, US, ..
- RSS feeds enable examiners of other offices and other experts to be alerted of changes to status/dossiers
- Many registers enable deeplinking



Example: Canadian Register

Canadian Patents Database

Introduction
Green Technologies
Search Options
Basic Search

Boolean Search
Advanced Search
Help
General Content
Searching
Search Language
FAQ
Disclaimer

Patent 2805819 Summary

**Third-party information liability
Claims and Abstract availability**

(12) Patent Application:	(11) CA 2805819
(54) English Title:	IMPROVED BROMINATED SORBENTS FOR REMOVING MERCURY FROM EMISSIONS PRODUCED DURING FUEL COMBUSTION
(54) French Title:	SORBANTS BROMES AMELIORES POUR L'ELIMINATION DU MERCURE D'EMISSIONS PRODUITES PENDANT LA COMBUSTION DE CARBURANT

Bibliographic Data | Abstracts | Claims | Representative Drawing | Admin Status | Documents

- To view images, click a link in the Document Description column. To download the documents, select one or more checkboxes in the first column and then click the "Download Selected in PDF format (Zip Archive)" button.
- [List of published and non-published patent-specific documents on the CPD.](#)
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<input type="checkbox"/>	Prosecution-Amendment	2017-05-16	4	236
<input type="checkbox"/>	Prosecution-Amendment	2016-08-10	1	34

WIPO patent register portal

The screenshot shows the WIPO Patentscope website interface. The browser address bar displays 'patentscope.wipo.int/search/en/search.jsf'. The main navigation bar includes 'Search', 'Browse', 'Translate', 'Options', 'News', 'Login', and 'Help'. A dropdown menu under 'Browse' is open, listing 'Browse by Week (PCT)', 'Sequence listing', 'IPC Green Inventory', and 'Portal to patent registers', with the last option highlighted in orange and a red arrow pointing to it. Below the navigation, there is a search bar with 'Front Page' selected and a 'Search' button. A notification states 'National patent collection of Canada now available'. On the right, there is a world map and a table of national patent registers.

Jurisdiction	Online National Register	English Interface	Inventor Search	PCT Search	PCT National Phase Entry	Fee Payment	Most Recent Legal Status	File Inspection	Full Publications	Online Gazette
Saudi Arabia	Y	Y	Y	N	N	N	Y E.g. 'Lapsed' for application number 1210694	N	Y Documents are available in random manner, e.g. for application number 5280065. Open the link behind the title and select whether you want to see the publication of the application or the	
African Intellectual Property Organization (OAPI)	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N	N
African Regional Intellectual Property Organization (ARIPO)	N*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N	N

What is available for work-sharing?

Secondary work-sharing platforms ("one-stop-shop") aggregate information or enable access to work products from several authoritative sources (Registers)

Espacenet

- Includes **INPADOC data**:
 - Very (most?) comprehensive extended and simple family data
 - National and regional legal status of jurisdictions sharing such data with EPO
- Includes **Global Dossier** (IP5 initiative)
 - Access to **IP5 Offices' file wrappers/dossiers** (One Portal Dossier)
 - always up-to-date because it is retrieved on-the-fly from IP5 national registers
 - Machine translation for non-English documents
 - Status may often be derived from recent dossier documents
 - **Inpadoc legal status** sometimes include complementary status that cannot be derived from most recent communication
 - Access to **non-IP5 dossiers** of 'providing' Offices of WIPO-CASE
 - partly operational (AU, CA, ..)

What is available for work-sharing?

Secondary platforms ...

Espacenet ...

- Includes Global Dossier
- integrated access to Common Citation Document (CCD):
 - viewing and comparing of citations from members of extended and simple families from AP, AU, CA, CN, DE, EA, EP, JP, KR, RU, TW, US, WO,
 - 'comparing': which examiners have seen a particular citation or an equivalent thereof

USPTO Global Dossier

- Website dedicated to Global Dossier (appears to be still under development)
- Access to same dossiers like Espacenet GD (IP5 and CASE 'providing offices')
- presents **only extended family information** (without WO member); i.e. doesn't permit to view/select only simple family/PCT family
- Integrated application 'Citation List' (under development) to view comprehensive lists of citations from family members (backward and forward); **not suitable for 'comparing'**

Global Dossier at USPTO

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Office

WIPO

Type

PCT Application

PCT/US2014/052705

i

★ Collections **0**
↻ History **1**

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

IP Office Type

All IP5 Offices

EPO

SIPO

KIPO

JPO

USPTO

Non-IP5 Offices

	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	20160024				US PCT/US14/52705 US 61870089	MX 2016002410 A	05/31/2016	
	EA	20169047				US PCT/US14/52705 US 61870089	EA 201690475 A1	06/30/2016	
	AR	P1400002			08/26/2014	US 61870089	AR 097461 A1	03/16/2016	
<input checked="" type="checkbox"/>	AU	2014311324	1) Red Leaf Resources, Inc.,	Gas transport composite barrier	08/26/2014	US PCT/US14/52705 US 61870089	AU 2014311324 A1 AU 2014311324 B2	04/07/2016 11/10/2016	(2) Add to ★
	AP	201609052			08/26/2014	US PCT/US14/52705 US 61870089	AP 201609052 D0	02/29/2016	
<input checked="" type="checkbox"/>	US	14469062	1) Patten, James W. 2) Bunger, James W. 3) Seely, Dan	GAS TRANSPORT COMPOSITE BARRIER	08/26/2014	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	

"+" indicates that AU dossier is accessible

What is available for work-sharing?

Secondary platforms ...

WIPO-CASE (non public)

- **Accessible only for 'accessing' and 'providing' Offices**
- 'providing' offices share their dossiers with other participating offices
- Includes IP5 dossiers obtained from GD/OPD & AU, CA, GB, IL, **IN**, NZ, ..
- Family information includes only so-called 'complex' families
 - Proprietary family building based on applications of 'providing' Offices recorded in CASE, and NPEs recorded in Patentscope
- Majority of dossiers are also [publicly accessible through Patentscope](#) 'document' tab (labelled as 'Global Dossier') and Global Dossier

PATENTSCOPE

- Access to WIPO CASE dossiers in 'document' tab (labelled as 'Global Dossier')
- Includes PCT family (limited; only NPEs reported to WIPO from Designated and Elected Offices); only visible for WO publications; no separate family building
- No extended or simple families (EPO data are not integrated)
- No citation data

'GD' in Patentscope (WIPO CASE data)

WIPO PATENTSCOPE
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1. (IN201637003071) COMPOSITIONS AND METHODS FOR IDENTIFYING A RISK OF CANCER IN A SUBJECT

National Biblio. Data Documents

Global Dossier		
Legal date	Description	
24.07.2017	FORM 18	
31.10.2016	FORM-13	
25.07.2016	FORM 3	
25.07.2016	OTHER PATENT DOCUMENT	
24.02.2016	CORRESPONDENCE	
24.02.2016	OTHERS	
28.01.2016	CORRESPONDENCE	
28.01.2016	FORM-1	
28.01.2016	FORM-2	PDF
28.01.2016	FORM-3	PDF
28.01.2016	FORM-5	PDF
28.01.2016	INTERNATIONAL PUBLICATION	PDF
28.01.2016	PCT SEARCH REPORT & OTHERS	PDF
28.01.2016	WO7692A1	PDF

RTY

Dossier is retrievable only if national application or publication number is known

(NB Patentscope includes only NPE family information reported to WIPO, and only when viewing the respective PCT)

Secondary platforms for work-sharing

- Espacenet, US-Global Dossier, WIPO-CASE and Patentscope are (at the present) complementary to each other
- Shall, in future, cover access to same set of dossiers
- Which one to use then?
 - Better user interface?
 - Searching, viewing, exporting, ...
 - Additional tools (comparing, translations, alerts, ..)
 - Additional information (citations, enriched citations, different types of families, ...)
- Many national registers already enable deep linking
- Do we still need secondary platforms then? Or just a 'federated register' linking to national registers

How different are examination results?

Sample **WO2008035580**

- 2 JP priorities
- Extended family: 39 members
- Simple family: 35 members

Derived from kind codes of publications recorded in Espacenet

- **Simple** family: **grants** in AP, AU, CA, 2xCN, NZ, EA, EP, KR, MA, MX, MY, NZ, TW, UA, US, PH, VN,?
- **Extended** family: further grants in: 2xJP (priority country)
- **Pendency: 2-10 years**
 - 2006-09-20 earliest priority date
 - 2008-09-03 JP grant
 - 2016-10-26 EP
- Still pending in BH, LA,..

Examples of grants: WO2008035580

WO-A1 = AU-B2 = JP-B1

1. A plant cultivation system comprising:

- a nonporous hydrophilic film for cultivating a plant thereon, and
- a feeding means for supplying water or a nutrient fluid to the lower surface of said nonporous hydrophilic film in the absence of a hydroponic tank for accommodating water or a nutrient fluid and cultivating a plant therein.

AU, JP granted initial claims without any modification

CA-C

1. A plant cultivation system comprising:

- a nonporous hydrophilic film for cultivating a plant thereon;
- a feeding means for feeding water or a nutrient fluid to the lower surface of said nonporous hydrophilic film,
- said feeding means comprising at least one layer which is a water impermeable material layer or a water absorbing material layer,
- said at least one layer is laid and extends under said nonporous hydrophilic film,
- wherein, when said feeding means comprises both the water impermeable material layer and the water absorbing material layer, the water absorbing material layer is disposed between said nonporous hydrophilic film and said water impermeable material layer and in contact with the lower surface of said nonporous hydrophilic film;
- and a drip tube as an irrigation means for supplying water or a nutrient fluid to the feeding means,
- said drip tube being disposed below said nonporous hydrophilic film in a manner such that water or a nutrient fluid supplied from the drip tube is fed to the lower surface of the nonporous hydrophilic film.

CA granted heavily modified claim

Examples of grants: WO2008035580

CA-C

1. A plant cultivation system comprising:
 - a nonporous hydrophilic film for cultivating a plant thereon;
 - a feeding means for feeding water or a nutrient fluid to the lower surface of said nonporous hydrophilic film,
 - said feeding means comprising at least one layer which is a water impermeable material layer or a water absorbing material layer,
 - said at least one layer is laid and extends under said nonporous hydrophilic film,
 - wherein, when said feeding means comprises both the water impermeable material layer and the water absorbing material layer, the water absorbing material layer is disposed between said nonporous hydrophilic film and said water impermeable material layer and in contact with the lower surface of said nonporous hydrophilic film;
 - and a drip tube as an irrigation means for supplying water or a nutrient fluid to the feeding means,
 - said drip tube being disposed below said nonporous hydrophilic film in a manner such that water or a nutrient fluid supplied from the drip tube is fed to the lower surface of the nonporous hydrophilic film.

US-B2

1. A plant cultivation system comprising:
 - a nonporous hydrophilic film for cultivating a plant thereon,
 - a feeding means for feeding water or a nutrient fluid to the lower surface of said nonporous hydrophilic film in the absence of a hydroponic tank for accommodating water or a nutrient fluid and cultivating a plant therein,
 - said feeding means comprising at least one layer selected from the group consisting of a water impermeable material layer and a water absorbing material layer,
 - which is laid and extends under said nonporous hydrophilic film,
 - wherein, when said feeding means comprises both of said water impermeable material layer and said water absorbing material layer, said water absorbing material layer is disposed between said nonporous hydrophilic film and said water impermeable material layer and is in contact with the lower surface of said nonporous hydrophilic film,
 - and a drip tube as an irrigation means for supplying water or a nutrient fluid to said feeding means,
 - said drip tube disposed below said nonporous hydrophilic film in a manner such that water or nutrient fluid supplied from said drip tube is fed to the lower surface of said nonporous hydrophilic film;
 - wherein said nonporous hydrophilic film is a film which exhibits an electrical conductivity (EC) difference of 4.5 dS/m or less,
 - said EC difference being determined by a method comprising contacting water with a saline solution having a salt concentration of 0.5% by weight through said nonporous hydrophilic film, measuring the electrical conductivity of each of the water and the saline solution 4 days (96 hours) after the start of the contact, and calculating the difference in electrical conductivity between the water and the saline solution.

US granted even more restricted claim

ISR: 2 category A documents only

INTERNATIONAL SEARCH REPORT		International application No. PCT/JP2007/067578
A. CLASSIFICATION OF SUBJECT MATTER A01G27/00(2006.01)i, A01G1/00(2006.01)i, A01G7/00(2006.01)i, A01G13/00(2006.01)i, A01G25/00(2006.01)i According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) A01G27/00, A01G1/00, A01G7/00, A01G13/00, A01G25/00 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2007 Kokai Jitsuyo Shinan Koho 1971-2007 Toroku Jitsuyo Shinan Koho 1994-2007 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant part thereof	Number of pages
A	JP 2001-292643 A (Taiyo Kogyo Kabushiki Kaisha), 23 October, 2001 (23.10.01) Full text; all drawings (Family: none)	
A	JP 2003-506051 A (E.I. Du Pont De Nemours & Co.), 18 February, 2003 (18.02.03), Full text; all drawings & US 6484439 B1 & WO 2001/010192 A1 & EP 1530896 A2	1-13

Only A documents

Only JP publications

EP-A4: Supplementary EP search report



SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

EP 07 82 8221

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 1 695 615 A1 (UNIV LAVAL [CA]) 30 August 2006 (2006-08-30) * paragraph [0011] - paragraph [0013]; figures * -----	1	INV. A01G27/00 A01G1/00 A01G7/00 A01G13/00 A01G25/00 A01G31/02

Also seen by CA and US examiners

US20070376748		US2006257213 A1 - 16 November 2006	
US20070376748		US2006257213 A1 - 16 November 2006	
EP20070828221	X	EP1695615 A1 (UNIV LAVAL [CA]) - 30 August 2006 * paragraph [0011] - paragraph [0013]; figure - *	1
US20070376748		CA2498077 A1 (UNIV LAVAL [CA]) - 23 August 2006	
US20070376748		CA2498070 A1 (SOLENO TEXTILES TECH INC [CA]) - 23 August 2006	

comparing citations in CCD

Explanations for substantial differences

- Examiners may have applied **different prior art**
 - Different prior art searches, i.e. prior art documents
 - Different priority dates applied
- Differences in **national legislation** (exclusions) or **case law**
- Individual examiner's views/experience
- Patents do not belong to same simple family, i.e. applicants have sought protection for different subject matter (e.g. continuations/divisions); descriptions most likely differ

Reasons for additional citations/searches

- Lack of trust in other work product, e.g. if
 - ISR with only category A documents
 - ISR including citations of only one single jurisdiction
- Claims amended before or with national phase entry (e.g., if ISRs with X citations)
- Claims amended during national phase examination
- Language skills of examiners
- Familiarity/expertise of examiner with relevant documentation
- Strict prior art disclosure requirement, for example in the US

CONCLUSIONS

- ISR and WO may be very **useful for applicants** to assess potential success of application before investing in national phase entries
- ISR and WO may be of **limited utility for examiners**, in particular, when claims are amended for national phase entry, and additional prior art searches often appear to be needed in national phases.

Family table for PCT NPEs sample cases

Case studies BH, LK, MY, TH, BT, PH, KH, LA workshops														
Status: Aug 17, 2016														
Simple Family														
National Application Numbers	PCT Member of Family	Size of Inpadoc Family	Number of Simple Families in Inpadoc Family	Grants	Withdrawn or Lapsed or Abandoned	Refused or Rejected	Pending	Earliest priority/first/last grant dates	Pending range	Grants but in Extended Family	Observations Observations ISR (only A?)	Observations lack of unity (in ISR, or national reports)	Supplementary prior art searches in national phases (e.g. EP-A4)	main claims available in English (different, equivalent, equal to WO-A1/2? To grants in other jurisdictions?)
BH 20080018 MY 149627A PH 1-2008-502595 TH?	PCT/KR2007/00247 3 stable composition	24	1	AU, CA, EA, EP, US, JP, CN, 2x KR, UA, MY, MA, MX, NZ, UA, (CR, SV, GT), PH			BH	2006-05-22 KR(2); 2009-09-18 KR; 2016-01-06 EP	3-10		only A ISA=KR	no, 2 KR grants are the 2 priorities	EP-A4 JP more than ISR AU more than ISR US more than ISR	MY equal to WO-A1 AU-B different to WO-A1: one substantial difference (lyophilizing) EP-B a bit narrower US-B only method (a bit narrower than AU) PH has US main claim as composition
BH 20090030 LA 96 MY 147396A PH 1-2009-500273 TH?	PCT/JP2007/06757 8 plant cultivation	34	7	AP, AU, 2x CN, US, NZ, CA, KR, EA, JP, MA, MX, MY, TW, UA, E(12g), PH			EP, BH	2006-09-20 JP(2); 2008-09-03 JP; 2014-04-01 TW	2-8+	JP	only A, only JP ISA=JP		EP-A4 CA, US more than ISR add prior art by CA seen also by US;	AU, JP, MY equal to WO-A1; CA is narrower; US narrower than CA PH mc equal to US mc
BH? KH 2012/0150 MY 155685A PH 1-2013-501448 TH?	PCT/JP2012/00023 7 solid liquid separation	16	1	AU, CA, CN, EP, JP, KR, MY, RU,				2011-01-24 JP(2); 2012-02-08 JP;	1-5		only A ISA=EP		JP, KR, US more than ISR	AU, CA, mc equal to WO-A1
BH 20080005 MY 150185A PH none TH?	PCT/EP2007/05301 5 energy conversion	19												
BH 20090006 MY 153238A PH 1-2009-500135 TH?	PCT/EP2007/05738 0 cryogenic engine	24												
BH 20090047 MY 151581A PH 1-2009-501523 TH?	PCT/EP2008/05010 3 insulated tank	30												
BH 20090066 MY 150324A PH none TH?	PCT/US2008/00119 remote control	7												
BH 20090019 MY 151783A PH 1-2009-500417 TH?	PCT/EP2007/053161 compressed air engine	25												
BH 20090028 MY 148768A PH 1-2009-500495	PCT/US2007/07432 7 secure transaction	21	1	AU, US, NZ, TW, GB, EA, MX, MY, UA,	US, PH	EP, KR, JP business method	BH	2006-09-18 US+EP, GB; 2009-01-07 GB; 2014-09-21 TW	3-8		Y, A, only US ISA=US		JP, US more than ISR AU only ISR	AU and US equal and different from WO GB different from AU and US MY appears 2b equal to GB CA, EP and AU different from WO-A1; subtle differences of EP and AU re catalyst layer details; CA and AU very similar but no
BH 20090024 MY 150103A PH none TH?	PCT/EP2007/050357 polyolefin	15	1	AU, CN, CA, KR, JP, EP, MX, MY, RU, FI			BH	2006-06-14 FI; 2010-11-15 FI; 2015-08-05 EP	4-9		X,Y ISA=EP		EP-A4 add EP prior art not seen by others AU only ISR	

Systematic analysis of samples of **pending cases** at workshops with

- Smaller IPOs: Bahrain, Sri Lanka, Laos, Cambodia, Qatar, Bhutan, Oman, Mongolia, Papua New Guinea, Pakistan, Iran
- Medium IPOs: Malaysia, Thailand, Philippines, Viet Nam, Indonesia

What work products are available for other PCT national phase entries in other jurisdictions, and how useful are they?

How to implement systematic passive work-sharing to make examination more efficient?

- Mostly older applications
- > more likely that national phase examination is completed

Evidence & conclusions derived from sample set

- Large patent families: **10++ members**
 - Many work products from many other national phases can be utilized
- Large fraction of families with grants: **>95%**
 - **Most likely a patent can be granted; but which claims from which country are best?**
 - The first foreign grant (PPH; e.g. for the sake of speediness)?
- Wide range of pendencies: **3-10 years** after priority filing
 - What is backlog? How long to wait?
- **Granted claims substantially different** from claims granted in other jurisdictions: **>60%**
 - **Careful selection of suitable claim sets**
- Granted claims different from WO-A1/2 claims: **>90%**
- **Additional prior art searches in national phases: >90%**
 - Take into account for claim selection or decision to await further results
 - Do not solely rely on ISR
- Grants in some, rejections and withdrawals on other jurisdiction: **20%**
 - Carefully analyze reasons for rejections/substantial withdrawals

What are the implications of transparency?

- Examination work products are **easily visible**, after application is published, for
 - Examiners
 - Third parties
- Foreign examination work products are **usable** for
 - Examiners in national phase
 - Managers to monitor examination quality
 - Third parties to monitor prosecution, examination quality, prepare oppositions,
....
- **Available** foreign examination work products **cannot be ignored** for national phase examination
 - Even examination of PPH requests need to include a check if other work products from further national phases have become available, in particular relevant prior art.

Observations/Conclusions

- Duplication/repetition of work is not a bad thing as such
 - Improves the overall quality of patents
 - For PCT NPEs, examiners should never exclusively rely only on ISR/WO
 - However, work products become only gradually available and visible
 - Awaiting results from other national phases may be an option to enhance quality and efficiency, particularly in under-resourced Offices
 - Most recent or last grant is potentially of best quality
 - What does this mean for PPH?
- Currently examination of PCT NPEs starts in many jurisdictions at almost the same time; no coordination
- Cooperative examination would be the ideal way for improving
 - Quality of all patents of a family, and not just those ones granted last, and
 - Efficiency of procedures overall

Observations/Conclusions

- Sharing of application and legal status data (including NPE) still needs to improve, e.g. for regional cooperation
- Family building needs to be expanded, in particular with a view to IPOs in emerging and developing economies
- Patent families are global: Only platforms for work-sharing with global coverage make work-sharing efficient
 - regional solutions are not really useful
- Which work-products from other nation phases to use?
 - 'Trusted' Offices?

Sample competencies of examiner

Field: **Work-sharing**

- Examiner is capable of identifying patent family relations for given application [**basic**]
- Examiner is capable of researching examination status of family members [**basic**]
- Examiner is capable of retrieving examination work products for family members [**basic**]
- Examiner is capable of assessing applicability/utility of examination work products to application awaiting examination [**medium**]
 - Claims granted in other jurisdictions
 - Search and examination reports prepared in other jurisdictions
- Examiner is capable of selecting suitable claim set for grant [**medium**]
- Examiner is capable of communicating reasons for selecting a claim set and motivating applicant to adopt proposal [**medium**]
- Examiner is capable of utilizing foreign search reports/citations for preparing a search report for a pending application [**medium**]
- Examiner is capable of utilizing foreign examination reports/rejection rulings for preparing an examination report for a pending application [**advanced**]
- Examiner is capable of utilizing foreign examination reports for preparing a rejection ruling for a pending application [**advanced**]

Thank you

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