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

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Head, Cooperation on Examination and Training Section
PCT International Cooperation Division

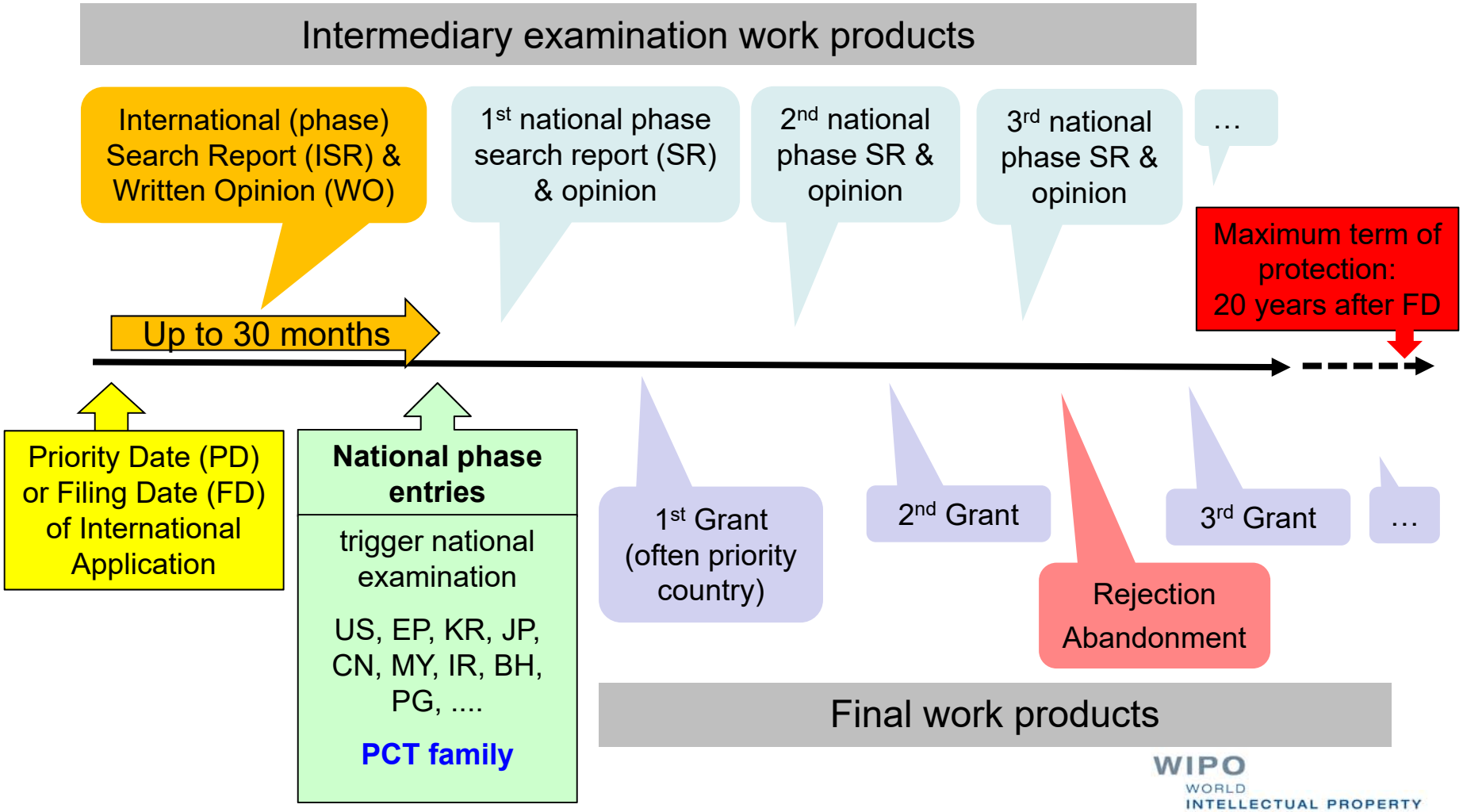
Moscow
September 16, 2019

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



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WO2014136037

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+)

WO2010098129 Inpadoc **family table** in Espacenet

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

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

Grant

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

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

Grant

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

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
Тасака, Казухико	ДЖЭПЭН ОЙЛ, ГЭЗ ЭНД МЕТАЛЗ НЭШНЛ КОРПОРЕЙШН, ИНПЕКС КОРПОРЕЙШН, (+4)	B01D3/00	C10G2/00	EA201170995 (A1) 2012-02-28 EA018772 (B1) 2013-10-30	2009-0

Grant

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

publication date

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

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
TASAKA KAZUHIKO [JP]	JAPAN OIL GAS & METALS JOGMEC [JP] INPEX CORP [JP] (+4)	B01D3/00	B01D53/14	EP2402418 (A1) 2012-01-04 EP2402418 (A4) 2012-11-21 Global Dossier	2009-02-27

No grant

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

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

Grant

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WO2010098129 Status EP family member

Europäisches Patentamt
European Patent Office
Office européen des brevets

European Patent Register

About European Patent Register | Other EPO online services

Smart search | Advanced search | Help

EP2402418

- European procedure
- About this file
- Legal status
- Federated register
- Event history
- Citations
- Patent family
- **All documents**

Quick help

- Is it possible to download documents?
- Is it possible to print a list of all the documents?
- Can I sort the list of documents?
- Is it possible to open one of the documents?
- Can I open multiple documents in separate windows?
- Is it possible to print a document?

Maintenance news

All documents: EP2402418

Dossier alert: RSS Email

Refine search | Selected documents | Zip Archive | Espacenet | Submit observations | Report error

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; ..)

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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

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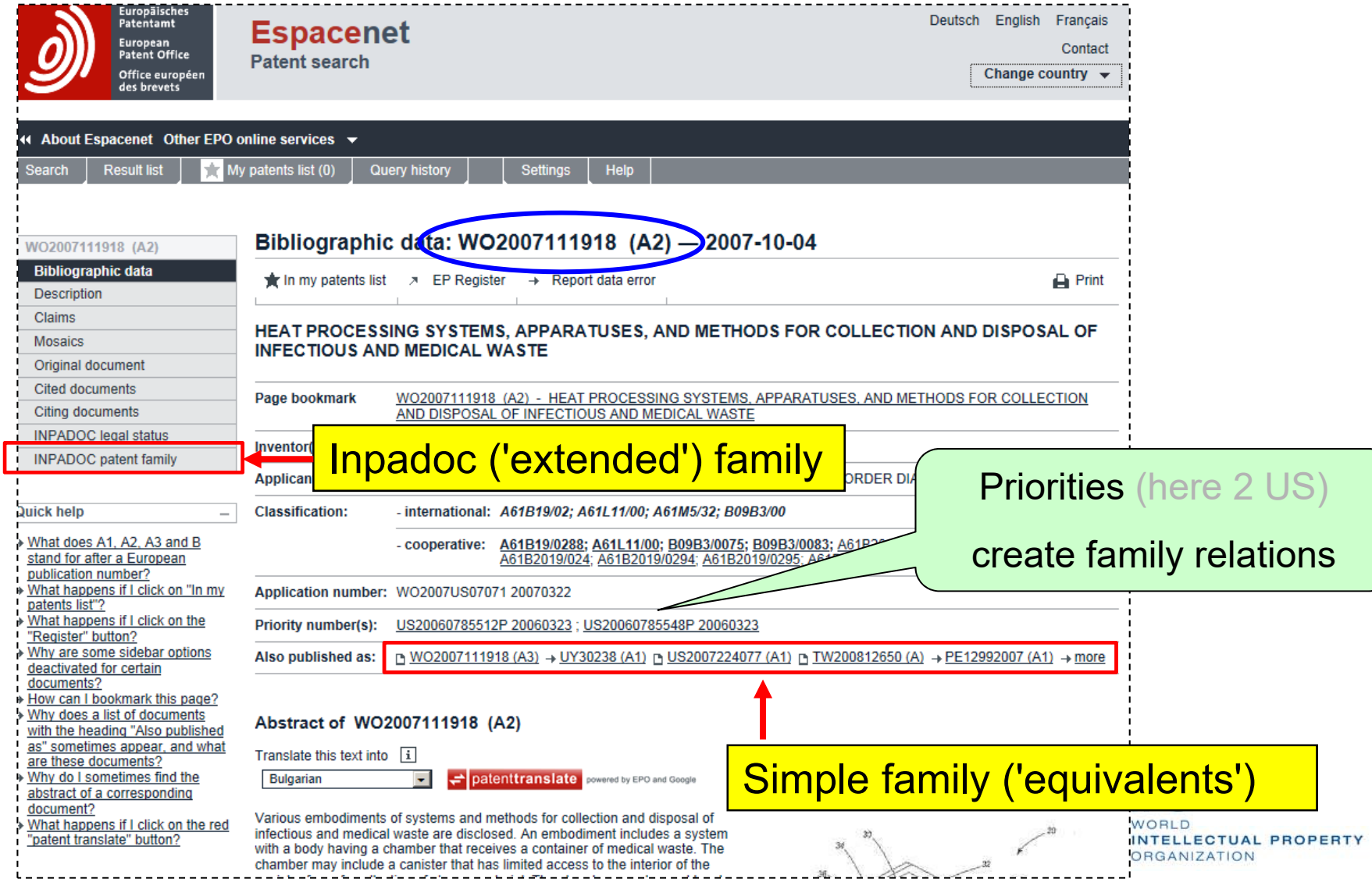
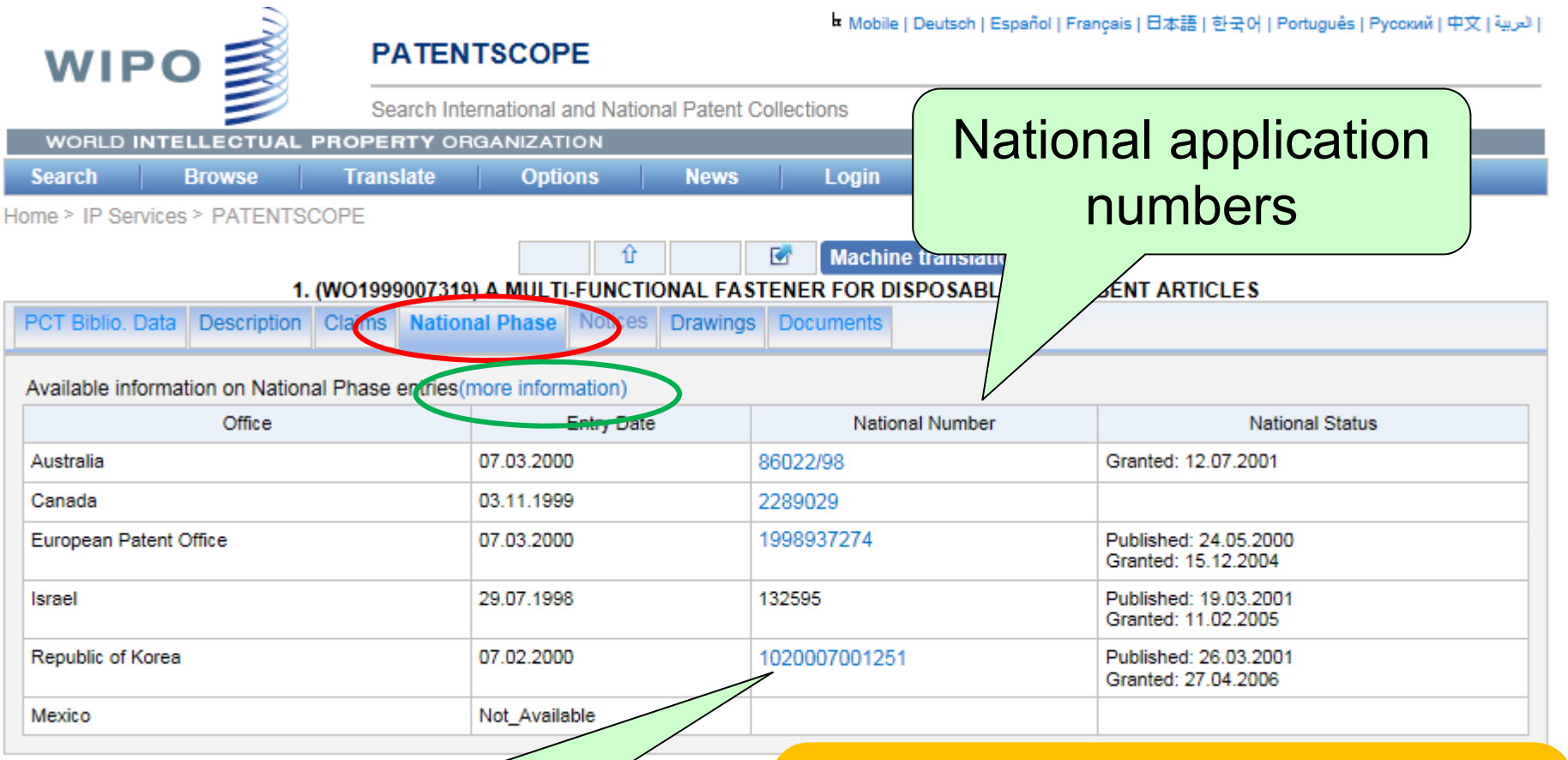
Source of family information: Espacenet



National phase entries in Patentscope



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**, **2x**US
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

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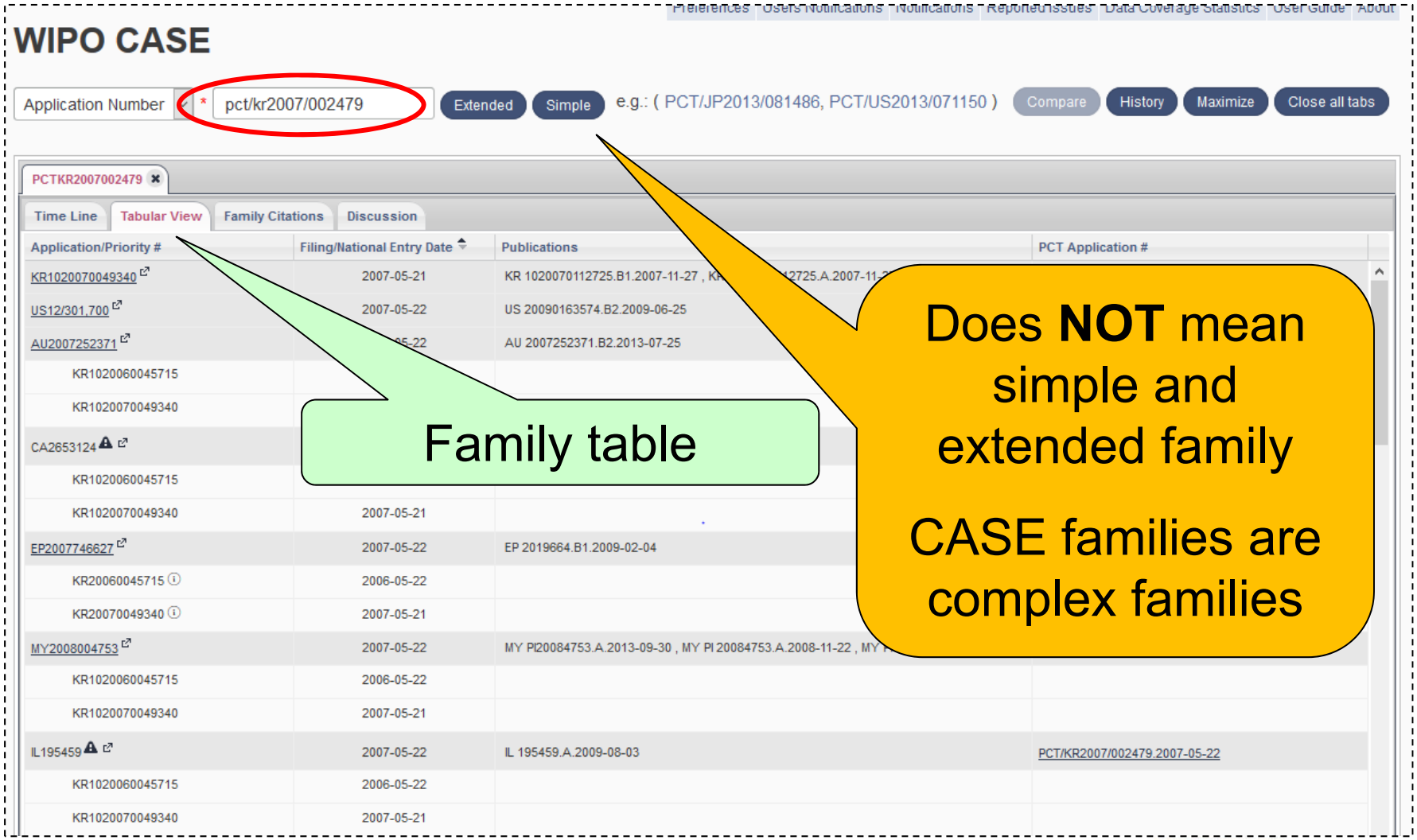
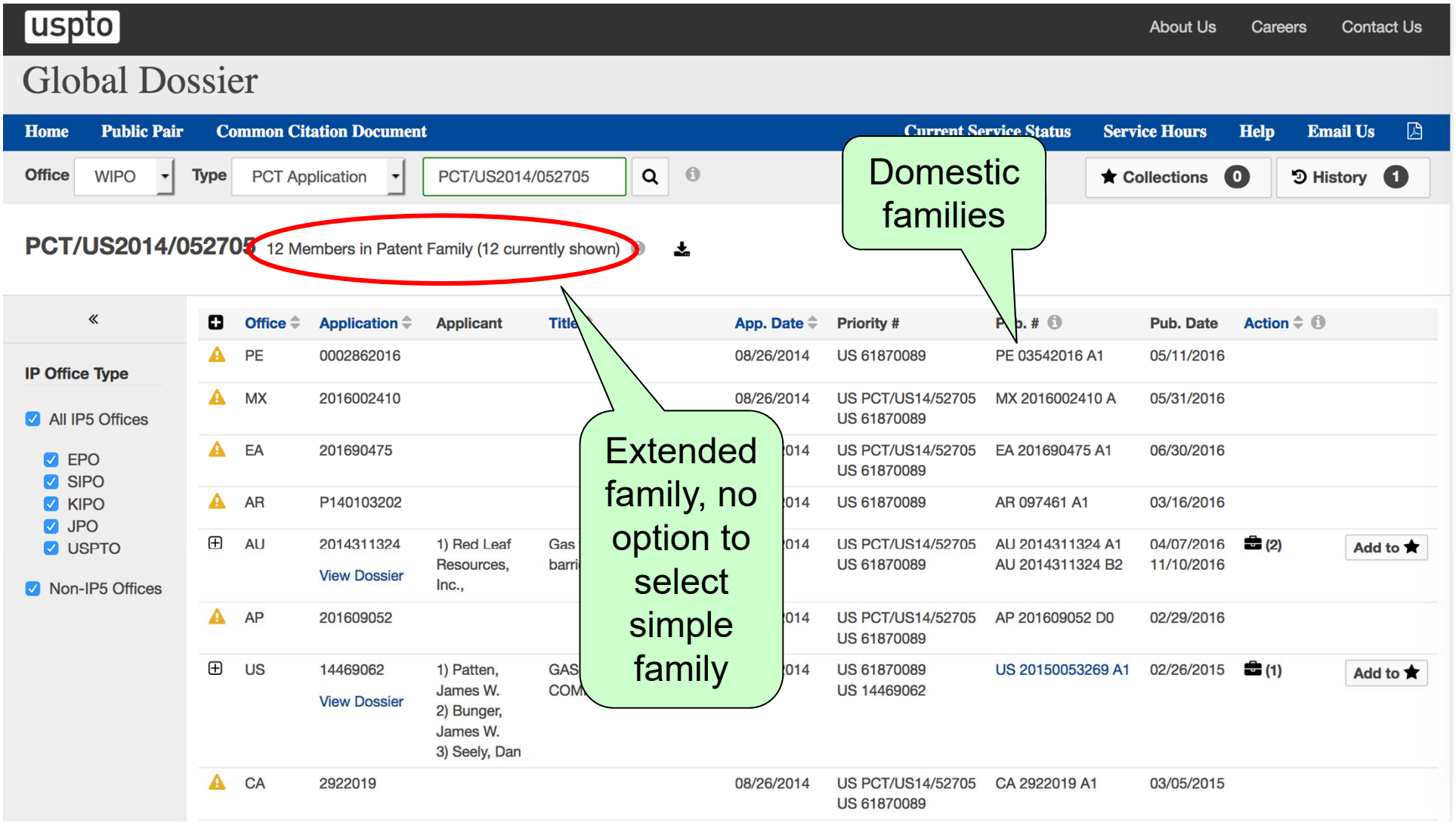
Status Jan 2018

WIPO CASE family table



PCT/US2014/052705

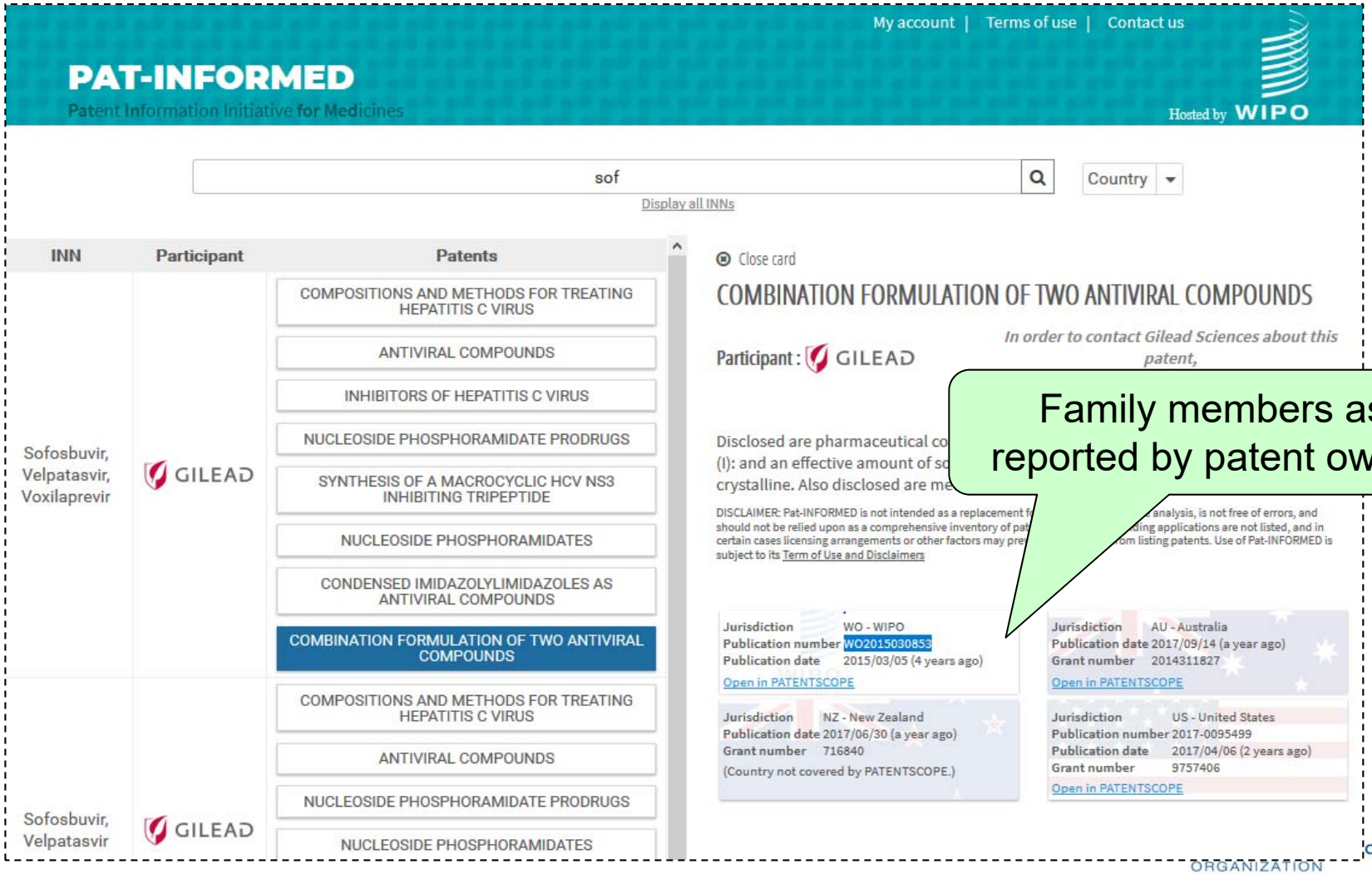
Patent family in Global Dossier (USPTO)



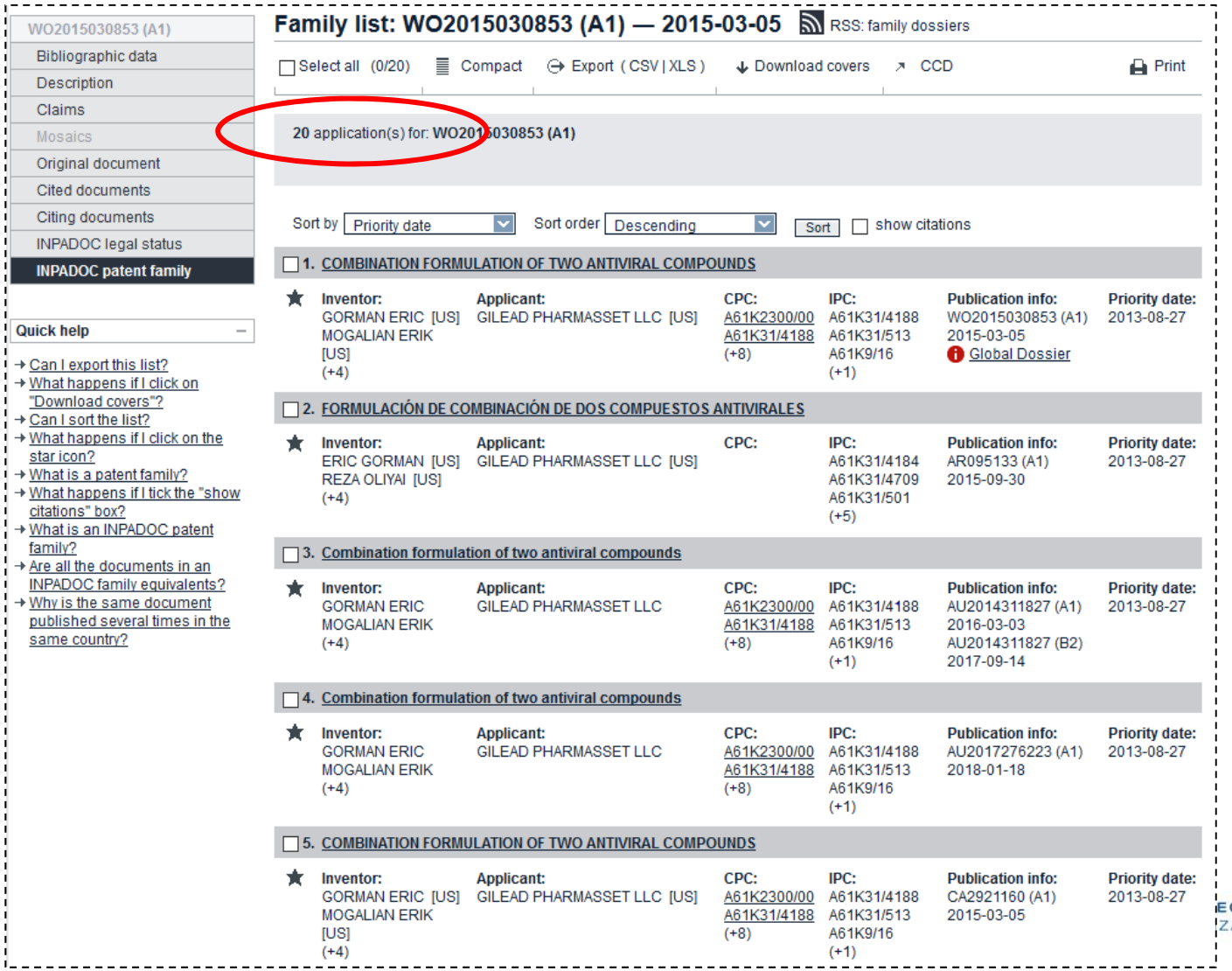
Comparison of family data of 4 samples

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, 2x**US**, **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



Corresponding Inpadoc family information



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

Select all (0/20) | Compact | Export (CSV | XLS) | Download covers | CCD | Print

20 application(s) for: **WO2015030853 (A1)**

Sort by Priority date | Sort order Descending | Sort | show citations

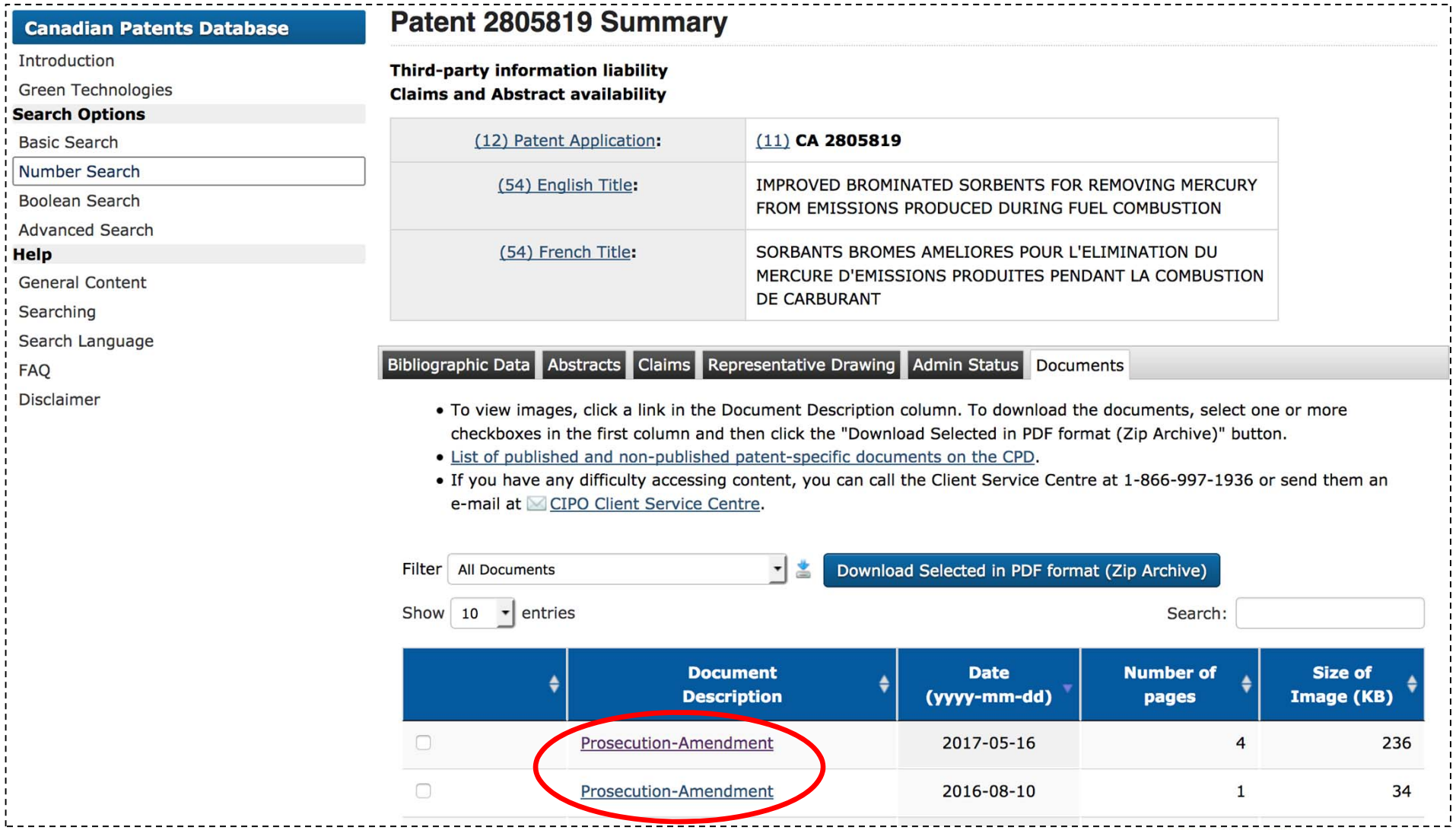
	Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
1. COMBINATION FORMULATION OF TWO ANTIVIRAL COMPOUNDS	GORMAN ERIC [US] MOGALIAN ERIK [US] (+4)	GILEAD PHARMASSET LLC [US]	A61K2300/00 A61K31/4188 (+8)	A61K31/4188 A61K31/513 A61K9/16 (+1)	WO2015030853 (A1) 2015-03-05 Global Dossier	2013-08-27
2. FORMULACIÓN DE COMBINACIÓN DE DOS COMPUESTOS ANTIVIRALES	ERIC GORMAN [US] REZA OLIYAI [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	GORMAN ERIC MOGALIAN ERIK (+4)	GILEAD PHARMASSET LLC	A61K2300/00 A61K31/4188 (+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	GORMAN ERIC MOGALIAN ERIK (+4)	GILEAD PHARMASSET LLC	A61K2300/00 A61K31/4188 (+8)	A61K31/4188 A61K31/513 A61K9/16 (+1)	AU2017276223 (A1) 2018-01-18	2013-08-27
5. COMBINATION FORMULATION OF TWO ANTIVIRAL COMPOUNDS	GORMAN ERIC [US] MOGALIAN ERIK [US] (+4)	GILEAD PHARMASSET LLC [US]	A61K2300/00 A61K31/4188 (+8)	A61K31/4188 A61K31/513 A61K9/16 (+1)	CA2921160 (A1) 2015-03-05	2013-08-27

ECTUAL PROPERTY
ZATION

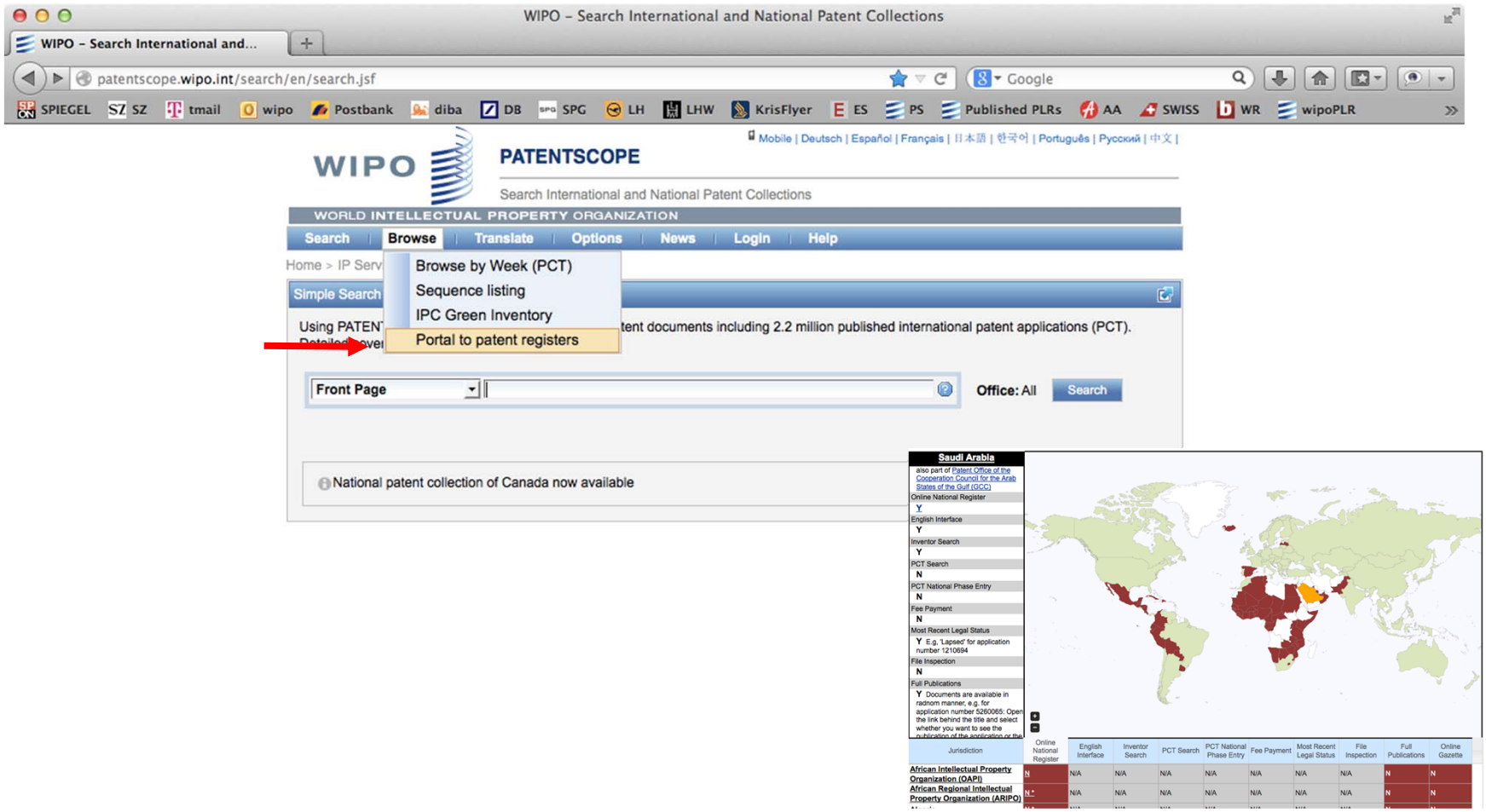
What is available for work-sharing?

- 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



WIPO patent register portal



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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'

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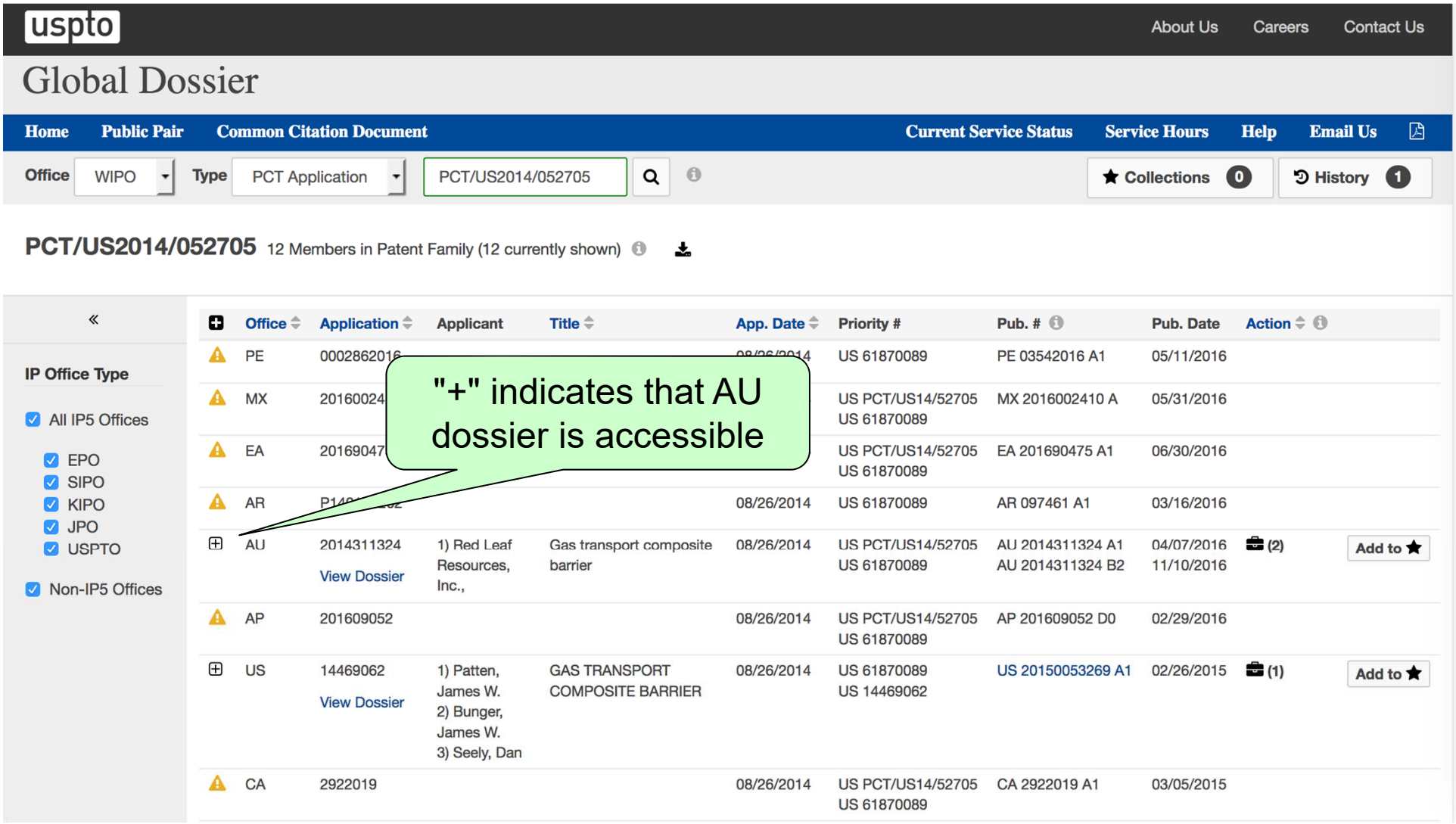
PCT/US2014/052705

Global Dossier at USPTO



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

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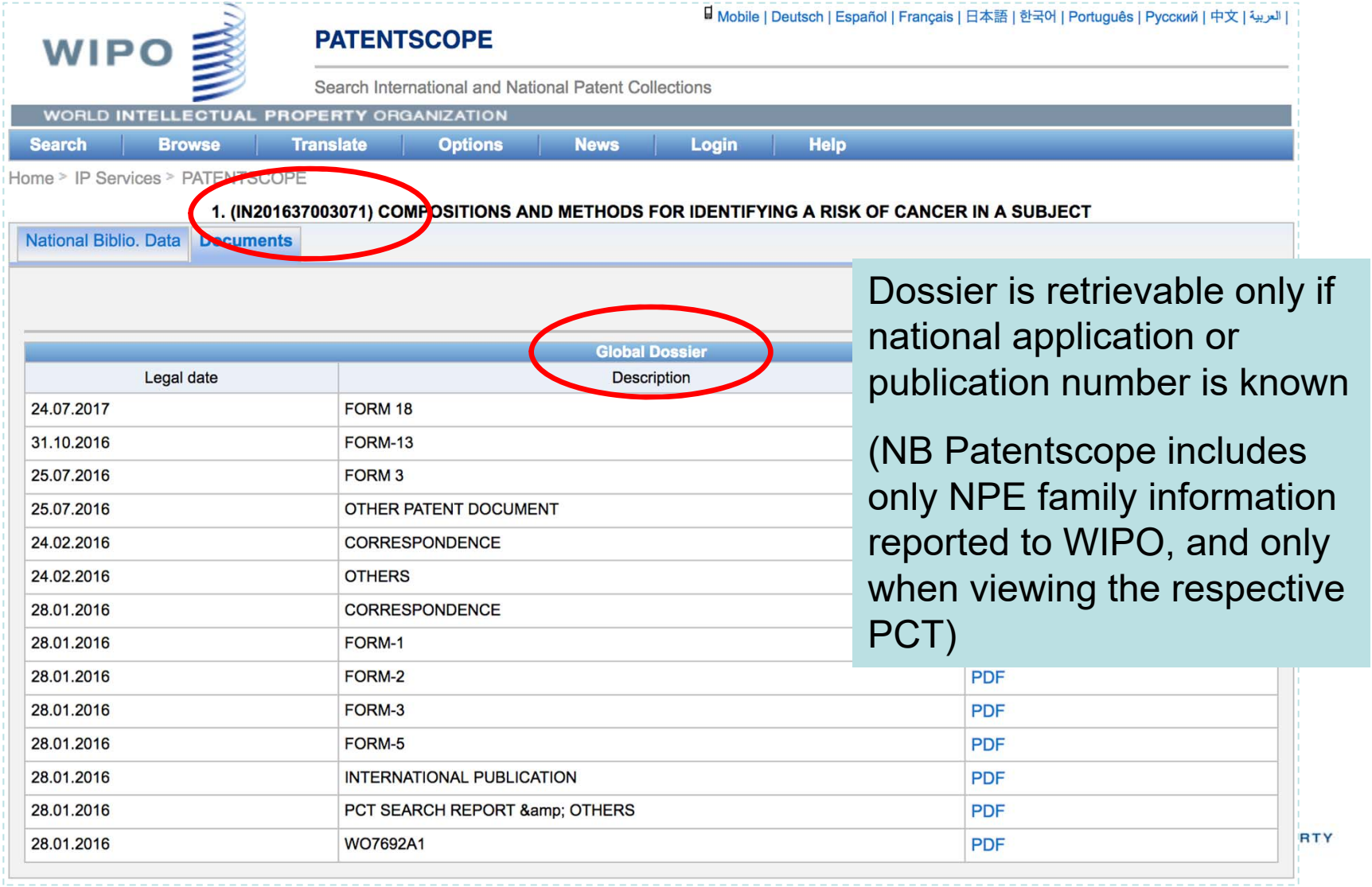
pAU2014311324

'GD' in Patentscope (WIPO CASE data)



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 man- ner 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 man- ner 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

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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	Relevant to claim No.
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

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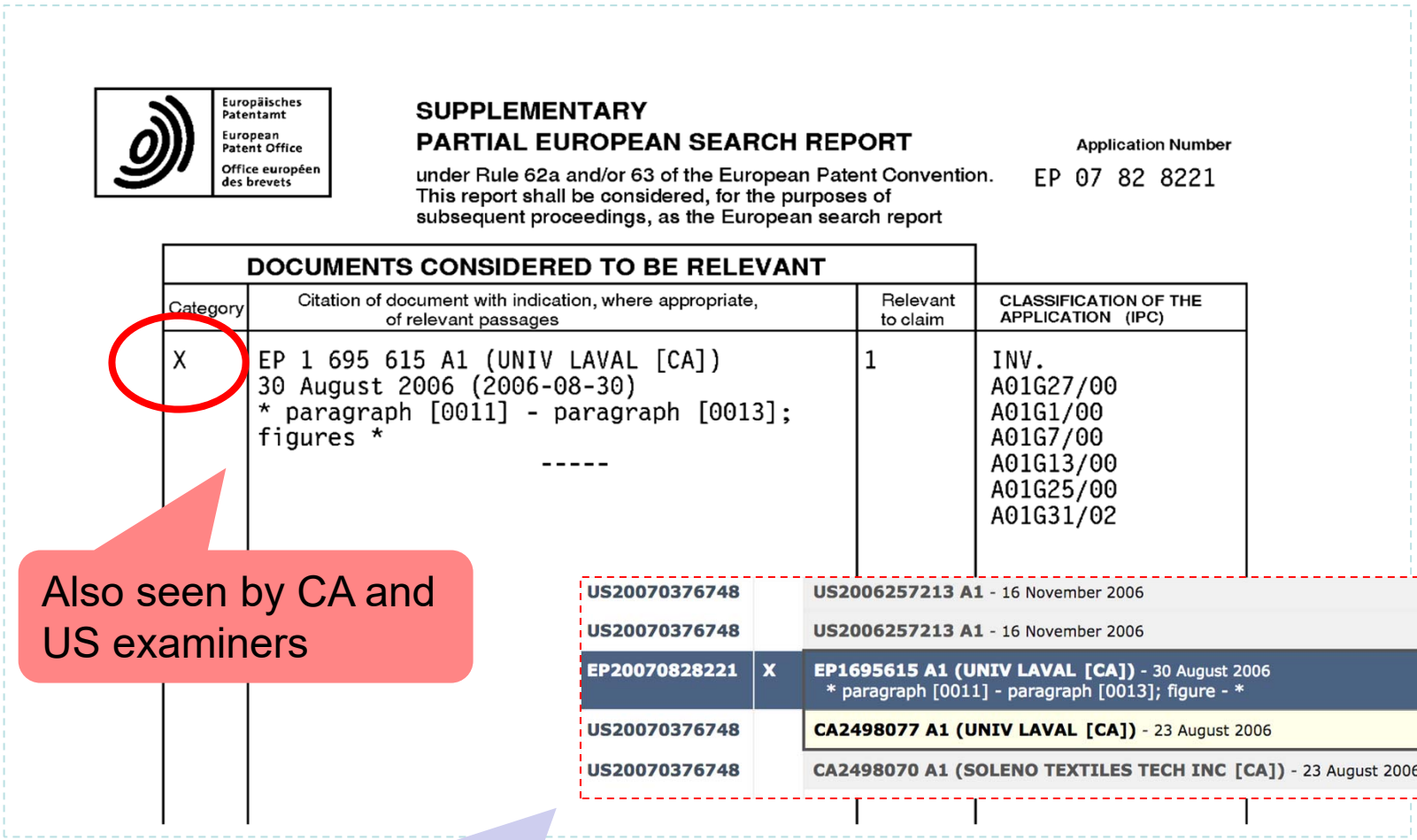
EP-A4: Supplementary EP search report



Europäisches Patentamt
European Patent Office
Office européen des brevets

SUPPLEMENTARY
PARTIAL EUROPEAN SEARCH REPORT

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

Application Number
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

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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

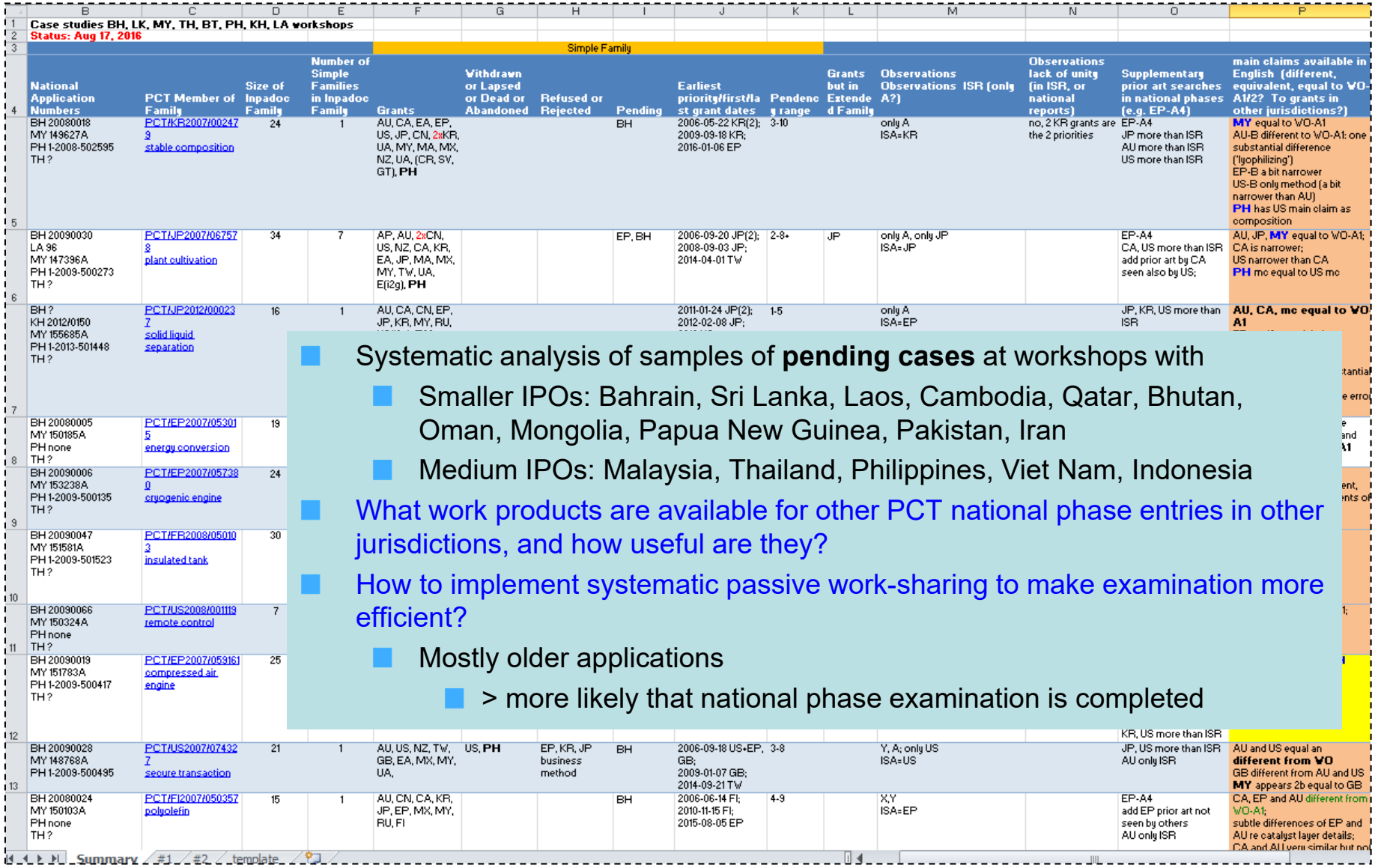
Reasons for additional citations/searches

- 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 Dead or Abandoned	Refused or Rejected	Pending	Earliest priority/first/last grant dates	Pendency 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/KR2007/002479 stable composition	24	1	AU, CA, EA, EP, US, JP, CN, 2xKR, 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/JP2007/067578 plant cultivation	34	7	AP, AU, 2xCN, US, NZ, CA, KR, EA, JP, MA, MX, MY, TW, UA, E(i2g), **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/JP2012/000237 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/EP2007/053015 energy conversion	19												
BH 20090006 MY 153238A PH 1-2009-500135 TH ?	PCT/EP2007/057380 cryogenic engine	24												
BH 20090047 MY 151581A PH 1-2009-501523 TH ?	PCT/FR2008/050103 insulated tank	30												
BH 20090066 MY 150324A PH none TH ?	PCT/US2008/001119 remote control	7												
BH 20090019 MY 151783A PH 1-2009-500417 TH ?	PCT/EP2007/059161 compressed air engine	25												
BH 20090028 MY 148768A PH 1-2009-500495	PCT/US2007/074327 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 an **different from WO** GB different from AU and US **MY** appears 2b equal to GB
BH 20080024 MY 150103A PH none TH ?	PCT/FI2007/050357 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	CA, EP and AU different from WO-A1; subtle differences of EP and AU re catalyst layer details; CA and AU very similar but not

- 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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