

Topic 3: Growing transparency of examination in the PCT National Phases

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

> Pretoria February 3, 2020

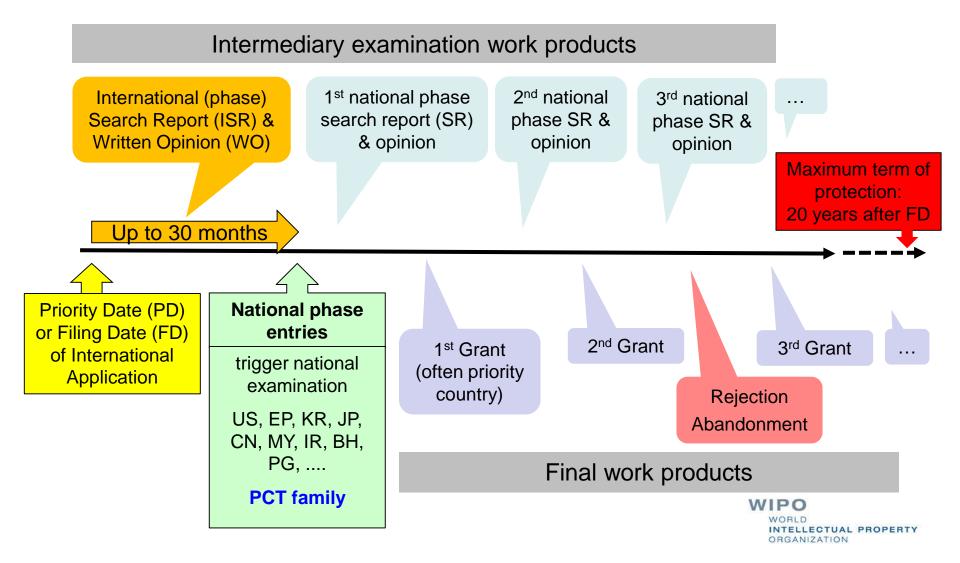
Agenda

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;...)

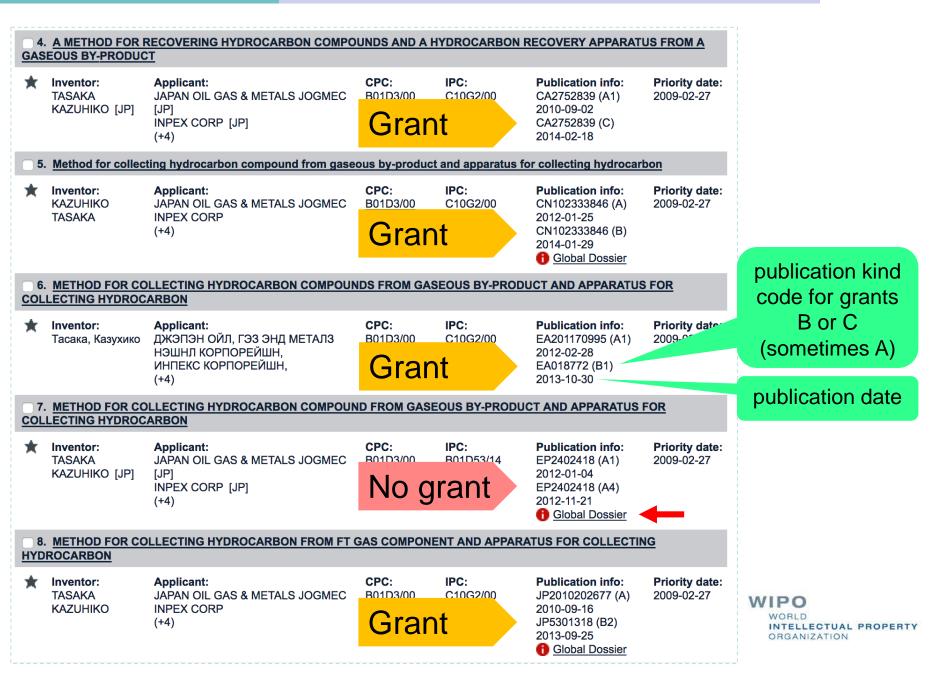
Search strategies

- 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+)



WO2010098129 Inpadoc family table in Espacenet





WO2010098129 Status EP family member

Image: Second system Europäisches Patentamt European Patent Office Office européen des brevets Image: Second system About European Patent Register	Patent and European Patent Office Office européen des brevets About European Patent Register Other EPO online services ~														
Smart search Advanced search	1 Help														
EP2402418	All documents: EP2402418 Dossier alert: RSS Kemail														
European procedure About this file	Refine search Selected documents Zip Archive Selected documents Espacenet Submit observations														
Legal status Federated register Event history	All documents(38) Search														
Citations Patent family	Date Document type														
All documents	18.09.2017 Closing of application														
	07.06.2017 Application deemed to be withdrawn (translations of claims/payment missing from 01-04-2012)														
Quick help –	04.04.2017 Notice drawing attention to the payment of the renewal fee and additional fee														
 → Is it possible to download documents? → Is it possible to print a list of all 	21.12.2016 Bibliographic data of the European patent application														
the documents? → Can I sort the list of documents?	21.12.2016 Communication about intention to grant a European patent														
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Maintenance news +	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; ..)

WORLD INTELLECTUAL PROPERTY ORGANIZATION

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 <u>reported</u> 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

...

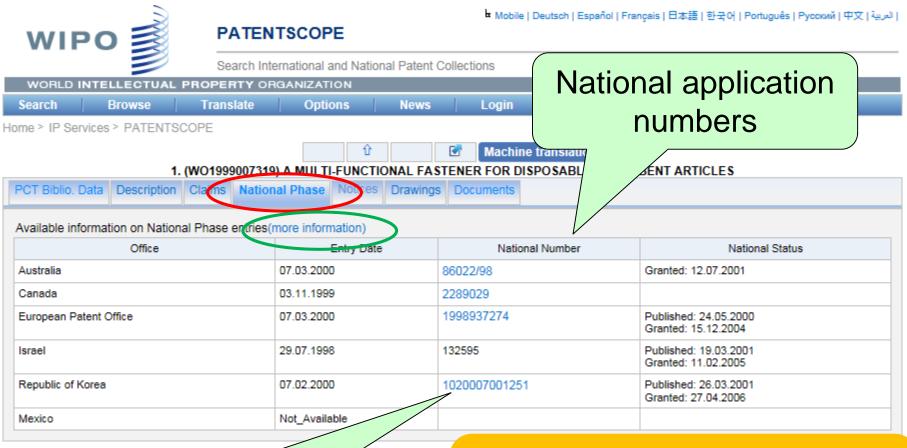
Other specialized platforms, e.g. WIPO's Pat-Informed



Source of family information: Espacenet

Éuropäisches Patentamt European Patent Office Office européen des brevets	Espacenet Patent search	Deutsch English Français Contact Change country ▼
↔ About Espacenet Other EPO of the o	online services 🔻	
Search Result list 📩 🙀 My	y patents list (0) Query history Settings Help	
WO2007111918 (A2)	Bibliographic data: WO2007111918 (A2) — 2007-10-04	
Bibliographic data Description	★ In my patents list > EP Register → Report data error	🖨 Print
Claims Mosaics Original document	HEAT PROCESSING SYSTEMS, APPARATUSES, AND METHODS FOR COLLECTIO INFECTIOUS AND MEDICAL WASTE	N AND DISPOSAL OF
Cited documents Citing documents	Page bookmark WO2007111918 (A2) - HEAT PROCESSING SYSTEMS, APPARATUSES, AND MET AND DISPOSAL OF INFECTIOUS AND MEDICAL WASTE	HODS FOR COLLECTION
INPADOC legal status INPADOC patent family	Applican Inpadoc ('extended') family	Priorities (here 2 US)
Quick help –	Classification: - international: A61B19/02; A61L11/00; A61M5/32; B09B3/00	
What does A1, A2, A3 and B stand for after a European publication number?	- cooperative: <u>A61B19/0288; A61L11/00; B09B3/0075; B09B3/0083; A61B2019/024; A61B2019/0294; A61B2019/0295; A61B20019/0295; A61B2000000000000000000000000000000000000</u>	create family relations
What happens if I click on "In my patents list"?	Application number: WO2007US07071 20070322	
What happens if I click on the "Register" button?	Priority number(s): US20060785512P 20060323 ; US20060785548P 20060323	
Why are some sidebar options deactivated for certain	Also published as: <u> <u> <u> </u> <u> </u></u></u>	→ <u>PE12992007 (A1)</u> → <u>more</u>
documents? + How can I bookmark this page? + Why does a list of documents with the heading "Also published as" sometimes appear, and what	Abstract of WO2007111918 (A2)	
are these documents? <u>Why do I sometimes find the</u> <u>abstract of a corresponding</u> document?		mily ('equivalents')
<u>What happens if I click on the red</u> <u>"patent translate" button?</u>	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

National phase entries in Patentscope

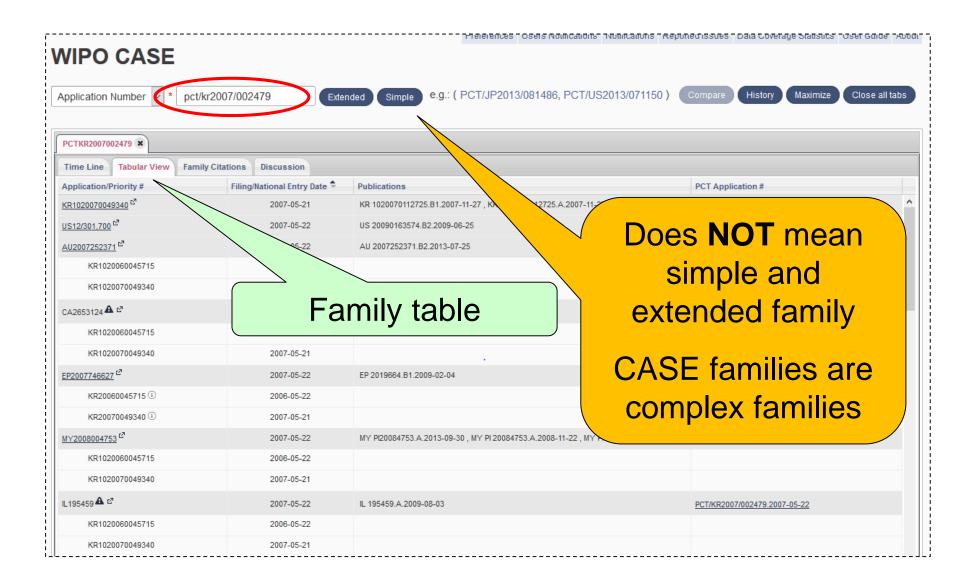


Hyperlinked to national registers

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

Currently some 60 jurisdictions

WIPO CASE family table



Patent family in Global Dossier (USPTO)

uspto	About Us Careers Contact Us														
Global Dos	Global Dossier														
Home Public Pair	Iome Public Pair Common Citation Document Email Us 🖻														
Office WIPO -															
PCT/US2014/052705 12 Members in Patent Family (12 currently shown)															
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Comparison of family data of 4 samples

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Status as of Jun 3, 2019	EPO Inpadoc	USPTO GD	Patentscope NPE	WIPO CASE	Consolidated	Google
PCT/KR2007/002479	25: AU, BR, CA,	= Inpadoc	18 : AU, CA, CN,	22: AU, BR, CA,	34: AU, BR, CA,	25: AU, BR, CA,
stable composition	CN, CR, EA, EC,		CO , CR, DZ, EA,	CN, CR, EC, EP,	CN , CO, CR, DZ,	CN, CR, EA, EC,
	EP, GE, GT , HK ,		EG , EP, GE, IN, JP,	GE, ID , IL, IN, JP,	EA, EC, EG, <mark>EP</mark> ,	EP, GE, GT, HK, IL,
	IL, JP, 2x KR, MA,		MX, NO, NZ, PH ,	KR, MA, MN , MY,	GE, GT, HK, ID, IL,	JP, 2xKR, MA, MX,
	MX, MY, NZ, SV,		US	MX, SG , SV, VN ,	JP, 2xKR, MA,	MY, NZ, SV, TN,
	TN, UA , US, ZA			US	MN, MX , MY, NO,	UA, US, ZA
	(./.ES)				NZ, PH, SG, SV,	(./.ES)
					TN, UA, <mark>US</mark> , VN,	
					ZA	
PCT/JP2010/001325	12 : AU, BR, CA,	= Inpadoc	7: AU, CA, CN, EA,	13 : AU, BR, CA,	15: AU, BR, CA,	12: AU, BR, CA,
collecting hydrocarbon compound	CN, EA, EP, JP,		EP, US	CN, EP, ID , JP, MY,	CN, EA, EP, ID, JP,	CN, EA, EP, JP,
	MY, 2xUS, ZA			TH, VN , 2xUS	MY, TH, 2x <mark>US</mark> , VN,	MY, 2xUS, ZA
					ZA	
PCT/US2014/052705	13 : AR, AU, CA,	= Inpadoc + IL	13: AU, CA, CN,	13 : AR, AU, BR,	19 : AR, AU , BR,	15 : AP , AR, AU,
composite barrier	CL, CN, EA, EP,		EA, EP, GE , ID, IL,	CL, CN, EA, EP, ID,	CA, CL, CN , EA ,	CA, CL, CN, EA, EP,
	MA, MX, PE, TN ,		MA, MX, PE, UA	IN , MA, MX, MY	EP , GE, ID, IN,	IL , MA, MX, PE,
	US				MA, MX, MY, PE,	TN, US
					TN, UA, US	
PCT/IB2016/000305	21: AR, AU, BR,	= Inpadoc + IL	20: AU, CA, CN,	19 : AR, AU, BR,	30: AR, AU, BR,	21: AU, BR, CA,
mercury based compound	CA, CL, CN, CO,		CO, CR, EA, EP,	CN, CU, DO, EA,	CA, CL, CN , CO,	CL, CN, CO, CR,
	CR, CU, DO, EA,		GE , IL, JP, KR, MX,	EP, ID , IN , JP, KR,	CR, CU, DO, EA ,	CU, DO, EA, EP, IL,
	EP , JP, KR, MX,		2xNI , PE, PH, SG,	MX, MY , PE, PH,	EP, GE, ID, IL, IN,	JP, KR, MX, PE,
	PE, PH, SG, TW ,		UA , US	VN, US	JP, KR , MX , MY,	PH, SG, TW, US
	US				2xNI, PE, PH , SG,	
					TW, VN, UA, US	
	Green Bold: prese	nt in all 4 databases				
	Black Bold: preser	nt only in one databas	se			
	Counts include PC	T applications				

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, ..

WIPO

RGANIZATION

TELLECTUAL PROPERTY

- RSS feeds enable examiners of other offices and other experts to be alerted of changes to status/dossiers
- Many registers enable deeplinking

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JOURNAL	Ranking ▼	•		Bibliography	Drawing
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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, ..)

WIPO WORLD INTELLECTUAL PROPERTY ORGANIZATION

What is available for work-sharing?

Secondary platforms ...

Espacenet ...

Includes Global Dossier

integrated access to Common Citation Document (CCD):

- viewing <u>and</u> 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'

WORLD INTELLECTUAL PROPERTY ORGANIZATION

Global Dossier at USPTO

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Global Do	Global Dossier														
Home Public Pair	ome Public Pair Common Citation Document Current Service Status Service Hours Help Email Us 🖻														
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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)

WIP	0	PATENTSCOP	E		G Mobile	Deutsch Es	spañol Français 日本語 한국어 Português Русский 中文	العربية
		Search International a	nd Natior	nal Patent Col	lections			
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04.07.0047	Legal date	FORM 18		Descr	ription		publication number is l	known
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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.

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

AU, JP granted initial claims

without any modification

CONTRACT ON CONTRACT OF CONTRACT.

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.



ISR: 2 category A documents only

INTERNATIONAL SEARCH REPORT	International appli	cation No.	
	PCT/JP2	007/067578	
A. CLASSIFICATION OF SUBJECT MATTER A01G27/00(2006.01)i, A01G1/00(2006.01)i, A 2006.01)i, A01G25/00(2006.01)i	A01G7/00(2006.01)i, .	A01G13/00	
according to International Patent Classification (IPC) or to both national class	assification and IPC		
3. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classif A01G27/00, A01G1/00, A01G7/00, A01G13/00,			
Documentation searched other than minimum documentation to the extent th Jitsuyo Shinan Koho 1922-1996 Jitsu Kokai Jitsuyo Shinan Koho 1971-2007 Torok	iyo Shinan Toroku Koho	1996-2007	
	1	torma uaad)	
lectronic data base consulted during the international search (name of data	i base and, where practicable, search	terms used)	
 DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate A JP 2001-292643 A (Taiyo Kogyo H) Kaisha), 	oriate, of the relevant	A docum	
DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropr A JP 2001-292643 A (Taiyo Kogyo I	riate, of the relevant Kabushile Only		

EP-A4: Supplementary EP search report



A

SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT

under Rule 62a and/or 63 of the European Patent Convention. EP 07 82 8221 This report shall be considered, for the purposes of subsequent proceedings, as the European search report

Application Number

		eport shall be considered, for equent proceedings, as the Eu									
DC	OCUMENTS CON	ISIDERED TO BE RELE									
Category		with indication, where appropriate t passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)							
so seen by	/ CA and	US20070376748		US20	06257213 A	1 - 16 November 2006	L				
S examine		US20070376748	US20070376748 US20			L - 16 November 2006					
	13	EP20070828221	x			UNIV LAVAL [CA]) - 30 August 2006 1] - paragraph [0013]; figure - *					
		US20070376748		CA24	2498077 A1 (UNIV LAVAL [CA]) - 23 August 2006						
		US20070376748	A2498070 A1 (SOLENO TEXTILES TECH INC [CA]) - 23 August 200								
		·				[[]				

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**

	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	P
	Case studies BH, LI Status: Aug 17, 2016		I, KH, LA w	orkshops											
3	Status: Aug II, 2010	•					Simple F-	amily							
4	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		Pending	Earliest priority/first/la st grant dates		but in Extende	Observations Observations ISR (only A?)	Observations lack of unity (in ISR, or national reports)		main claims available in English (different, equivalent, equal to VO- A1/2? To grants in other jurisdictions?)
Ì	BH 20080018 MY 149827A PH 1-2008-502595 TH ?	PCT/KB2007/00247 3 stable composition	24	1	AU, CA, EA, EP, US, JP, CN, 2%KP, UA, MY, MA, MX, NZ, UA, (CP, SV, GT), PH			ВН	2006-05-22 KR(2); 2009-09-18 KR; 2016-01-06 EP	3-10		oniyA ISA=KR	no, 2 KR grants are the 2 priorities	JP more than ISR AU more than ISR US more than ISR	MY equal to WD-A1 AU-B different to WD-A1: one substantial difference (l'upophilizing') 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, 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	PCT/JP2012/00023	16	1	AU, CA, CN, EP, JP, KB, MY, BU,				2011-01-24 JP(2); 2012-02-08 JP;	1-5		only A ISA=EP		JP, KR, US more than ISB	AU, CA, mc equal to VO A1
!	MY 155685A PH 1-2013-501448 TH ?	solid liquid separation		S	•		•		•	-		g cases at v os, Cambod		•	stantia , ie erro,
i	BH 20080005 MY 150185A PH none TH ?	PCT/EP2007/05301 5 energy conversion	19				-		-			i, Pakistan, I			e and A1
	BH 20090006 MY 153238A PH 1-2009-500135 TH ?	PCT/EP2007/05738 Q cryogenic engine	24	V							·	nilippines, Vi • PCT nation			ent,
9	BH 20090047 MY 151581A PH 1-2009-501523	PCT/FR2008/05010 3 insulated tank	30			•			ful are t			1 OT Hation		c chinos	
10	TH ?						ent sy	vstem	atic pas	sive	worl	k-sharing to	make e	xaminatio	on more
	BH 20090066 MY 150324A PH none TH ?	PCT/US2008/001119 remote control	7	е	fficient?										n;
	BH 20090019 MY 151783A PH 1-2009-500417 TH ?	PCT/EP2007/059161 compressed air. engine	25		MOS	stly old > ma				nal p	hase	e examinatio	n is con	npleted	1
12														KR, US more than ISR	
	BH 20090028 MY 148768A PH 1-2009-500495	PCT/US2007/07432 Z 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		AU only ISR	AU and US equal an different from VO 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;
14 4	N N Summany	/#4 /#D / La	molata				1	1	1		1			1	CA and All very similar but no

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

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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

WIPO

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- regional solutions are not really useful
- Which work-products from other nation phases to use?
 - 'Trusted' Offices?

Thank you

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