

PCT Patent Application Process Explained from Start to Finish

Welcoming remarks will begin at
9:55 a.m. Eastern Time.

The formal presentation will begin at 10 a.m. Eastern

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PCT Patent Application Process Explained from Start to Finish

Presented by:

Quan-Ling Sim, World Intellectual Property Organization

July 25, 2013

Questions?

We will be taking questions at the
conclusion of the presentation.

Please type your questions into the chat.

Operator Assistance

Audio difficulties: Dial 0 0

Other issues: +1-847-559-0846

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- *AUTM Better World Report*
- AUTM Salary Survey
- AUTM Technology Transfer Practice Manual
- AUTM Licensing Activity Survey (currently for United States and Canada)
- AUTM Update

Member Benefits

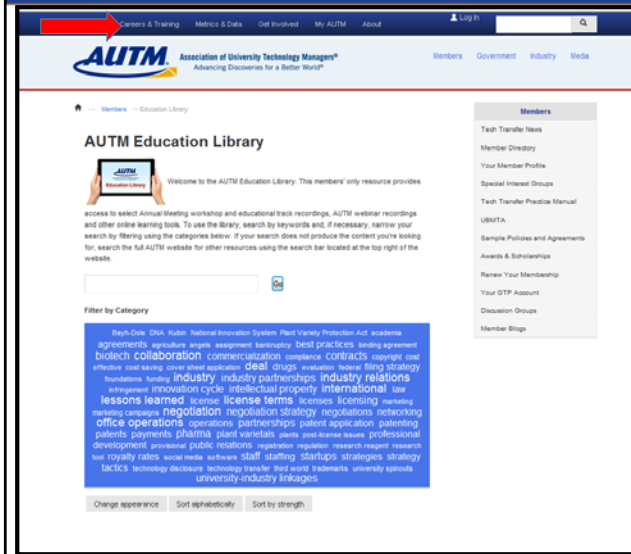
In-person and Online Networking

- Special Interest Groups
- Online Discussion Groups
- Volunteer committees
- Partnership Forum at Annual Meeting
- Meetings at national and regional levels

Additional Benefits

- Updates on legislative activity and how it affects you
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The screenshot shows the AUTM Education Library page. At the top, there is a navigation bar with links for 'Careers & Training', 'Media & Data', 'Get Involved', 'My AUTM', and 'About'. Below this is the AUTM logo and a search bar. The main heading is 'AUTM Education Library'. A welcome message states: 'Welcome to the AUTM Education Library. This members' only resource provides access to select Annual Meeting workshop and educational track recordings, AUTM webinar recordings and other online learning tools. To use the library, search by keywords and, if necessary, narrow your search by filtering using the categories below. If your search does not produce the content you're looking for, search the full AUTM website for other resources using the search bar located at the top right of the website.' Below the message is a search input field and a 'Filter by Category' section with a list of keywords including 'BioTech', 'collaboration', 'commercialization', 'contracts', 'copyright', 'cost saving', 'energy', 'innovation', 'industry', 'intellectual property', 'international', 'law', 'negotiation', 'operations', 'partnerships', 'patent', 'payments', 'pharma', 'plant', 'varieties', 'pilot', 'scale-up', 'startups', 'strategies', 'strategy', 'technology', 'transfer', 'university', 'ventures', 'university-industry linkages'. At the bottom, there are options to 'Change appearance', 'Sort alphabetically', and 'Sort by strength'.

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Seeded content:

- 23 Annual Meeting workshop recordings
- 10 relevant links to the TTP Manual
- 5 educational webinar recordings
- Additional content added annually by committee

<http://www.autm.net/source/ed-library/index.cfm>

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The screenshot shows the AUTM Global Technology Portal (GTP) website. At the top, there is a navigation bar with links for 'Home', 'Organizations', 'Technologies', 'Needs', 'Capabilities', 'Startups', 'Success stories', and 'People'. Below this is the AUTM logo and a search bar. The main heading is 'The AUTM Global Technology Portal (GTP)'. A welcome message states: 'Welcome to the AUTM Global Technology Portal, where you can easily find the latest university technologies available for licensing worldwide.' Below the message is a large image of a hand holding a blue folder. To the right of the image is a 'Technologies' section with two items: 'Low-Temperature, Corrosion-Resistant Integrated Heat Exchangers to Improve Efficiency of Coal Plants' and 'Controlling and Predicting the Stability of a Protein Against Degradation by Proteases'. At the bottom, there is a 'Get ready for the AUTM 2012 Annual Meeting by posting your technologies and capabilities' button.

AUTM Global Technology Portal



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GTP.AUTM.NET



Quan-Ling Sim
Head of PCT Outreach
and Users Relations Section
PCT Legal Division

World International
Property Organization

The Patent Cooperation Treaty (PCT) Application Process Explained From Start to Finish!

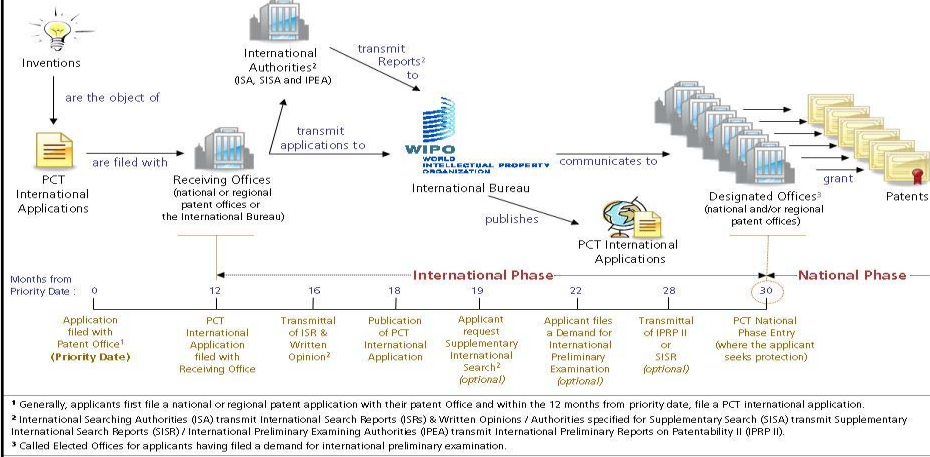
Mr. Quan-Ling Sim
Head, PCT Outreach and User Relations Section

Thursday
July 25, 2013

Main Topics

- What is a patent?
- What is the PCT?
- Why use the PCT?

Overview of the PCT System



Source: World Intellectual Property Organization (WIPO), March 2012

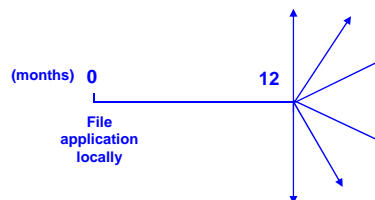
What is a Patent?

- A territorial right that is granted by a government authority for an invention in a field of technology
 - Exclusive right to prevent others from making, using, distributing, selling or importing the invention
- Invention is a product, process or apparatus that is new (novel), useful (utility) and non-obvious (inventive step)
- Provides protection for 20 years from the filing date of the patent application

What is a Patent? (2)

- The exclusive right is granted for a limited period in exchange for public disclosure of the invention
 - Patent applications published at 18 months from the date of filing
 - Accelerates and advances technological development
- Application for a patent is made with a national or regional patent authority, or alternatively, through the Patent Cooperation Treaty

Traditional Patent System



- Local patent application followed within 12 months by multiple foreign applications claiming priority under the Paris Convention
- Multiple formality requirements, searches, publications, examinations, prosecutions
- Translations and national fees at 12 months

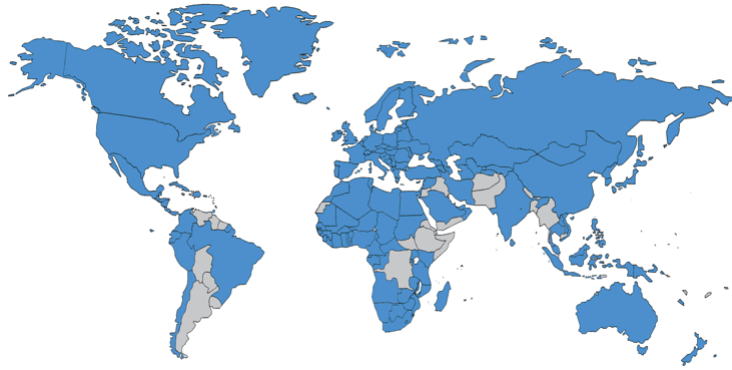
What is the PCT?

- An international treaty facilitating the process of seeking patents internationally
- An efficient and advantageous procedure for users of the patent system and patent Offices
- Signed in June 1970 and became operational in June 1978 with 18 Contracting States

General Remarks on the PCT

- The PCT system is a patent “filing” system, not a patent “granting” system
- The PCT system consists of an international and national phase
- The decision on granting patents is taken exclusively by national or regional Offices in the national phase

148 PCT Contracting States (1)



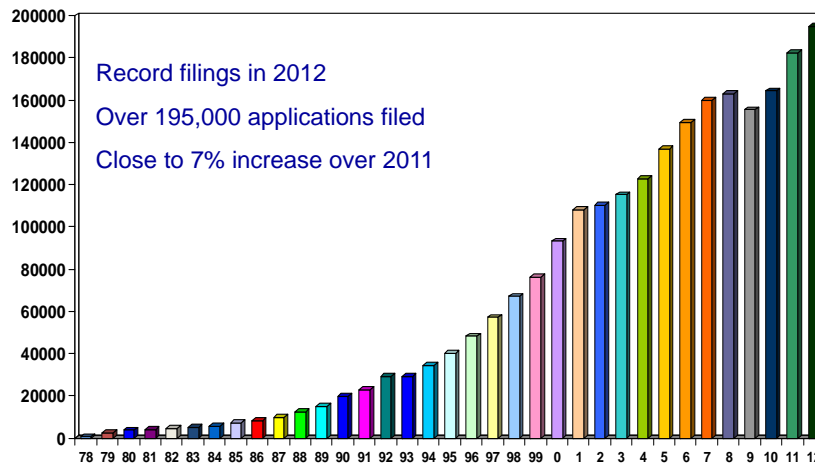
148 PCT Contracting States (2)

Albania	Cuba	Ireland	Nigeria	Sudan
Algeria	Cyprus	Israel	Norway	Swaziland
Angola	Czech Republic	Italy	Oman	Sweden
Antigua and Barbuda	Democratic People's	Japan	Panama	Switzerland
Armenia	Republic of Korea	Kazakhstan	Papua New Guinea	Syrian Arab Republic
Australia	Denmark	Kenya	Peru	Tajikistan
Austria	Dominica	Kyrgyzstan	Philippines	Thailand
Azerbaijan	Dominican Republic	Lao People's Dem Rep.	Poland	The former Yugoslav
Bahrain	Ecuador	Latvia	Portugal	Republic of Macedonia
Barbados	Egypt	Lesotho	Qatar	Togo
Belarus	El Salvador	Liberia	Republic of Korea	Trinidad and Tobago
Belgium	Equatorial Guinea	Libya	Republic of Moldova	Tunisia
Belize	Estonia	Liechtenstein	Romania	Turkey
Benin	Finland	Lithuania	Rwanda	Turkmenistan
Bosnia and Herzegovina	France	Luxembourg	Russian Federation	Uganda
Botswana	Gabon	Madagascar	Saint Kitts and Nevis	Ukraine
Brazil	Gambia	Malawi	Saint Lucia	United Arab Emirates
Brunei Darussalam	Georgia	Malaysia	Saint Vincent and the Grenadines	United Kingdom
Bulgaria	Germany	Mali	San Marino	United Republic of Tanzania
Burkina Faso	Ghana	Mauritania	Sao Tomé e Príncipe	United States of America
Cameron	Greece	Mexico	Saudi Arabia	Uzbekistan
Canada	Grenada	Monaco	Senegal	Viet Nam
Central African Republic	Guatemala	Mongolia	Serbia	Zambia
Chad	Guinea	Montenegro	Seychelles	Zimbabwe
Chile	Guinea-Bissau	Morocco	Sierra Leone	
China	Honduras	Mozambique	Singapore	
Colombia	Hungary	Namibia	Slovakia	
Comoros	Iceland	Netherlands	Slovenia	
Congo	India	New Zealand	South Africa	
Costa Rica	Indonesia	Nicaragua	Spain	
Côte d'Ivoire	Iran	Niger	Sri Lanka	
Croatia				

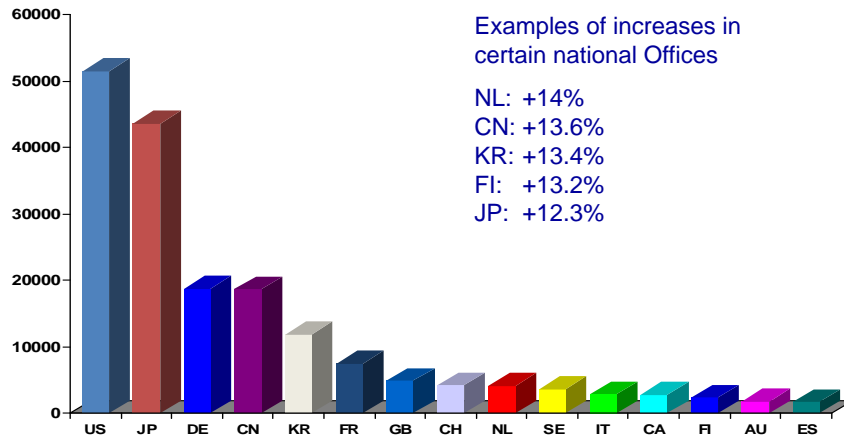
Countries not yet PCT Contracting States

Afghanistan	Haiti	Paraguay
Andorra	Iraq	Samoa
Argentina	Jamaica	Solomon Islands
Bahamas	Jordan	Somalia
Bangladesh	Kiribati	South Sudan
Bhutan	Kuwait	Suriname
Bolivia	Lebanon	Timor-Leste
Burundi	Maldives	Tonga
Cambodia	Marshall Islands	Tuvalu
Cape Verde	Mauritius	Uruguay
Democratic Republic of Congo	Micronesia	Vanuatu
Djibouti	Myanmar	Venezuela
Eritrea	Nauru	Yemen
Ethiopia	Nepal	(45)
Fiji	Pakistan	
Guyana	Palau	

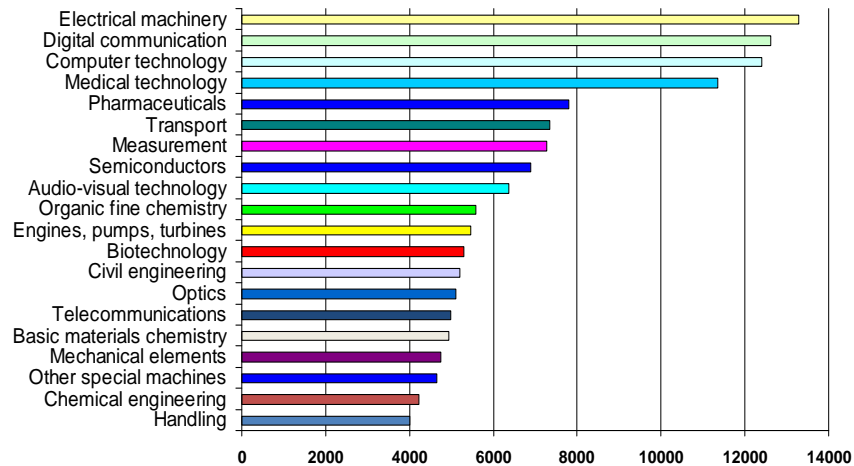
PCT Applications (2012)



Filings by Country of Origin (2012)



Top 20 Fields of Technology (2012)



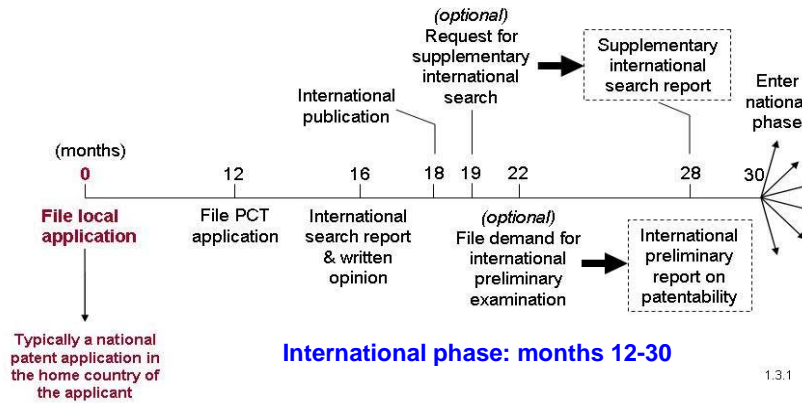
Top PCT Applicants: Businesses (2012)

Rank	Applicant's Name	Origin	PCT applications			Change compared to 2011
			2010	2011	2012	
1	ZTE CORPORATION	China	1,868	2,826	3,906	1,080
2	PANASONIC CORPORATION	Japan	2,153	2,463	2,951	488
3	SHARP KABUSHIKI KAISHA	Japan	1,286	1,755	2,001	246
4	HUAWEI TECHNOLOGIES CO., LTD.	China	1,527	1,831	1,801	-30
5	ROBERT BOSCH CORPORATION	Germany	1,302	1,518	1,775	257
6	TOYOTA JIDOSHA KABUSHIKI KAISHA	Japan	1,095	1,417	1,652	235
7	QUALCOMM INCORPORATED	United States of America	1,675	1,494	1,305	-189
8	SIEMENS AKTIENGESELLSCHAFT	Germany	830	1,039	1,272	233
9	KONINKLIJKE PHILIPS ELECTRONICS N.V.	Netherlands	1,433	1,148	1,230	82
10	TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)	Sweden	1,147	1,116	1,197	81
11	LG ELECTRONICS INC.	Republic of Korea	1,297	1,336	1,084	-242
12	MITSUBISHI ELECTRIC CORPORATION	Japan	726	834	1,042	208
13	NEC CORPORATION	Japan	1,106	1,056	999	-57
14	FUJIFILM CORPORATION	Japan	275	414	891	477
15	HITACHI, LTD.	Japan	372	547	745	198
16	SAMSUNG ELECTRONICS CO., LTD.	Republic of Korea	574	757	683	-74
17	FUJITSU LIMITED	Japan	475	494	671	177
18	NOKIA CORPORATION	Finland	632	698	670	-28
19	BASF SE	Germany	817	773	644	-129
20	INTEL CORPORATION	United States of America	201	309	640	331

Top PCT Applicants: Universities (2012)

Rank	Applicant's Name	Origin	PCT applications			Change compared to 2011
			2010	2011	2012	
1	UNIVERSITY OF CALIFORNIA	United States of America	304	277	351	74
2	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	United States of America	146	179	168	-11
3	HARVARD UNIVERSITY	United States of America	91	88	146	58
4	JOHNS HOPKINS UNIVERSITY	United States of America	89	111	141	30
5	COLUMBIA UNIVERSITY	United States of America	91	82	114	32
5	UNIVERSITY OF TEXAS SYSTEM	United States of America	129	127	114	-13
7	SEOUL NATIONAL UNIVERSITY	Republic of Korea	97	99	101	2
8	LELAND STANFORD JUNIOR UNIVERSITY	United States of America	54	79	95	16
9	PEKING UNIVERSITY	China	26	29	92	63
10	UNIVERSITY OF FLORIDA	United States of America	107	84	89	-5
11	CALIFORNIA INSTITUTE OF TECHNOLOGY	United States of America	50	59	88	29
12	KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY	Republic of Korea	51	103	82	-21
13	CORNELL UNIVERSITY	United States of America	81	88	73	-15
14	UNIVERSITY OF TOKYO	Japan	105	98	66	-32
15	YONSEI UNIVERSITY	Republic of Korea	38	43	65	22
16	TSINGHUA UNIVERSITY	China	24	36	62	26
16	ISIS INNOVATION LIMITED	United Kingdom	46	62	62	0
18	KYOTO UNIVERSITY	Japan	47	70	61	-9
19	UNIVERSITY OF MICHIGAN	United States of America	79	96	59	-37
20	PURDUE UNIVERSITY	United States of America	50	41	57	16

Typical PCT Timeline



PCT International Phase

- Unified filing procedure consisting of the **filing** and **processing** of a single application in any language with legal effect in all PCT Contracting States
- Information on the potential patentability of an invention prior to the start of national patent procedures (“national phase”)
- Publication of the international application together with the International Search Report
- Time delay of at least 30 months before the start of the national patent procedure

What Does a PCT Application Contain?

- A request
- A description
- One or more claims
- Drawings (where necessary)
- An abstract

The Receiving Office

- PCT applications are filed with a receiving Office
- Formalities check of the PCT application
- Accords or refuses an international filing date
- Specifies one or more International Authorities for search or examination
- Collects fees for the receiving Office, International Bureau and the International Searching Authority

International Search

- Performed by an International Searching Authority
- PCT Minimum Documentation (PCT Rule 34)
- Everything which has been made available to the public, anywhere in the world, by means of **written** disclosure
- Capable of being of assistance in determining that the claimed invention is or is not new and that it does or does not involve an inventive step
- Made available to the public prior to the international filing date

International Searching Authorities

- Australia
- Austria
- Brazil
- Canada
- China
- Egypt
- Finland
- *India (not yet operating)*
- Israel
- Japan
- Republic of Korea
- Russian Federation
- Spain
- Sweden
- United States of America
- European Patent Office
- Nordic Patent Institute (Denmark, Iceland, Norway)

International Search Report (ISR)

- IPC (International Patent Classification) symbols
- Indications of the technical areas searched
- Indications relating to any finding of lack of unity
- A list of the relevant prior art documents
- Indications relating to any finding that a meaningful search could not be carried out in respect of certain (but not all) claims

International Search Report (ISR) (2)

- Time limit to establish ISR and written opinion of the ISA
 - 3 months from the date of receipt of the search copy by the ISA (usually within approximately 16 months from the priority date if priority is claimed); or
 - 9 months from the priority date, whichever time limit expires later

Example of an ISR

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 50,14535 B (NCR CORPORATION) 28 May 1975 (28.05.75), column 4, lines 3 to 27	7-9, 11
X	GB 392415 A (JONES) 18 May 1933 (18.05.33) Fig. 1	1-3
Y	page 3, lines 5-7	4, 10
A	Fig. 5, support 36	11-12
X	GB 2174500 A (STC) 5 November 1986 (05.11.86) page 1, lines 5-15, 22-34, 46-80; Fig. 1	1-3
Y		4
A	US 4322752 A (BIXTY) 30 March 1982 (30.03.82) claim 1	1
A	IBM, LP, Integrated Circuit and Electronic Technical Disclosure, No. 6, p. 17, No. 6, p. 17	1-5

Symbols indicating which aspect of patentability the document cited is relevant to (for example, novelty, inventive step, etc.)

Documents relevant to whether or not your invention may be patentable

The claim numbers in your application to which the document is relevant

Written Opinion of the ISA

- A preliminary non-binding opinion on novelty, inventive step and industrial applicability
- Established at the same time as the ISR
- Remains secret during the international phase
- No formal response procedure although applicants may submit informal comments

Example of the Written Opinion

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY		International application No.
Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step, industrial applicability; citations and explanations supporting such statement	
1. Statement		Patentability assessment of the claims
Novelty (N)	Claims: Claim(s) 3-15	YES
	Claims: Claim(s) 16	NO
Inventive step (IS)	Claims: Claim(s) 8, 10-12	YES
	Claims: Claim(s) 3-7, 9, 14-16	NO
Industrial applicability (IA)	Claims: Claim(s) 3-16	YES
	Claims:	NO
2. Citations and explanations:		
	INDEPENDENT CLAIM 3	
	Document US-A-5 332 238, which is considered to represent the most relevant state of the art, discloses (cf. relevant passages indicated in the ISR) a device from which the subject-matter of INDEPENDENT CLAIM 3	
	Document US-A-5 332 238, which is considered to represent the most relevant state of the art,	

Reasoning supporting the assessment

International Publication

- Takes place shortly after 18 months from the earliest filing date
- One of the main functions of the International Bureau
- Contents of published PCT application
 - Standardized front page with bibliographic data, title and abstract
 - Description, claims and drawings (if any)
 - International Search Report
 - Other elements prescribed by the PCT Regulations (e.g., amended claims, declarations, etc.)
- Ten publication languages (Arabic, Chinese, English, French, German, Japanese, Korean, Portuguese, Russian, Spanish)
- PCT application file maintained by the International Bureau is publicly available after international publication and contains other documents such as the application as filed, PCT Forms and general correspondence

Supplementary International Search

- Introduced on January 1, 2009
- Optional procedure
- More comprehensive overview of the prior art, e.g., language coverage
- Offered by Austria, European Patent Office, Finland, Russian Federation, Sweden, Nordic Patent Institute (6)

International Preliminary Examination

- Optional procedure
- Requested by filing a demand before the expiry of 22 months with an International Preliminary Authority (IPEA) (same list as ISA)
- Opportunity to amend the description, claims and drawings to address objections raised by the ISA before the start of the national phase procedure
- Results in the issuance of a preliminary, non-binding opinion by the IPEA on novelty, inventive step and industrial applicability
 - International Preliminary Report on Patentability (Chapter II) (IPRP Ch.II)

PCT National Phase

- After the end of the international phase
- PCT is a gateway to national patent systems
- Leads to the grant (or refusal) of a patent by national or regional Offices

Why Use the PCT?

- “Internationalization” of a single PCT application providing near global geographical coverage
- Time delay (additional time for decision making)
- Patentability assessment
- Cost deferral

Patentability Assessment

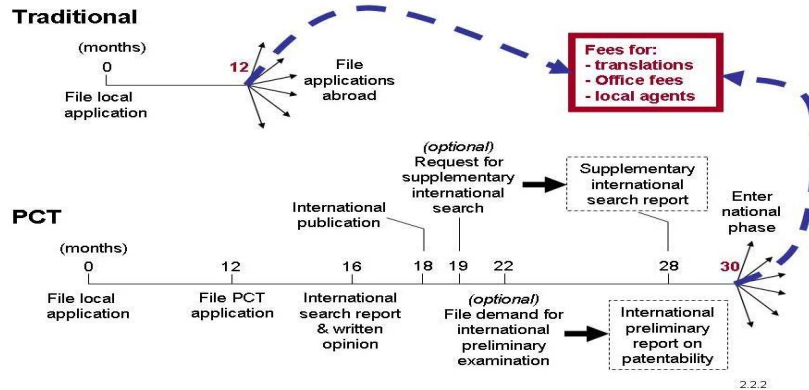
- Strong basis for patenting decisions
- Valuable information that is of assistance in making patenting decisions
- The International Search Report (ISR) and the written opinion of the International Searching Authority
- International Preliminary Report on Patentability (IPRP (Ch.II)) of the International Preliminary Examining Authority (optional)

Cost Deferral

- Seeking patents in foreign countries requires a significant capital investment
- The PCT provides for the deferral of main initial costs associated with internationalization:
 - Cost of translations
 - Local patent agent fees
 - Local patent Office fees

When are These Initial Costs Incurred?

Traditional Patent System vs PCT System



Other PCT Advantages

- Amendment possibilities under the Chapter II procedure prior to entry into the national phase
 - Description
 - Claims
 - Drawings
- Electronic filing of PCT applications at reduced expense
- Management of PCT applications in ePCT

Need More Information?

- PCT Resources
 - <http://www.wipo.int/pct/en/>
- PCT Information Service
 - Telephone: (+41-22) 338 83 38
 - E-mail: pct.infoline@wipo.int

Questions? Comments?



Discussion and Q&A

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AUTM 2014 Annual Meeting

Feb. 19 – 22
San Francisco Marriott Marquis
San Francisco, CA USA



Save the
Date!

