

Overview of the Patent Cooperation Treaty (PCT)

Thursday February 11, 2016

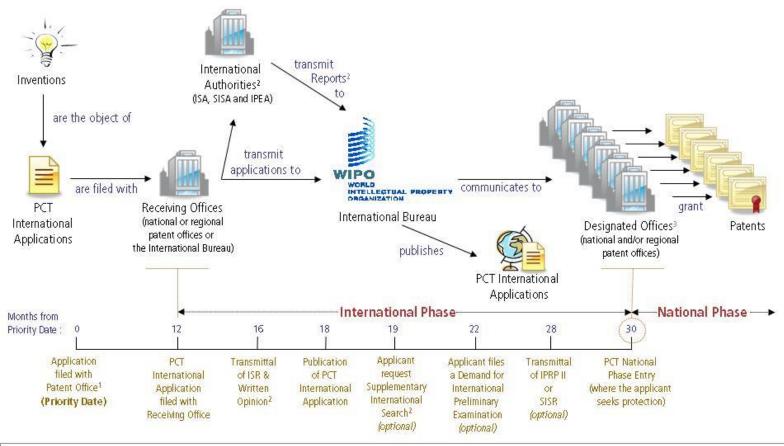
Mr. Quan-Ling SIM
Head, PCT Outreach and User Relations Section
PCT Legal Division
WIPO FOR OFFICIAL USE ONLY

Main Topics

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



Overview of the PCT System



Generally, applicants first file a national or regional patent application with their patent Office and within the 12 months from priority date, file a PCT international application.

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



² International Searching Authorities (ISA) transmit International Search Reports (ISRs) & Written Opinions / Authorities specified for Supplementary Search (SISA) transmit Supplementary International Search Reports (SISR) / International Preliminary Examining Authorities (IPEA) transmit International Preliminary Reports on Patentability II (IPRP II).

³ Called Elected Offices for applicants having filed a demand for international preliminary examination.

What is a Patent?

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

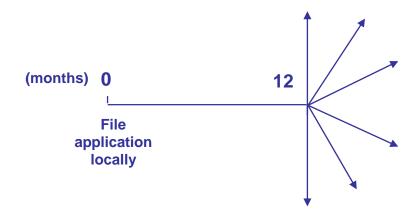


What is a Patent? (2)

- Provides public disclosure of the invention in exchange for patent protection
 - □ 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

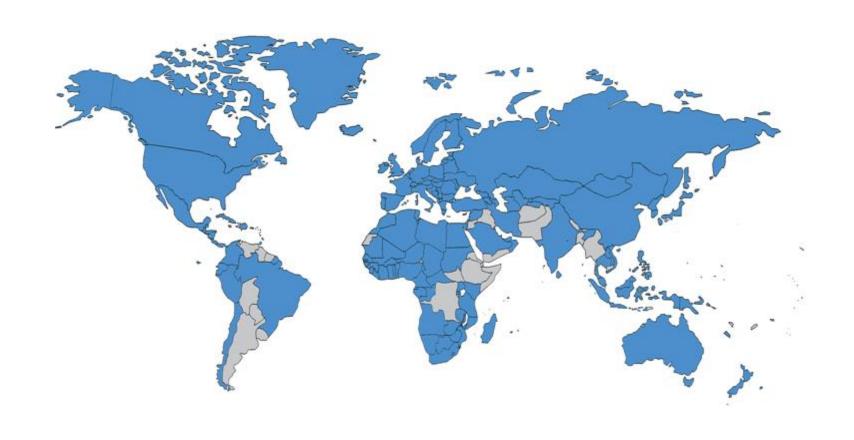


General Remarks on the PCT

- 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





Countries not yet PCT Contracting States

Afghanistan

Andorra

Argentina

Bahamas

Bangladesh

Bhutan

Bolivia

Burundi

Cambodia

Cape Verde

Democratic Republic of Congo

Djibouti

Eritrea

Ethiopia

Fiji

Guyana

Haiti

Iraq

Jamaica

Jordan

Kiribati

Kuwait

Lebanon

Maldives

Marshall Islands

Mauritius

Micronesia

Myanmar

Nauru

Nepal

Pakistan

Palau

Paraguay

Samoa

Solomon Islands

Somalia

South Sudan

Suriname

Timor-Leste

Tonga

Tuvalu

Uruguay Vanuatu

Venezuela

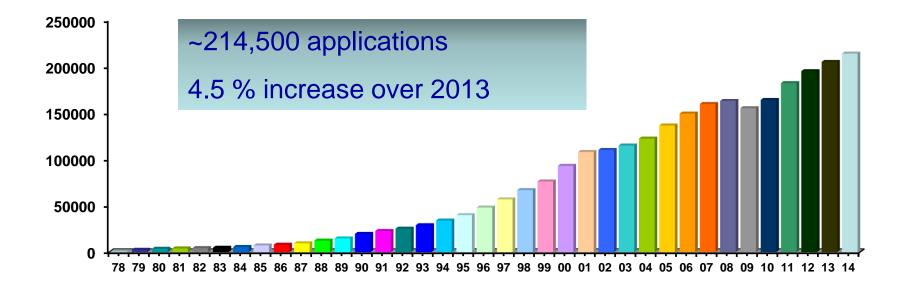
Yemen

(45)

UN: 193 countries

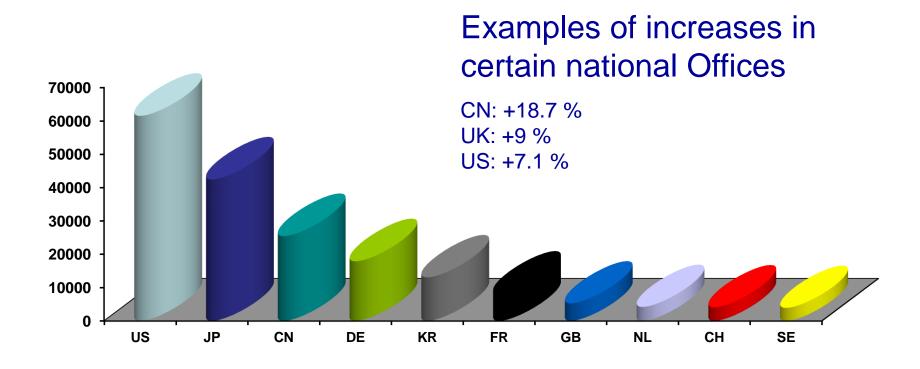
The International Patent System

PCT Applications (2014)



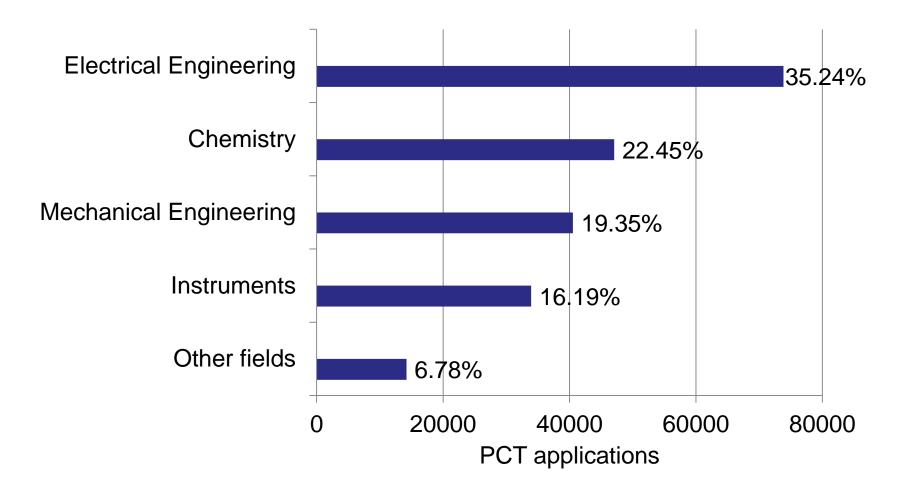


Filings by Country of Origin (2014)





Fields of Technology (2014)



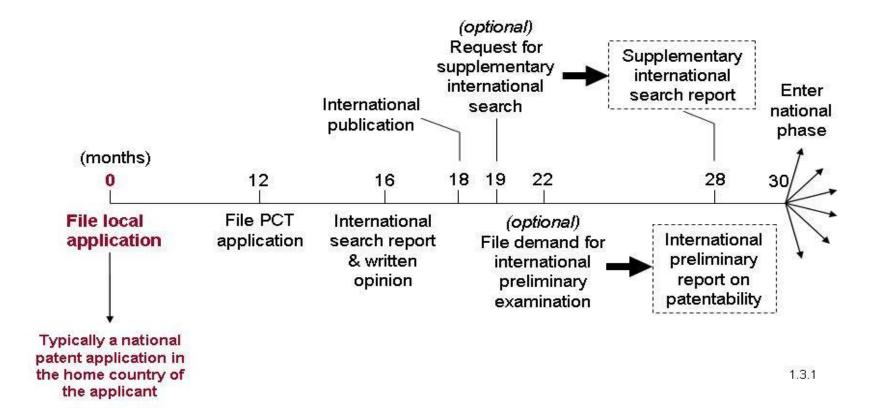


Top PCT Applicants (2014)

1. Huawei (CN) – 3442	11. Samsung (KR) – 1381	
2. Qualcomm (US) - 2409	12. Toyota (JP) - 1378	
3. ZTE (CN) - 2179	13. Bosch (DE) – 1371	
4. Panasonic (JP) – 1682	14. Sharp (JP) - 1227	
5. Mitsubishi Electric (JP) – 1593	15. NEC (JP) - 1215	
6. Intel (US) - 1539	16. LG Electronics (KR) – 1138	
7. Ericsson (SE) – 1512	17. Tencent Technology (CN) - 1086	
8. Microsoft (US) -1460	18. Fujifilm (JP) – 1072	
9. Siemens (DE) – 1399	19. United Technologies (US) - 1013	
10. Philips (NL) -1391	20. Hitachi (JP) - 996	



Typical PCT Timeline





PCT International Phase

- Unified filing procedure consisting of the <u>filing</u> and <u>processing</u> of a single application 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 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

Category* Citation of document, with indication, where appropriate, of the relevant passages X JP 50/14535 B (NCR CORPORATION) 28 May 1975 (28.05.75), column 4, lines 3 to 27 GB 392415 A (JONES) 18 May 1933 (18.05.33) Fig. 1 Page 3, lines 5-7 Fig. 5, support 36 GB 2174500 A (STC) 5 November 1986 (05.11.86) Page 1, lines 5-15, 22-34, 46-80; Fig. 1 A GREEN, J.P. Integrated Circuit and Electronic BM Technical Disclosure Bull Symbols indicating which aspect of patentability the document cited is relevant to (for example, novelty,	C. DOCU	MENTS CONSIDERED TO BE RELEVANT	
X GB 392415 A (JONES) 18 May 1933 (18.05.33) Fig. 1 page 3, lines 5-7 4, 10 11-12 X Fig. 5, support 36 11-12 GB 2174500 A (STC) 5 November 1986 (05.11.86) page 1, lines 5-15, 22-34, 46-80; Fig. 1 1-3 4 X Y US 4322752 A (BIXTY) 30 March 1982 (30.03.82) claim 1 1 1-5 A GREEN, J.P. Integrated Circuit and Electronic 1-5 Symbols indicating Documents relevant to which aspect of patentability the document cited is relevant to your invention may be patentable	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y Pig. 1 page 3, lines 5-7 A Fig. 5, support 36 GB 2174500 A (STC) 5 November 1986 (05.11.86) page 1, lines 5-15, 22-34, 46-80; Fig. 1 A US 4322752 A (BIXTY) 30 March 1982 (30.03.82) claim 1 A GREEN, J.P. Integrated Circuit and Electronic BM Technical Disclosure Bull Ol. 17, No. 6, page Symbols indicating which aspect of patentability the document cited is relevant to (for whether or not your invention may be patentable	X	(28.05.75), column 4, lines 3 to 27	7-9, 11
Y A page 3, lines 5-7 Fig. 5, support 36 GB 2174500 A (STC) 5 November 1986 (05.11.86) page 1, lines 5-15, 22-34, 46-80; Fig. 1 A US 4322752 A (BIXTY) 30 March 1982 (30.03.82) claim 1 A GREEN, J.P. Integrated Circuit and Electronic US 4322752 A (BIXTY) 30 March 1982 (30.03.82) claim 1 A GREEN, J.P. Integrated Circuit and Electronic US 4322752 A (BIXTY) 30 March 1982 (30.03.82) The claim numbers in your application to which the document is relevant to whether or not your invention may be patentable	X		1-3
A Fig. 5, support 36 GB 2174500 A (STC) 5 November 1986 (05.11.86) page 1, lines 5-15, 22-34, 46-80; Fig. 1 A US 4322752 A (BIXTY) 30 March 1982 (30.03.82) claim 1 A GREEN, J.P. Integrated Circuit and Electronic IBM Technical Disclosure Bull iol. 17, No. 6, page Documents relevant to which aspect of patentability the document cited is relevant to (for whether or not your invention may be patentable	Y		4, 10
X Y page 1, lines 5-15, 22-34, 46-80; Fig. 1 A US 4322752 A (BIXTY) 30 March 1982 (30.03.82) claim 1 A GREEN, J.P. Integrated Circuit and Electronic BM Technical Disclosure Bull ol. 17, No. 6, page 1 Documents relevant to which aspect of patentability the document cited is relevant to (for may be patentable	Α	/ · · · · · · · · · · · · · · · · · · ·	
A GREEN, J.P. Integrated Circuit and Electronic Symbols indicating which aspect of patentability the document cited is relevant to (for Symbols indication and Electronic Documents relevant to which the document is relevant to your invention may be patentable		page 1, lines 5-15, 22-34, 46-80; Fig. 1	
Symbols indicating which aspect of patentability the document cited is relevant to (for may be patentable which aspect of the document cited is relevant to (for may be patentable to the document cited is relevant to (for may be patentable to the document cited is relevant to (for may be patentable to the document is		claim 1	1
Symbols indicating which aspect of patentability the document cited is relevant to (for The claim numbers in your application to which the document is relevant to (for may be patentable The claim numbers in your application to which the document is relevant	A		1-5
Symbols indicating which aspect of patentability the document cited is relevant to (for Documents relevant to which the document is your invention may be patentable	\		
the document cited is relevant to (for may be patentable	which as	indicating Documents relevant to	in your application to which the document is
example, novelty,	the docu relevant	ment cited is your invention to (for may be patentable	relevant
	•		
inventive step, etc.)	inventive	e step, etc.)	WIPO

The International Patent System

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
- Made available to the public on the WIPO web site at the same time as the ISR
- No formal response procedure although applicants may submit informal comments



Example of the Written Opinion

International application No. WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive sten or industrial applicability; Box No. V citations and explanations supporting such statement **Patentability** Statement assessment of the claims Claim(s) 3-15 YES Novelty (N) Claims Claim(s) 16 NO Claims Claim(s) 8, 10-12 Inventive step (IS) Claims YES Claim(s) 3-7, 9, 14-16 NO Claims Claim(s) 3-16 Industrial applicability (IA) Claims 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 (1)

- 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.)



International Publication (2)

- 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, written opinion of the ISA, 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, Singapore, Sweden, Nordic Patent Institute (7)



International Preliminary Examination

- Optional procedure
- Requested by filing a demand 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 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 (30 months)
- 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)
- Cost deferral
- Patentability assessment



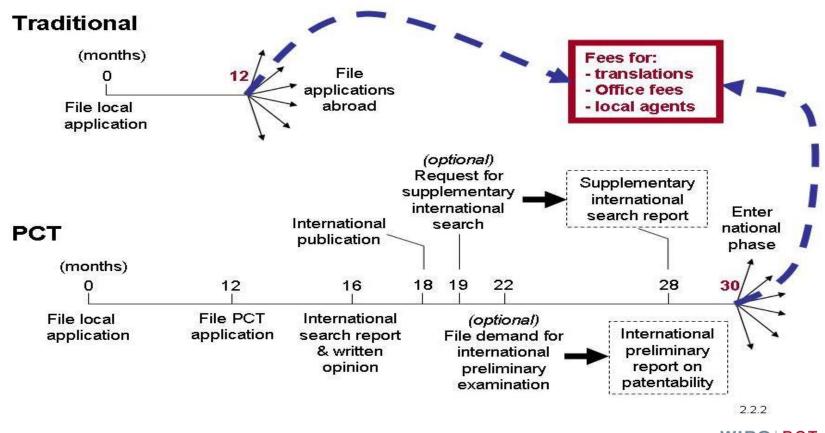
Cost Deferral

- 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



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)



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
- Centralized management of your PCT application 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

