

The Patent Cooperation Treaty (PCT)



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Brussels, September 18, 2018

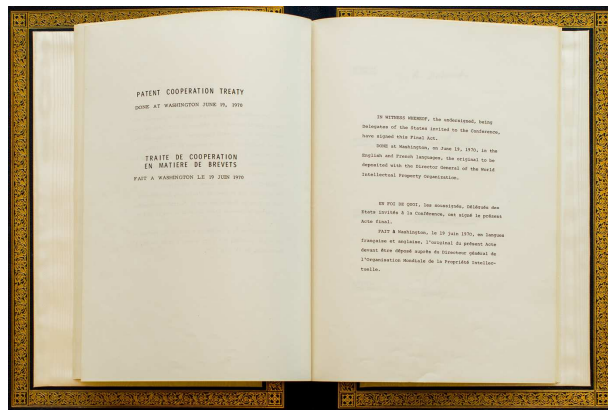
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Introduction to the PCT System

40 Years of the PCT

- 24 January 2018: 40th anniversary of the entry into force of the Patent Cooperation Treaty (PCT)



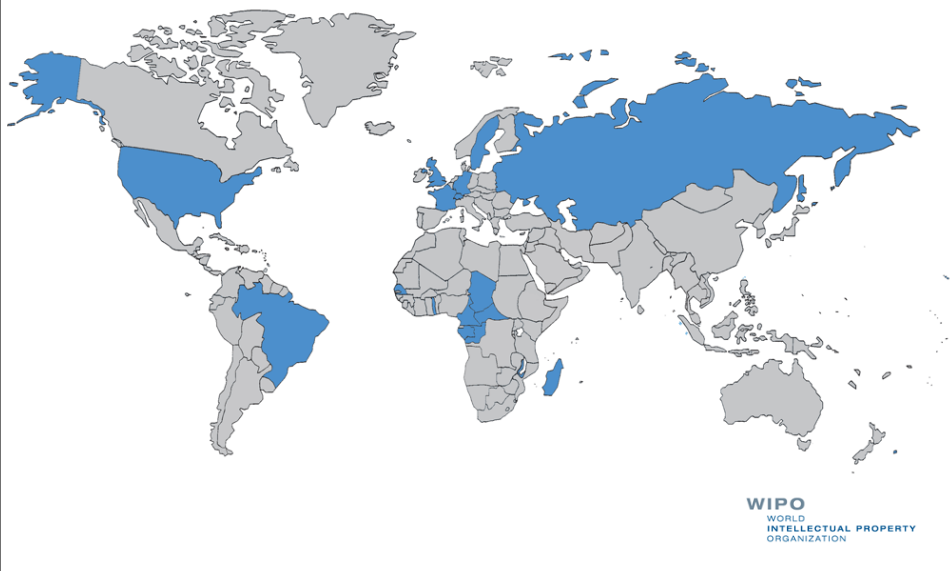
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Patent systems

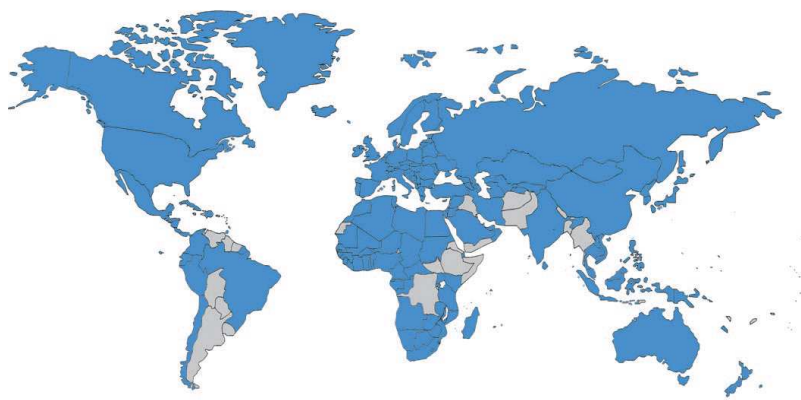
- **Patent systems before 1978 in industrialized countries**
 - Increasing number of applications for multiple countries
 - Technology and inventions increasingly complex
 - Offices conducting searches in parallel
 - Multiplicity of languages
 - Backlogs and delays
 - Offices lacking trust in each other's results
 - Inventions losing economic value
 - Some relief by Paris Convention
- **Users and Offices had an interest in simplifying and streamlining procedures**

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The PCT in 1978 – 18 Member States

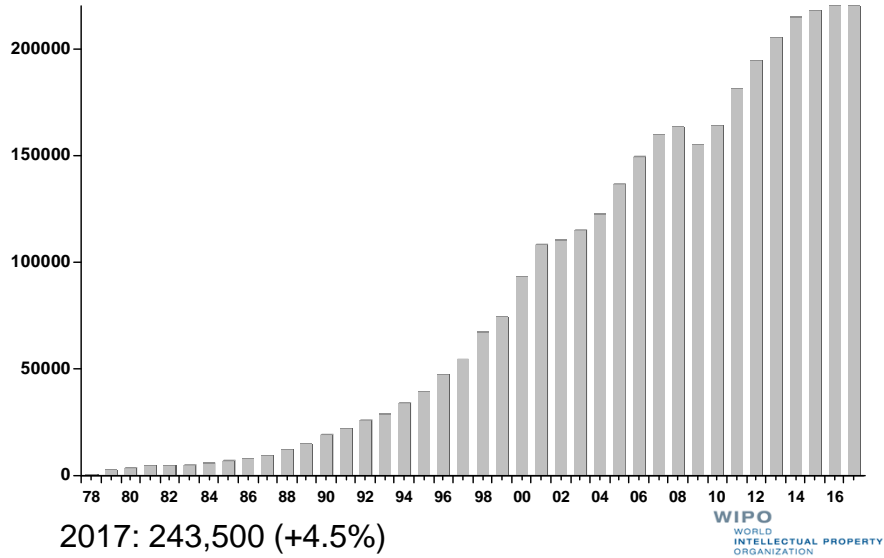


PCT Coverage Today



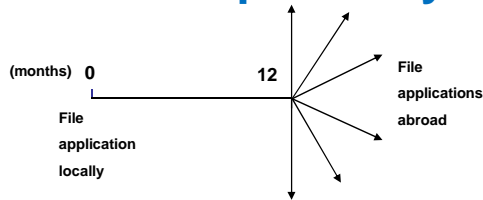
152 PCT Contracting States

PCT Applications



Why is the PCT so successful?

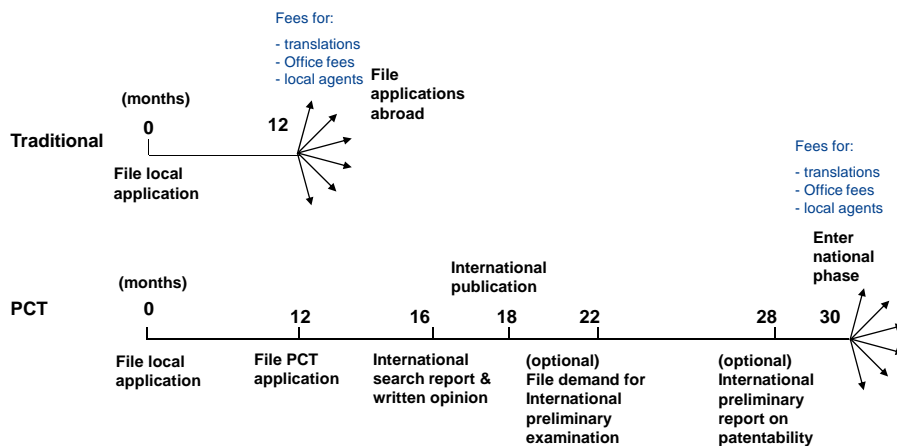
Traditional patent systems



- Local patent application followed within 12 months by multiple foreign applications claiming priority under Paris Convention:
 - multiple formality requirements
 - multiple searches
 - multiple publications
 - multiple examinations and prosecutions of applications
 - translations and national fees required at 12 months
- Some rationalization because of regional arrangements: ARIPO, EAPO, EPO, OAPI

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Traditional patent system vs. PCT system



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PCT system

Local patent application followed within 12 months by international application under the PCT, claiming Paris Convention priority, with “national phase” commencing at 30 months*:

- one set of formality requirements
- international search
- international publication
- international preliminary examination
- international application can be put in order before national phase
- translations and national fees required at 30 months,* and only if applicant wishes to proceed

* For exceptions, see
http://www.wipo.int/pct/en/texts/reservations/res_incomp.html

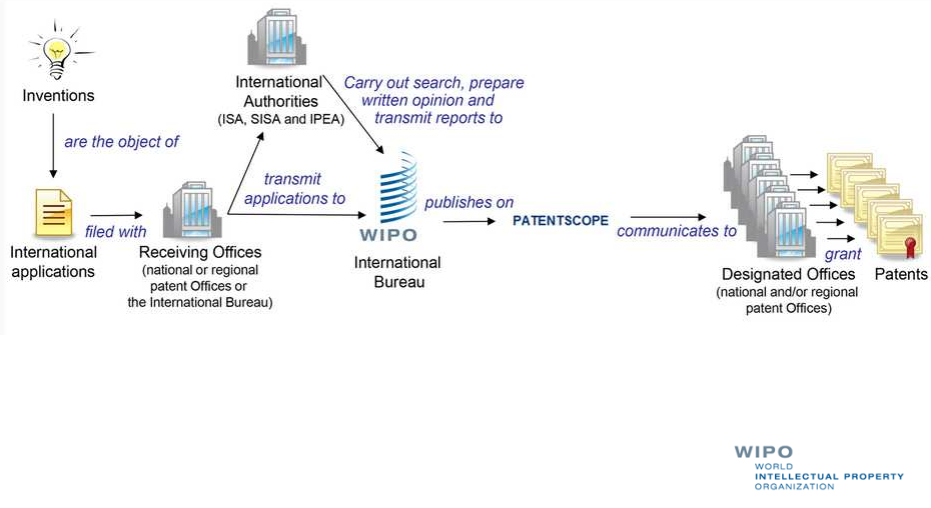
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Benefits from using the PCT: a unique procedure

- One application, in one language, filed with one Office, replaces multiple foreign filings until entry into the national phase
- International filing date has the effect of national filing date in all designated Offices
- Uniform formal requirements accepted by all designated Offices
- Decision on foreign filings can be postponed up to 30 months from the priority date at minimal cost
- Enables assessment of economic value of the invention and the chances of obtaining a patent before entering national phase

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Overview of the PCT system



International Search and Written Opinion of the ISA

International Searching Authorities (23 in total)

- | | |
|------------------|---------------------------------------------------------------------------------------|
| ■ AT – Austria | ■ KR – Republic of Korea |
| ■ AU – Australia | ■ PH – Philippines (<i>not yet operational</i>) |
| ■ BR – Brazil | ■ RU – Russian Federation |
| ■ CA – Canada | ■ SE – Sweden |
| ■ CL – Chile | ■ SG – Singapore |
| ■ CN – China | ■ TR – Turkey |
| ■ EG – Egypt | ■ UA – Ukraine |
| ■ ES – Spain | ■ US – United States of America |
| ■ FI – Finland | ■ EP – European Patent Office |
| ■ IL – Israel | ■ XN – Nordic Patent Institute (Denmark, Iceland, Norway) |
| ■ IN – India | ■ XV – Visegrad Patent Institute (VPI) (Czech Republic, Hungary, Poland, Slovakia) |
| ■ JP – Japan | |

Receiving Office decides on which ISAs is/are competent

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The International Searching Authority

- Establishes international search report (ISR) (Rules 42 and 43) and/or declaration that no international search report will be established (Article 17(2))
- Establishes written opinion of the ISA (Rule 43*bis*): non-binding first opinion on novelty, inventive step (non-obviousness) and industrial applicability of claimed invention

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Prior art for international search (Article 15(2) and Rule 33)

- Prior art:
 - everything which has been made available to the public,
 - anywhere in the world,
 - by means of written disclosure,
 - which is 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,
 - provided the making available to the public occurred prior to the international filing date.
- PCT Minimum Documentation (Rule 34)

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Written opinion of the ISA (Rule 43bis)

- Initial preliminary non-binding opinion on:
 - novelty (not anticipated)
 - inventive step (not obvious)
 - industrial applicability
- A written opinion will be established for all international applications at the same time as the ISR
- The written opinion is sent to applicant and the International Bureau together with the ISR

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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 | GREEN, J.P. Integrated Circuit and Electronic IBM Technical Disclosure Bulletin, vol. 17, No. 6, page 1000 | 1-5 |

Symbols indicating the relevance of the cited prior art to the patentability of the international application (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

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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 or industrial applicability; citations and explanations supporting such statement | |
| 1. Statement | Patentability assessment of the claims | |
| Novelty (N) | Claims <u>Claim(s) 3-15</u> YES | |
| | Claims <u>Claim(s) 16</u> NO | |
| Inventive step (IS) | Claims <u>Claim(s) 8, 10-12</u> YES | |
| | Claims <u>Claim(s) 3-7, 9, 14-16</u> NO | |
| Industrial applicability (IA) | Claims <u>Claim(s) 3-16</u> 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

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Further developments

Objectives

- Offices giving more credence to each other's work products
- Best quality and work-sharing

Quality of International Search

- More competition ?
- Statistics on timeliness
- IP5 Collaborative Search and Examination (pilot)
- “Centralized Access to Search and Examination” (CASE)
- Quality reports to Meeting of International Authorities (MIA)

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Work-sharing national–international procedures

Examples:

- Use of results of earlier search for international search
- “PCT Direct” at EPO
- Patent Prosecution Highway (PPH) for national phase

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IT environment

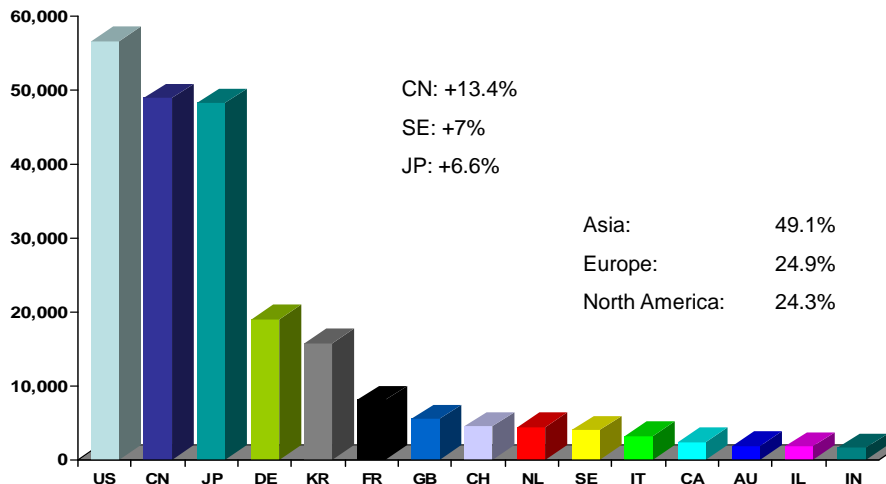
- **Further efforts to streamline**
 - Cooperation in developing IT tools and standards
 - Automation of workflows
 - “Quality at source”
 - “End-to-End” processing of data (electronic filing, common formats)
 - Real time access to data by users and Offices
 - Validation systems and “self-service” offers (example: recording of changes)
 - Machine translation
 - Fee incentives
- **Re-distribution of certain functions among Patent Offices and International Bureau?**

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Statistics


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International applications received in 2017 by country of origin



- 23.3% originating in US, 20% in China, 19.8% in Japan
- 63% from the top 3 countries, 77% from top 5 countries, 93% of filings from top 15 countries

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Top PCT Applicants 2017

() of published
PCT applications

1. Huawei Technologies—CN (4,024)
2. ZTE—CN (2,965)
3. Intel—US (2,637)
4. Mitsubishi Electric—JP (2,521)
5. Qualcomm—US (2,163)
6. LG Electronics—KR (1,945)
7. BOE Technology Group—CN (1,818)
8. Samsung—KR (1,757)
9. Sony—JP (1,735)
10. Ericsson—SE (1,564)
11. Microsoft—US (1,563)
12. Hewlett-Packard—US (1,519)
13. LE Holdings —CN (1,397)
14. Bosch—DE (1,354)
15. Panasonic—JP (1,280)
16. Philips—NL (1,077)
17. Siemens—DE (1,063)
18. Shenzhen China Star Optoelectronics—CN (972)
19. Fujifilm—JP (970)
20. Denso—JP (968)

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Information and Training

PCT training options

- “Learn the PCT” Video Series
(<http://www.wipo.int/pct/en/training/index.html>)
 - A series of 29 short videos designed to provide a basic introduction to important aspects and issues in the PCT system (in English)
- PCT Distance Learning Course available in the 10 publication languages
(http://www.wipo.int/pct/en/distance_learning/index.html)
- PCT Webinars
(<http://www.wipo.int/pct/en/seminar/webinars/index.html>)
 - Free webinars on PCT topics for companies/law firms on request
- More information on the PCT resources website:
www.wipo.int/pct

Where to Get Help

PCT Resources/Information

- For general questions about the PCT, contact the PCT Information Service at:

Telephone: (+41-22) 338 83 38

Facsimile*: (+41-22) 338 83 39

E-mail: pct.infoline@wipo.int

- Contact the speaker:

eva.schumm@wipo.int

+41-22-338-9393

* Note: Fax transmissions no longer recommended since January 1, 2018