In The Name of Allah

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International Patent System

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What is Patent?

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- Patent, is a legal document granted by the government giving an inventor the exclusive right to make, use, and sell an invention for a specified number of years.

- Patents are also available for significant improvements on previously invented items.

Goal of Patent System!

- The goal of the patent system is to encourage inventors to advance the state of technology by awarding them special rights to benefit from their inventions.

- Books, movies, and works of art cannot be patented, but protection is available for such items under the law of copyright.

- Patent law is one branch of the larger legal field known as intellectual property (IP), which also includes trademark and copyright law.

What is patentable?

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To qualify for a patent, the invention must meet three basic tests:

- First, it must be novel, meaning that the invention did not previously exist.

- Second, the invention must be non-obvious, which means that the invention must be a significant improvement to existing technology. Simple changes to previously known devices do not comprise a patentable invention.

- Finally, the proposed invention must be useful. Legal experts commonly interpret this to mean that no patent will be granted for inventions that can only be used for an illegal or immoral purpose.

Discovery is NOT Patentable!

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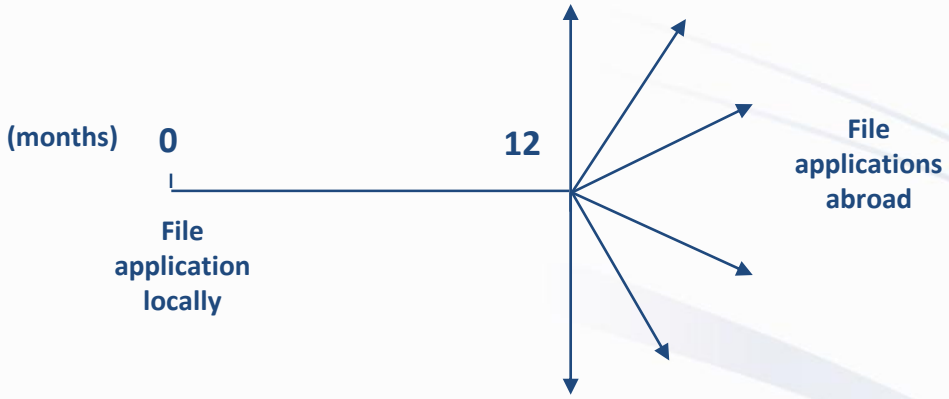
- Some types of discoveries are not patentable. No one can obtain a patent on a law of nature or a scientific principle even if he or she is the first one to discover it.

- For example, Isaac Newton could not have obtained a patent on the laws of gravity, and Albert Einstein could not have patented his formula for relativity, E=mc2.

Using the traditional patent system to seek multinational patent protection!?



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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

The PCT – 1970

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- Basic idea: simplify the procedure for obtaining patent protection in many countries, making it more efficient and economical for:
  - **users** of the patent system: makes available a *filing tool for applicants* for foreign patent filings; and
  - **patent offices**: makes available a *tool for effective processing of patent applications by offices* of PCT Member States willing to exploit work done by others

PCT Basics

- **Filing Tool for applicants**:
  - Only one application filed, containing, by default, the designation of all States (for every kind of protection available) and usual priority claim(s)
  - Has the effect of a regular national filing (including establishment of a priority date) in each designated State: the international filing date is the filing date in each designated State
  - Filed in one language
  - Filed with one Office
  - One set of formality requirements
  - Delays national processing until 30 months from priority date
  - International reports improve basis for decision making

PCT Basics

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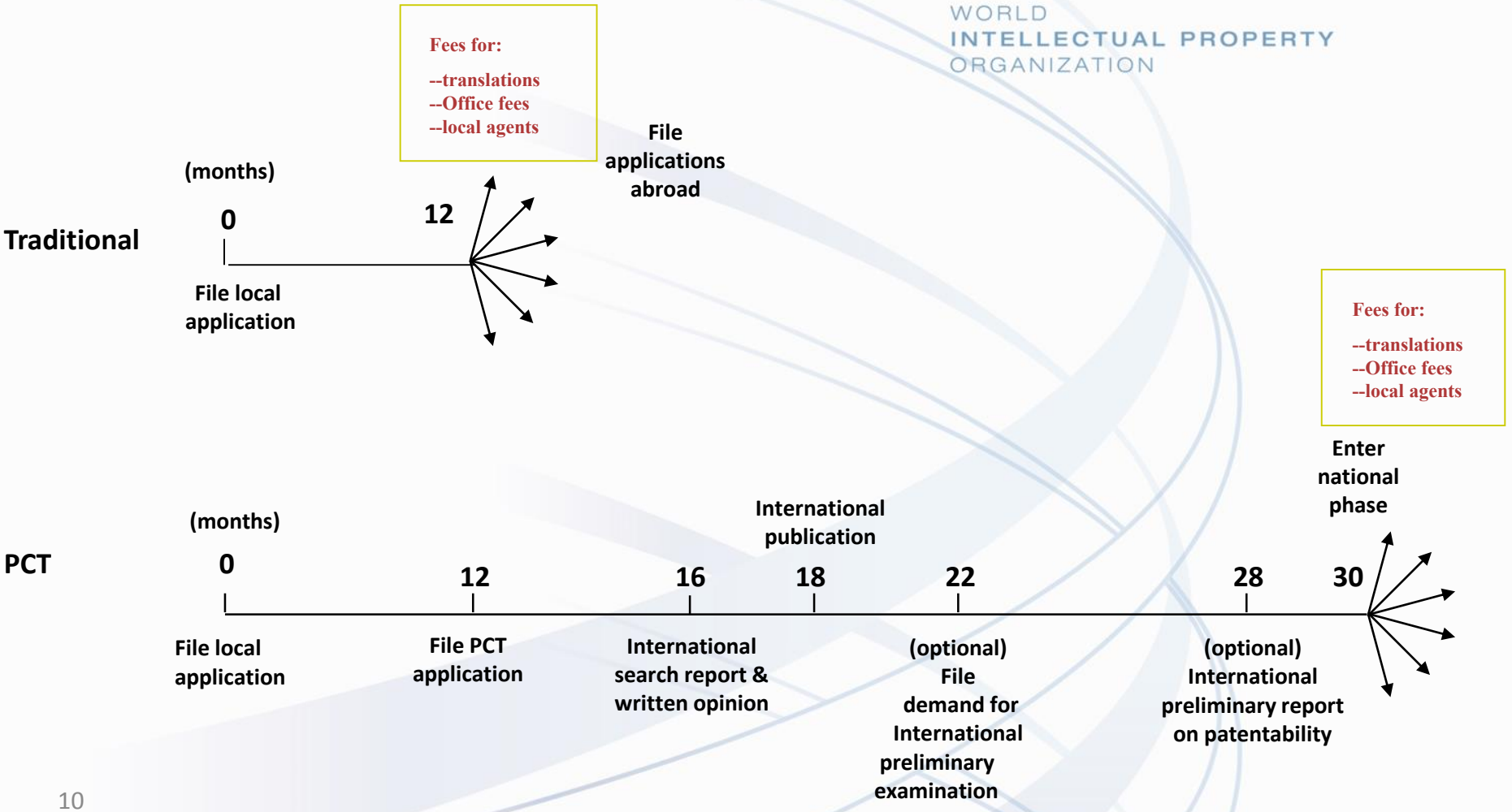
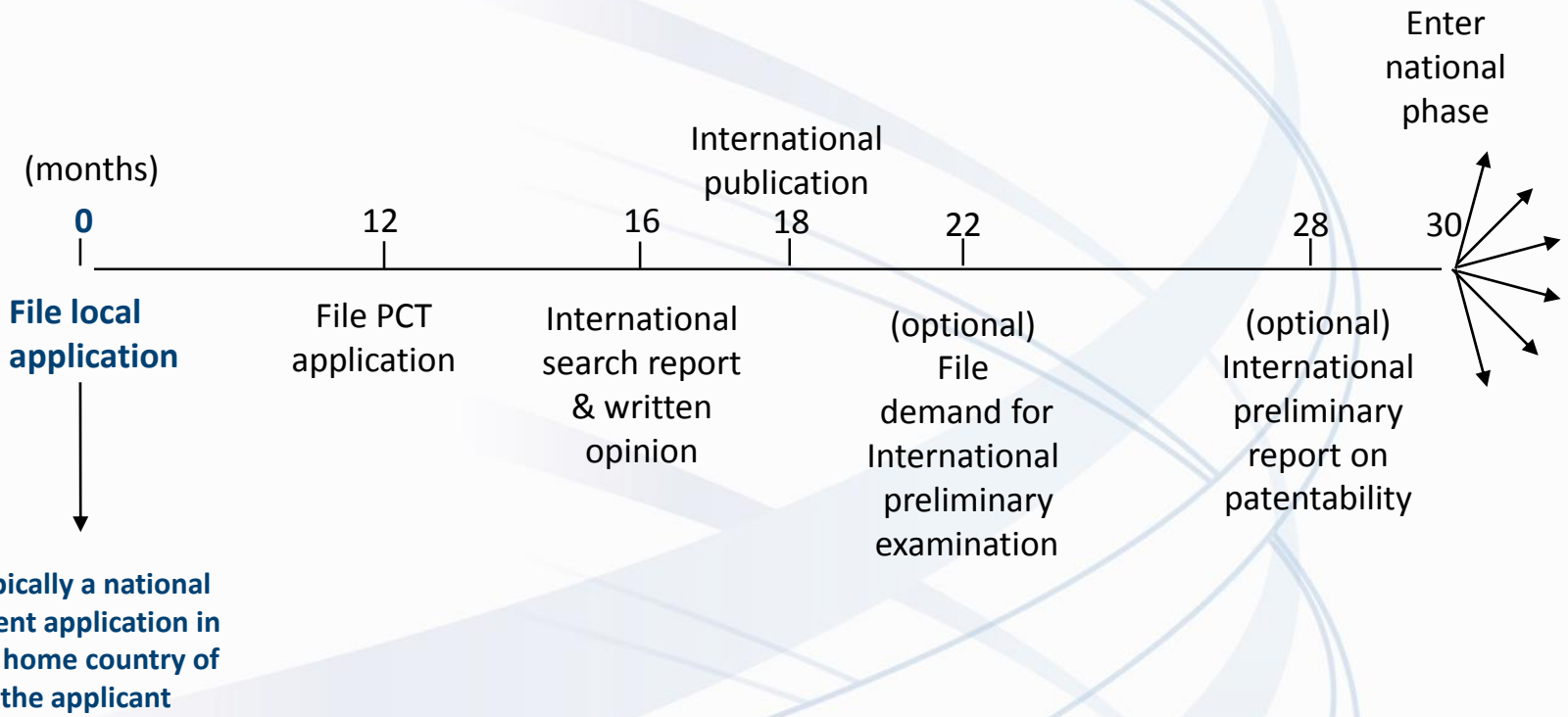
- **Work sharing tool for Offices**:
  - Central formality checking
  - Central international publication
  - International search report (ISR)
  - International Preliminary Reports on Patentability (preliminary, non-binding opinion on novelty, inventive step (non-obviousness) and industrial applicability

Traditional patent system vs. PCT system



The PCT System



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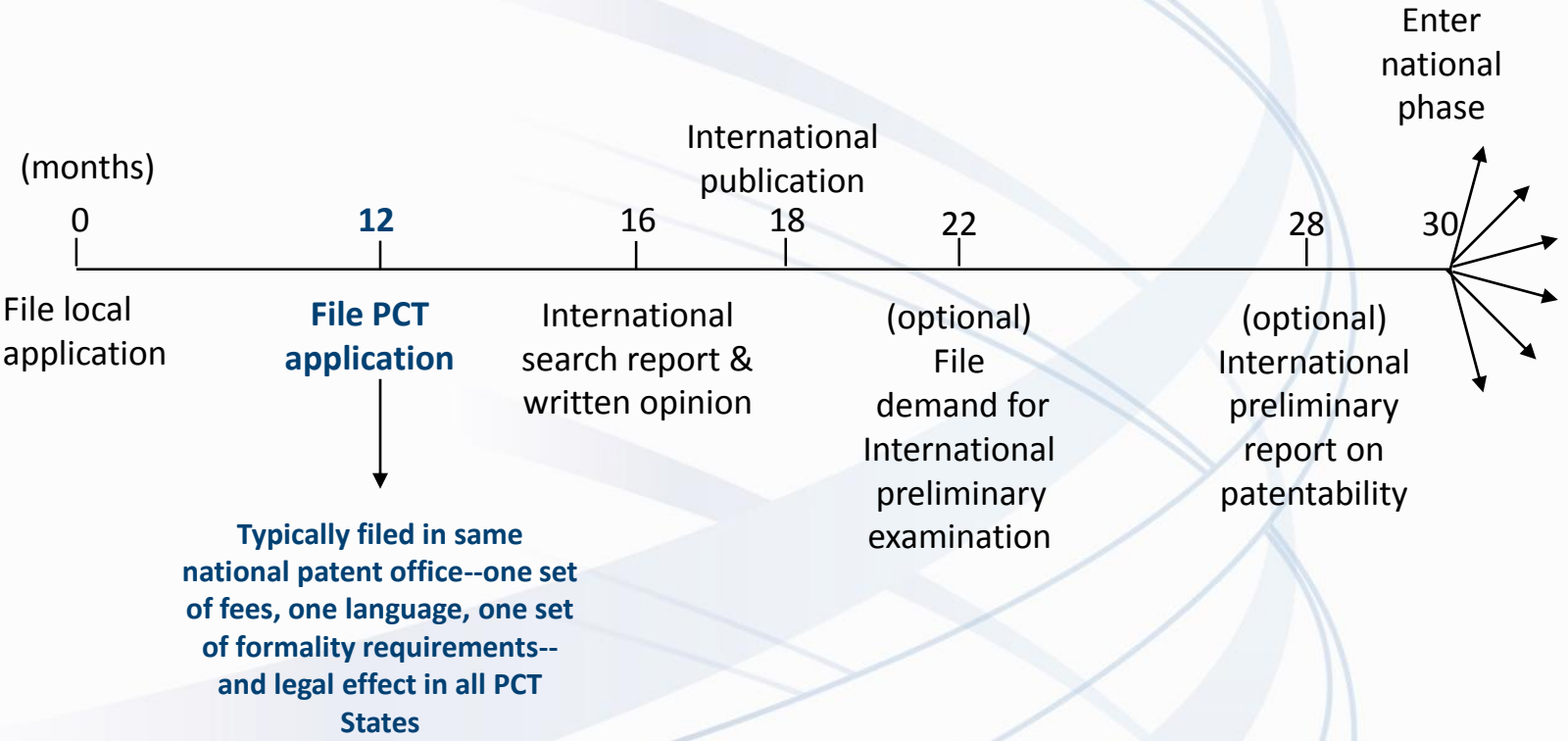

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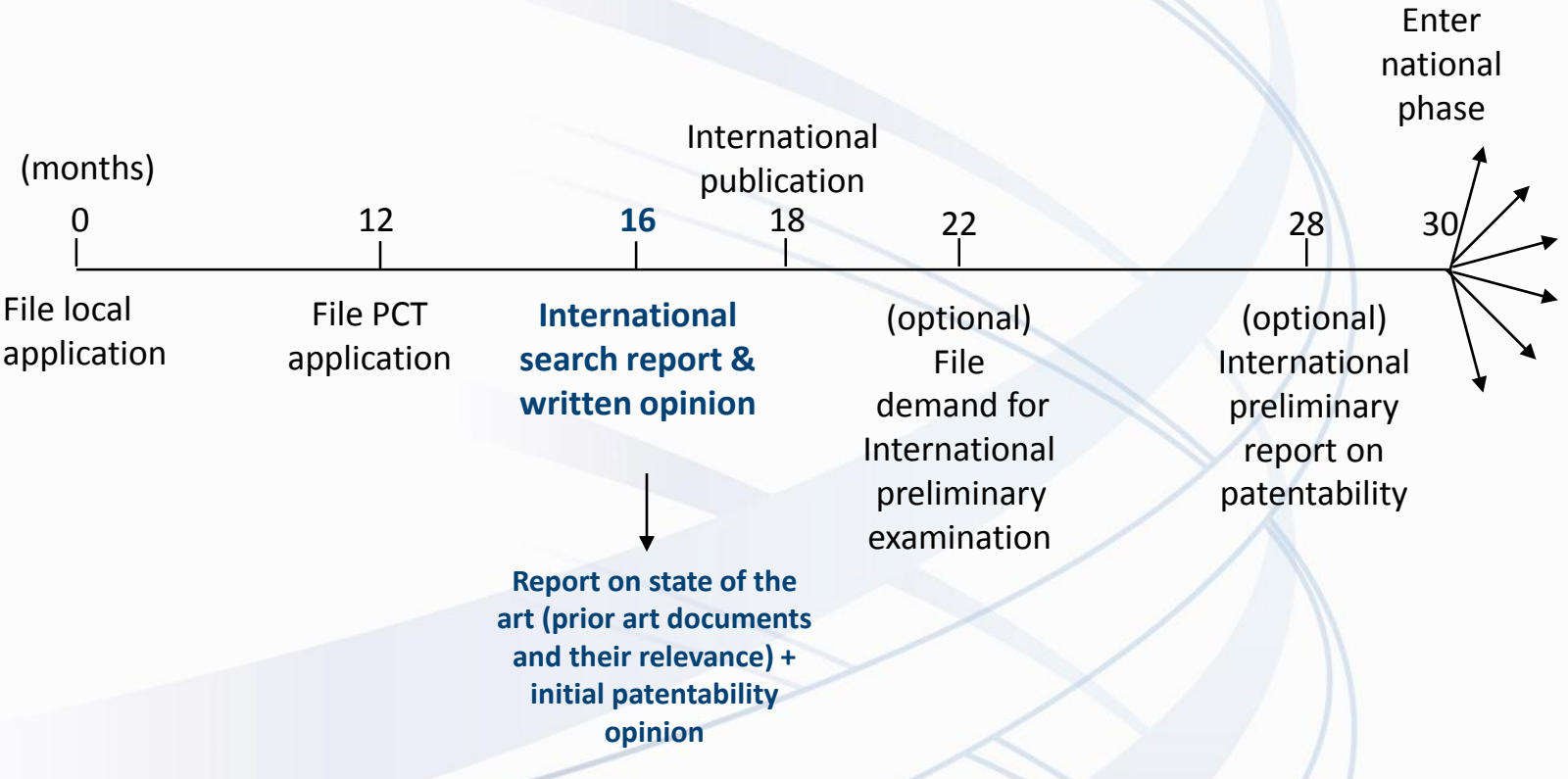

PCT International Searching Authorities

The ISAs are the following 18 offices:

- Australia
- Austria
- Brazil
- Canada
- China
- Chile (not yet operating)
- Egypt
- Finland
- India (October 15, 2013)
- Israel
- Japan
- Republic of Korea
- Russian Federation
- Spain
- Sweden
- United States of America
- European Patent Office
- Nordic Patent Institute

Prior art for international search

- 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)

Example: PCT International Search Report

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
	GB 392415 A (JONES) 18 May 1933 (18.05.33)	
X	Fig. 1	1-3
Y	page 3, lines 5-7	4, 10
A	Fig. 5, support 36	11-12
	GB 2174500 A (STC) 5 November 1986 (05.11.86)	
X	page 1, lines 5-15, 22-34, 46-80; Fig. 1	1-3
Y		4
	US 4322752 A (BIXTY) 30 March 1982 (30.03.82)	
A	claim 1	1
A	GREEN, J.P. Integrated Circuit and Electronic Compass, IBM Technical Disclosure Bulletin, October 1975, Vol. 17, No. 6, pages 1344 and 1345	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

Example: PCT Written opinion of the International Searching Authority

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

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

Patentability assessment of claims

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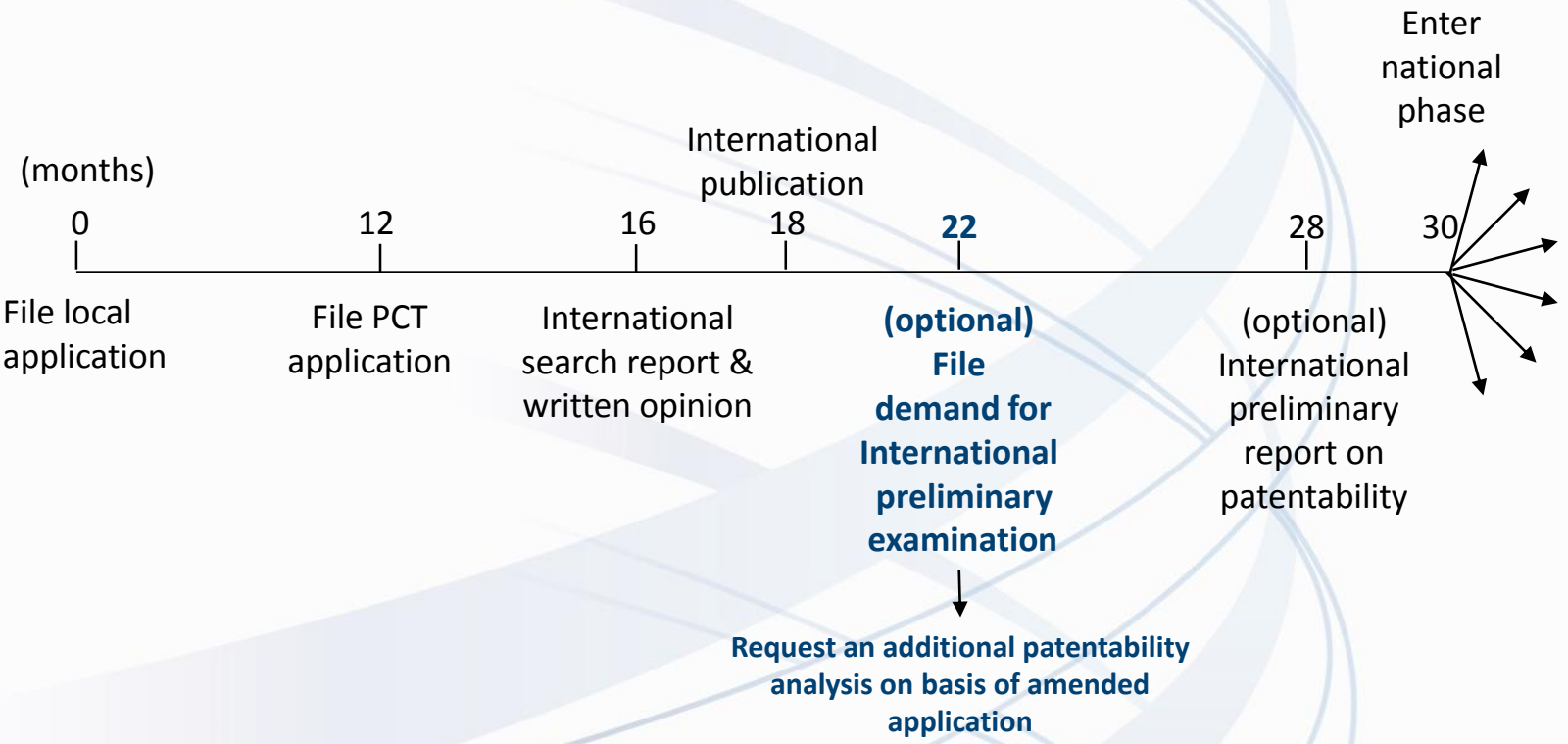

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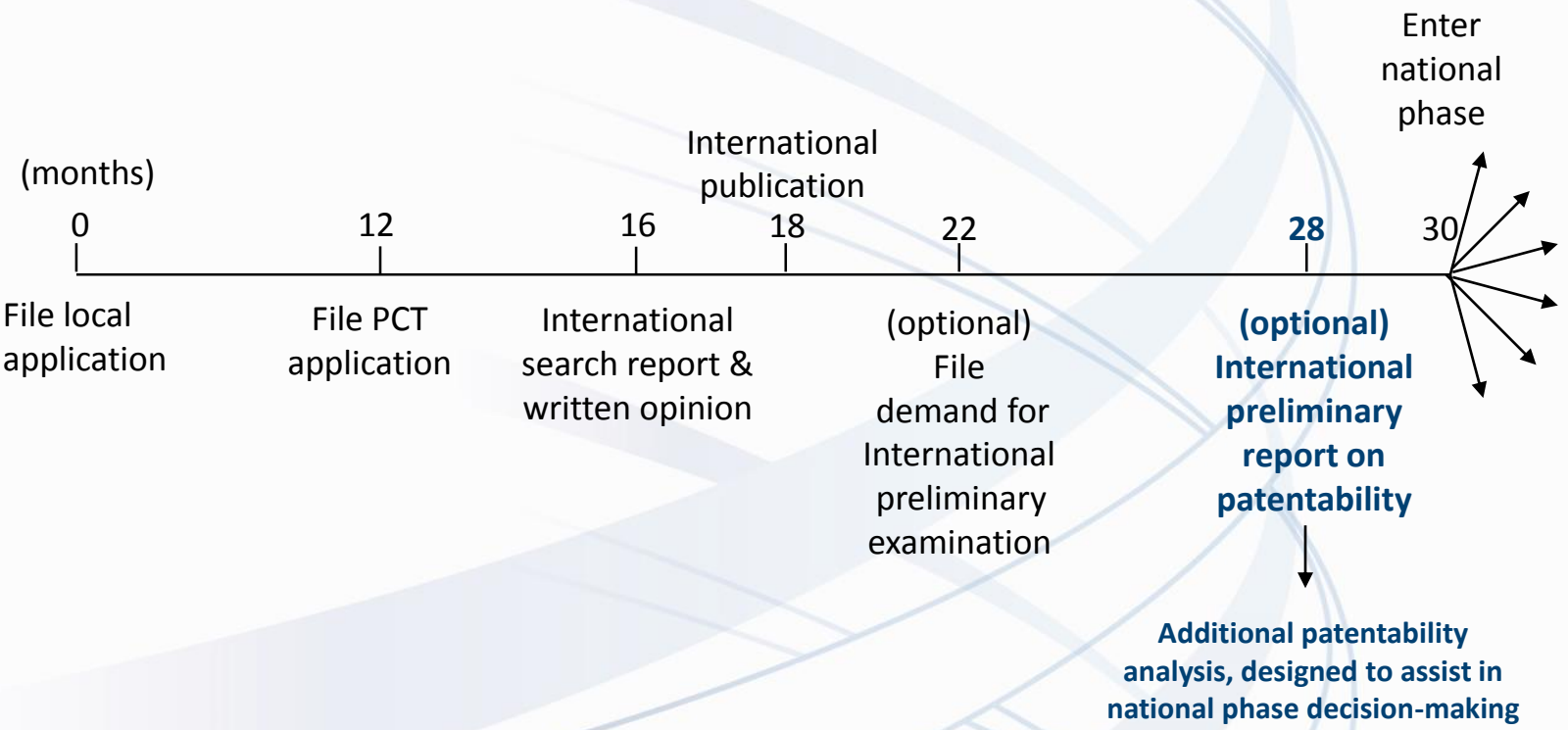

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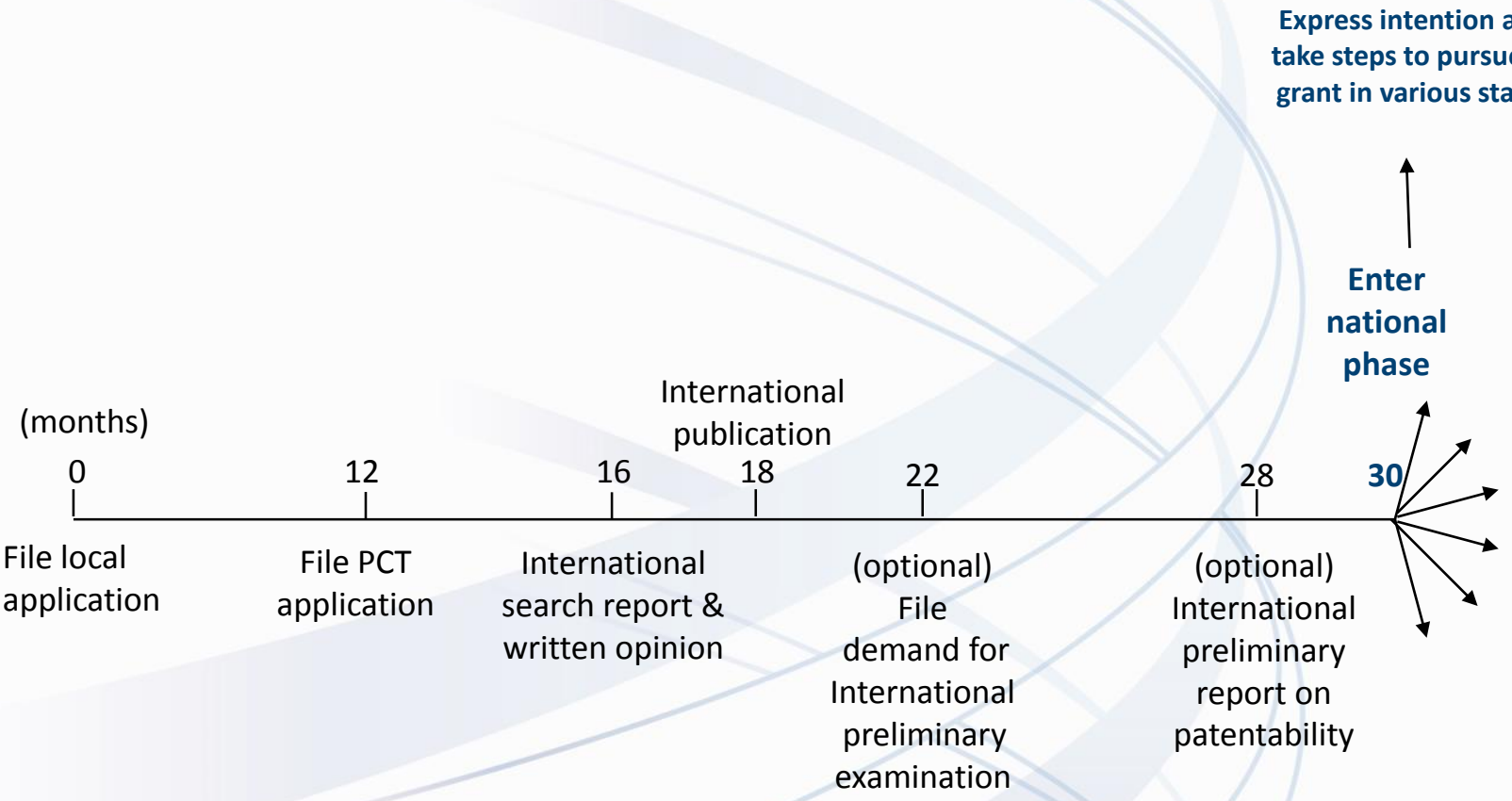

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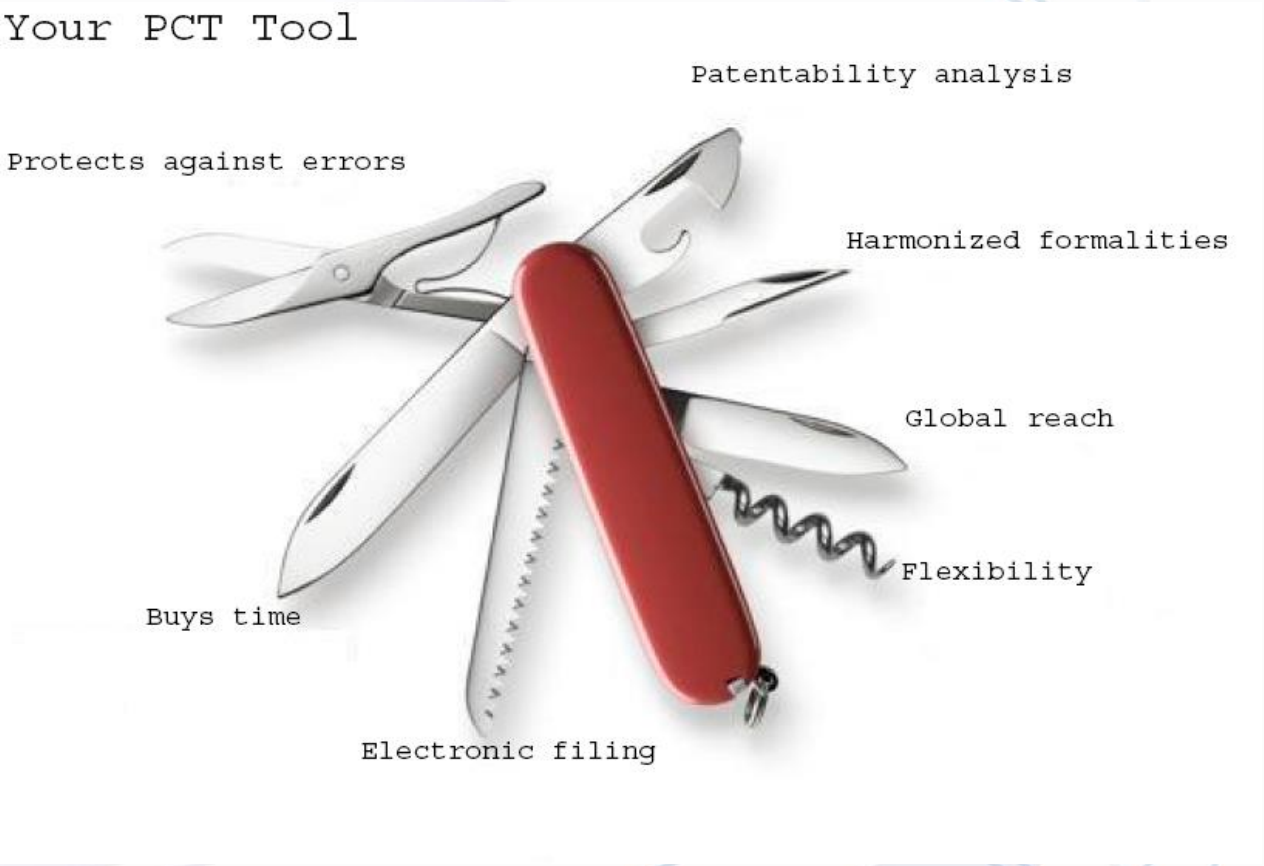

The PCT in 1978

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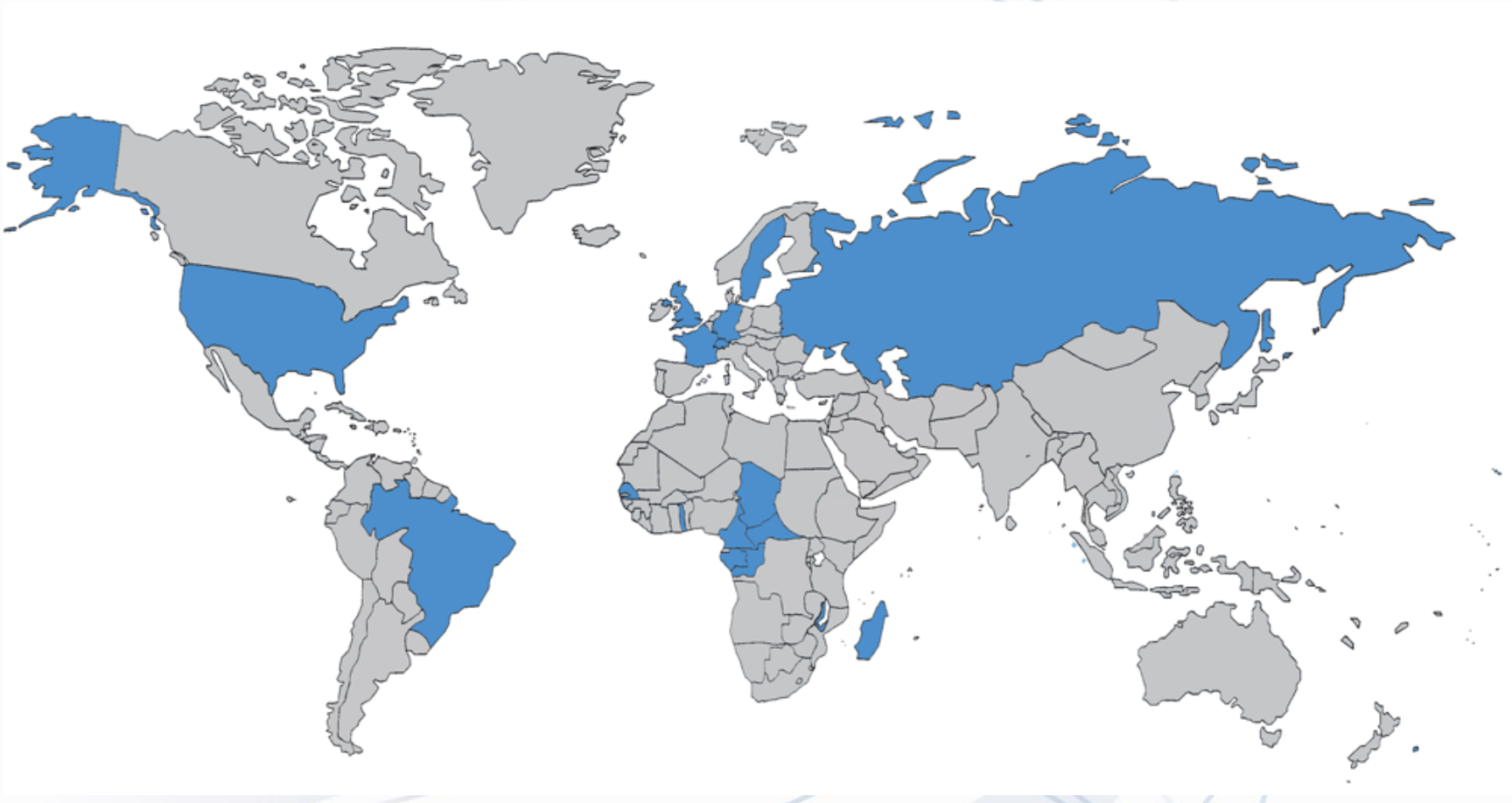

PCT Coverage Today

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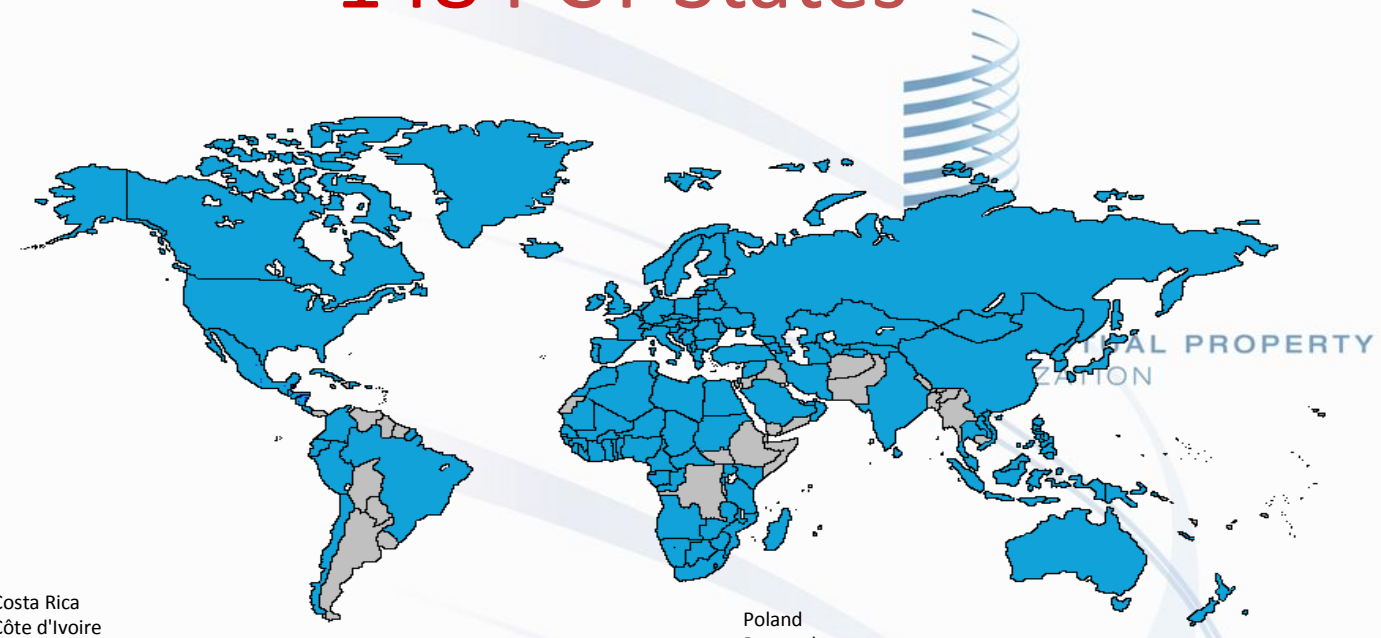
148 PCT States

=PCT



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Antigua and Barbuda
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Australia
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Belarus
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Botswana
Brazil
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Bulgaria
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Indonesia
Iran (Islamic Republic of) (4 Oct. 2013)
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Sao Tomé e Principe
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Swaziland
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The former Yugoslav Republic of Macedonia
Togo
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Tunisia
Turkey
Turkmenistan
Uganda
Ukraine
United Arab Emirates
United Kingdom
United Republic of Tanzania
United States of America
Uzbekistan
Viet Nam
Zambia
Zimbabwe

Countries not yet in PCT

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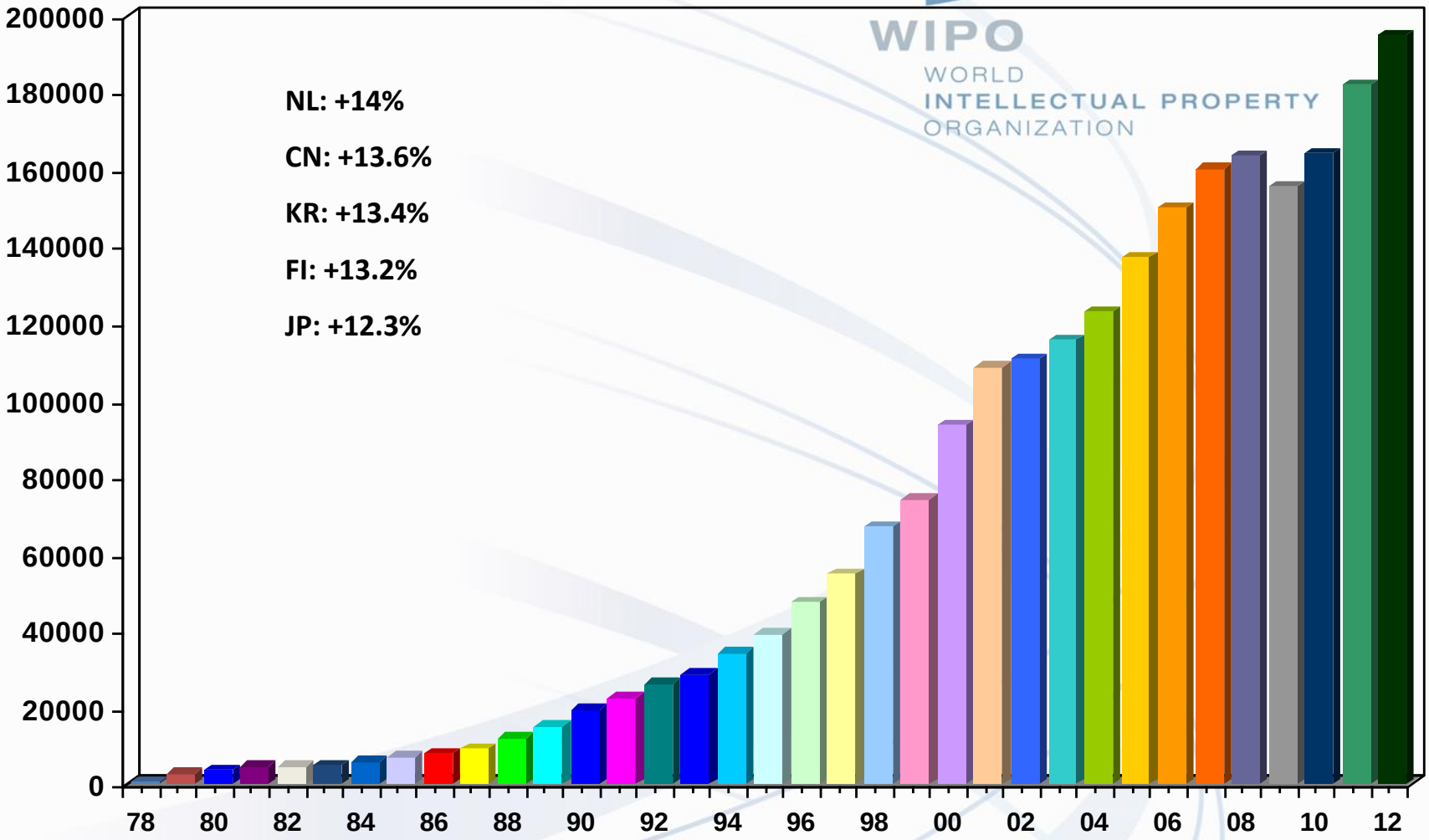
Suriname
Timor-Leste
Tonga
Tuvalu
Uruguay
Vanuatu
Venezuela
Yemen

(45)

PCT Applications 2012



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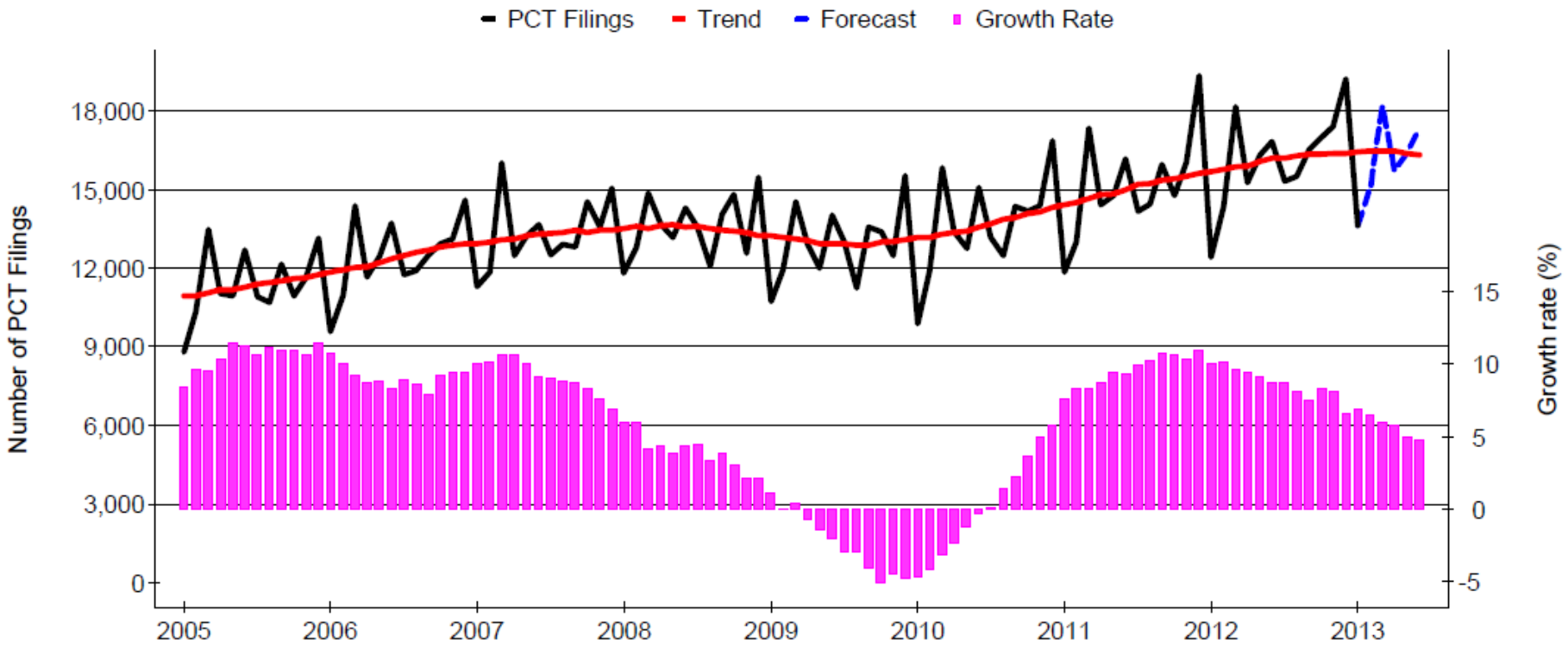
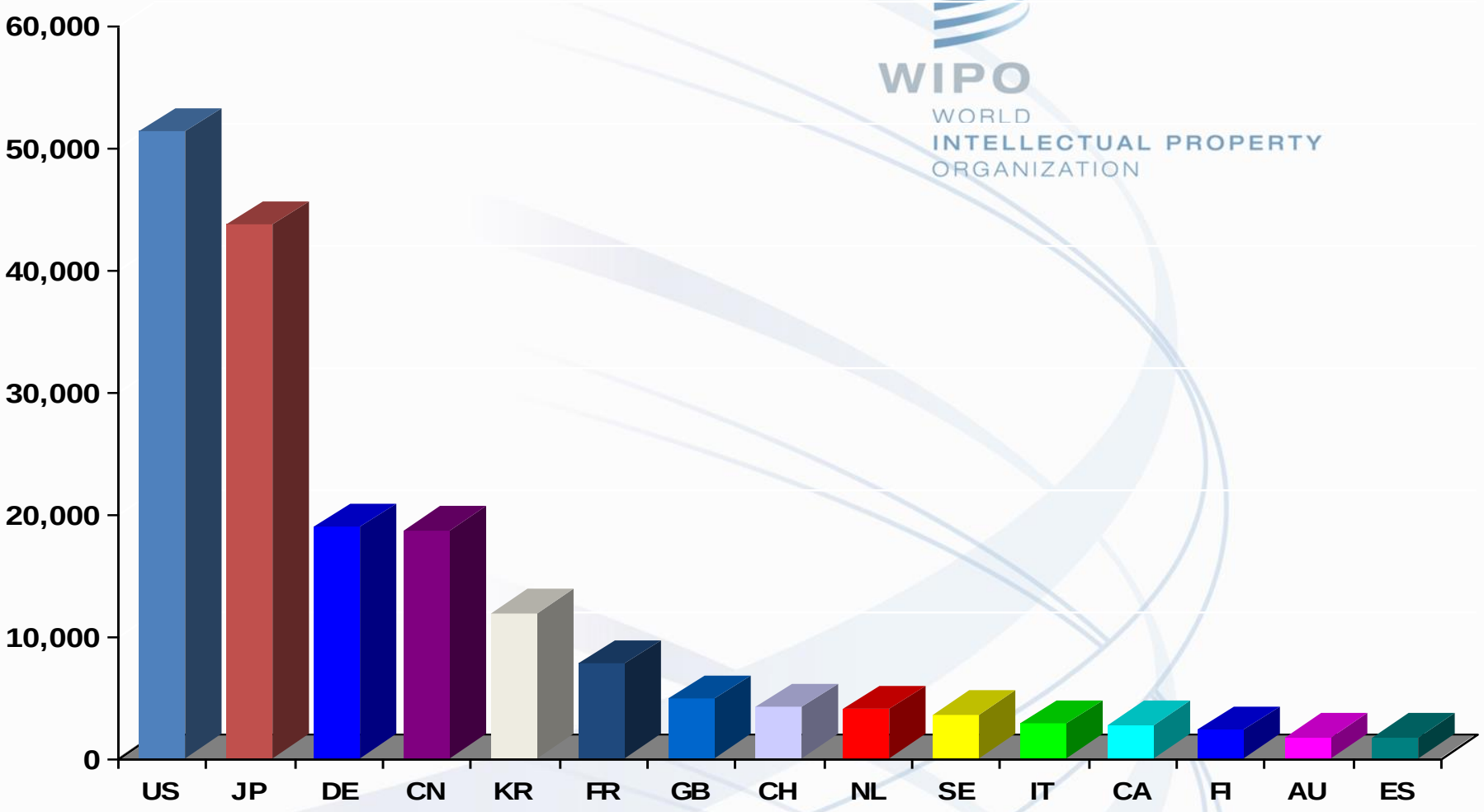
194,400 PCT applications
+6.6% in 2012

87.3% fully electronic
Forecasting +3.8% in 2013

Trends in PCT filing

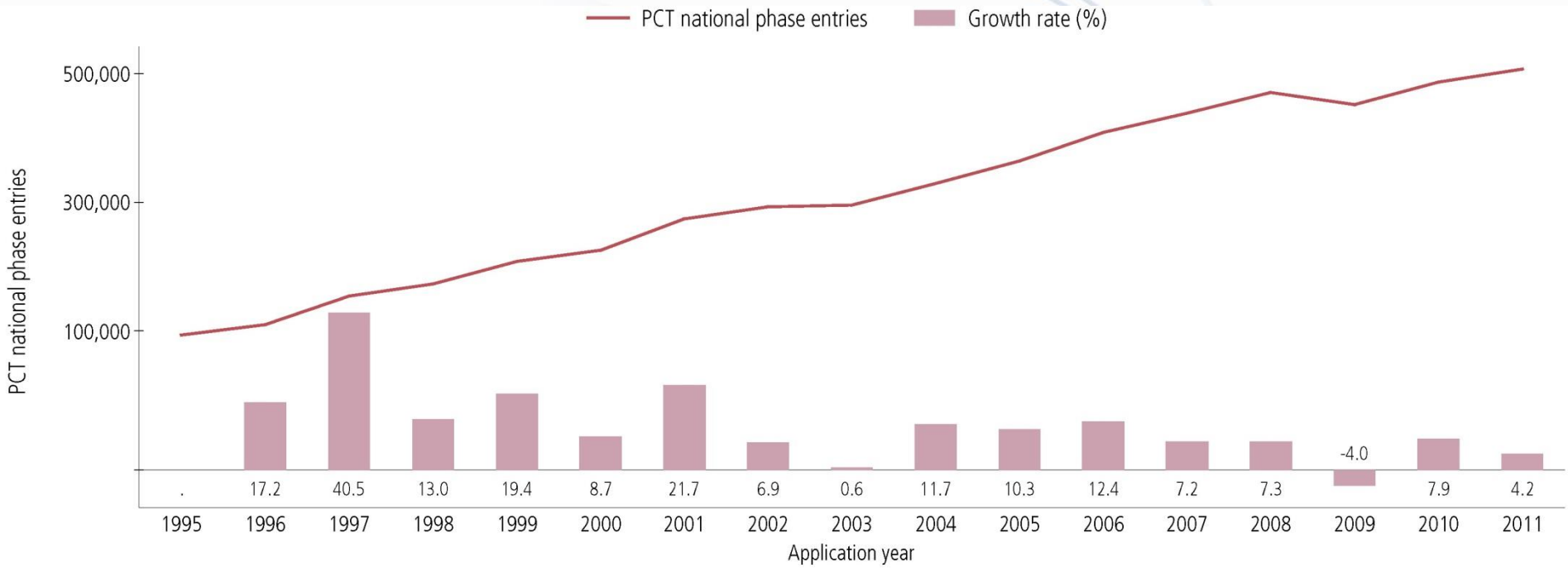


International applications received in 2012 by country of origin



Top 15 countries responsible for 92.7% of IAs filed in 2012

PCT National phase entries—total



507,400 national phase entries estimated in 2011 (+ 4.2%)

431,800 (about 85%) of NPEs are from non-resident applicants, making PCT NPEs responsible for 54.9% of all non-resident patent applications filed worldwide in 2011

Top PCT Applicants 2012

1. ZTE Corporation—CN (3906)*
2. Panasonic—JP (2951)
3. Sharp—JP (2001)
4. Huawei—CN (1801)
5. Bosch—DE (1775)
6. Toyota—JP (1652)
7. Qualcomm—US (1305)
8. Siemens—DE (1272)
9. Philips—NL (1230)
10. Ericsson—SE (1197)
11. LG Electronics—KR (1094)
12. Mitsubishi Electric—JP (1042)
13. NEC—JP (999)
14. Fujifilm Corporation (891)
15. Hitachi—JP (745)
16. Samsung Electronics—KR (683)
17. Fujitsu—JP (671)
18. Nokia—FI (670)
19. BASF—DE (644)
20. Intel—US (640)

*(…) of published PCT applications

Top University PCT Applicants 2012

1. University of California (US)
2. MIT (US)
3. Harvard University (US)
4. Johns Hopkins (US)
5. Columbia University (US)
6. University of Texas (US)
7. Seoul National University (KR)
8. Leland Stanford University (US)
9. Peking University (CN)
10. University of Florida (US)
11. Cal Tech (US)
12. Korea Advanced Institute of Science and Technology (KR)
13. Cornell University (US)
14. University of Tokyo (JP)
15. Yonsei University (KR)
16. Isis Innovation Limited (GB)
17. Tsinghua University (CN)
18. Kyoto University (JP)
19. University of Michigan (US)
20. Purdue University (US)

Top Government/Research Institution PCT Applicants 2012

1. Commissariat a l'Energie Atomique et aux Energies Alternatives (France)
2. Fraunhofer-Gesellschaft zur Forderung Der Angewandten Forschung e.v. (Germany)
3. Centre National de la Recherche Scientifique (CNRS) (France)
4. China Academy of Telecommunications Technology
5. Institute of Microelectronics of Chinese Academy of Sciences (China)
6. Mimos Berhad (Malaysia)
7. Institut National de la Sante et de la Recherche Medicale (INSERM) (France)
8. Electronics & Telecommunications Research Institute of Korea
9. Agency of Science, Technology and Research (Singapore)
10. Consejo Superior de Investigaciones Cientificas (CSIC) (Spain)
11. United States of America, represented by the Secretary, Department of Health and Human Services
12. National Institute of Advanced Industrial Science and Technology (Japan)
13. Council of Scientific and Industrial Research (India)
14. Korea Research Institute of BioScience and Biotechnology
15. Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek Tno (Netherlands)
16. Max Plank Institute (Germany)

Certain PCT Advantages

The PCT, as the cornerstone of the international patent system, provides a worldwide system for simplified filing and processing of patent applications, which:

1. postpones the major costs associated with internationalizing a patent application
2. provides a strong basis for patenting decisions
3. harmonizes formal requirements
4. protects applicant from certain inadvertent errors
5. evolves to meet user needs
6. is used by the world's major corporations, universities and research institutions when they seek international patent protection

ePCT

- Online portal that provides PCT services for both applicants and offices
- Available since May 2011
- Provides secure and direct interaction with PCT applications maintained by the International Bureau
- Applicants may now conduct most PCT transactions electronically

ePCT Overview

Applicant portal development

- Single portal for all actions and info, irrespective of responsible Office
- Information entered is used directly; no more transcription errors
- Live file - always up-to-date

Web filing

- Data checks using same functions as IB; always up-to-date
- Share drafts in ePCT like a normal IA file - rights carry through to IA
- View IA file immediately on filing(*)

Receiving Offices

- Direct access to IB+ISA(*) file
- Option of using online tools equivalent to RO/IB
- Offer e-filing without need to run own server
- Alternative to PCT-EDI with built-in local files and records management

International Authorities

- Direct access to IB+RO(*) file
- Share access to application body, including all updates(*) as soon as approved by RO, IB, ISA or IPEA

(*) feature which would be dependent on level of participation by other Office

PCT Training Options

- **PCT Distance learning** course content available in the 10 PCT publication languages
- New: **29 video segments** on WIPO's Youtube channel about individual PCT topics from our Basic Seminar series
- PCT **Webinars**
  - providing free updates on developments in PCT procedures, and PCT strategies—previous webinars are archived and freely available
  - upon request also for companies or law firms, for example, for focused training on how to use ePCT
- In-person PCT **Seminars** and training sessions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PCT One Million and Counting
Gallery of PCT Notable Inventions and Inventors
Collection of PCT User Strategies
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WIPO ACADEMY

CERTIFICATE

This is to certify that

Pooria Gill

has completed the PCT Distance Learning Course

INTRODUCTION TO THE PATENT COOPERATION TREATY

11 September 2019

Sherif Saadallah
Executive Director
WIPO Academy

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PCT Resources

Legal Information

- Treaty, Regulations and Administrative Instructions
- Guidelines for Authorities and Offices
- Amendments to the Regulations (July 1, 2010) [PPT] [Archives]
- Directives for New Equivalent Amounts of Certain PCT Fees
- FAQs
- PCT Glossary
- PCT Case Law Database
- Legal Text Index (July 1, 2010) [PDF] [Archives] New
- *History of the PCT Regulations* [PDF]
- Washington Diplomatic Conference on the PCT

- Reservations and Incompatibilities
- Types of Protection [PDF]
- Time Limits for Entering National/Regional Phase New
- Waivers: Powers of Attorney
- Access to IPER under Rule 94.1(c)
- Regional Patents via the PCT
- States Party to PCT/Paris/WTO [PDF]
- Restoration of the Right of Priority

- PCT Contracting States [PDF]
- ISA and IPEA Agreements

PCT Offices

- Quality Reports by International Authorities
- Forms for Offices
- Data Services for Offices
- Minimum Documentation: Patents [PDF] and Non-Patent Literature [PDF]
- Information Concerning Emergency Preparedness Plans
- Patent Applications Management Software (PCT-ROAD)

Patent Data

- PATENTSCOPE® Search Service
- *Official Notices (PCT Gazette)* Collection
- Data Services

Meetings, Training and Documents

- PCT Distance Learning Course New
- Seminars
- PCT Webinars
- PCT Assembly Reports
- Meetings and Documents
- PCT Presentations
- PCT Working Group

Manner and order of the "Description"

- It should be in six parts.
- Those parts should have the following headings:
  - “Technical Field”
  - “Background Art”
  - “Disclosure of Invention”
  - “Brief Description of Drawings”
  - “Best Mode for Carrying Out the Invention”
    - “Mode(s) for Carrying Out the Invention”
    - “Industrial Applicability” (i.e., where applicable)
  - “Sequence Listing”
    - “Sequence Listing Free Text”

Thanks for your Attentions

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Mazandaran University of Medical Sciences and Health Care
Sari, I.R. Iran

www.mazums.ac.ir