

In The Name of Allah



International Patent System

Pooria Gill; PhD

Associate Professor at MAZUMS

p.gill@mazums.ac.ir

What is Patent?



- ❑ 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, which also includes trademark and copyright law.

What is patentable?



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

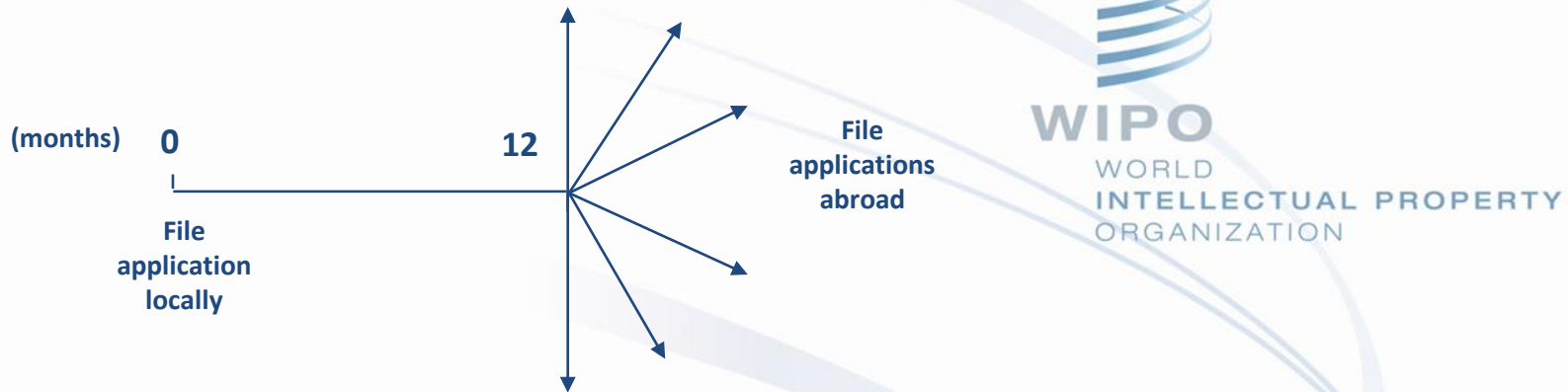
- **First**, it must be novel, meaning that the invention did not previously exist.
- **Second**, the invention must be non-obvious, which means that the invention must be a significant improvement to existing technology. Simple changes to previously known devices do not comprise a patentable invention.
- **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!



- ❑ 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, $E=mc^2$.

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



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



- 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

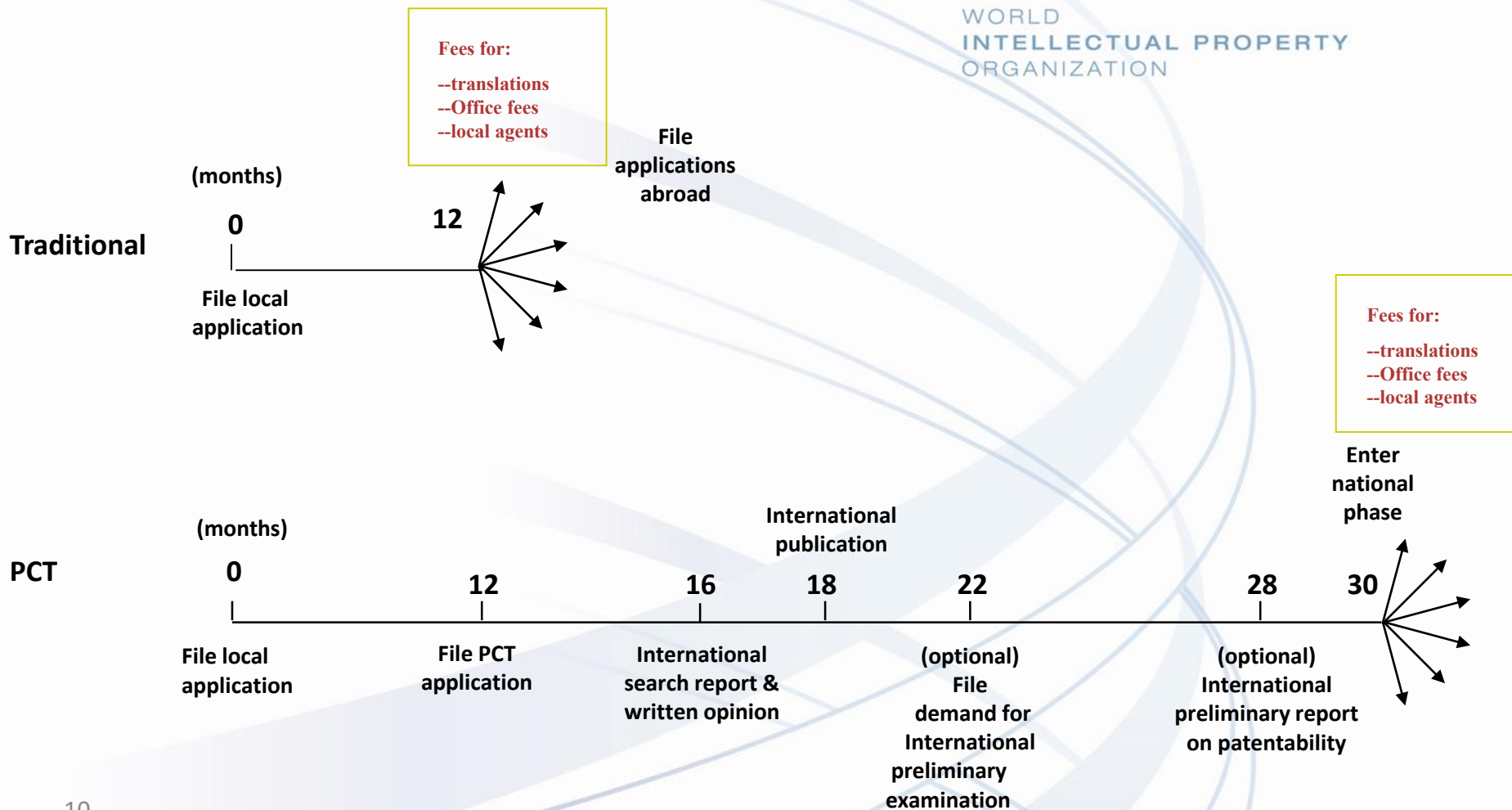


PCT Basics

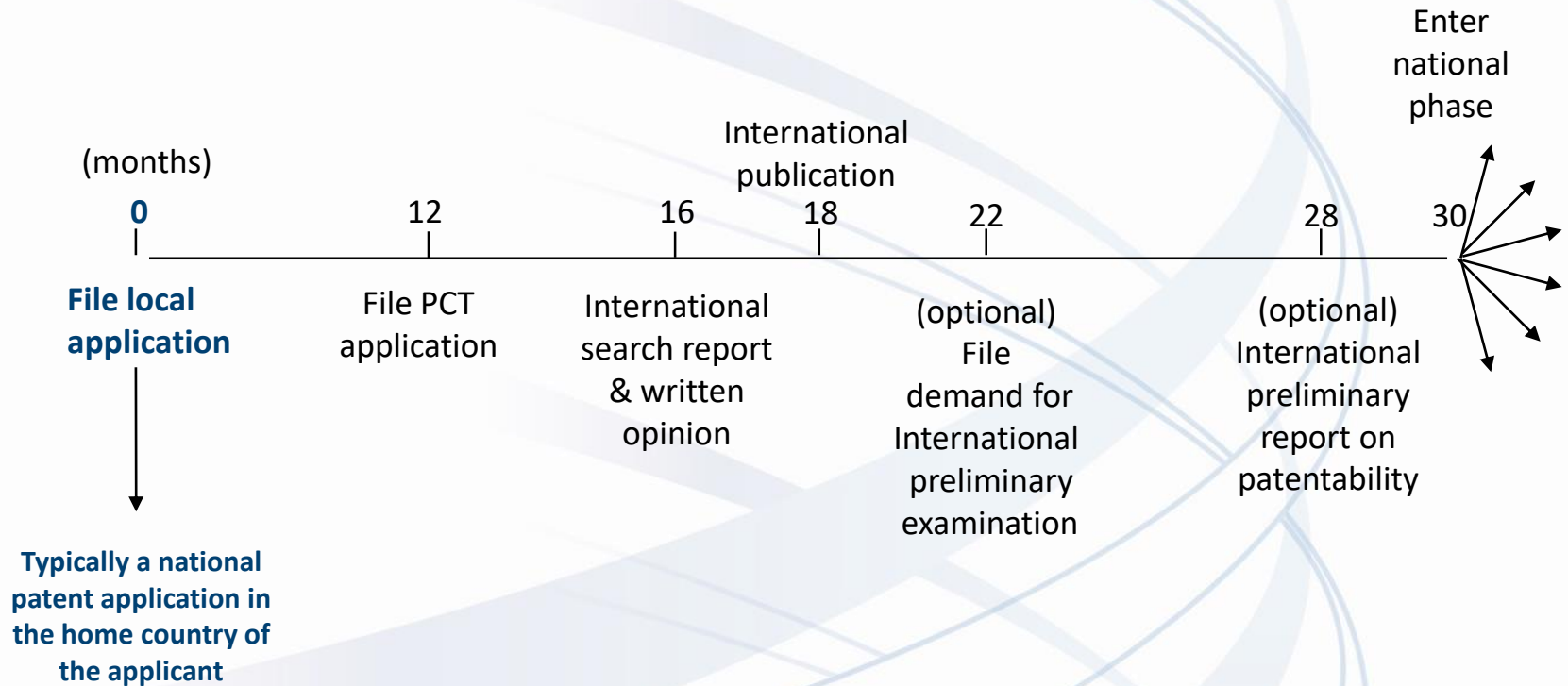


- **Work sharing tool for Offices:**
 - Central formality checking
 - Central international publication
 - International search report (ISR)
 - International Preliminary Reports on Patentability (preliminary, non-binding opinion on novelty, inventive step (non-obviousness) and industrial applicability)

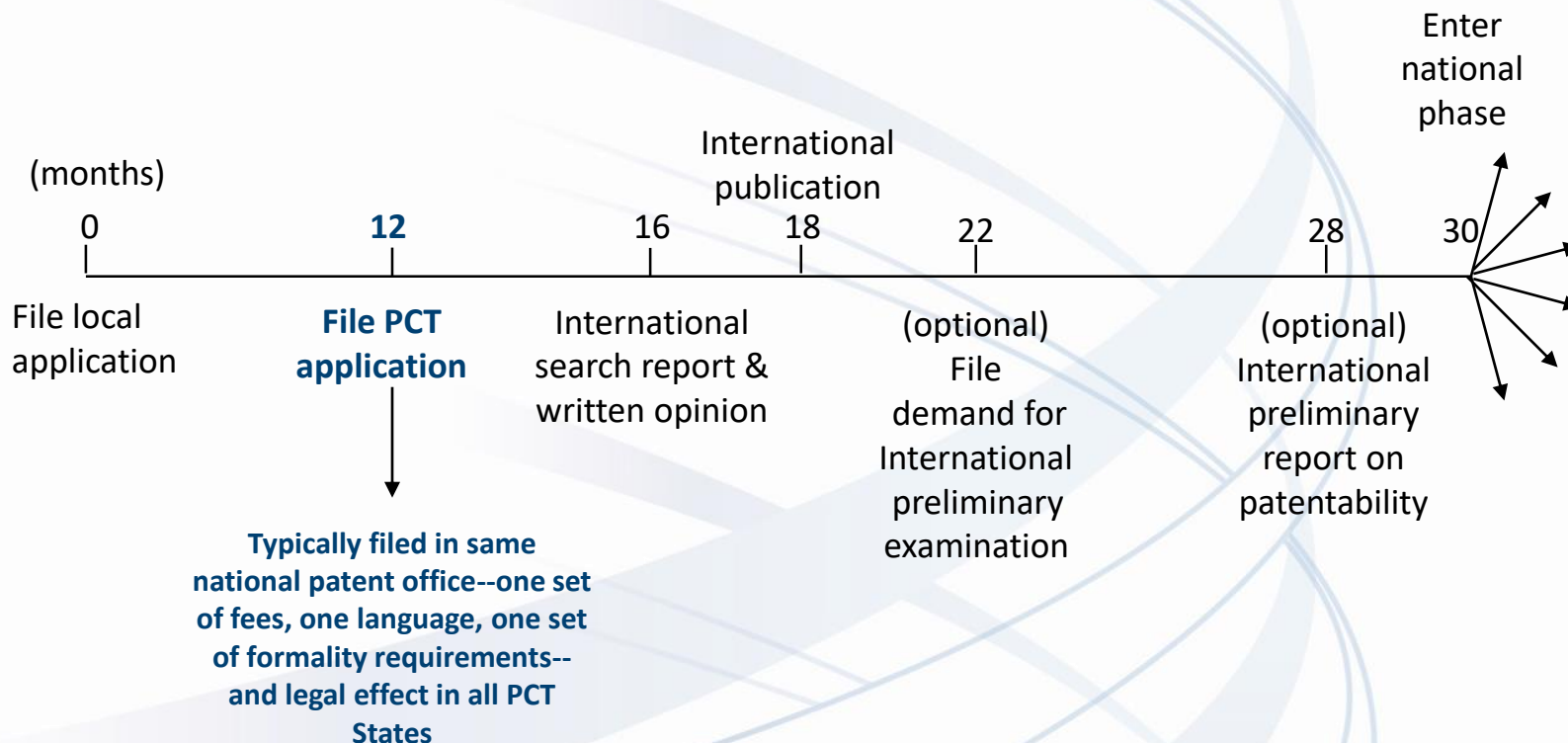
Traditional patent system vs. PCT system



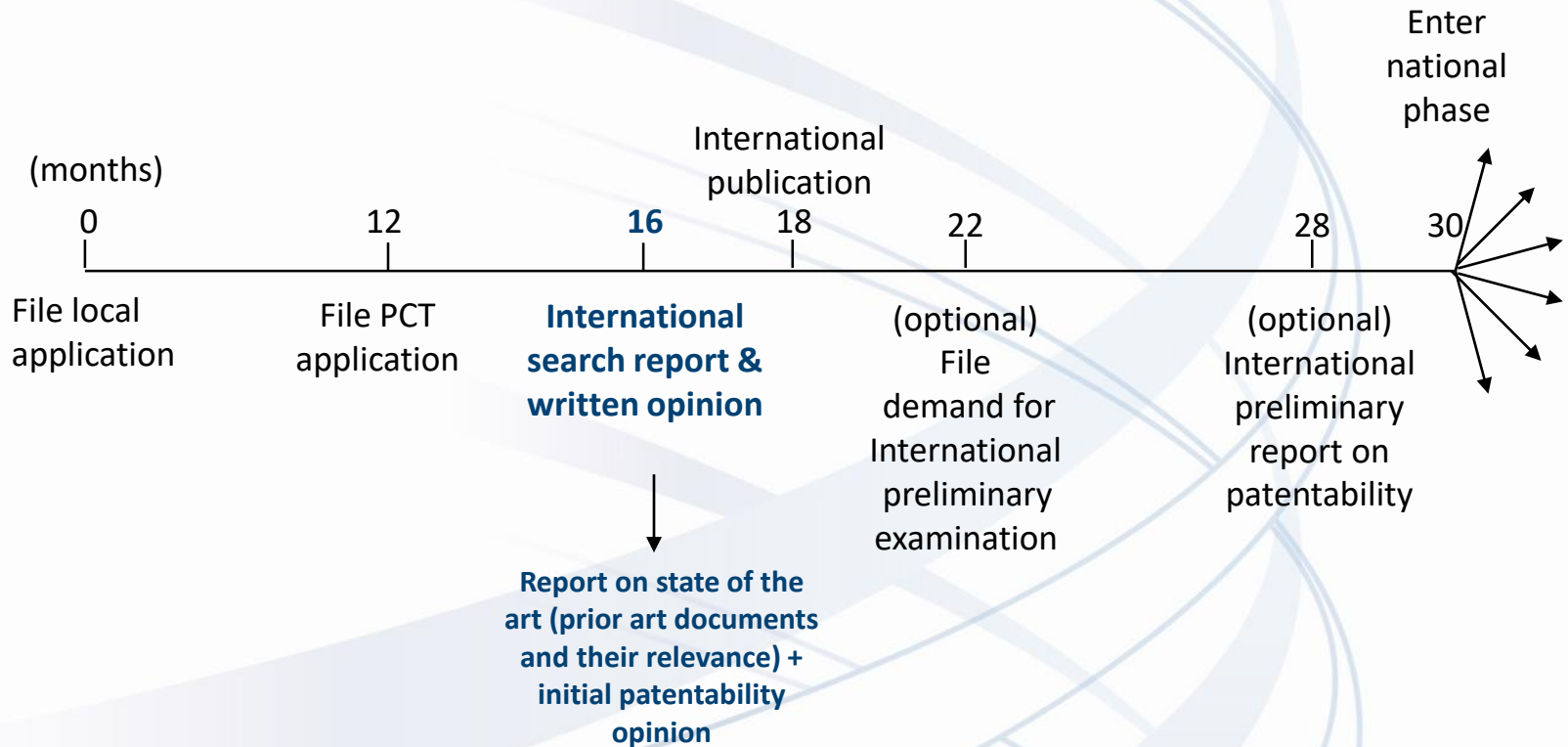
The PCT System



The PCT System



The PCT System



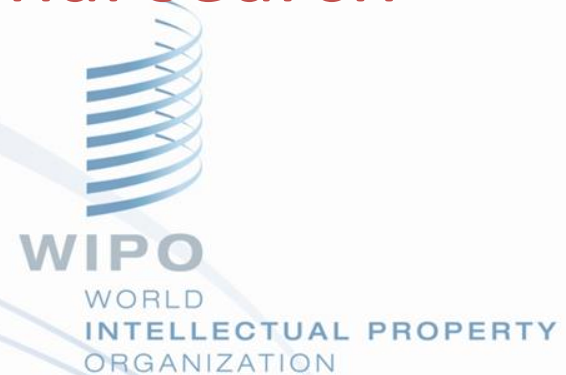
PCT International Searching Authorities

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
X	GB 392415 A (JONES) 18 May 1933 (18.05.33) Fig. 1 page 3, lines 5-7 Fig. 5, support 36	1-3
Y		4, 10
A		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 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 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
1. Statement		
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,		

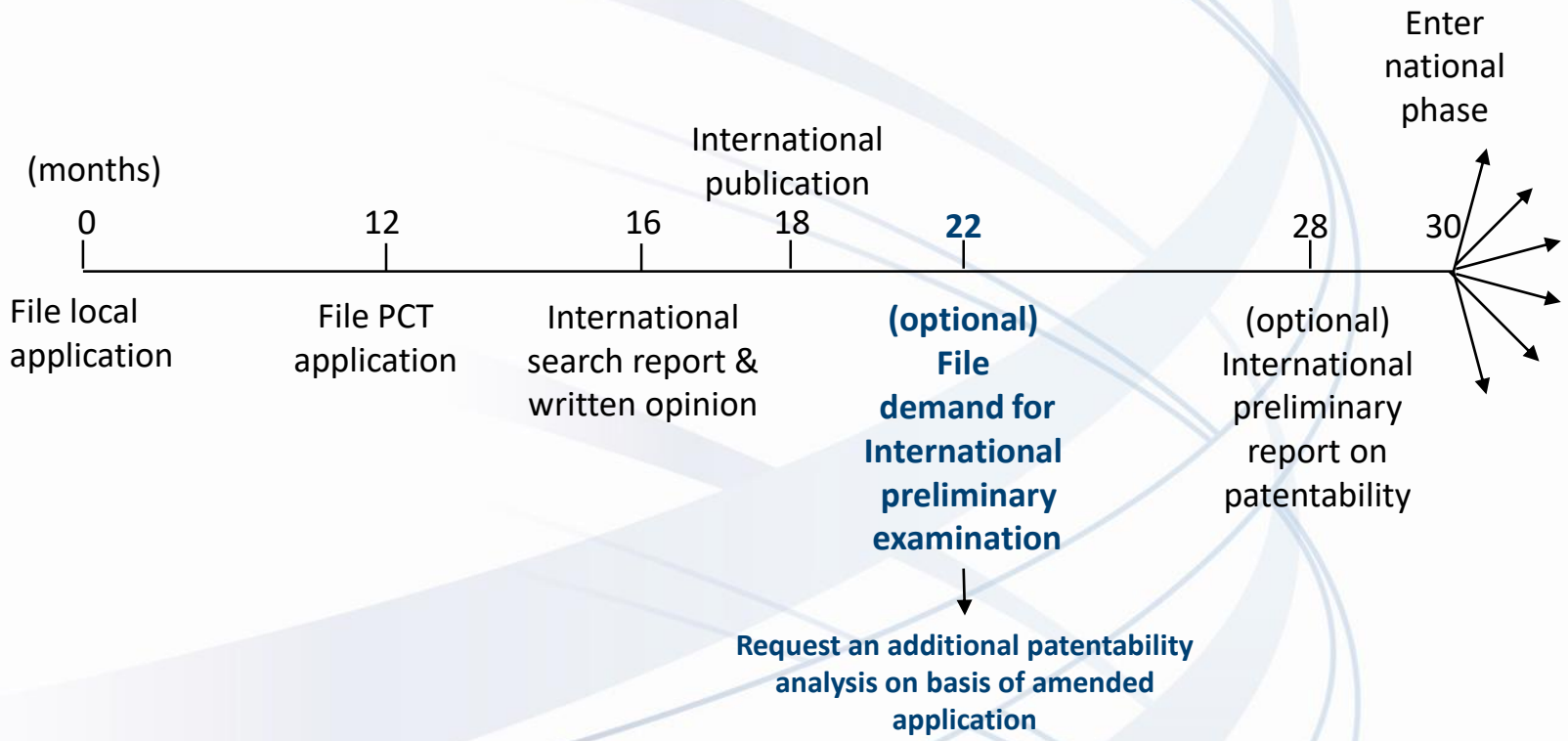
Reasoning supporting the assessment

Patentability assessment of claims

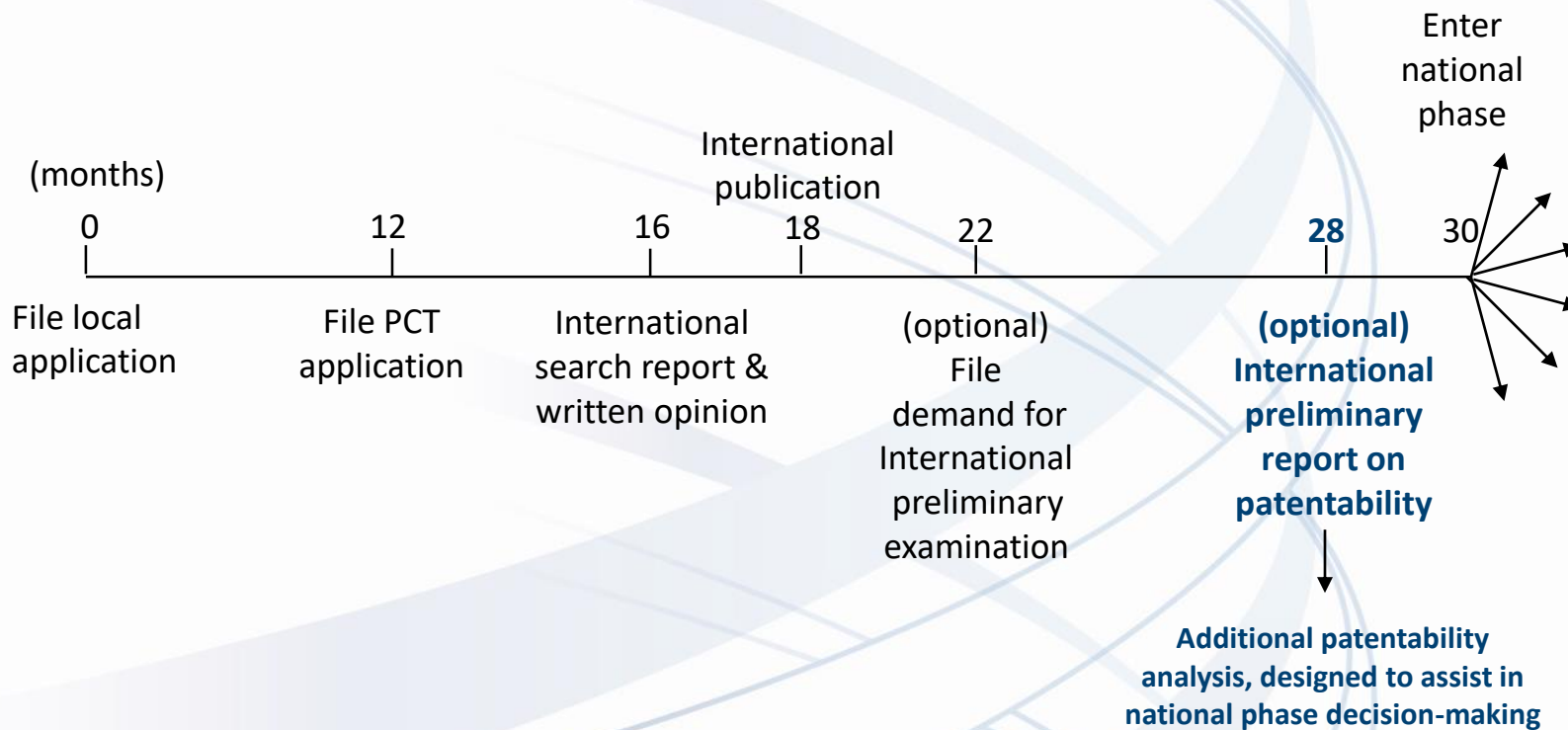
The PCT System



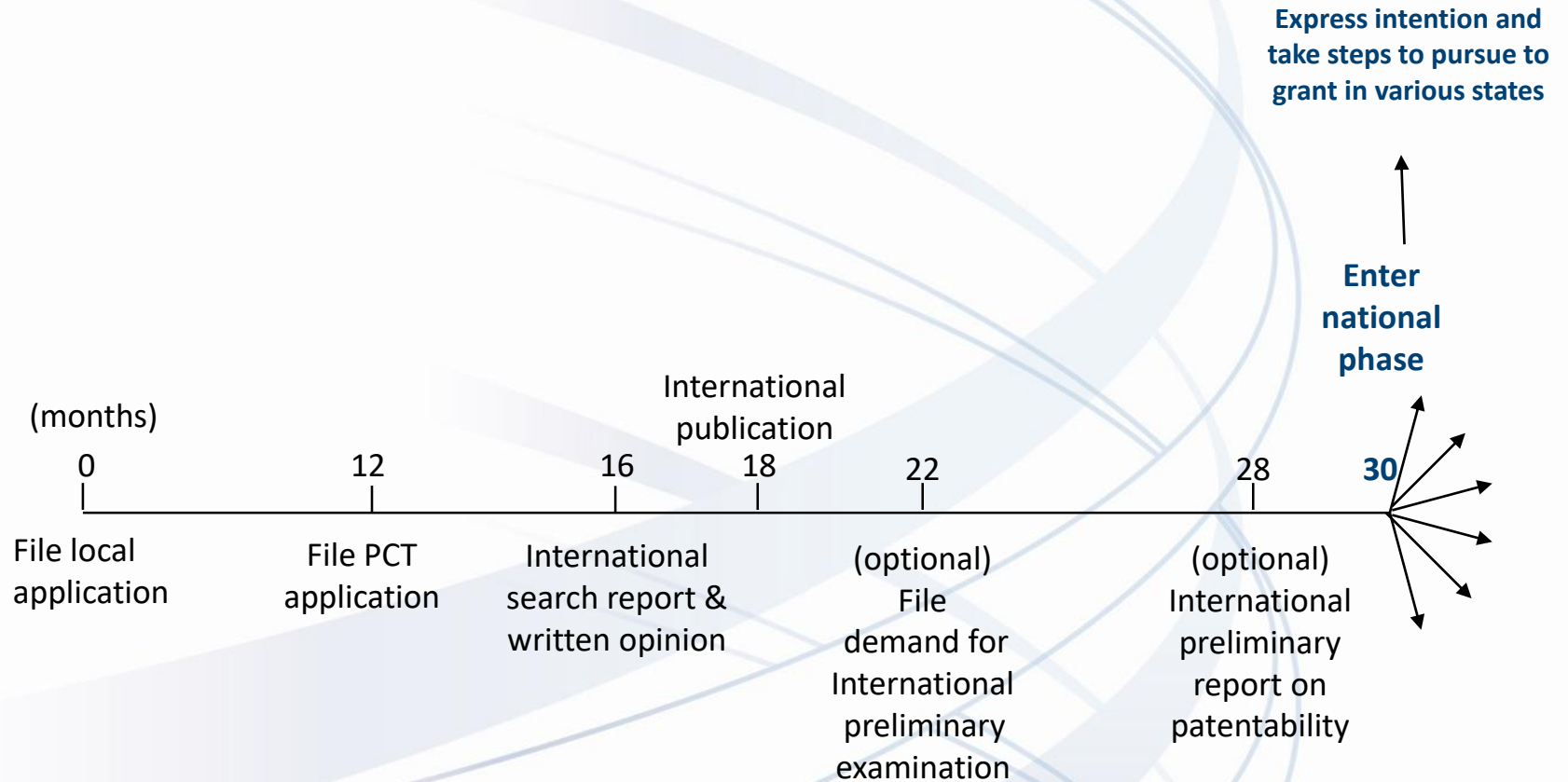
The PCT System



The PCT System



The PCT System

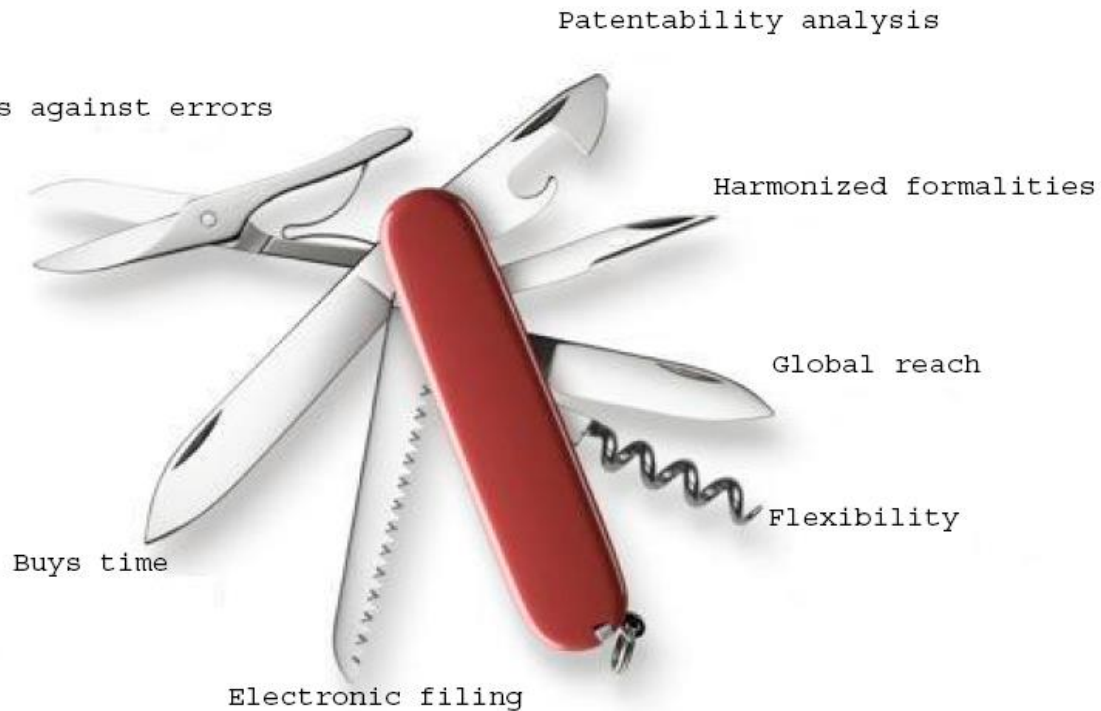




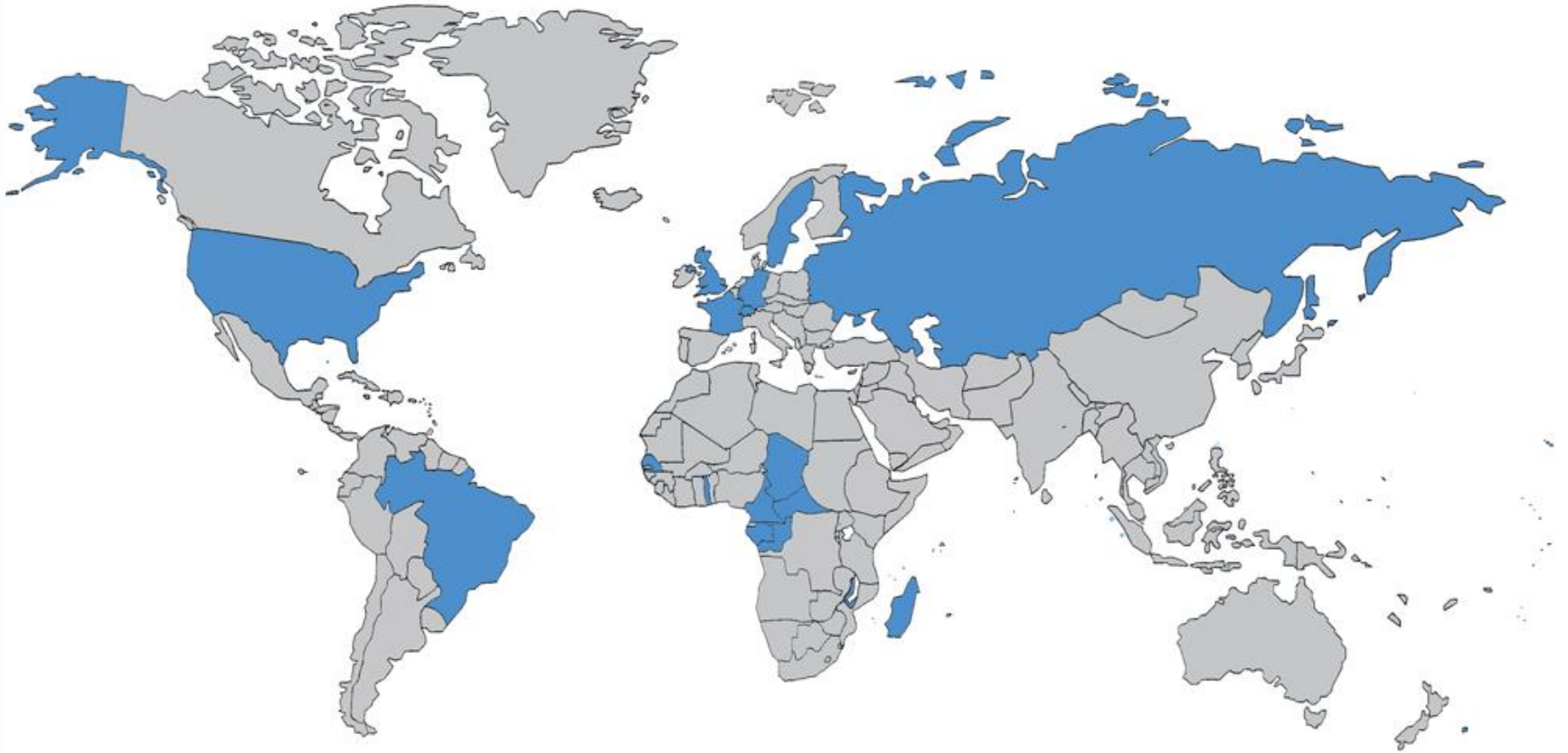
The PCT



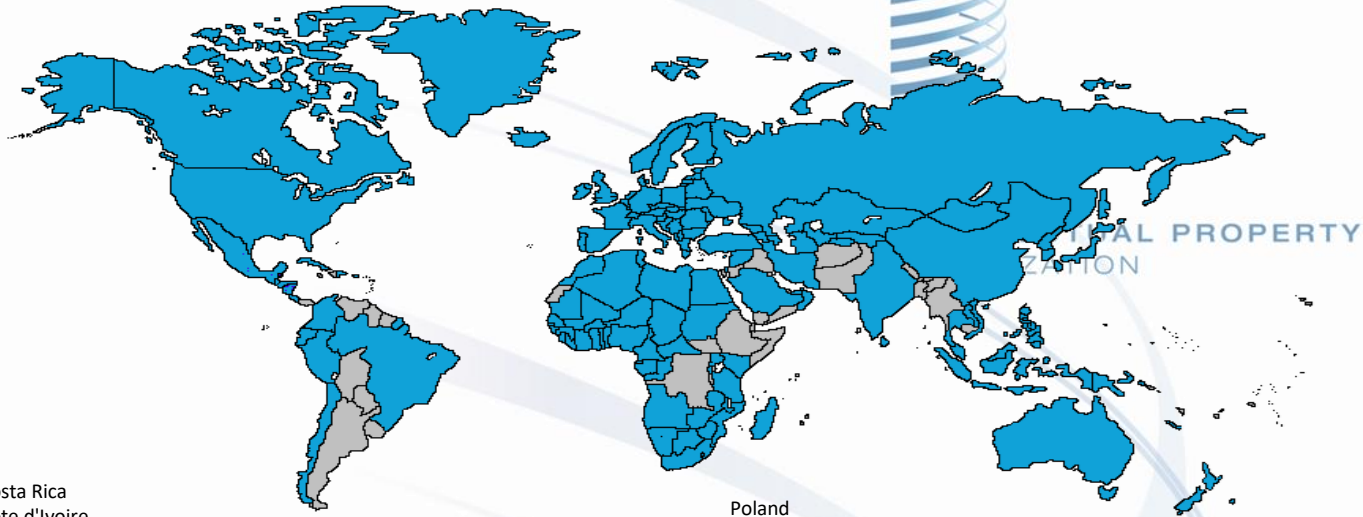
Your PCT Tool



The PCT in 1978



148 PCT States



Albania
Algeria
Angola
Antigua and Barbuda
Armenia
Australia
Austria
Azerbaijan
Bahrain
Barbados
Belarus
Belgium
Belize
Benin
Bosnia and Herzegovina
Botswana
Brazil
Brunei Darussalam
Bulgaria
Burkina Faso
Cameroon
Canada
Central African Republic
Chad
Chile
China
Colombia
Comoros
Congo

Costa Rica
Côte d'Ivoire
Croatia
Cuba
Cyprus
Czech Republic
Democratic People's
Republic of Korea
Denmark
Dominica
Dominican Republic
Ecuador
Egypt
El Salvador
Equatorial Guinea
Estonia
Finland
France
Gabon
Gambia
Georgia
Germany
Ghana
Greece
Grenada
Guatemala
Guinea

Guinea-Bissau
Honduras
Hungary
Iceland
India
Indonesia
Iran (Islamic Republic of)
(4 Oct. 2013)
Ireland
Israel
Italy
Japan
Kazakhstan
Kenya
Kyrgyzstan
Lao People's Dem Rep.
Latvia
Lesotho
Liberia
Libyan Arab Jamahiriya
Liechtenstein
Lithuania
Luxembourg
Madagascar

Malawi
Malaysia
Mali
Malta
Mauritania
Mexico
Monaco
Mongolia
Montenegro
Morocco
Mozambique
Namibia
Netherlands
New Zealand
Nicaragua
Niger
Nigeria
Norway
Oman
Panama
Papua New Guinea
Peru
Philippines

Poland
Portugal
Qatar
Republic of Korea
Republic of Moldova
Romania
Rwanda
Russian Federation
Saint Lucia
Saint Vincent and
the Grenadines
San Marino
Sao Tomé e Príncipe
Saudi Arabia (3 Aug. 2013)
Senegal
Serbia
Seychelles
Sierra Leone
Singapore
Slovakia
Slovenia
South Africa
Spain
Sri Lanka
Sudan
Swaziland

St. Kitts and Nevis
Sweden
Switzerland
Syrian Arab Republic
Tajikistan
Thailand
The former Yugoslav
Republic of Macedonia
Togo
Trinidad and Tobago
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

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)

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

PCT Challenges



- Improving the quality of PCT international phase work products
- Building trust between patent offices, so that duplicative international phase and national phase processing can be reduced
- Language issues
 - ❑ 33% of applications filed in Chinese, Japanese and Korean
- Helping developing countries benefit from the PCT
 - ❑ 15 countries responsible for 92.1% of IAs published in 2011
- Making PCT accessible to applicants of all types from all Contracting States (for example, SMEs)
- Helping PCT users stay abreast of new developments and strategies

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



PATENTSCOPE®

- About Patents
- PCT Resources
- PCT Service Center
- Database Search
- Data Services
- Publications
- Projects & Programs
- Patent Law
- Priority Documents

RELATED LINKS

- WIPO GOLD
- Patent Classification: IPC
- Statistics
- Life Sciences
- WIPO Standards

E-NEWSLETTERS

- Subscription

PCT Resources

About the PCT

- Information Service
- PCT in the News **New**
- About the Patent Cooperation Treaty
- Protecting your Inventions Abroad: Frequently Asked Questions about the Patent Cooperation Treaty (PCT) [PDF]
- PCT Yearly Review
- PCT One Million and Counting
- Gallery of PCT Notable Inventions and Inventors
- Collection of PCT User Strategies
- PCT User Survey

Filing

- Electronic Filing (PCT-SAFE)
- PCT-Patent Prosecution Highway Pilot (PCT-PPH)
- Common Application Format
- Direct Filing with the IB
- Fees & Warning
- Online Document Upload **New**
- PCT Applicant's Guide
- Forms
- PCT Newsletter **New**
- IPO Closed Dates
- PCT Time Limit Calculator

WARNING

- Requests for payment of fees that do not come from the International Bureau of WIPO

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



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

www.mazums.ac.ir