

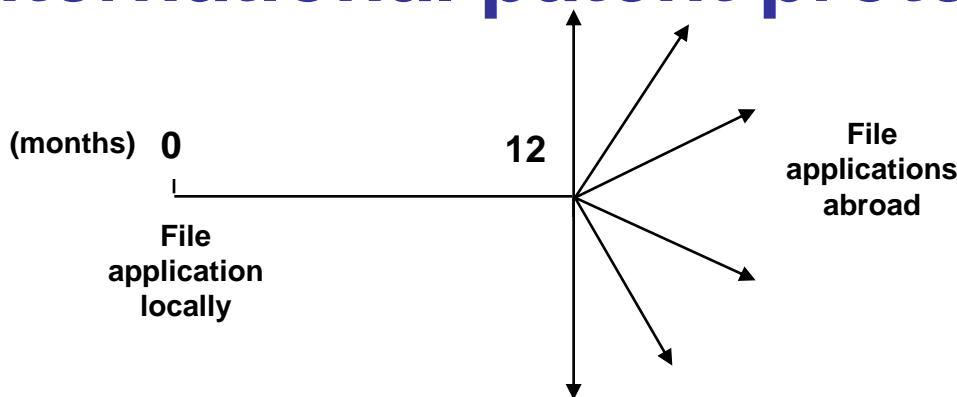


The Patent Cooperation Treaty

**Kraków, Gliwice and Wrocław
January 23 to 25, 2018**

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Program Officer, PCT International Cooperation Division
Patents and Technology Sector

Using the traditional patent system to seek international patent protection



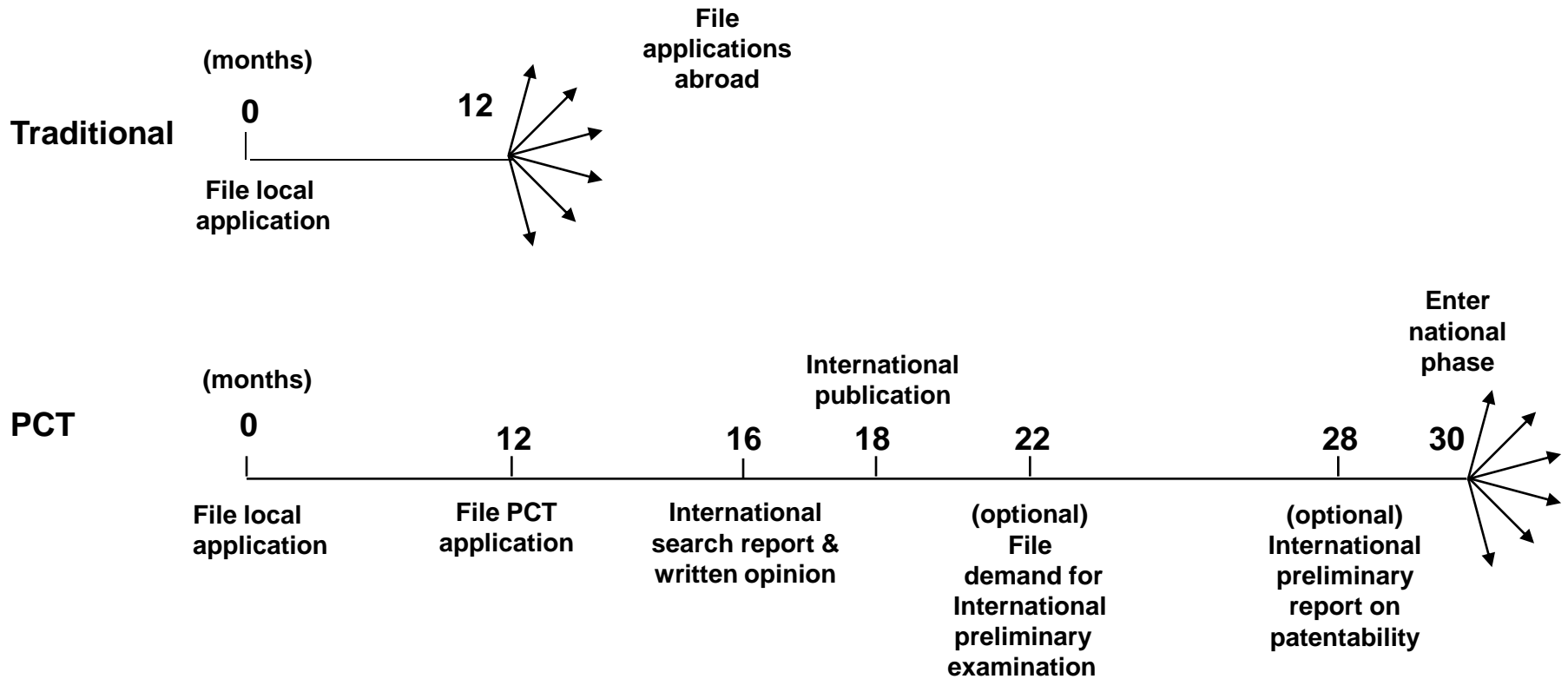
Local patent application followed within 12 months by multiple foreign applications claiming priority under Paris Convention:

- 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

Traditional patent system vs. PCT system



The PCT



- A mainly procedural international treaty facilitating certain steps in the process of obtaining patents internationally
- More specifically, the PCT establishes a procedure for the *filing* and *processing* of a single application for a patent which has legal effect in the countries which are Treaty members
- Simplifies the procedure for obtaining patent protection in many countries, making it more efficient and economical for:
 - (1) users of the patent system (applicants and inventors); and
 - (2) patent Offices

The PCT now has 152 Contracting States

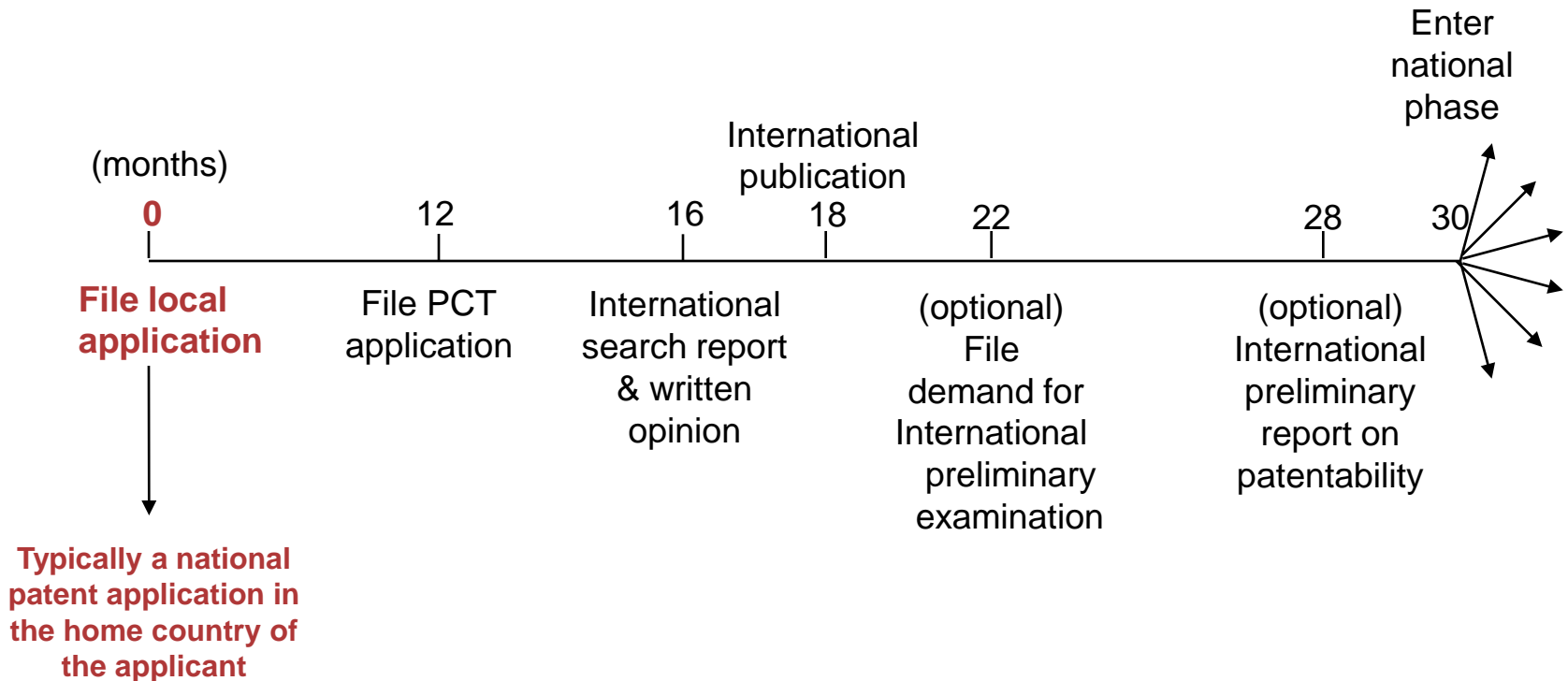


PCT - General Features

- Rationalized filing and processing
- Covers 152 countries and 4 regional patent systems; ARIPO, OAPI, EPO, EA
- International and national phases

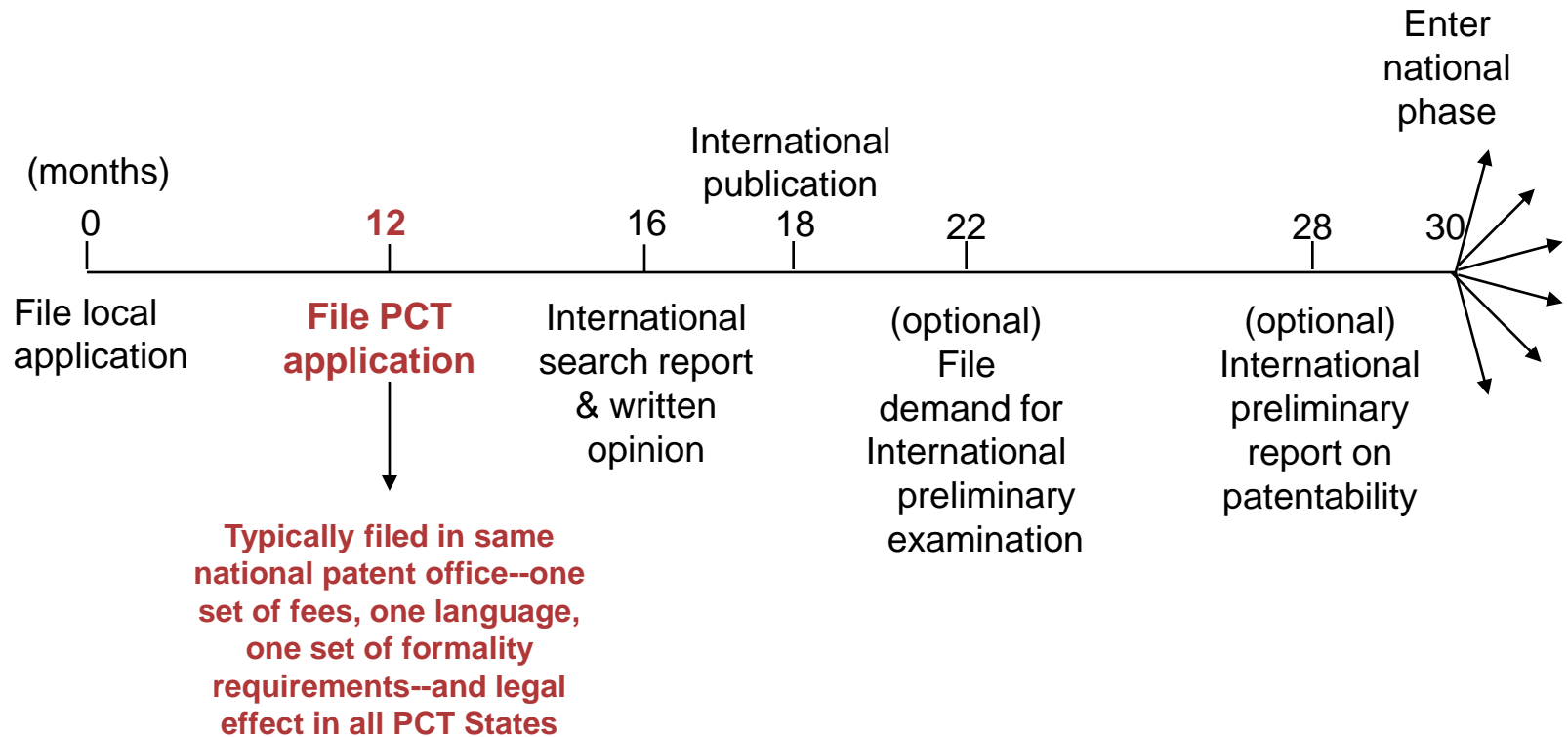
The PCT System

--typical use, in more detail



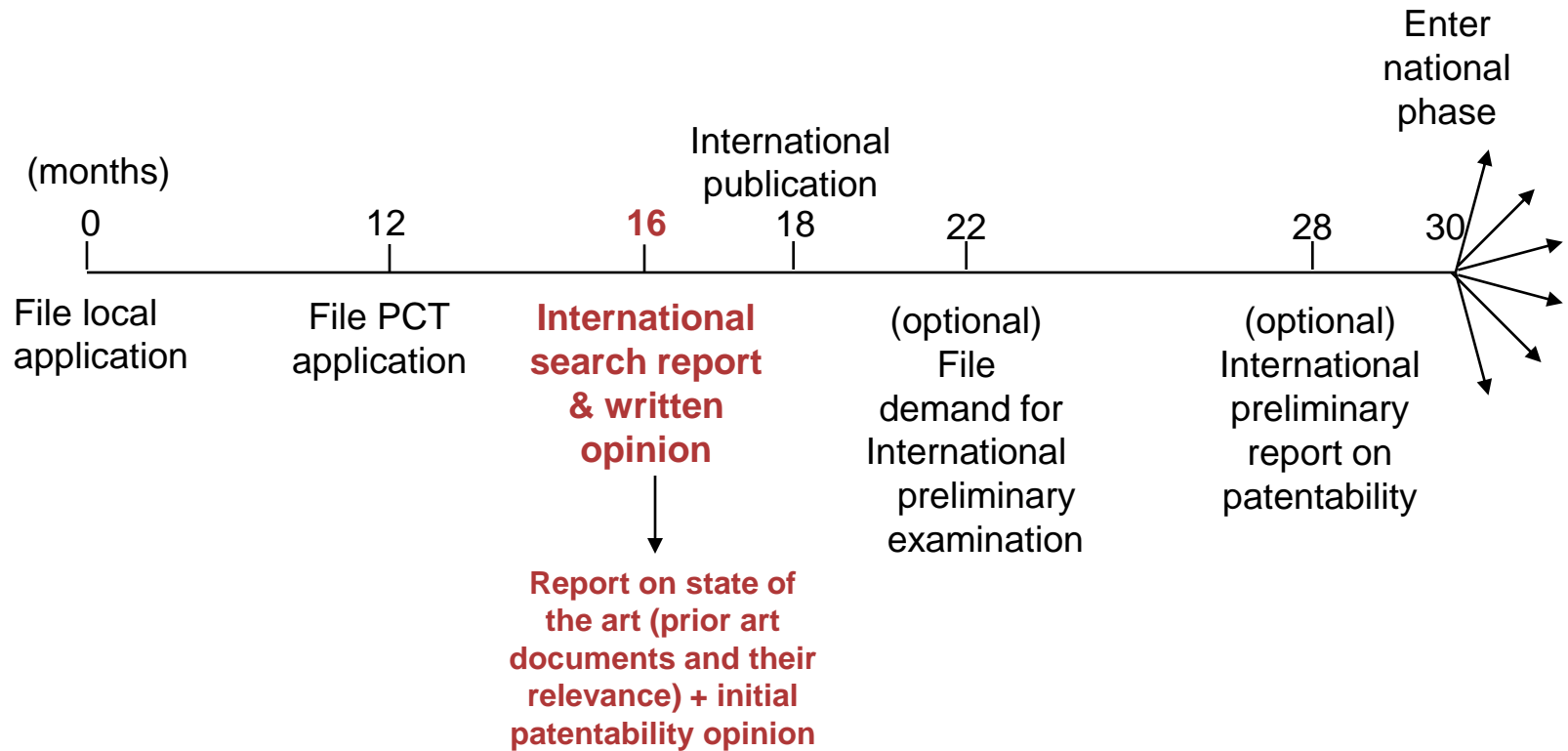
The PCT System

--typical use, in more detail



The PCT System

--typical use, in more detail



The PCT

International Searching Authorities

- Today: the Patent Offices of
 - Australia
 - Austria
 - Brazil
 - Canada
 - Chile
 - China
 - Egypt
 - Finland
 - India
 - Israel
 - Japan
 - Republic of Korea
 - Russian Federation
 - Singapore
 - Spain
 - Sweden
 - Turkey
 - Ukraine
 - United States of America
 - European Patent Office
 - Nordic Patent Institute
 - Visegrad Patent Institute

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 Y A	GB 392415 A (JONES) 18 May 1933 (18.05.33) Fig. 1 page 3, lines 5-7 Fig. 5, support 36	1-3 4, 10 11-12
X Y	GB 2174500 A (STC) 5 November 1986 (05.11.86) page 1, lines 5-15, 22-34, 46-80; Fig. 1	1-3 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

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

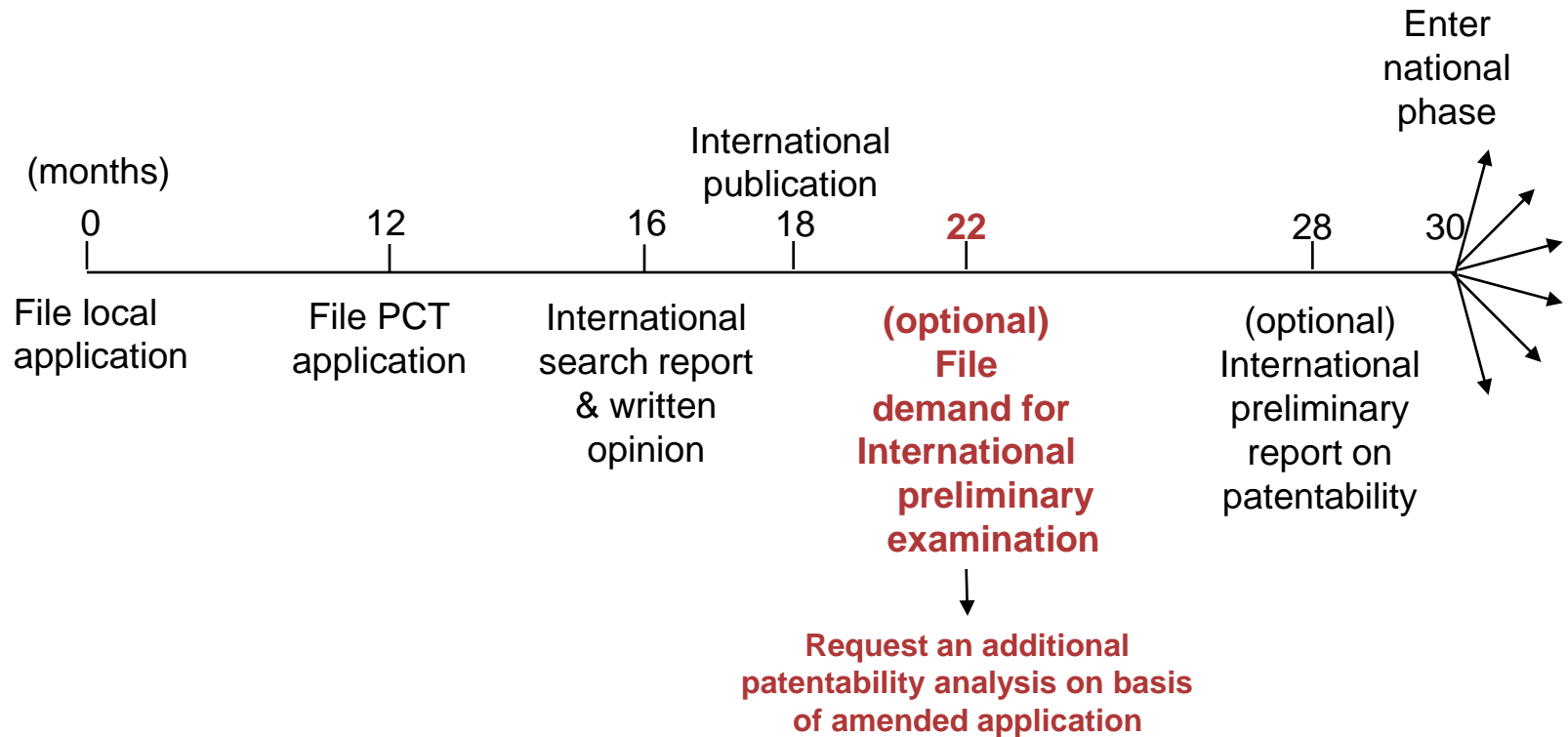
The PCT System

--typical use, in more detail



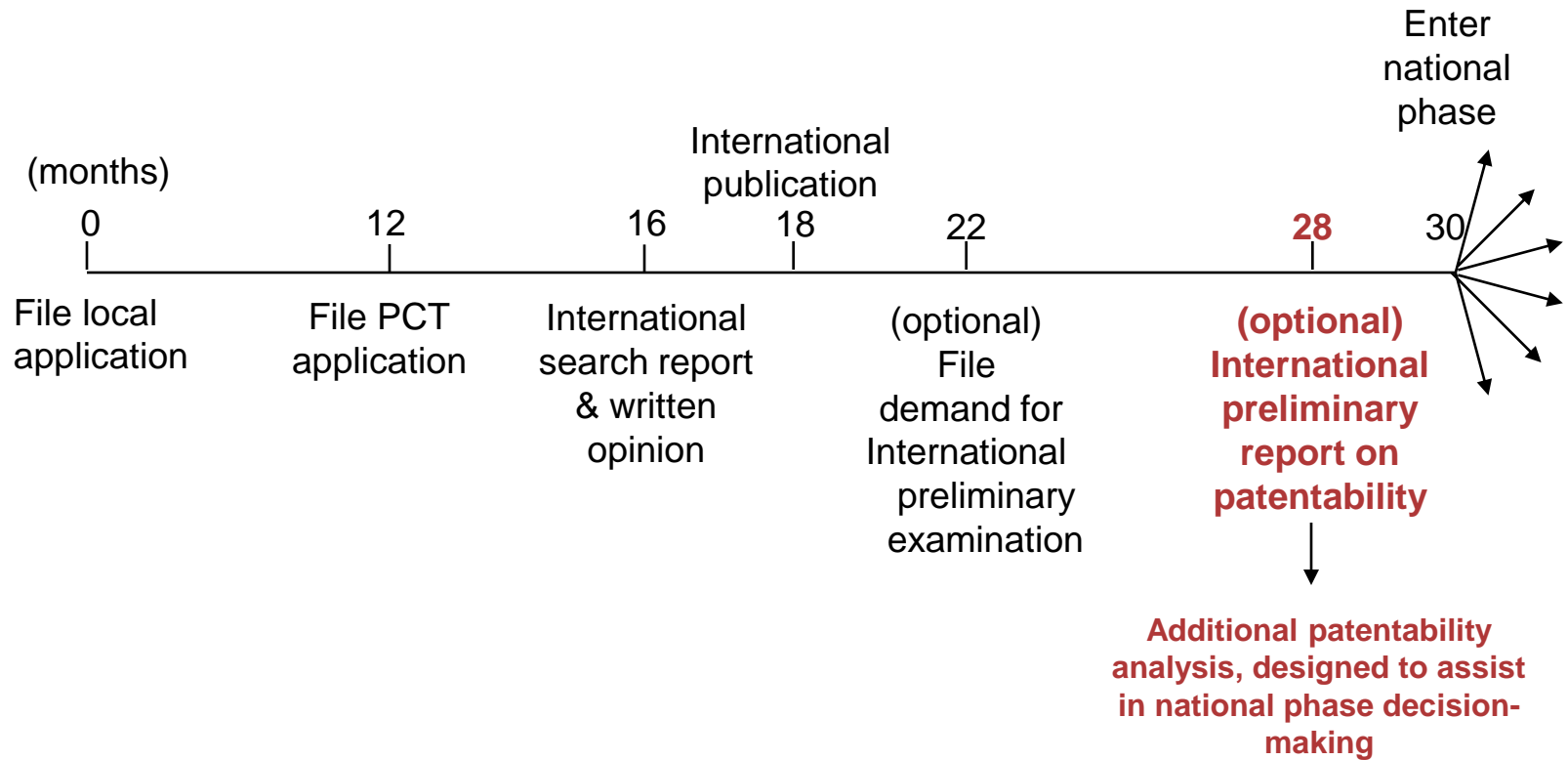
The PCT System

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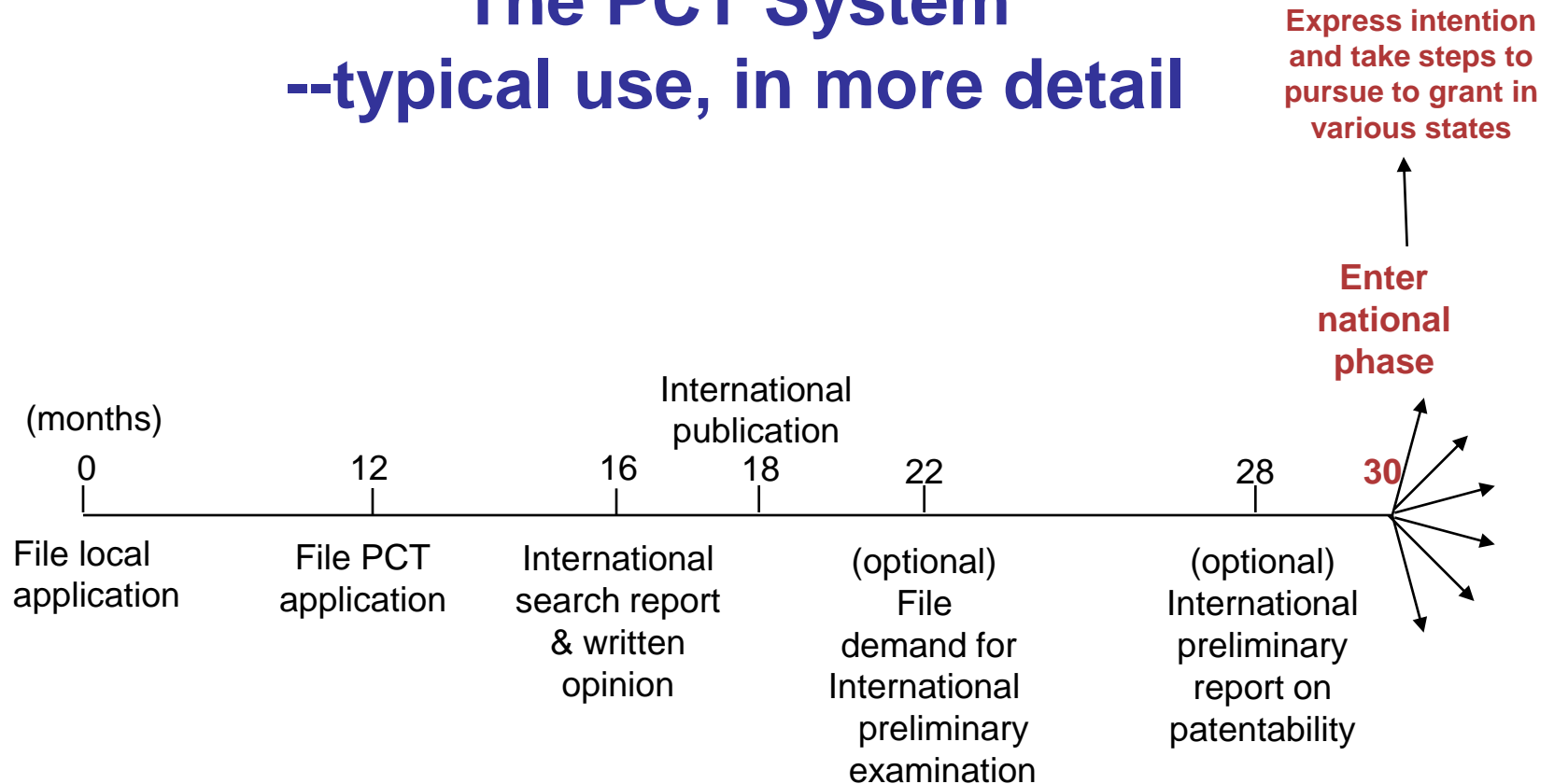
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The PCT System

--typical use, in more detail



General remarks on the PCT system (1)

- The PCT system is a patent “filing” system, not a patent “granting” system. There is no “PCT patent” or “global patent”
- The decision on granting patents is made exclusively by national or regional Offices in the national phase
- Only inventions may be protected via the PCT by applying for patents, utility models and similar titles
- Design and trademark protection cannot be obtained via the PCT. There are separate international conventions dealing with these types of industrial property protection (the Hague Agreement and the Madrid Agreement and Protocol, respectively)

General remarks on the PCT system (2)

- The PCT is administered by WIPO as are other international conventions in the field of industrial property, such as the Paris Convention
- PCT signed in June 1970, in Washington, D.C., and became operational in June 1978 with 18 States

Rationalized filing

- One set of application documents
 - including technical drawings, accepted by all Offices
- One language
- Centralized fees payment
- Centralized submission of related documents
- Electronic filing available - fee reduction

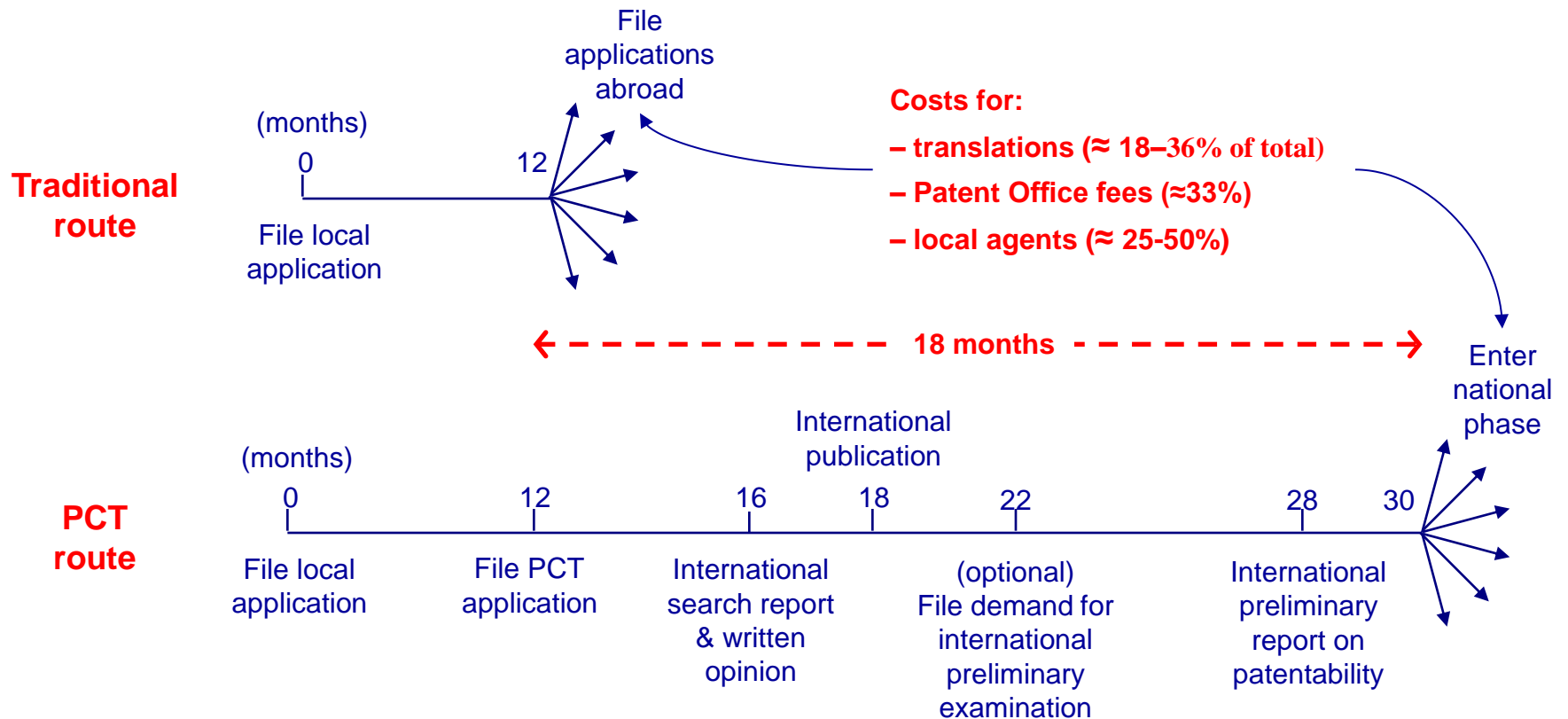
Rationalized processing

- One agent for international phase
- International search and written examination opinion
- Centralized (international) publication
- (Optional) international preliminary examination

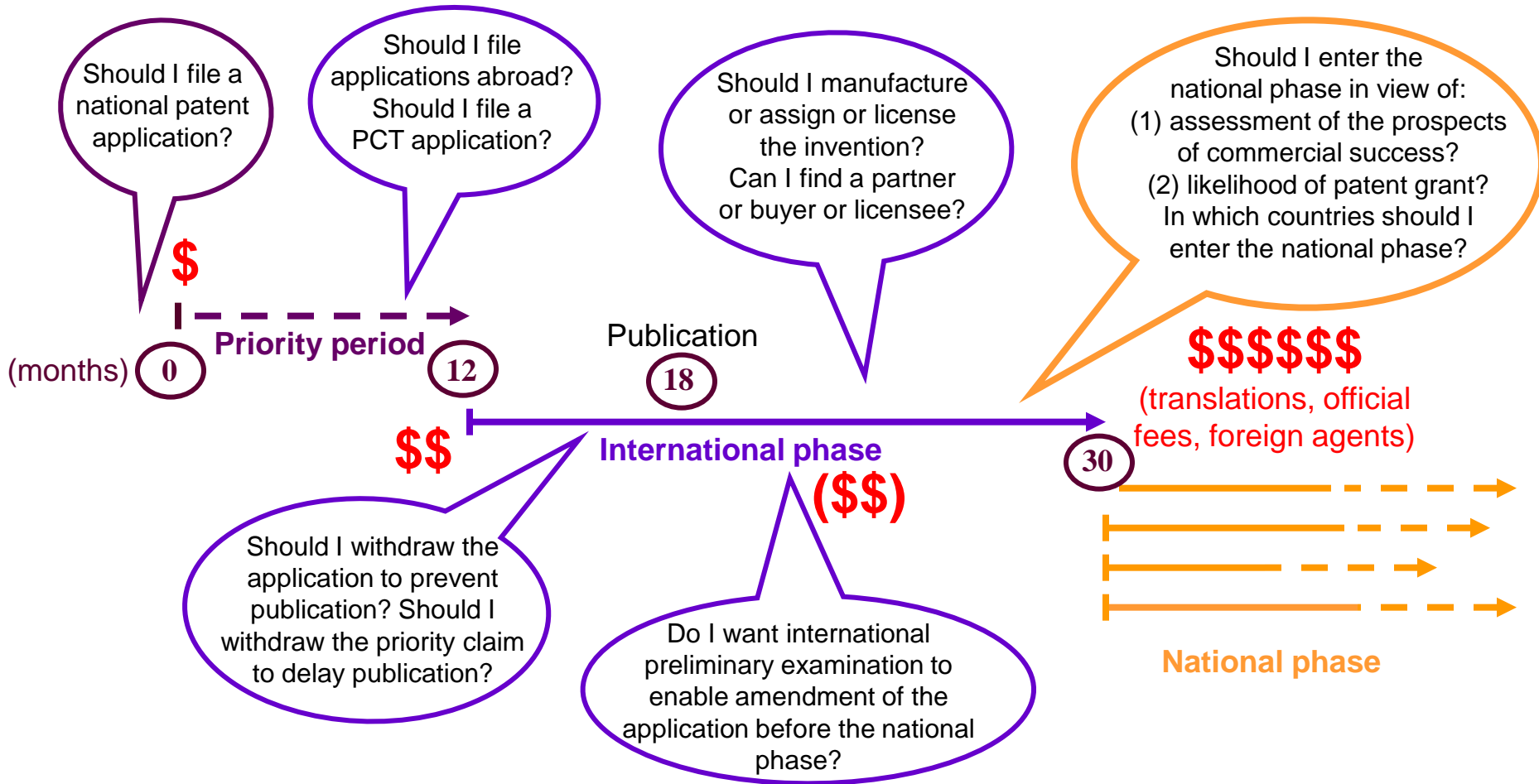
Financial benefits

- Better decision making
- Delaying and avoiding costs
- Avoiding duplication in examination

Costs in traditional and PCT filing routes



PCT Decision Points



More information about patentability

More information about commercial prospects

Time ~ information ~ decisions

- 18 months more time
- More information – patentability
 - international search report and written opinion
 - (optional) international preliminary report on patentability
- More information – commercial potential and risks
 - production costs, market appeal, profitability
 - potential partners, licensees, buyers
 - competitors
- Result – better decisions, better investment



The Future of the PCT System – A Look Ahead

PCT Evolution

- In 1978, the PCT has only 18 Contracting States
- In 1978, 459 international applications were filed
- Currently, the PCT has **152** Contracting States
- In 2016, 233.000 international applications were filed

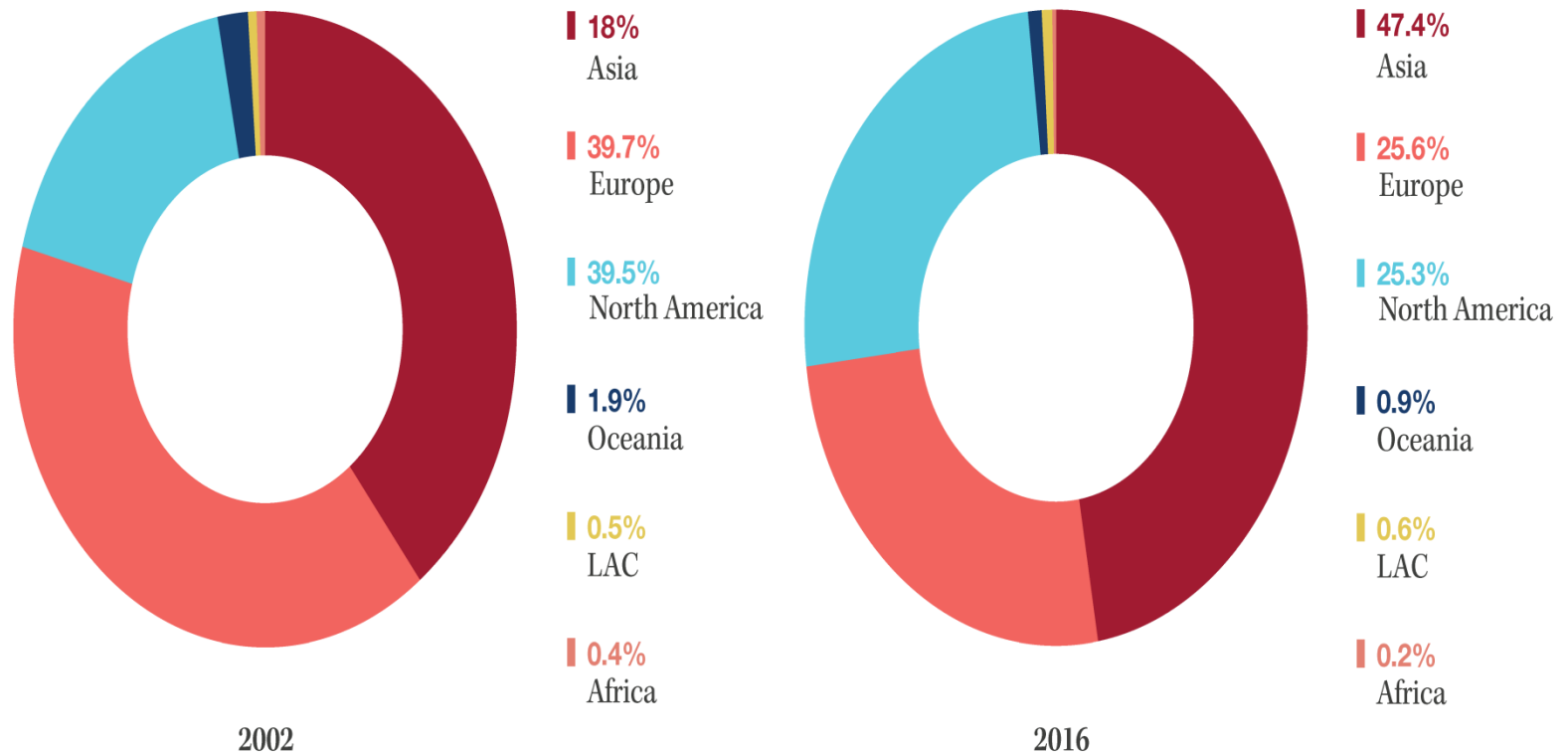
The PCT accounts for 76% of WIPO revenue, enabling the financing of the development cooperation program of the Organization

The PCT: new realities (1)

- ±80% of PCT Contracting States are developing and least-developed countries
- PCT Contracting States represent an estimated 95% of the world's economic activity by GDP
- 87% of the world's population
- Strong increase in volumes of international applications nearly every year
- The source of applications is also diversifying, with particular strong growth in Asia
- In 1978 there were 5 PCT publication languages; today we have 10 (depending on the RO, applications can be filed in other languages)

The PCT: new realities (2)

PCT applications filed by region



Source: PCT Yearly Review 2017, WIPO

The PCT: new realities (3)

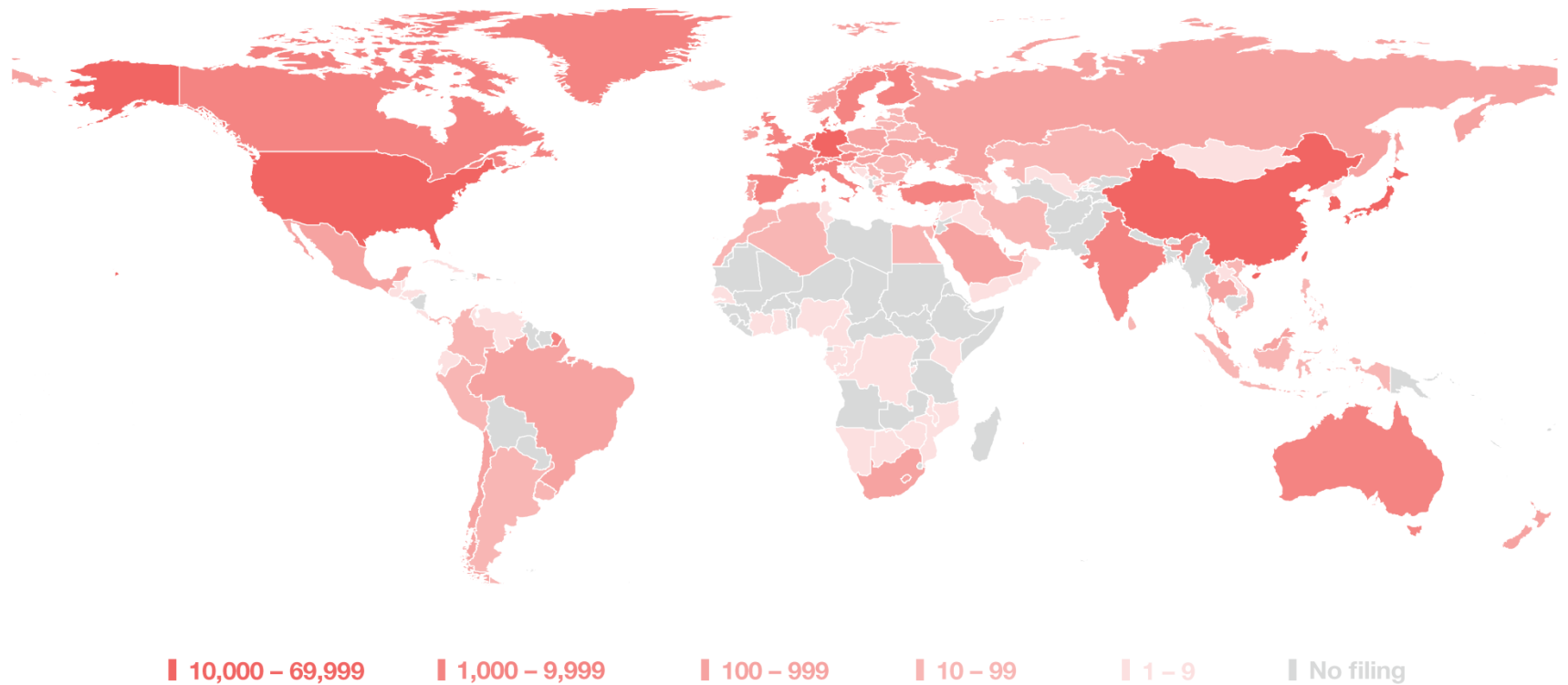
Language	Number of publications	Growth
English	104,166	51.84
Japanese	39,706	19.76
Chinese	20,728	10.32
German	16,422	8.17
Korean	10,616	5.28
French	6,302	3.14
Spanish	1,572	0.78
Russian	939	0.47
Portuguese	458	0.23
Arabic	19	0.01

2015

Use of the PCT

PCT applications by origin, 2016

PCT applications are highly concentrated among a few origins.



Note: Data for 2016 are WIPO estimates.

Source: WIPO Statistics Database, April 2017.

PCT: future evolution... how?

Putting renewed emphasis on the “**Cooperation**” element of the Treaty, mostly requiring changes to the behaviors and actions of Offices rather than significant changes to the legal framework

Main directions

- Development of the legal framework
- IT environment
- Other platforms
- Financial issues
- Quality

Development of the legal framework (1)

- Most important reforms has been completed
 - Designation system
 - Length of the international phase
 - Establishment of written opinions
 - Fee structure
 - Introduction of procedures for sequence listings
 - Declarations
 - “missing parts”
 - “restoration of the right of priority”

Development of the legal framework (2)

Various changes does not require changes to the PCT framework

- Greater credence given to international reports in the national phase

Other changes do not seem possible to implement

- Greater transparency in Chapter II processing



- ✓ Many features of the PCT are in the Articles of the Treaty and appears impossible to change without a diplomatic conference, which will bring the risk of having two different versions of the PCT in force while all 152 Contracting States ratify it in a meaningful period.
- ✓ Some of the features set out in the Regulations are implemented in the national laws, which will take a long time to change.

Development of the legal framework (3)

- Ongoing need for minor modifications:
 - To support improved IT-based workflows and quality initiatives;
 - To encourage further sharing of national search and classification information;
 - To allow new forms of disclosure appropriate to new technologies
 - To set national incentives for good practice by applicants, reducing processing costs for national Offices and the risk of invalid patents being granted

Development of the legal framework (4)

- Example: PPH – Form of incentive to file higher quality international applications or to eliminate defects at an early stage, offering accelerated national examination under certain conditions (if the claimed invention has been found by another Office to be novel and inventive)
- What is the potential role of PPH in the PCT system?
 - 41+ participating Offices
 - Can PPH be used in combination with other work sharing tools as WIPO-CASE?
 - Would it be appropriate to support the PPH system within WIPO, such as offering direct integration within the PCT?

IT environment

- Electronic filing now accounts for over 95% of international applications
- Electronic processing is the norm at the International Bureau and many receiving Offices and International Authorities
- Greater cooperation is needed between national Offices and the International Bureau to unlock the full potential of electronic services to its next level (e.g. electronic processing across the whole of the international phase remains out of reach of most applicants)

IT environment – Some key issues

- Processes optimization for electronically filed applications (95%+) while supporting the filings on paper where necessary
- Self-service arrangements
- Revision of the functions performed by different Offices; centralization at the IB of some RO functions; practical assistance to the application process
- Applicants should be able to view files and communicate electronically with the Offices involved (international phase + national phase)
- Optimization of formats (XML, 3D graphics, videos)

Other Non-PCT IT Platforms

Assisting the work of national Offices:

- WIPO-DAS (PDAS) (15 Offices)
- IPAS
- WIPO-CASE (28 Offices)

PCT Platforms
■ ePCT
■ PCT-EDI
■ Patentscope

Financial issues (1)

- A typical international filing fee is presently around half (or a third, adjusted for inflation) of what it was in the mid-1990s, thanks to the efficiencies achieved at the IB
- 95% of applicants pay the electronic filing reduced fees, so the “normal” fee is not longer normal. Since the original objective of encouraging electronic filings has been accomplished, a readjustment of the fee levels might be proposed in the coming years, but is not yet urgent
- To ensure that the system is valuable to *any* applicant considering international patent protection through fee incentives based on limitation to a small number of designations

Financial issues (2)

- Method for fee reductions for certain applicants from certain countries recently updated
- PCT Working Group is discussing the possibility to extend similar discounts to universities and research institutions
- Centralized payment service at the IB will improve efficiency
- “Netting services” (calculating total amounts payable between two Offices and exchanging only the difference)

Quality (1)

- All PCT main work products should be useful for designated Offices, be delivered on time and be of a quality which makes them effective
- Quality of international search report is paramount
 - Full faith and credit by designated Offices to ISR which they themselves established as ISA
 - Find an independent international indicator of overall quality of work by the ISA
 - Incentives (as reduced fees) which correspond to the benefits the designated Offices will receive
 - Constant feedback

Quality (2)

- Ensuring that the processes of all Offices (ROs, ISAs, IPEAs) are effective and produce timely and accurate results
- Review of how competence as ISA is defined (how to maintain quality and consistency through competition between ISAs)
- Examiners training and access to search systems

Summarizing...

The key to future improvements lies in putting renewed emphasis on the “Cooperation” aim which underpins the Treaty. No doubt, changes to the legal framework will continue to play a supportive role. However, in the view of the International Bureau, it is now mainly up to the Contracting States and the national and regional Offices which perform roles under the Treaty to put further life into that “Cooperation” aim with a view towards making the PCT system fully effective as the tool to support innovation, investment and development that those same Contracting States designed it to be.

■ <http://www.wipo.int/export/sites/www/pct/en/3million/pdf/memo.pdf>

Thank you