



**The Wisconsin Intellectual Property Law Association
and the
Intellectual Property Law and International Practice
Sections of the Wisconsin State Bar**

Milwaukee, WI – May 24, 2006

**The PCT at the center of the international patent system:
New trends and latest developments**

*Presentation by Isabelle Boutillon, Office of the PCT
World Intellectual Property Organization (WIPO), Geneva, Switzerland*





This presentation will cover the following topics

- Setting the PCT scene
- New trends
- Latest developments
- Outline of the procedure
- PatentScope portal for access to PCT and patent matters





Setting the PCT scene





Setting the PCT scene

- an international treaty in the field of patents
- the international system for the filing of patent applications
- the momentum for improving the international patent system
- a model of international cooperation
- an open door into a wealth of scientific and technical information





The PCT: an international treaty in the field of patents

- Multilateral treaty for the filing (not granting) of patent applications with several subsidiary legal texts
- Other multilateral treaties
 - Paris Convention
 - regional patent treaties
 - etc.
- National laws





- Treaty concluded in June 1970
78 countries, including the US
11 IGOs and 11 NGOs
- Operations started in June 1978
18 countries, including the US
500 applications
- By end 2004
more than one million applications
- In 2005
128 countries
134,000 applications





The intention of the Contracting States
as illustrated by selected keywords from the preamble to the Treaty:

- to make a contribution to the **progress of science and technology**
- to perfect the **legal protection** of inventions
- to simplify and render **more economical** the obtaining of protection in several countries
- to facilitate and accelerate **access by the public** to technical information contained in documents describing new inventions
- to foster and accelerate **economic development** for developing countries





The framework in which the PCT was concluded in 1970

- national laws of future PCT Contracting States
- then existing international instrument of which a number of the future PCT Contracting States were already members:
 - Paris Convention for the Protection of Industrial Property (1883)
- then soon to be concluded international or regional instruments of which a number of the future PCT Contracting States would also be members:
 - Strasbourg Agreement on the International Patent Classification (1971)
 - European Patent Convention (EPC) (1973)
- from its conclusion, the PCT became an essential part of the background holding the overall structure of the international patent system





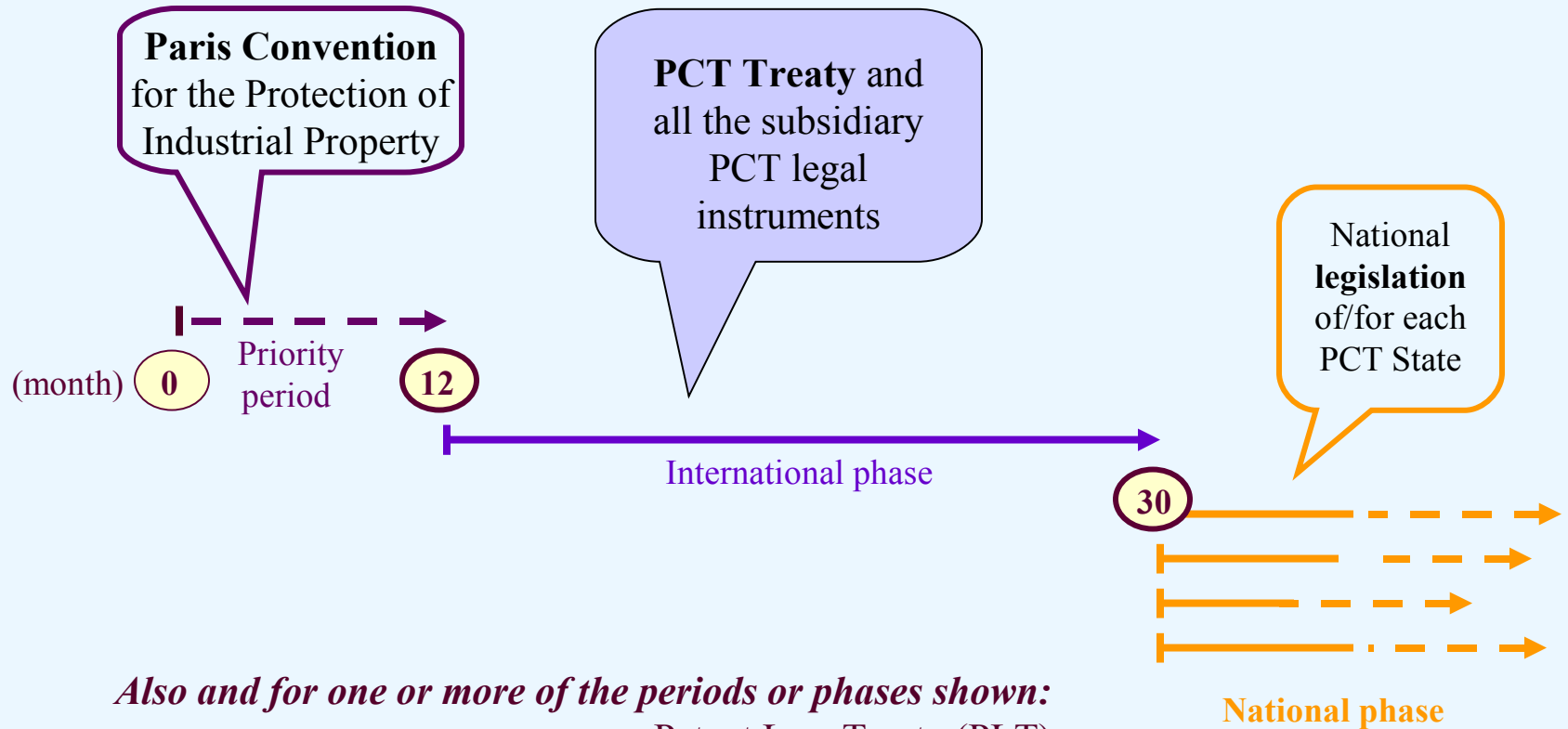
The treaties and conventions concluded subsequently

- instruments of which a number of the PCT Contracting States were going to become members in the course of the following years or are still today considering or preparing to becoming members:
 - Bangui Agreement (OAPI system and Office) (1977)
 - Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure (1977)
 - Treaty between Liechtenstein and Switzerland (1980)
 - Harare Protocol (ARIPO system and Office) (1982)
 - TRIPs Agreement within the framework of the WTO (1994)
 - Eurasian Patent Convention (EAPC) (1994)
 - Patent Law Treaty (PLT) (2000)





The main legal instruments of the patent system



Also and for one or more of the periods or phases shown:

- Patent Law Treaty (PLT)
- Budapest Treaty (deposit of biological material)
- Strasbourg Arrangement (on international patent classification)
- Regional patent treaties
- WTO Membership





The international system for the filing of patent applications

- **a patent “filing” system** for
inventions only (via patents, utility models or similar titles)

- **not a patent “granting” system**
decision to grant patents solely
within the jurisdiction of national offices
a “PCT patent” does not exist





- **The only international patent filing system**
available to date to patent applicants worldwide

- **One centralized international phase**
for all PCT countries

- Followed by **national examination processes**
but only in countries of interest





The momentum for improving the patent system

- Momentum engineered and encouraged by:
 - consistency between all elements
 - rationalization of procedures and approaches
 - cooperation between all interested parties
 - predictability of the system

- All these are visible in particular through:
 - international standards
 - agreed interpretation of Treaty provisions (and subsidiary texts)
 - guidelines for processing applications and for search and examination
 - timeline of the international procedure
 - guaranteed availability of detailed information
on various legal, procedural and technical aspects





A model of international cooperation between countries and intergovernmental organizations around the world

- More than 100 offices
 - national and regional
 - various PCT functions

- OPCT of WIPO
 - administration of the PCT system
 - publication and access to files





- Relatively smooth operation of the system
- Amidst the challenges posed by great diversity
 - culture of the various countries
 - IP and patent cultures
 - legal and patent systems
 - respective official languages in use at the various Offices





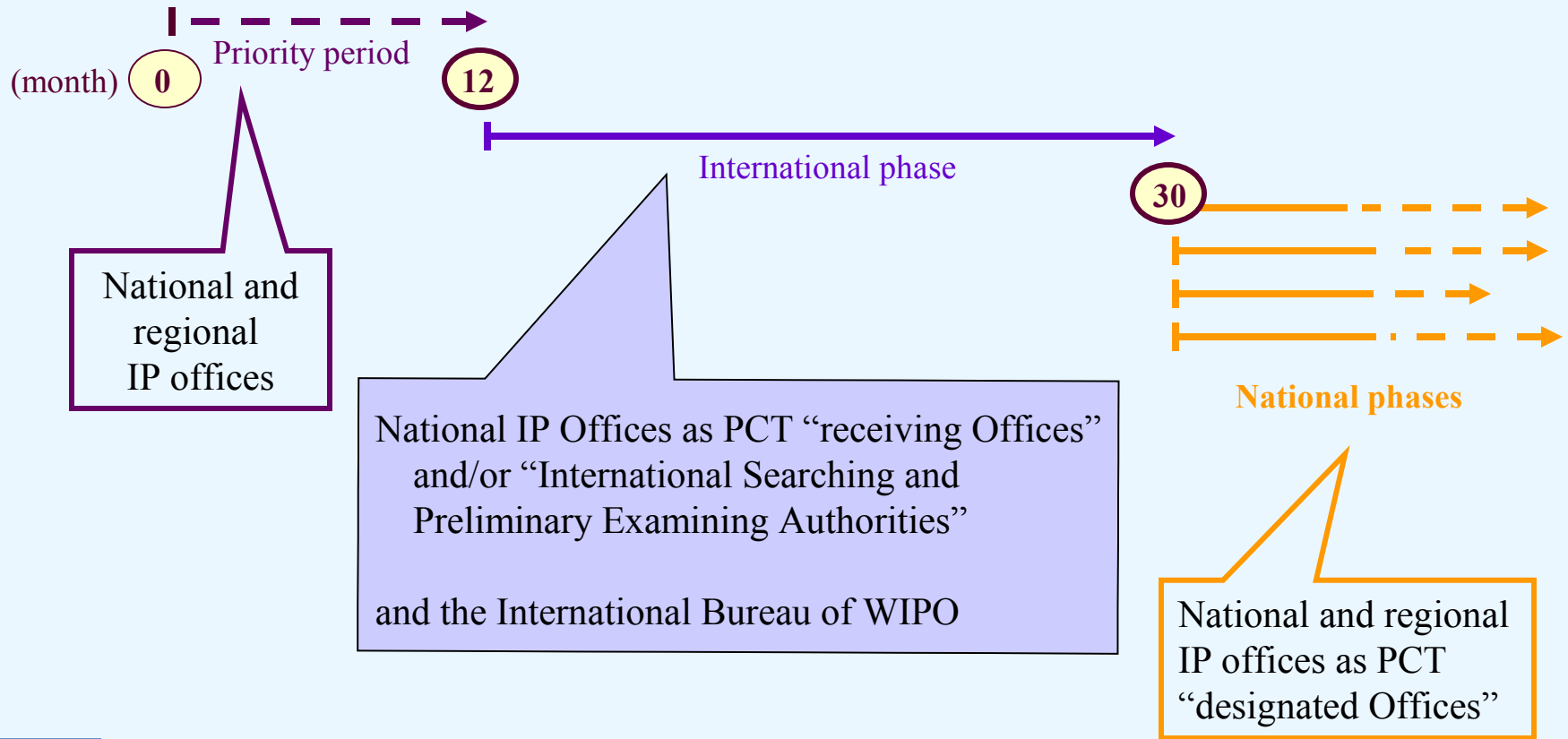
- Finding a balance throughout the entire system
 - via extensive consultation processes
 - sessions of the various bodies and other meetings
 - electronic forums
 - informal discussions

- Inherent intricacies remain
 - due to peculiarities of national laws and practices
 - US: inventorship and the qualifying applicant
 - JP: self-designation effect when priority is claimed
 - EPC: “WTO priorities” not recognized until “EPC 2000”





The main offices and organizations involved





An open door into a wealth of scientific and technical information via PatentScope portal

- Full text of over one million patent applications published
75% of which in English

- Title, abstract and search report always available
in English (original or translation)

- In all fields of technology

- Also public access to priority documents and PCT examination reports





New Trends





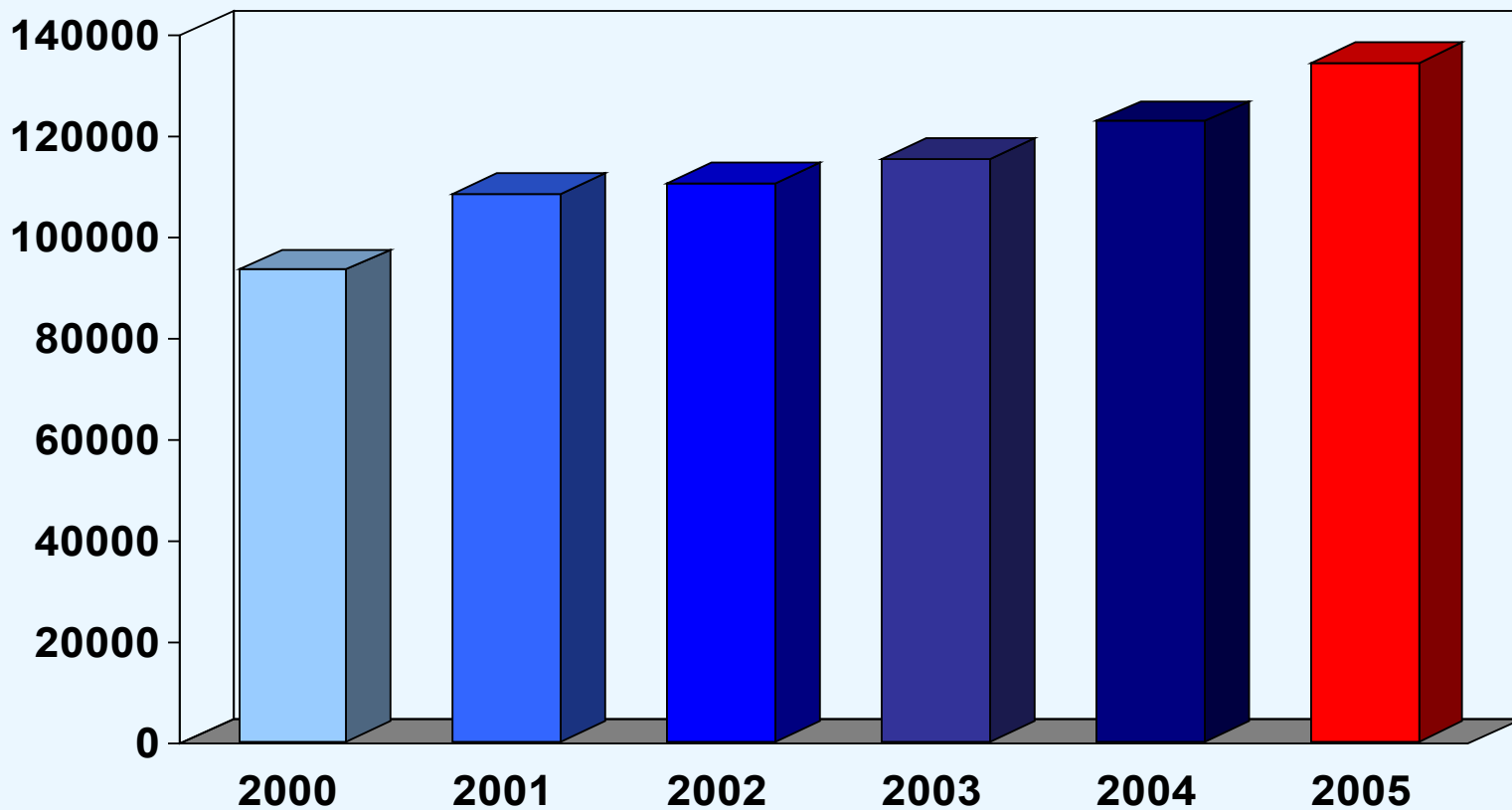
New trends

- **PCT Growth**
- **Opportunities and challenges**





PCT Growth



	2000	2001	2002	2003	2004	2005
Total IAs filed	93,240	108,231	110,390	115,198	122,607	134,073
Percent increase		16.1%	2.0%	4.4%	6.4%	9.4%





Selected Country Breakdown - 2005

		2005	% of total	Growth over 2004
<i>EPC States</i>		46,445	34.6	5.5
USA	(rank 1)	45,111	33.6	3.8
Japan	(2)	25,145	18.8	24.3
Germany	(3)	15,870	11.8	4.0
France	(4)	5,522	4.1	6.6
UK	(5)	5,115	3.8	1.5
Rep. Korea	(6)	4,747	3.5	33.6
China	(10)	2,452	1.8	43.7
Canada	(11)	2,315	1.7	9.8
Australia	(13)	2,022	1.5	10.1





Growth rate comparisons - 2005

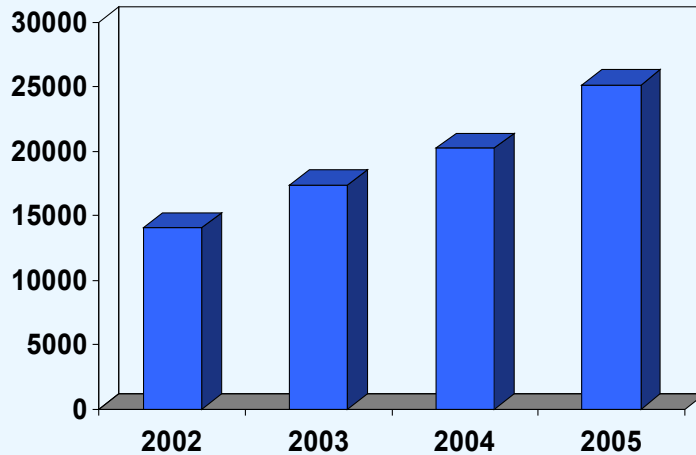
	2005	% of total	Growth over 2004
China	2,452	3.5	43.7
Republic of Korea	4,747	1.8	33.6
Japan	25,145	18.8	24.3
Australia	2,022	1.5	10.1
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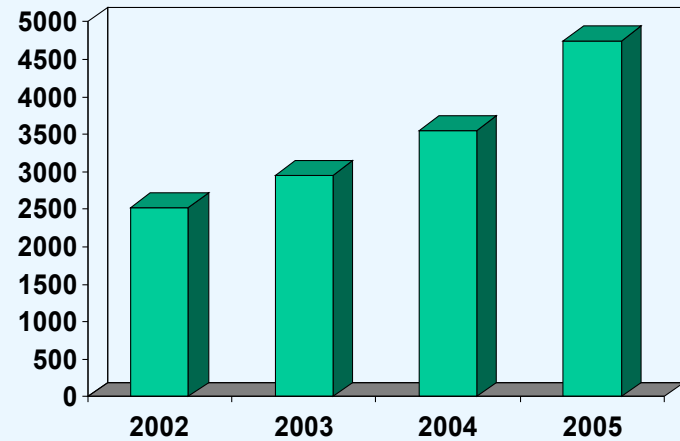


PCT Growth in South-East Asia

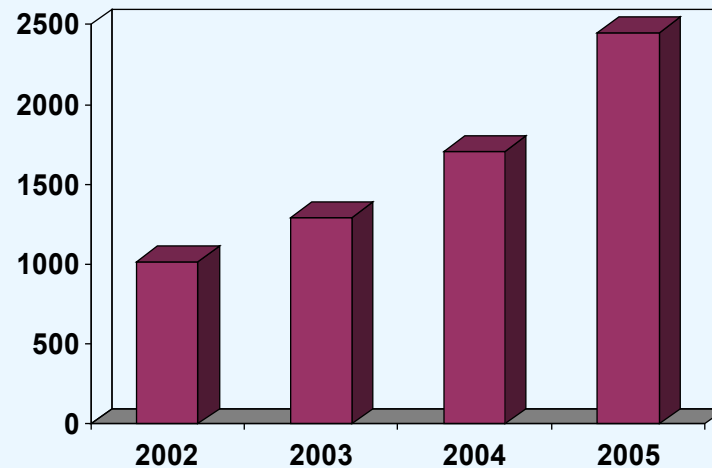
Japan



Republic of Korea



China





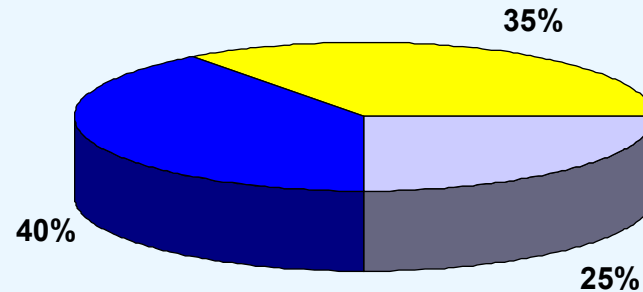
Top Applicants - 2005

1. Philips
2. Matsushita
3. Siemens
4. Nokia
5. Bosch
6. Intel
7. BASF
8. 3M
11. Kodak
12. Honeywell
13. Ericsson
14. Samsung
15. Procter & Gamble
16. Sony
17. Mitsubishi
18. Dupont
19. Toyota
20. Thomson





Top 20 Applicants by region - 2005



■ Europe ■ US ■ South-East Asia

8 (40%) from Europe

Germany: 4

Netherlands: 1

Sweden: 1

France: 1

Finland: 1

7 (35%) from US

5 (25%) from South-East Asia

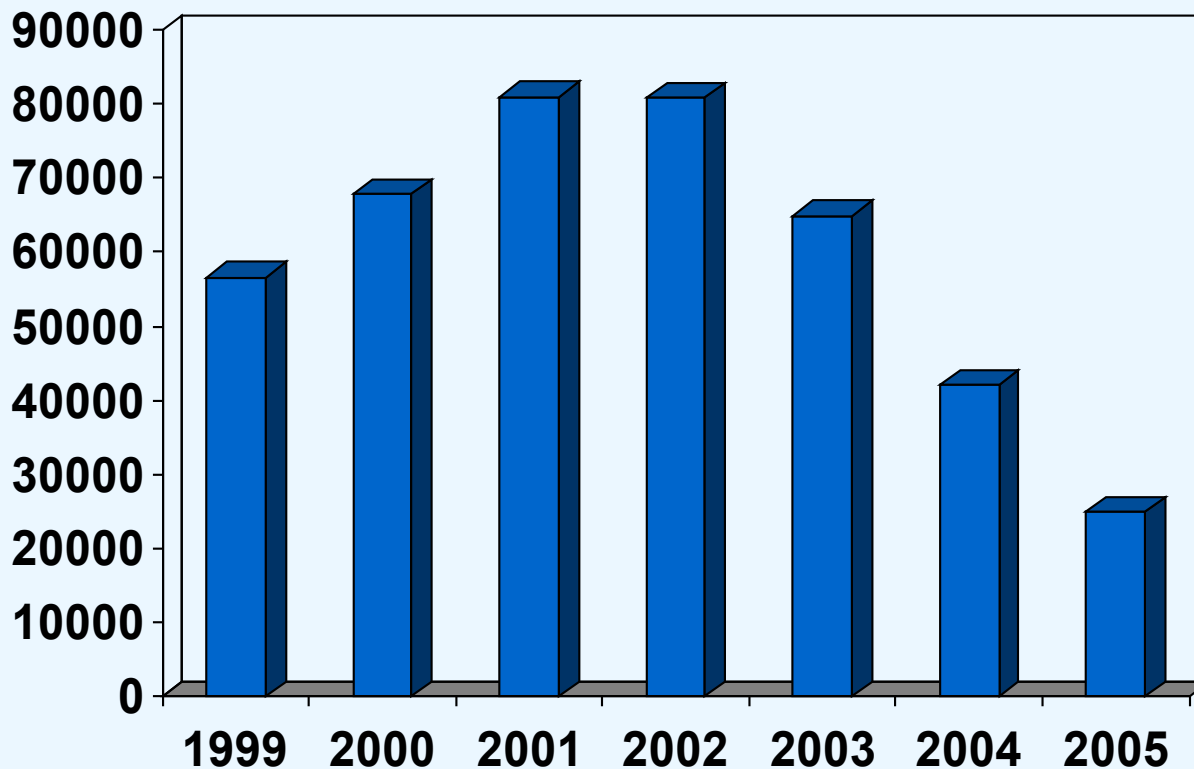
Japan: 4

RepKorea: 1





Chapter II Demands



	1999	2000	2001	2002	2003	2004	2005
Ch 2 Demand	56,610	67,831	80,922	80,806	64,905	42,051	24,900
Growth		19.8%	19.3%	-0.1%	-19.7%	-35.2%	-40.8%

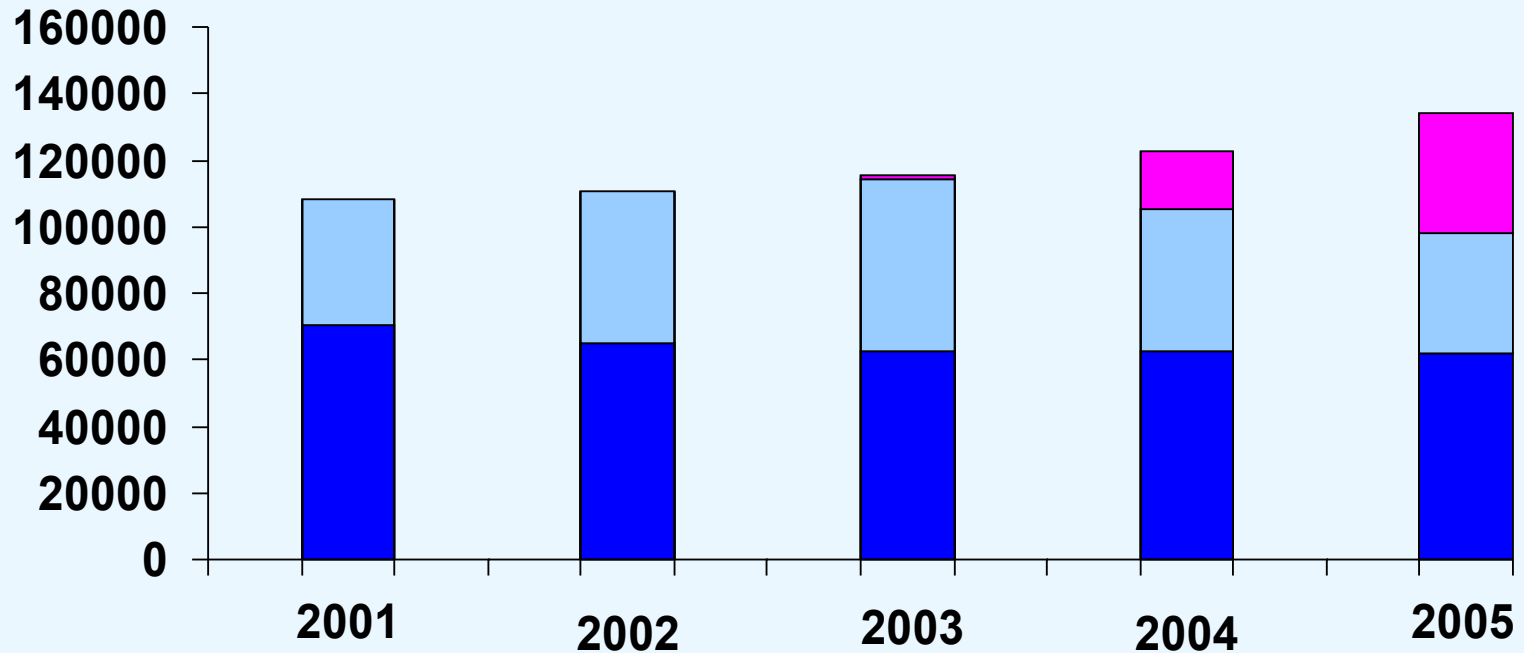




Electronic filing and processing

- workflow management

PCT Electronic Filing



■ Paper Only ■ Easy+Paper ■ E-Filing





Opportunities and Challenges

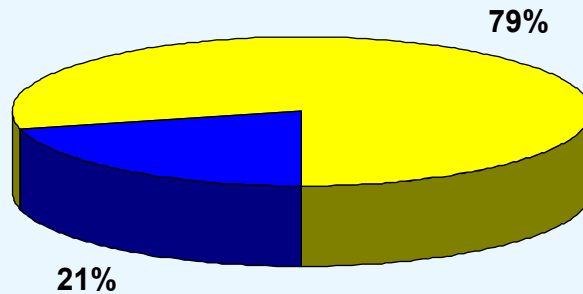




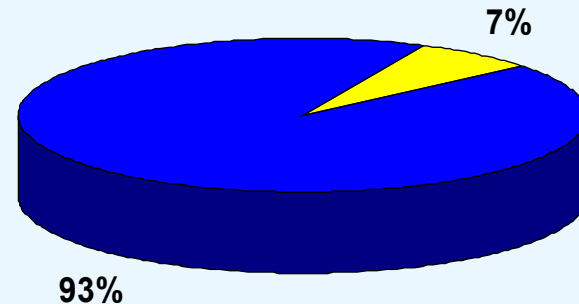
Being a Multilateral System

The Industrialized/Developing Countries Divide

PCT Membership



Filings 2004



■ Industrialized Countries ■ Others





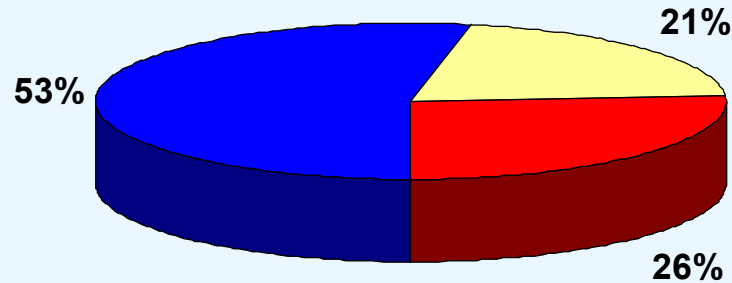
Decentralization and Democratization of the PCT

- Potential expansion of the International Searching Authorities
- Increased participation in PCT governance





International Search Timeliness and Quality



0-16 months	53%
16-17 months	14%
17-18 months	7%
18-19 months	5%

19-20 months	4%
20-21 months	3%
21-30 months	11%
30+ months	3%





International Searching Authorities

	% share
European Patent Office	49.5
United States of America	19.3
Japan	18.3
Sweden	2.7
Republic of Korea	2.6
Australia	2.3
China	1.8
Canada	1.7
Austria	0.7
Spain	0.7
Russian Federation	0.4
Finland	0.3





PCT and Harmonization

- De Jure Harmonization
 - Substantive Patent Law Treaty (SPLT)

- De Facto Harmonization
 - Common application
 - PCT Search & Examination Guidelines
 - PCT Minimum documentation
 - Impact of international search and preliminary examination
 - PCT Technical assistance





Other Challenges

- Working effectively with Offices and Authorities
- Continuing to add value
- Avoiding political quagmires
- Alternative PCT's
- Interface between PCT and the Patent Law Treaty (PLT)





Latest Developments





Latest developments

- Effect of the new search and examination system introduced in 2004
- 2006 Rules changes
- 2007 Rules changes





Effect of the new search and examination system introduced in 2004

Background

- First PCT Reform discussions started in 2000 on two main subjects
overall and automatic designation system
search and examination system
- Introduction in 2001 of single time limit for national phase entry: 30 months
- First package of significant Rules changes
adopted in October 2002
entered into force on January 1, 2004





Now, in 2006

- 2nd full year of application
of the new search and examination system
- Time for WIPO to start seeking feedback from users
new written opinions and reports on patentability
experience gained
ISAs/IPEAs
national phase procedures





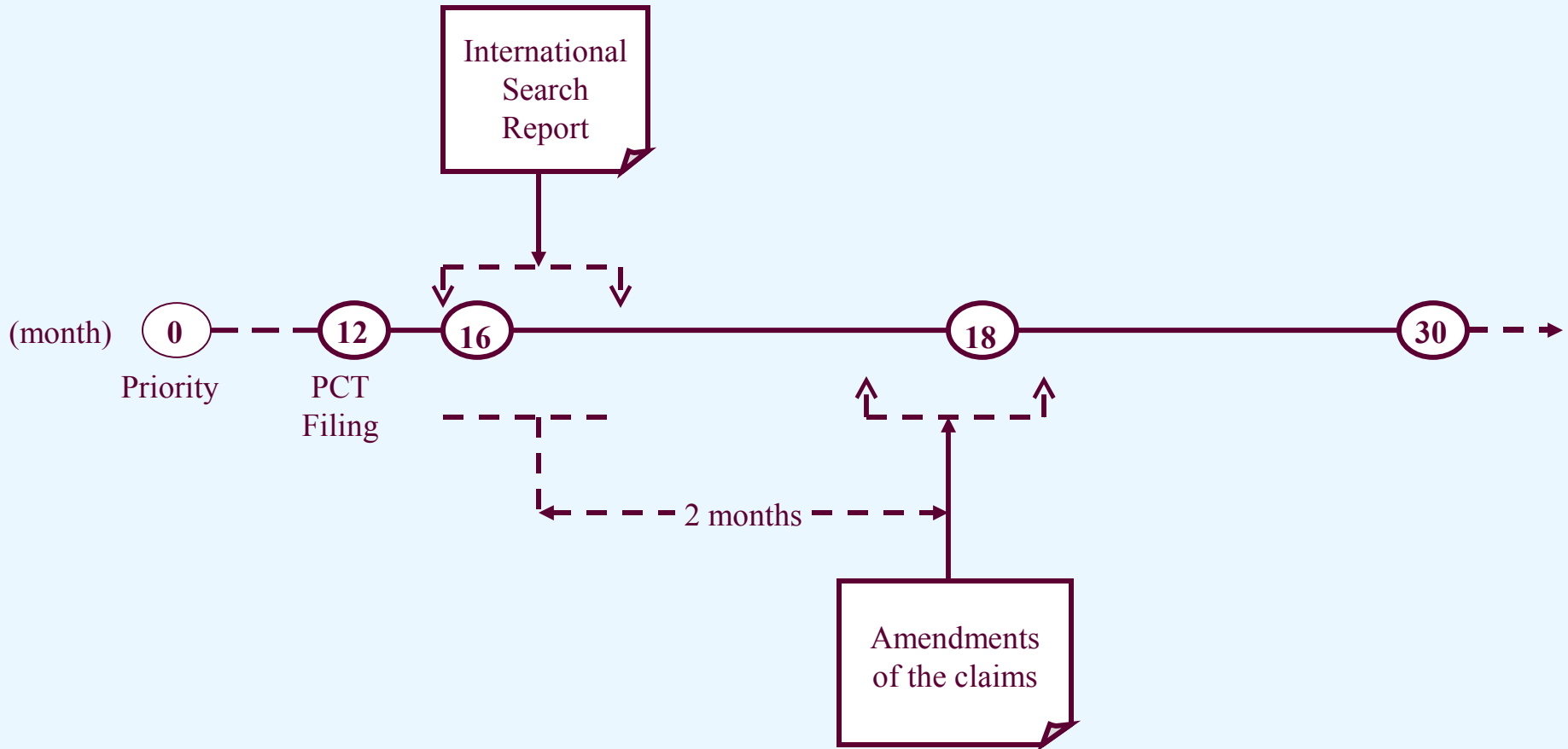
Is the new search and examination system a better system ?

- Attempt at solving PCT workload problems management of large national Offices
- Reduction of the number of international preliminary examinations under Chapter II
- Attempt to fit a temporary reality at the Regulations level
- But resulting in a stretched legal framework at the Treaty level !
- While still providing users with quality service ?



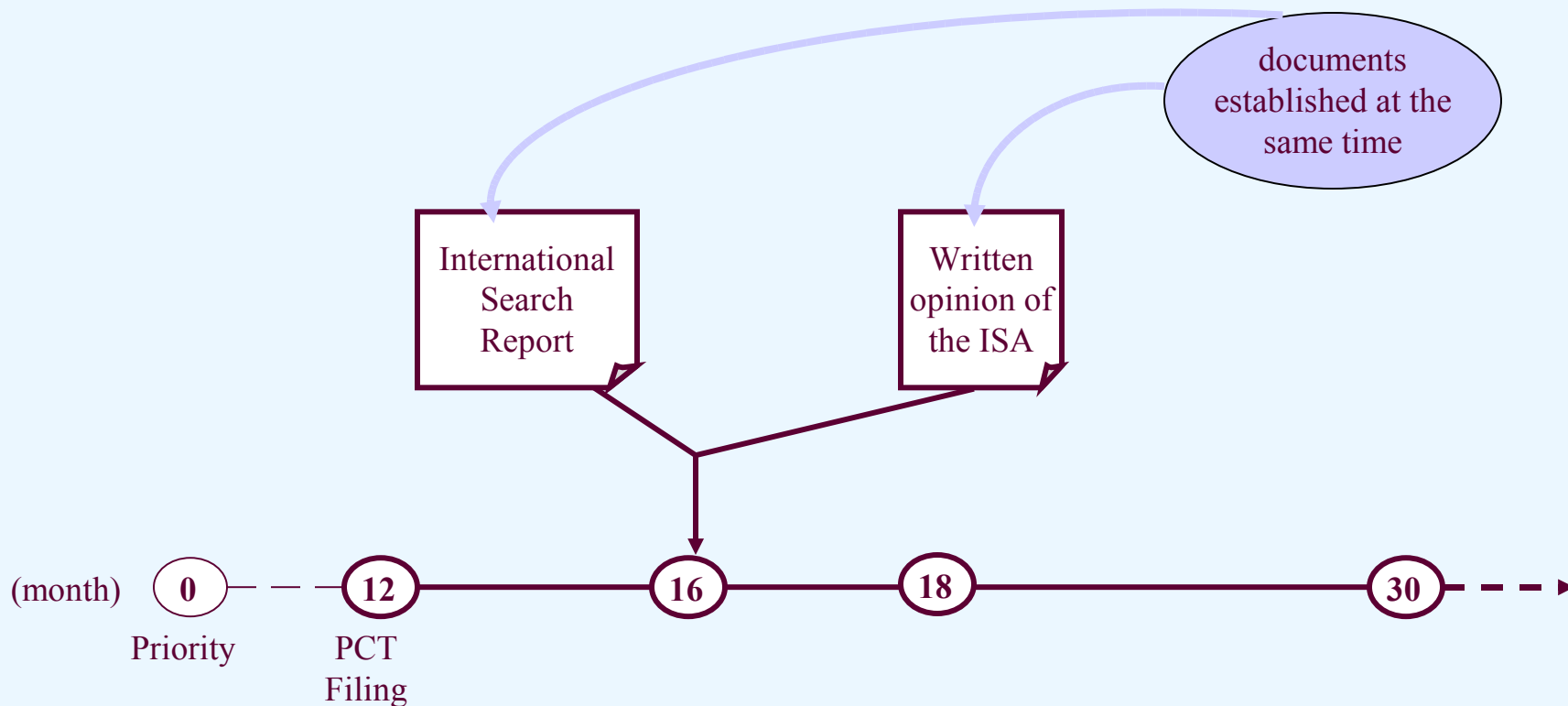


International search



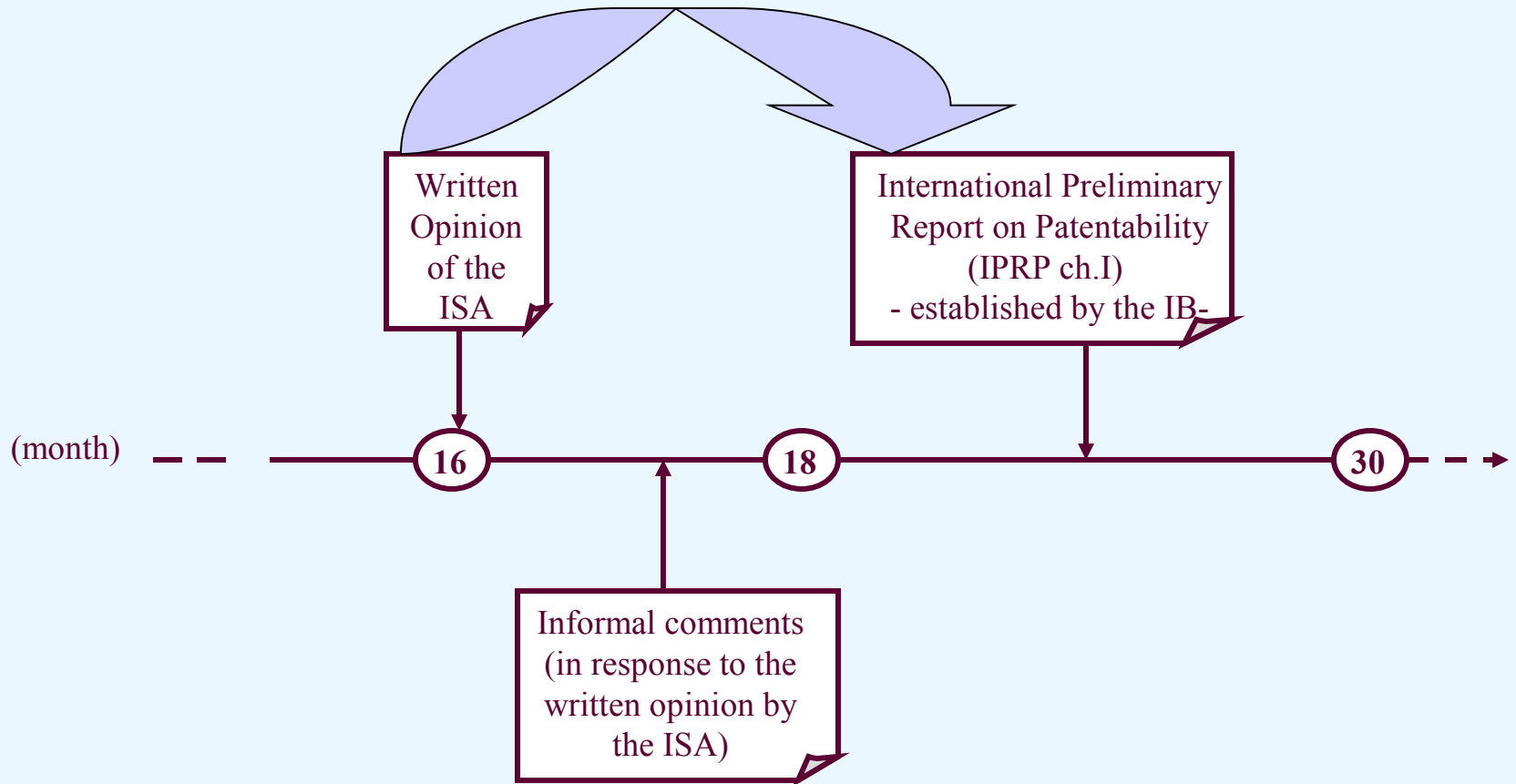


Written opinion by the ISA in the framework of the international search procedure



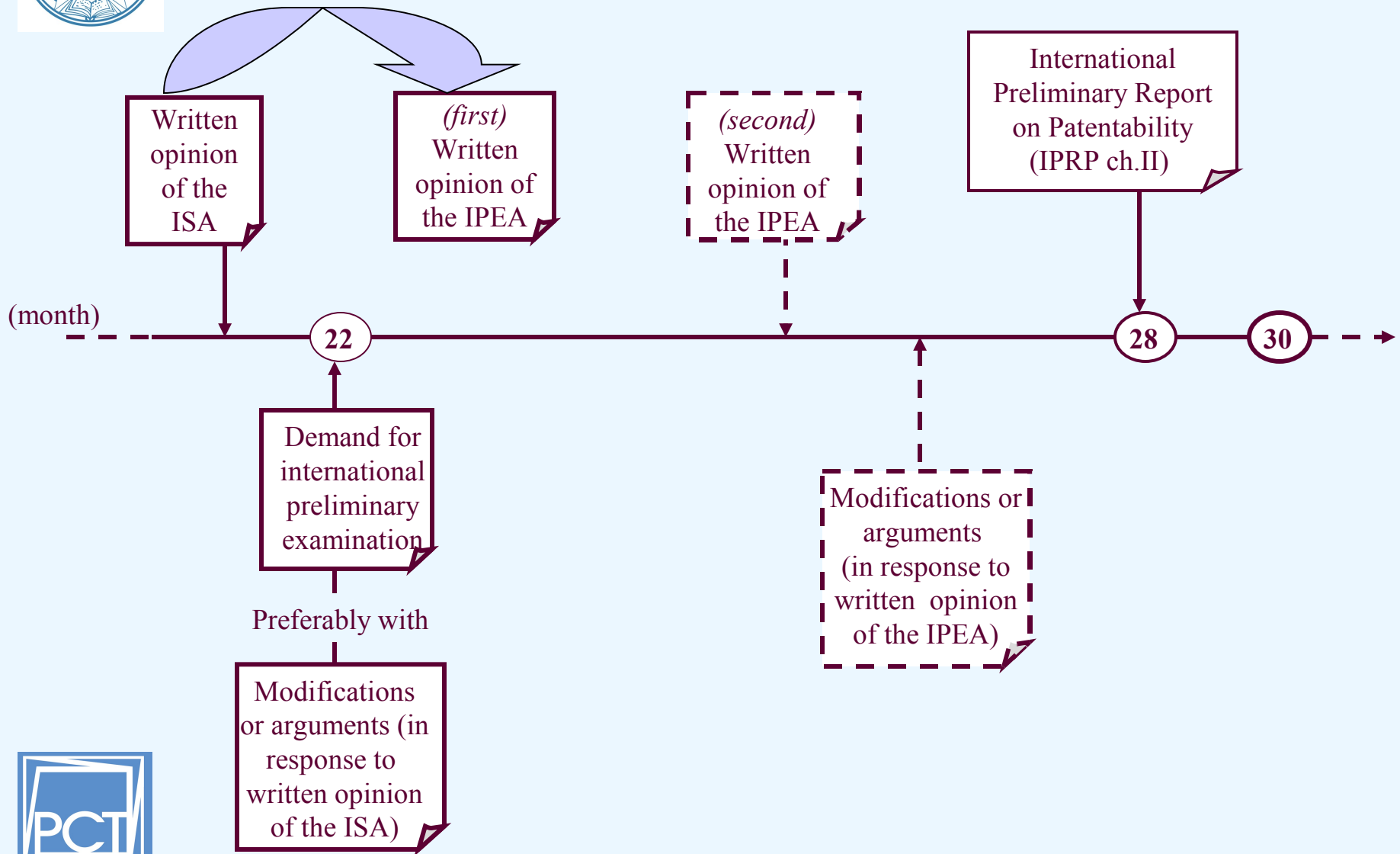


If Chapter II international preliminary examination is not requested





If Chapter II international preliminary examination is requested





2006 Rules changes, adopted in October 2005

- **Publication**
 - E-Publication
 - Arabic, new publication language
 - Publication of all declarations for national phase purposes
- **Designation system**
 - Exclusions to overall designation system





Electronic publication replaced paper as the legal publication

- Since April 1, 2006 (in practice, Thursday, April 6)
- Full text of all international applications
- PCT Gazette
- via WIPO's new portal "PatentScope"
- Paper copies of published international applications will continue to be sent to applicants until end June 2006 will remain available afterwards, in certain cases only





Arabic became new official publication language

- Since April 1, 2006
But first applications concerned will only be published in October 2006
- Only for applications filed in Arabic at receiving Offices accepting Arabic as a filing language
- For these applications, translation in search and examination language continues to be required
- Change introduced at the request of Egypt





Publication of all declarations for national phase purposes

- **Declarations** for national phase purposes
 - identity of the inventor
 - right to file application and obtain a patent
 - right to claim priority
 - inventorship (for the US designation)
 - non-prejudicial disclosures and exceptions to lack of novelty
- **Are all published** with the full text of the applications
- Continue **to be referred to**
 - on the front page of the published application
 - and in the gazette
- **Effective April 1, 2006**, regardless of date of filing of applications





Changes to exclusions to overall designation system

- Concerns the “self-designation” effect under certain national laws
- Loophole existing in PCT Rule since 2004 now closed
- Two conditions must be fulfilled for exclusion of designations to be allowed in PCT request, on PCT filing date
 - priority of earlier national application filed in same country as that being excluded from the PCT global designation
[this condition was missing from previous wording of the Rule]
 - and** designated Office concerned must have notified to WIPO applicability of the exclusion to its own designation
- Now, exclusion system applies to DE, JP, KR, RU





2007 Rules changes, adopted in October 2005

PLT-related changes

- Incorporation by reference of missing elements of the application
- Restoration of priority rights
- Rectifications of obvious mistakes

Non PLT-related change

- Inclusion of Korean language patent documents in PCT minimum documentation





Incorporation by reference of missing elements of the application

- **Missing elements or parts**
description, claims, drawings
- **Three conditions**
elements or parts contained in the priority document
incorporation by reference contained in the PCT application
incorporation by reference confirmed
by filing a copy of the document
within the prescribed time limit (2 months)
- **International filing date** will not be affected
- **Notifications of incompatibility** have been filed
by a number of receiving Offices
and designated Offices



these Offices will not be bound by the new provisions for some time



Restoration of priority rights (1)

- PCT filing is **more than 12 months** after priority date **but within 2 months** of the 12-month period
- **Priority claim would be maintained** for all steps in the international phase for calculation of time limits
- Receiving and designated Offices would restore priority claims on the basis of applicant's **request for restoration showing** either due care or unintentionality and may require a **declaration or other evidence**
- A number of receiving Offices have notified **incompatibility** with their national laws and will, therefore, for some time, not accept to review applicants' requests





Restoration of priority rights (2)

If **priority claim restored** by receiving Office on the basis of

- **due care**
all designated Offices will have to recognize priority claim unless they have (also) notified incompatibility
- **unintentionality**
only designated Offices which have not notified incompatibility and which already accept such criteria or a more liberal criteria will have to recognize priority claim
- effects will therefore **vary** amongst designated Offices for some time





Restoration of priority rights (3)

- **If priority claim not restored** by receiving Office

either because request for restoration not convincing on Office
or because receiving Office refused to review applicant's request

applicant must submit request for restoration to **designated Offices**
upon national phase entry

- **Each designated Office will review** request for restoration (with evidence)
on the basis of due care
or unintentionality
or both criteria
unless the Office has (also) notified incompatibility





Rectification of obvious mistakes

- Determination of obviousness of mistake and of rectification by “**Competent Authority**” and no longer by “anyone”
- No external document **other than the priority document** would be accepted as evidence
- **New time limit of 26 months** from the priority date for all types of mistakes in all types of documents (the application, etc.)
- Rule does not provide for possibility for Office to notify incompatibility **but any designated Office may disregard rectification**





Addition of Korean patent documents to PCT minimum documentation

- At the request of the Republic of Korea
- **Patent documents published by the Office (KIPO)**
 - patents
 - published patent applications
 - English language abstracts of patents and patent applications
 - not utility models
- As for documents in Japanese, Russian or Spanish
 - PCT Searching Authorities whose official language is not Korean would only be obliged to include these documents in their documentation if an English abstract is available



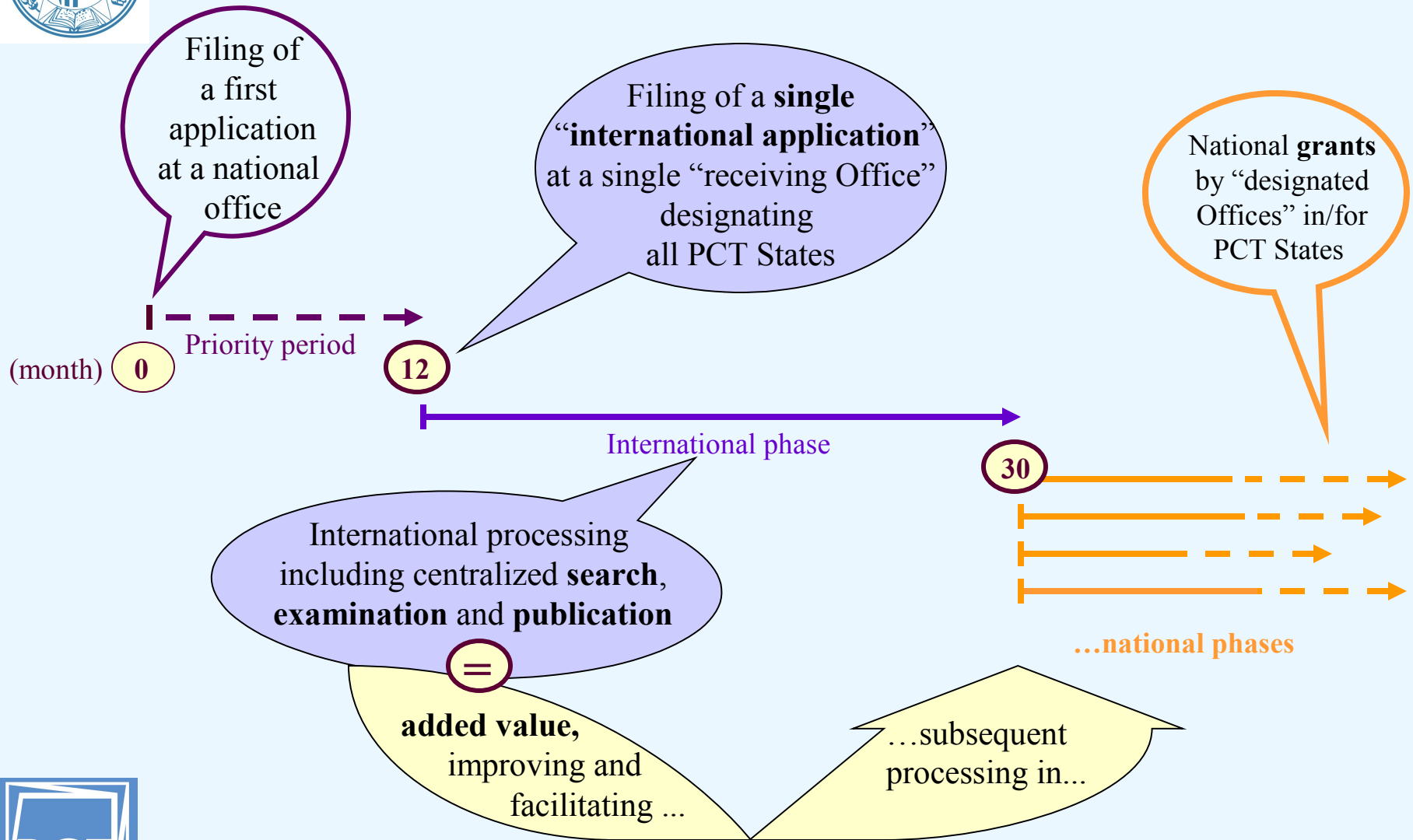


Outline of the PCT procedure





Outline of the PCT procedure





The international phase

4 steps

step 1 filing

step 2 search and unilateral examination on patentability

step 3 publication

(optional) **step 4** examination on patentability
(applicant may choose to request examination
and intervene in procedure)





Step 1—filing

Requires

- **one** applicant having a link with the PCT nationality or residence
- **one** description
- **one** claim





Step 1—filing

- **one** filing
- **one** language
- equates **actual national filing**
 - in each PCT country





Step 1—filing

- **one** set of fees
- **one** agent only for international phase
- **one** centralized submission of other documents





Filing of the PCT application guarantees an international filing date

- Immediately effective in all PCT Contracting States
 - Including recognition of priority rights claimed according to Paris Convention
 - Conditions:
 - the applicant has a link with at least one PCT State
(through nationality or residence)
 - the application contains
 - a description
 - at least one claim
 - the name of the applicant whose indication of nationality or residence determines the link with a Contracting State
 - an indication that the application is filed under the PCT
- (“Petition”)



[the filing will constitute the designation of all PCT Contracting States]



- Filing may even be made
[for example, at the receiving Office of the International Bureau of WIPO]

- at any time of day, any day of the year

- in any language

- without any signature, appointed agent, or payment

- in paper or fully or partly electronic form





Effects of the international application

- From the international filing date, the international application has :
 - the effect of a “regular national filing”
within the meaning of the Paris Convention
 - in each designated State

- The international filing date is considered to be the “actual” filing date
in each designated State

- To the extent the international application itself contains new matter,
the priority of the international application may be claimed
in a subsequent (national, regional or international) application
in respect of such new matter





Step 2—search and unilateral examination

Search

- by **one** office
- relevant **prior art**
PCT definition
- results in **international search report**





Step 2—search and unilateral examination

Unilateral examination

- by **one** office (same as for search)
- opinion on patentability
- generally results in
international preliminary report on patentability
(applicant may however requests optional examination subsequently so as to be able to intervene in process)





Step 3—publication

- by **WIPO**
- in one of **seven** publication languages
- full text in **electronic** and paper forms
available via Patentscope site
at www.wipo.int/patentscope/en/
- **with PCT file inspection** available via
<http://www.wipo.int/pctdb/en/search-adv.jsp>





International publication -- main features and effects (1)

- effected by the International Bureau
- “promptly” after the expiration of 18 months from the priority date
- in two main formats: full text of applications and gazette
- in electronic form
- in one of the PCT publication languages
Arabic, Chinese, English, French,
German, Japanese, Russian, Spanish





International publication -- main features and effects (2)

- Its date constitutes the date on which the PCT application becomes part of the prior art
- Has the effect of a national publication in each of the designated States
 - with a few exceptions
- Can be stopped or delayed by the applicant
- May take place earlier
 - upon the express request of the applicant





Step 4—Optional examination

- by **one** office (often same as for search)
- **second** opinion on patentability
if based on applicant's amendments and/or arguments
otherwise, usually same opinion as at search time
- results in
international preliminary report on patentability





Results of the international phase

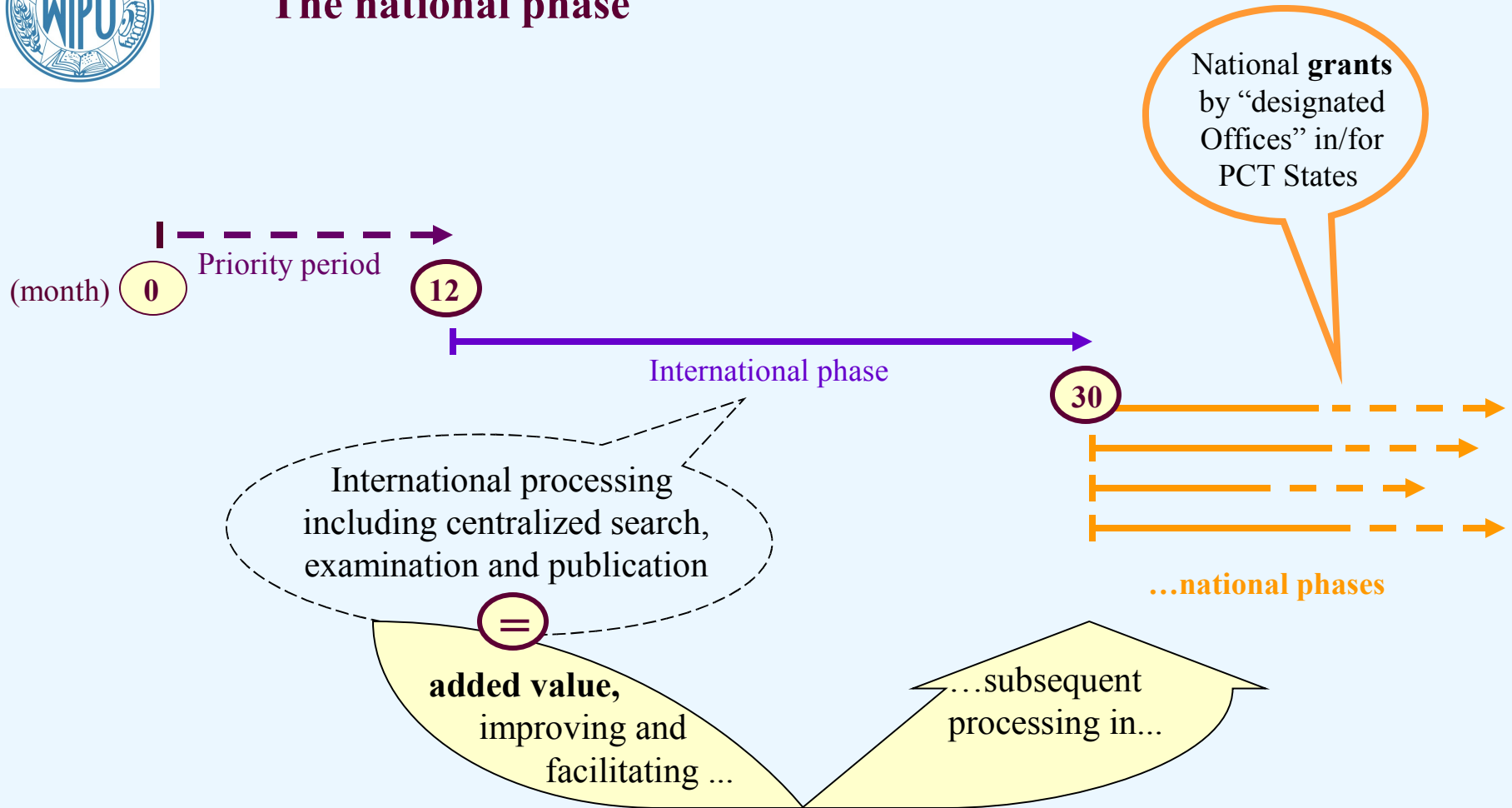
- publication of full text
- international search report
- international preliminary report on patentability

Basis for national phase entry decision and process





The national phase





National phase

- **must be entered**
 - by the applicant
 - before each designated Office
 - before the end of the international phase
- **but only if**
 - patent protection still desired





National phase before designated Offices

- only relevant in (or for) PCT States
where the applicant still wants to obtain national (or regional) patents

- for each designated Office
at the express request of the applicant,
together with:
 - translation of the international application
 - and payment of the national fee

- within the time limit of 30 months from the priority date
(with a few exceptions
in particular time limit of 31 months,
and, in very rare cases time limit of 20 months)





- **Depending on national office**

- **national phase will proceed**
on basis of
 - only PCT reports (search and examination)
 - or PCT reports and national examination
 - or national examination only

- **and will end with**
 - grant
 - or rejection
 - or abandonment





What designated Offices may or may not require - - general principles (1)

- time limit for compliance with national phase requirements
 - the Office cannot impose any obligation to comply with its requirements before the expiration of 30 months from the priority date

- form and contents of the international application
 - the Office can apply any requirements which are more favorable to applicants than those fixed in the Treaty and Regulations
 - the Office cannot apply requirements which are different from or add to the latter

- allegations or declarations contained in the application
 - the Office can require evidence but only after national processing has commenced





What designated Offices may or may not require -- general principles (2)

- qualifying as applicant according to the national law
 - the Office of the designated State concerned can reject the application if the applicant is not the inventor (with respect to the US)

- representation of the applicant for the purposes of national processing
 - the requirement of mandatory representation is permitted, but only once national processing has started

- substantive conditions of patentability
 - any criteria or other conditions of the national law are permitted in particular with respect to definition of prior art
 - the requirement to submit evidence is permitted





What designated Offices may or may not require -- general principles (3)

- preservation of the national security of the country
 - all measures that the country concerned considers necessary are permitted

- protection of the general economic interests of the country
 - all measures that the country concerned wishes to take are permitted, including those aimed at limiting the right of its nationals or residents to file international applications





PatentScope portal for access to PCT and patent matters





Public access to PCT and patent information

<http://www.wipo.int/patentscope/en/>

- central point of entry
- general legal, informational and training
- on specific applications
 - legal status
 - scientific and technical contents
- statistics
- other patent matters





Main PCT legal texts

- Treaty and
 - Regulations
 - Administrative Instructions
 - Legal notices in the PCT Gazette
 - WIPO Standards

- authentic versions in English and French

- for some texts
 - also in official translations in
 - Chinese, German, Italian, Japanese,
 - Portuguese, Russian, Spanish, etc.





Main PCT information material

- PCT Applicant's Guide
English and French
- PCT Newsletter
English
- PCT seminar and training material
English, French, German, Spanish, Japanese, etc.
- Notices, cumulative tables, lists, etc. on numerous PCT features





Other PCT and patent matters

- Patent and PCT statistics
 - filings
 - national phase entries
 - national grants
 - (several search criteria)
- General patent-related matters
 - patent law
 - Patent Law Treaty (PLT)
 - current patent issues





very much

Thank you for your attention

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