

Topic 2: PCT International Phase Examination Procedures

Lutz Mailänder

Head, International Cooperation on Examination and Training Section

Riyadh January 28, 2018

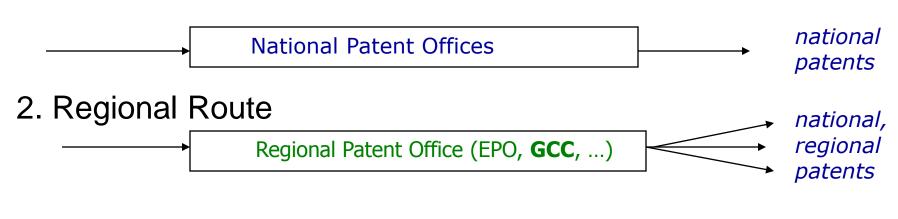
Agenda

- PCT system
- International phase and its examination results/products

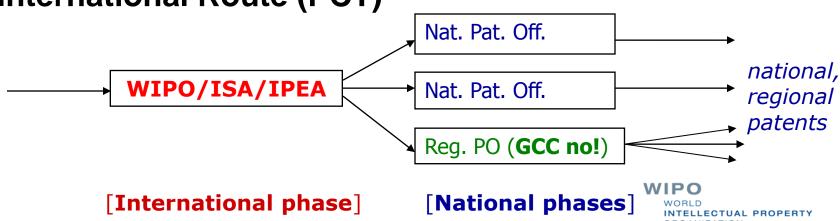


Obtaining patent protection abroad

1. National Routes







Patent Cooperation Treaty - PCT

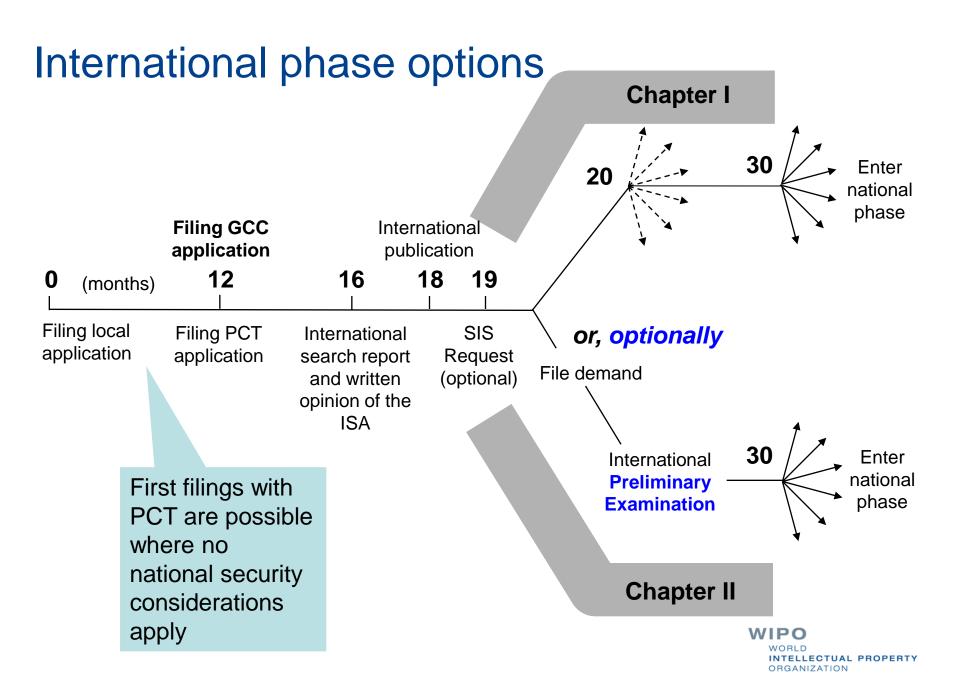
- "One-stop shop" for filing patent applications in several jurisdictions
- Filing with PCT 'Receiving Office' may be
 - First filing
 - Second filing claiming a Paris Convention priority of an earlier filing
- International phase administered by WIPO: preliminary search and examination by selected ISAs; optional preliminary examination of amended claims by IPEA
- National phases administered by national IPOs:
 - Decision on entry into national phase at the latest 30 months after filing/priority date (for most jurisdictions)
 - National granting procedures/laws/regulations apply
 - Sovereign decisions in each national phase independent of other national phases
- Total of national phase entries of PCT application constitute a family: 'PCT family'
 - Family relations are established by sharing the respective PCT application number
 - Work-sharing opportunities for efficient national procedures



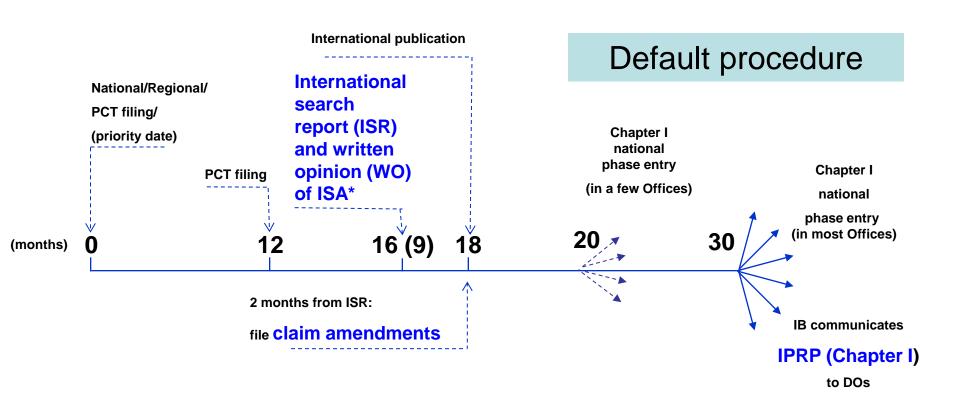
Sovereign national prosecution

Paris Convention 1883:

- No obligation to follow/adopt conclusions of other IPOs or to use their results (Article 4bis)
- http://www.wipo.int/treaties/en/ip/paris/summary_paris.html
- Each IPO has obligation to observe national legislation
- Each IPO has responsibility/liability for quality patents
- Lawyers often refer to grants at other IPOs: just ignore that!



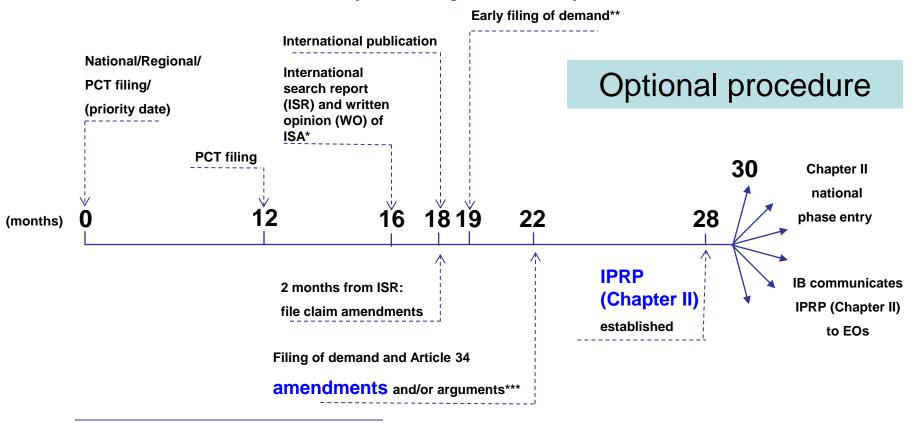
PCT timeline (Chapter I)



^{*} If PCT is a first filing, the ISA is to establish the ISR and WO of the ISA before the expiration of 9 months from the priority date (Rule 42.1)



PCT timeline (Chapter II)



- * If PCT is a first filing, the ISA will establish the ISR and WO of the ISA before the expiration of 9 months from the priority date (Rule 42.1)
- ** In respect of LU, TZ and UG, the time limit of 30 months to enter national phase will, however, only apply if those States have been elected in a demand filed before the expiration of 19 months from the priority date
- *** A demand for international preliminary examination may be filed at any time prior to the expiration of 3 months from the date of transmittal of the ISR and WO of the ISA, or 22 months from the priority date, whichever time limit expires later (Rule 54*bis*.1(a)).

Various Offices and Authorities involved

- Receiving Office (RO)
- International Searching Authority (ISA): ISR, WO-ISA, IPRP (Ch. I)
- International Bureau (IB): publications, file inspection
- International Preliminary Examining Authority (IPEA): IPRP (Ch. II)
- Designated/Elected Offices (national and regional) (DO/EO)



Legal framework

- International
 - Treaty [Art.]
 - Regulations [Rule]
 - Administrative Instructions [Sect.]
 - Agreements between IB and ISA/IPEAs
 - Notifications (published in PCT Gazette)
 - Guidelines (RO, IS/IPE)
 - Governing body PCT Assembly
- National
 - National laws implementing certain PCT related aspects (especially national phase processing and effects)
 - Patent law, regulations, examination guidelines, case law



Main products of international phase

Work products of authorities

- Publication of international application (bibliographic data, abstract, description, drawings, claims) [Rule 48]
- International Search Report (ISR) [Rule 43]
- Written Opinion of ISA (WO-ISA) [Rule 43bis]
 - prepared as complement to international search, but deals in substance with examination matters
- (Optional) Supplementary International Search Report (SISR) [Rule 45bis.7]
- International Preliminary Report on Patentability (IPRP)
 - IPRP (Chapter I) = WO-ISA plus cover sheet [Rule 44bis], or
 - IPRP (Chapter II) = International Preliminary Examination Report (IPER)

Other statements related to patentability

- (Optional) informal statements by applicant on WO-ISA and respective amendments of claims [Article 19(1); Rule 46.4]
- (Optional) third party observations [Sect. 801ff]



International publications

- 18 month after filing/priority date: WO-A1 or WO-A2
- WO-A1: international application (IA) + international search report (ISR)
- WO-**A2**: two distinct types of publications
 - International application as filed if no ISR is available yet
 - Optional at later stage: Declaration that no ISR will be established [Art. 17(2)(a)]
- WO-A3: Later publication international search report + front page
- WO-A4: Later publication of amended claims and/or statement [Article 19]
- WO-A8: Republication front page with corrections
- WO-A9: Republication of full application or ISR with corrections, alterations or supplements



Laid open for public inspection

- No publication as such, no publication number, no publication date,...
- Accessible through "file inspection", for example in Patentscope
 - Written Opinions
 - Accessible from date of publication of SR
 - IPRPs, IPER
 - Third Party Observations
 - Accessible in timely manner after submission



International Search Report (ISR)

- Established by (selected) competent ISA
- Search based on claims as originally filed [Article 15(3)]
 - Amendments only possible after receipt of ISR [Article 19]
- Search performed according to PCT Examination Guidelines
- Prior art is everything made available to the public [Rule 33]
 - in written disclosure (may refer to oral disclosure, exhibition)
 - prior to the international filing date (i.e. priority is irrelevant, in case priority claim is invalid for certain subject matter)
- Not any written disclosure is to be searched: only PCT minimum documentation [Rule 34]
- In case of lack of unity, only "first" invention will be searched [Rule 40], unless additional fees are paid
- ISA can decline search of certain subject matter [Rule 39], namely subject matter that is excluded from patentability in the national law of the ISA (PCT does not define what is patentable but knows certain exclusions from search!)

NTELLECTUAL PROPERTY

DRGANIZATION

Rule 39 (similar Rule 67 for IPEA)

Rule 39 Subject Matter under Article 17(2)(a)(i)

39.1 Definition

No International Searching Authority shall be required to search an international application if, and to the extent to which, its subject matter is any of the following:

- scientific and mathematical theories,
- (ii) plant or animal varieties or essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes,
- (iii) schemes, rules or methods of doing business, performing purely mental acts or playing games,
- (iv) methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods,
 - (v) mere presentations of information,
- (vi) computer programs to the extent that the International Searching Authority is not equipped to search prior art concerning such programs.

PCT Minimum Documentation

- Not any written disclosure is to be searched: only **PCT minimum documentation** [Art. 15(4); Rule 34)] comprising:
 - International (PCT) applications
 - Any regional applications and patents
 - National patents and applications published after 1920 of
 - France, Germany, Japan, Soviet Union, Switzerland, UK, USA;
 - China, Korea, Russian Federation;
 - Any patents or applications in English, French, German, Spanish made available to ISA by interested authorities
 - Any ISA whose official language is not Chinese, Japanese, Korean, Russian is entitled to exclude such documents for which no abstract translated in English is available
 - Certain non-patent literature (NPL)
 - See WIPO Handbook http://www.wipo.int/standards/en/part_04.html



International Searching Authority (ISA)

- 'Competent ISAs' to be specified by each RO
- Appointed by GA for fixed period of time
- Minimum requirements [Rule 36.1]:
 - 100 full-time employees with
 - Sufficient technical expertise to carry out searches
 - Sufficient language skills to understand minimum documentation or translations of it
 - Access to minimum documentation
- Quality management system
- Holds appointment as IPEA
 - Corresponding minimum requirements for IPEA [Rule 63]



Agreements of IB with ISA and IPEA

ISA and IPEA Agreements

Agreements with the International Bureau of WIPO in relation to the functioning of the following Authorities as International Searching and International Preliminary Examining Authorities under the PCT (in PDF format):

- AT Austrian Patent Office
- AU Australian Patent Office
- BR National Institute of Industrial Property (Brazil)
- CA Canadian Intellectual Property Office
- CN State Intellectual Property Office of the People's Republic of China
- EG Egyptian Patent Office
- EP European Patent Office (EPO)
- ES Spanish Patent and Trademark Office
- FI National Board of Patents and Registration of Finland
- IL Israel Patent Office
- IN Indian Patent Office
- JP Japan Patent Office
- KR Korean Intellectual Property Office
- RU Federal Service for Intellectual Property, Patents and Trademarks (Russian Federation)
- SE Swedish Patent and Registration Office
- US United States Patent and Trademark Office (USPTO)
- XN Nordic Patent Institute

Plus SG, UA, TR, XV, PH

Example of ISA/IPEA agreement

Annex B Subject Matter Not Excluded from Search or Examination

The subject matter set forth in Rule 39.1 or 67.1 which, under Article 4 of the Agreement, is not excluded from search or examination, is the following:

all subject matter which is searched or examined under the Canadian patent grant procedure.



ISR

- ISR is "enriched" search report as it includes
 - List of relevant prior art documents (citations)

plus indications:

- For which claims a document is relevant
- Which parts of the document are relevant (e.g. line 5-6, page 7; drawing 6) for those claims
- Why the document is relevant (challenging novelty, inventive step; describing background art)
- IPCs of the claimed subject matter
- Limited search strategy: technology areas (IPC) searched
- Includes observations regarding lack of unity (Box III), or whether no meaningful search could be performed (clarity of claims)(Box II)



Enriched prior art search reports

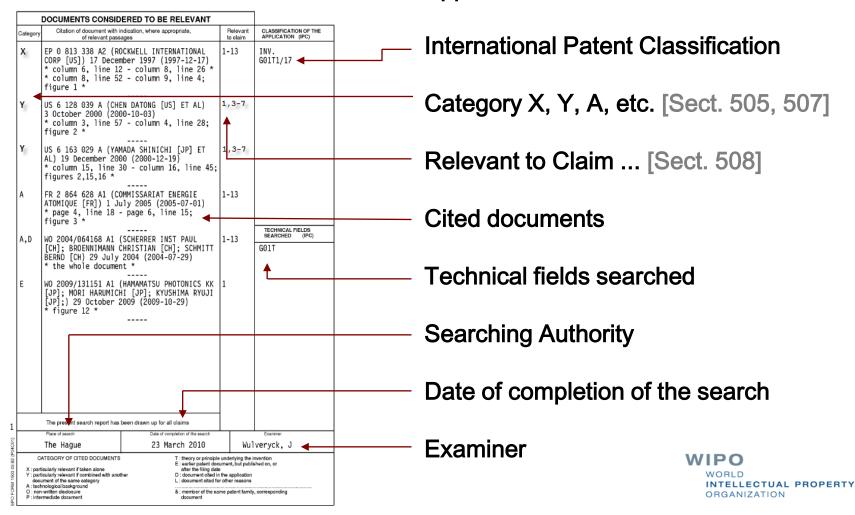


EUROPEAN SEARCH REPORT

EP 99 16 8955

Application Number

Application number



Citation details according to Rule 43.5

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	FR 2 862 349 A1 (MDI MOTOR DEV INTERNAT SA [LU]) 20 May 2005 (2005-05-20) the whole document figures 1-12	1-19
Y	US 4 651 525 A (CESTERO LUIS G [US]) 24 March 1987 (1987-03-24) abstract column 2, lines 12-36 column 7, lines 30-41 figure 1	1–19
Υ	DE 24 22 672 A1 (EHSES GEORG) 20 November 1975 (1975-11-20) page 6, paragraph 2 - page 7, paragraph 1	1,2, 12-14,16



Categories of citations

- X particularly relevant if taken alone (novelty)
- Y particularly relevant if combined with another document of the same category (inventive step)
- A technological background
- O non written disclosure
- P intermediate document, i.e. published between the earliest priority date and the filing date
- E earlier document but published on or after the filing date
- T theory or principle underlying the invention
- D document cited in the application
- I (applied by EPO for some time in the past)

See 16.59ff of the PCT Examination Guidelines



INTERNATIONAL SEARCH REPORT

Limited explanations of search strategy

о.

A. CLASSIFICATION OF SUBJECT MATTER

[Rule 43.6]

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.				

Elements of the ISR

- Three obligatory elements
 - Introductory statements
 - References to four optional boxes
 - Enriched citations
 - Parent family members for citations (language equivalents)
- Optional boxes (I-IV) related to certain introductory statements



obligatory

1.	Ba	sis of tl	he report
	a.	With r	regard to the language, the international search was carried out on the basis of:
		[the international application in the language in which it was filed.
		[a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
	b.		This international search report has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).
	c.		With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.
2.			Certain claims were found unsearchable (see Box No. II).
3.		u	Unity of invention is lacking (see Box No. III).
4.	Wit	th regar	rd to the title,
			he text is approved as submitted by the applicant.
			he text has been established by this Authority to read as follows:
5.	Wi	th rega	rd to the abstract,
		t	he text is approved as submitted by the applicant.
			he text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2007/059161

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2862349	A1	20-05-2005	AT 373769 T AU 2004291704 A1 BR PI0416222 A CN 1926307 A EP 1702137 A1 WO 2005049968 A1 HR 20060223 A2 JP 2007511697 T KR 20060124650 A US 2007101712 A1	15-10-2007 02-06-2005 02-01-2007 07-03-2007 20-09-2006 02-06-2005 31-05-2007 10-05-2007 05-12-2006 10-05-2007
US 4651525	Α	24-03-1987	NONE	
DE 2422672	A1	20-11-1975	NONE	
US 3267661	Α	23-08-1966	NONE	
FR 1009307	Α	28-05-1952	NONE	

ISR

- Communicated to applicant when established (≈16 months from priority date; 9 months from filing date)
- Communicated to DOs/EOs at national phase entry
- Available to general public through publication by IB (WO-A1/A3)
 - i.e. at the earliest 18 months after filing/priority date
- After publication also accessible as separate records in databases, with enrichments, in
 - CCD
 - EP-Register (if EPO national phase entry)
 - 'cited documents' link in Espacenet
- If no ISR is established a respective declaration is published (additional WO-A2) [Article 17, Rule 48]
- After receipt of ISR, applicant may amend claims once and submit statement [Article 19]

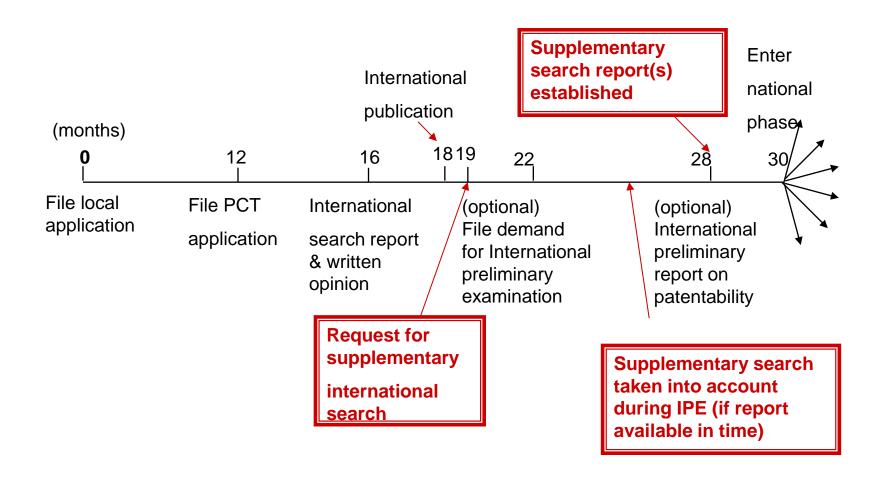


Supplementary Int. Search Report (SISR)

- Addresses applicants' concerns about additional prior art not found by ISA, e.g. because of linguistic diversity
- Search of supplementary subject matter not covered by ISR.
- Established by alternative authority, currently offered only by AT,
 EP, FI, RU, SE and XN (applicant has free choice)
- No written opinion
- Translated into English if necessary
- Not published but made available to public (file inspection)



SIS in the PCT System





Written Opinion (WO) & IPRP (Chapter I)

- WO is established together with ISR but not published with ISR
- Deals in substance with examination matters; Initial preliminary nonbinding opinion on:
 - novelty (not anticipated)
 - inventive step (not obvious)
 - industrial applicability
- Relevant date for prior art is priority date!
- Provided to applicant with ISR
- WO is converted to IPRP (Chapter I) if no chapter II preliminary examination is requested, and communicated to DO (30 months) together with any informal comments of the applicant on WO-ISA
- Made publicly accessible (file inspection) at WO-A1/3 publication, e.g. in
 - Patentscope, EP-Register
 - not yet in CCD



PCT - WO

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

Statement

Novelty (N)

Yes: Claims No: Claims 3, 19 1, 2, 4-18, 20

Inventive step (IS)

Yes: Claims

Claims

1-20 1-20

Industrial applicability (IA)

es: Claims lo: Claims

Citations and explanations

see separate sheet

Form PCT/ISA/237 (April 2007)

Statements [Rule 70.6]

Explanations [Rule 70.8]

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/US2010/020787

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- Reference is made to the following documents:
 - D1 US 2002/186921 A1 (SCHUMACHER LYNN C [CA] ET AL) 12 December 2002 (2002-12-12)
 - D2 WO 2007/136816 A2 (MASSACHUSETTS INST TECHNOLOGY [US]; BULOVIC VLADIMIR [YU]; KYMISSIS IO) 29 November 2007 (2007-11-29)
- The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 4-15, 17-18, 20 is not new in the sense of Article 33(2) PCT.
- 2.1 D1 discloses

an optical fiber capable of being diagnosed non-invasively comprising an optical fiber (12) for conveying a light beam; said optical fiber comprising a first end for receiving said light beam and a second end opposed thereto, a core (14) comprising an inner wall, and a cladding (16) surrounding said core,

said optical fiber further comprising at least one uncladded portion comprising a plurality of quantum dots (26) dispersed in a medium,

wherein said quantum dots become activated by evanescent wave coupling resulting from total internal reflection of said light beam contacting said inner wall of said optical fiber core and wherein said activation results in emittance of light from said quantum dots (Fig. 2c; paragraphs [0033], [0045]).

Therefore, the subject-matter of present claim 1 is not novel over the teachings of D1.

2.2 D1 also discloses

ORGANIZATION

International preliminary examination

- IPE may be chosen, e.g., after negative ISA-WO
 - To have additional opportunities to amend claims, description, drawings
 - Communicate to some extent with examiner
- Examination is based on claims amended after ISR [Art. 19] or claims amended with request for IPE [Art. 34]
- Claims relating to subject matter not searched by the ISA need not be examined by the IPEA [Rules 66.1(e)]
- Relevant date for prior art is priority date (priority period for claiming priority is extended to 14 month; [Rule 64.18(b)(iii)]
- Prior art described in ISR and SISR is considered; additional prior art may be considered
- No obligation of IPEA to conduct additional search



IPEA & IPRP (Chapter II) (=IPER)

- IPEA obliged to issue a WO before issuing negative IPRP (right to be heard), or in case of other defects [Rule 66.2]
- Applicant is invited to respond and submit amendments
 - No obligation of IPEA to respond to responses
- Multiple WO (IPEA) and responses/amendments by applicant are possible [Rule 66.4], however limited time frame for IPRP
- Applicant can request hearing
- IPEA completes with the issuing of the IPRP (Ch. II) (=IPER)
- IPRP may cite additional prior art, no extra search report is issued
- Statements and explanations on novelty, inventive step, industrial applicability; no statement on patentability as such, or other related aspects
- IPRP shall call attention to non written prior art and "certain documents" (later published prior art) [Rule 70.9, 70.10]



IPRP (Chapter II)

- Communicated to EOs (30 months)
- Mostly available through file inspection, e.g.
 - Patentscope
 - EP-Register
 - Global Dossier
 - not yet CCD

Requirements of patentability (generic)

- Examination has to check
 - Technical nature
 - Unity
 - No case of exclusion
 - Industrial applicability
 - Novelty
 - Inventive step
 - Sufficient disclosure
 - Legal certainty of claims (clarity)
 - Additions to initial disclosure

PCT: ISA may decline search

Should be checked before prior art search

Requires prior art search

PCT: Not examined

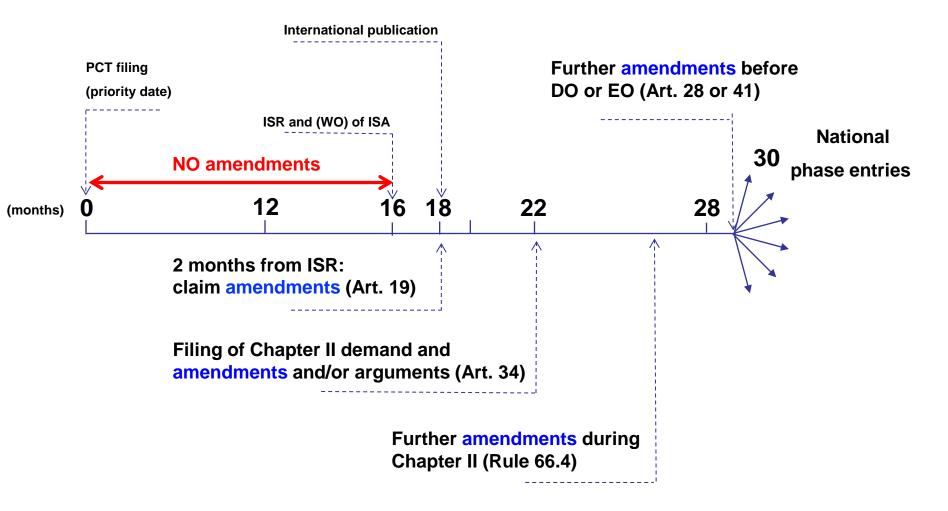


What can applicants do (after filing)?

- Submit missing parts of application
- Request rectifications of obvious mistakes
- Amend claims after receipt of ISR (amendments before IB; Article 19)
- Submit comments on 1st WO
- Amend claims, description, drawings before DO (Article 28), i.e. in national phase
- Request IPE
 - Amend claims, description, drawings before IPEA (Article 34)
 - Request hearing before issuing of IPRP (chapter II)
 - Respond to 2nd and further WOs
 - Further amendments during IPE (Rule 66.4)
- Amend claims, description, drawings **before EO** (Article 41), i.e. in national phase



Amendments of claims





Summary PCT S&E Products

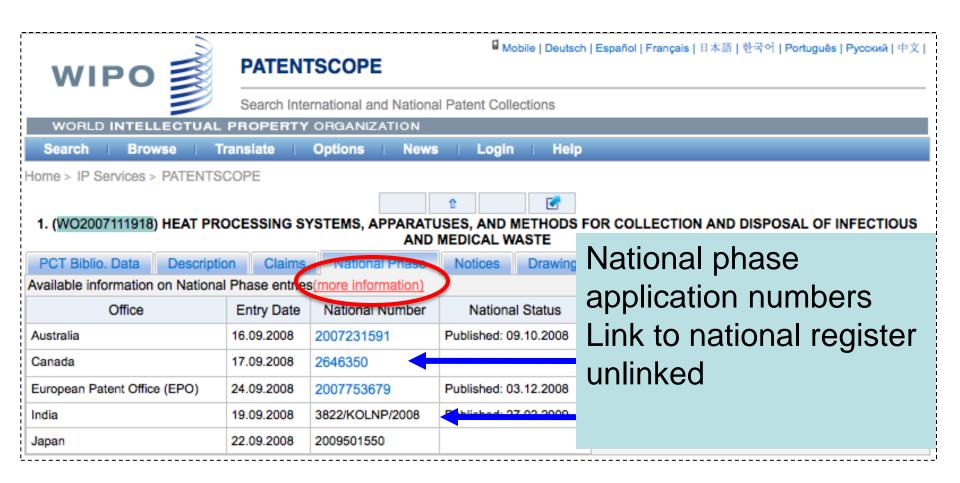
- International search report (ISR):
 - Available as WO-A1 or WO-A3 publication
 - 18 months or more after filing/priority date
- Written opinion of ISA (WO-ISA)
 - Available through file inspection (through Patentscope or Espacenet)
 - 30 months after filing/priority date (at national phase entry)
- Supplementary international search report (SISR) (where applicable)
- International preliminary report on patentability (IPRP Ch. I and II)
 - Available through file inspection (through Patentscope or Espacenet)
 - 30 months after filing/priority date (at national phase entry)
- (Third party observations)
 - Available through file inspection (through Patentscope or Espacenet)
 - At earliest 18 months after filing/priority date



Where to find products: Patentscope

Patent documents & file inspection (access to PDFs Overview of basic of communications bibliographic data between IB and applicant ("HTML front page") PCT Biblio, Data Description Claims National Phase Notices Drawings Documents National phase entry Legal status, e.g. data, sometimes linked withdrawals during international phase to national registers

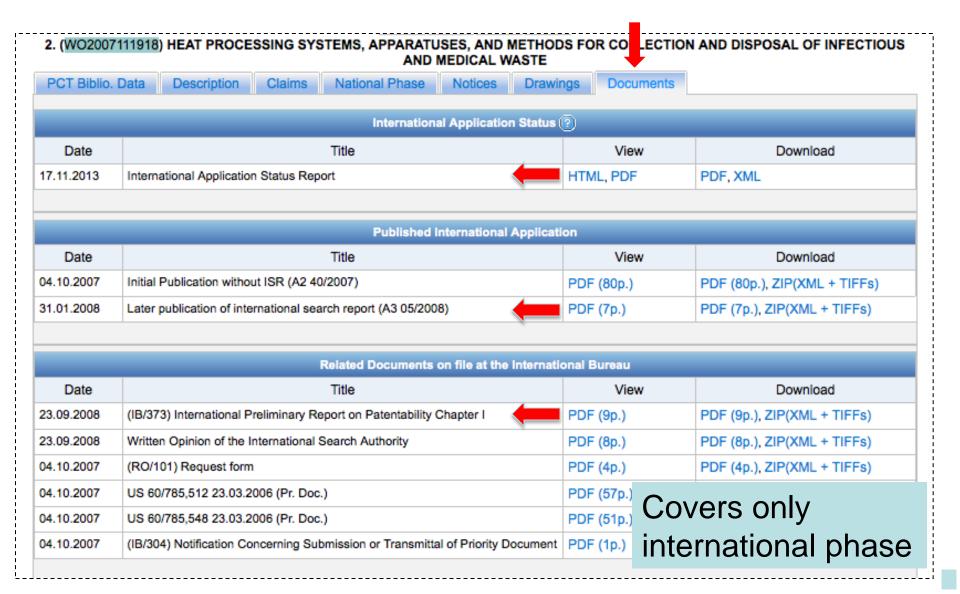
Patentscope: national phase data



US NPE?

WIPO
WORLD
INTELLECTUAL PROPERTY
ORGANIZATION

Patentscope: PCT file inspection



National phase challenges

- Claims may be different from claims in international phase
 - If the amended claims include features taken from the description, these features are not covered by ISR, IPRP; i.e. these reports may be of limited use
 - top-up searches may be required if the prior art cited in ISR, IPRP does not show these features;
 - Check if similar claims are submitted for the national phases at other IPOs; use respective S&E results, if available
- ISA/IPEA assumes validity of priority if priority document is not available; requires checking of validity in national phases

National phase challenges

- Differences of patent laws, e.g. exclusions, examination guidelines applied by ISA/IPEA;
- In particular, there is no "international" case law on interpretation of PCT Treaty and Regulations (since there is no appeal); consequently ISA/IPEA apply their respective case law.
- Trust/confidence in IPEA/ISA
- Small IPOs: same task like bigger offices but limited resources
 - Consider utilization of S&E results of other national phases, but observe national sovereignty



Thank you

lutz.mailander@wipo.int

