

Topic 2: PCT International Phase Examination Procedures and Challenges for National Phase Procedures

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Moscow September 16, 2019

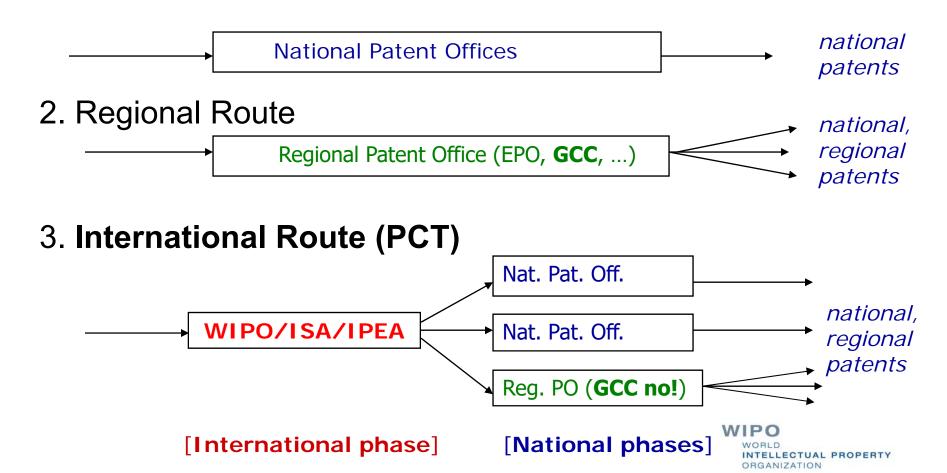
Agenda

- PCT system
- International phase and its examination results/products
- Challenges for national phase examination



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

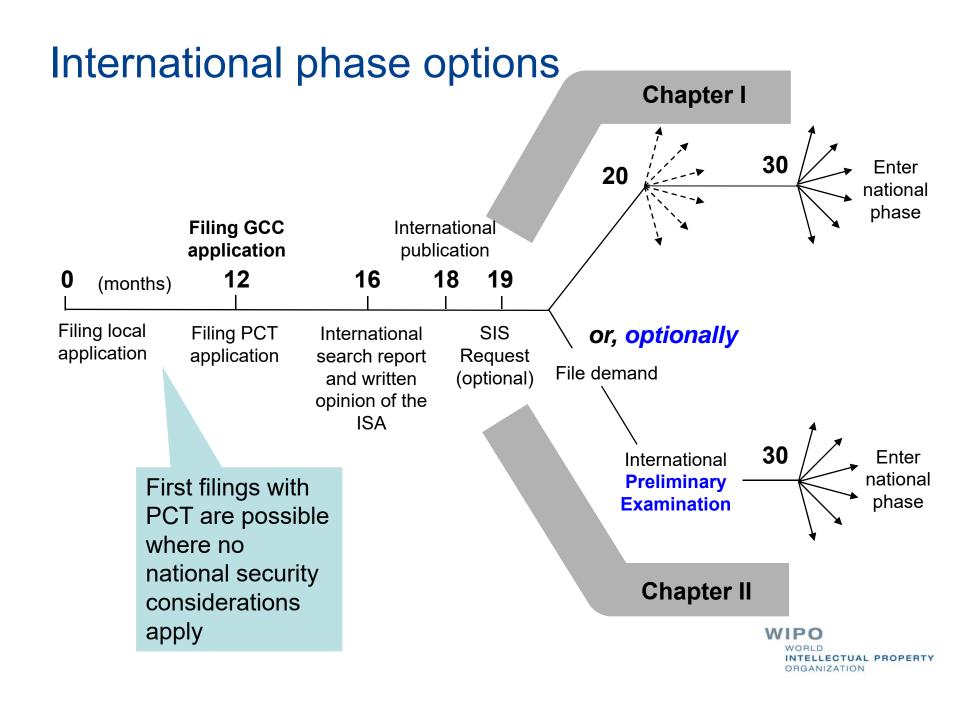


Sovereign national prosecution

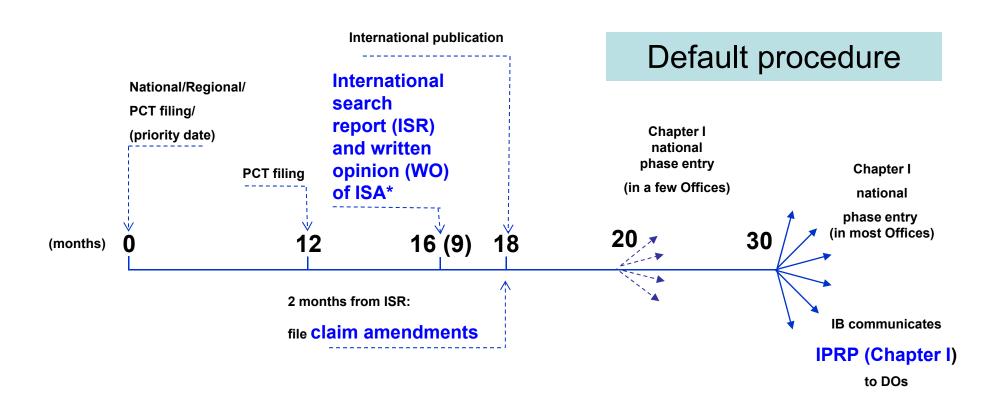
Paris Convention 1883:

- 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!



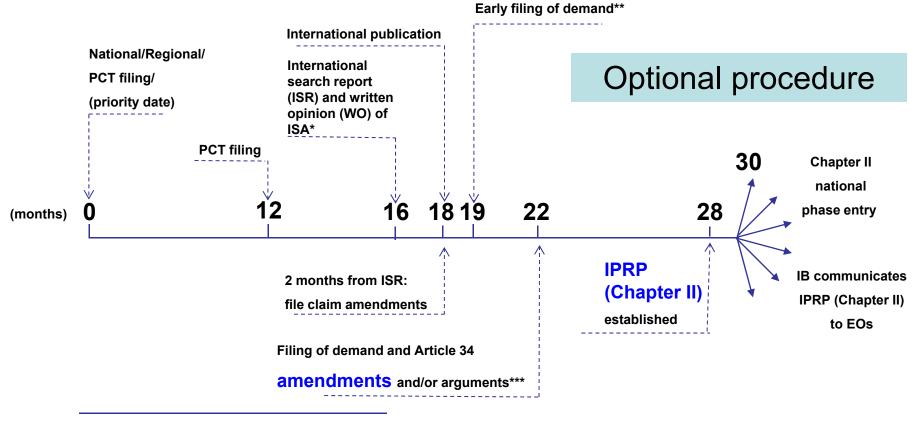


PCT timeline (Chapter I)



^{*} 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 54bis.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

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:

- (i) 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.

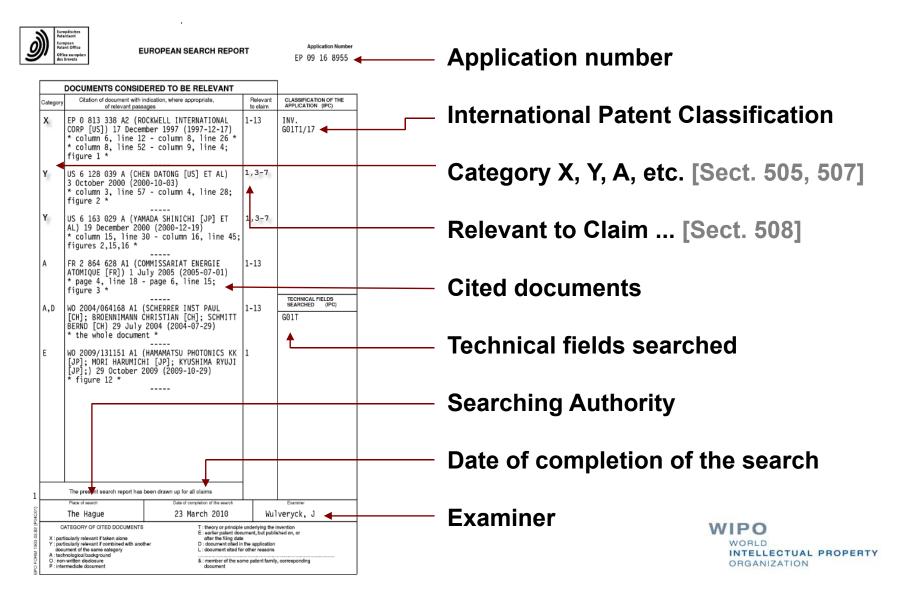


ISR

- 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



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 |
| Y | 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

0.

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 | asis of the report |
|----|----|---|
| | a. | With 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. | | Unity of invention is lacking (see Box No. III). |
| 4. | Wi | th regard to the title, |
| | | the text is approved as submitted by the applicant. |
| | | the text has been established by this Authority to read as follows: |
| | | |
| | | |
| 5. | W | ith regard to the abstract, |
| ٥. | ** | the text is approved as submitted by the applicant. |
| | | the 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. |

obligatory

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2007/059161

| | | | I | |
|---|----|---------------------|--|--|
| Patent document citéd 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 |
| 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]

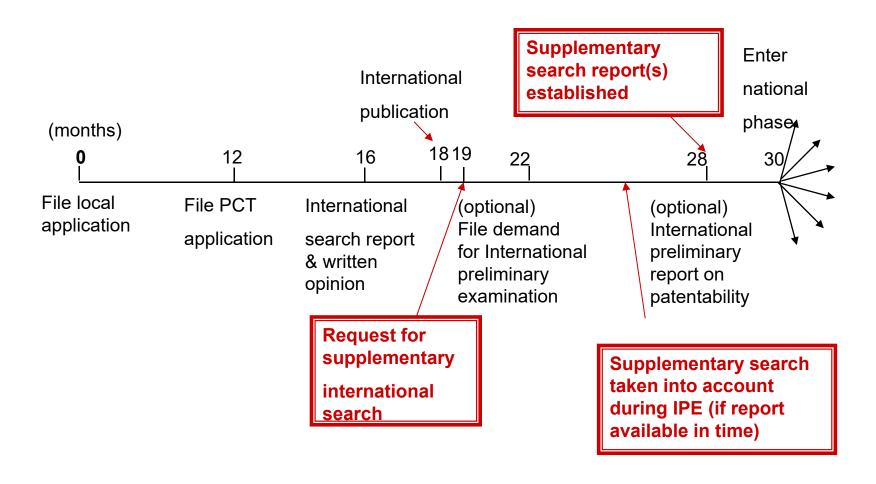


Supplementary Int. Search Report (SISR)

- 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

1-20

1-20

Inventive step (IS)

es: Claims

lo: Claims

NO. Claims

Industrial applicability (IA)

Yes: Claims No: Claims

2. 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)
- 2 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 published
- 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

PCT: ISA may decline search

Should be checked before prior art search

Requires prior art search

PCT: Not examined

- Legal certainty of claims (clarity)
- Additions to initial disclosure

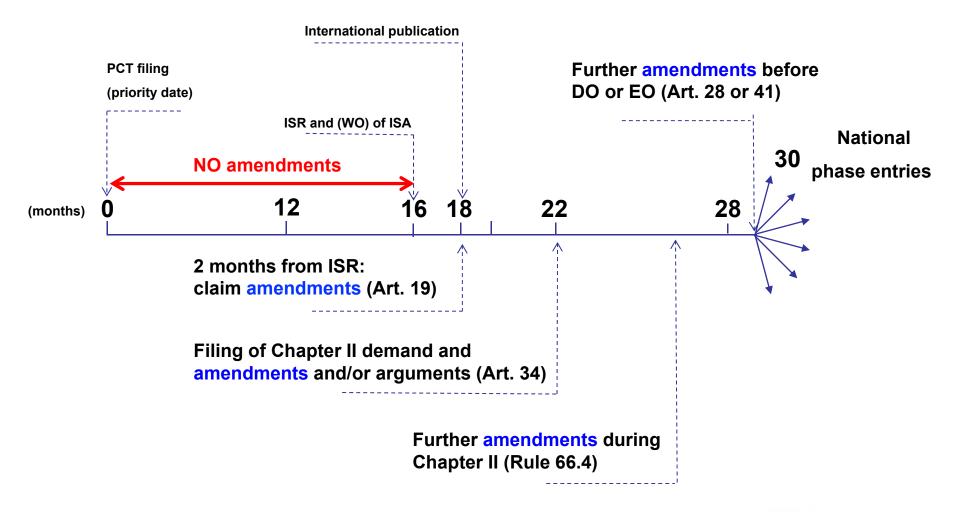
WIPO
WORLD
INTELLECTUAL PROPERTY
ORGANIZATION

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



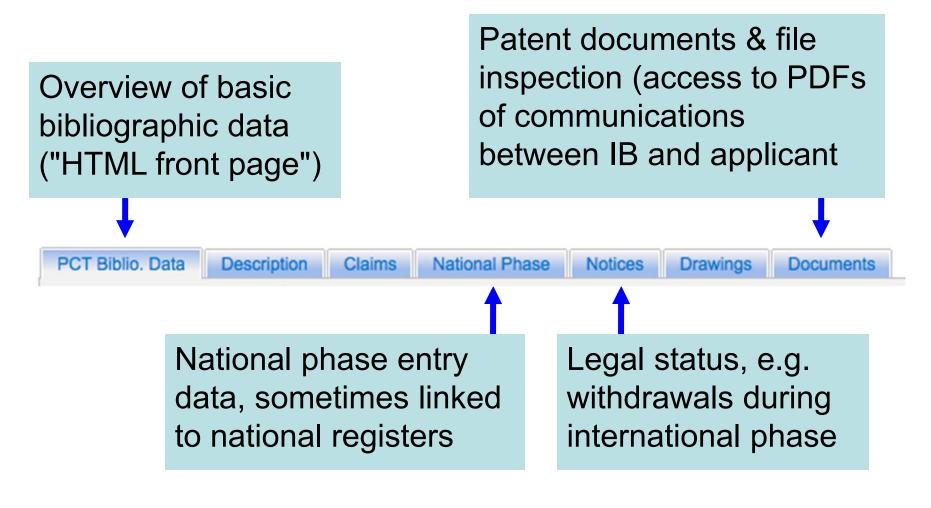


Summary PCT S&E Products

- 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

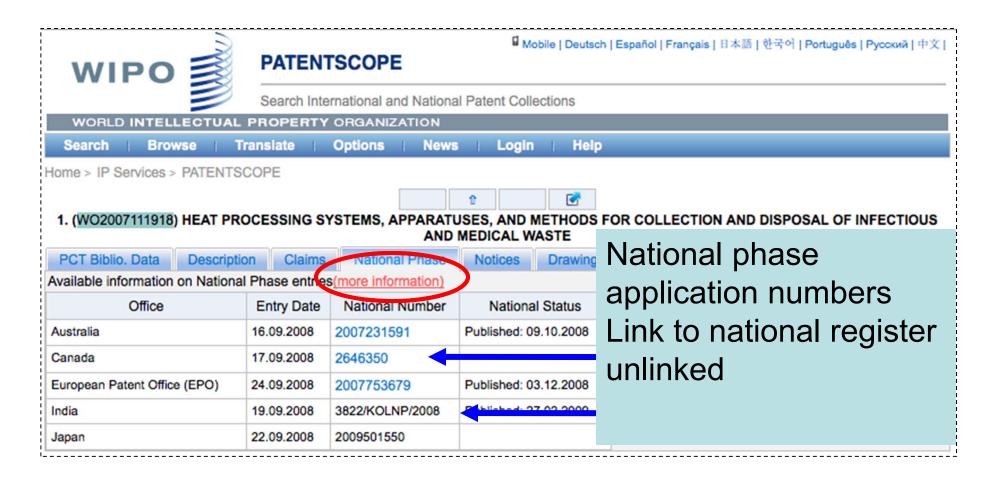


Where to find products: Patentscope



WIPO
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Patentscope: national phase data



US NPE?



Patentscope: PCT file inspection



National phase challenges

- Claims may be different from claims in international phase
 - Usually the case if WO finds claims not patentable (X,Y) documents in ISR)
 - 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 results
 - EPO always conducts supplementary search if EPO is not ISA
 - Other IPOs also often conduct supplementary searches if ISR has only A documents
- Small IPOs: same task like bigger offices but limited resources
 - Consider utilization of S&E results of other national phases, but observe national sovereignty



Sample case PG/P/2011/00033



PG/P/2011/00033





Espacenet Patent search

Deutsch English Français

Contact

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|---|-------------|---------------------|---------------|----------|------|--|
| Search | Result list | My patents list (0) | Query history | Settings | Help | |

| WO2010098129 (A1) | |
|-----------------------|----|
| Bibliographic data | |
| Description | |
| Claims | |
| Mosaics | |
| Original document | |
| Cited documents | |
| Citing documents | |
| INPADOC legal status | |
| INPADOC patent family | |
| | PD |

Bibliographic data: WO2010098129 (A1) — 2010-09-02

★ In my patents list 🤻 EP Register 📳 Report data error

METHOD FOR COLLECTING HYDROCARBON COMPOUND FROM GASEOUS BY-PRODUCT AND APPARATUS FOR COLLECTING HYDROCARBON

Page bookmark W02010098129 (A1) - METHOD FOR COLLECTING HYDROCARBON COMPOUND FROM GASEOUS BY-PRODUCT AND APPARATUS FOR COLLECTING HYDROCARBON

rentor(s): TASAKA KAZUHIKO [JP] +

PDF with Search Report

AN OIL GAS & METALS JOGMEC [JP]; INPEX CORP [JP]; NIPPON OIL CORP [JP]; JAPAN PETROLEUM LORATION CO [JP]; COSMO OIL CO LTD [JP]; NIPPON STEEL ENG CO LTD [JP]; TASAKA KAZUHIKO [JP]

Quick help

- → What is meant by high quality text as facsimile?
- → What does A1, A2, A3 and B stand for after a European publication number?
- → What happens if I click on "In my patents list"?
- → What happens if I click on the "Register" button?
- → Why are some sidebar options deactivated for certain documents?

Classification: - international: C10G2/00

- cooperative: <u>B01D3/00</u>; <u>B01D53/1475</u>; <u>B01D53/1487</u>; <u>C10G2/30</u>; <u>C10G21/28</u>; <u>C10K1/143</u>; <u>C10K1/18</u>;

B01D53/1425; C10G2300/1022; C10G2300/301; C10G2300/44; Y02C10/06; Y02P20/152

Priority number(s): <u>JP20090046151 20090227</u>

Also published as:
□ AU2010219005 (A1) □ AU2010219005 (B2) → BRPI1007862 (A2) □ CA2752839 (A1) □ CA2752839 (C)

→ more

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2010/001325

PERTY

A. CLASSIFICATION OF SUBJECT MATTER

C10G2/00(2006.01)i

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) C10G2/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2010 Kokai Jitsuyo Shinan Koho 1971-2010 Toroku Jitsuyo Shinan Koho 1994-2010

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) JSTPlus (JDreamII), JST7580 (JDreamII)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | JP 2005-530892 A (Chevron USA Inc.), 13 October 2005 (13.10.2005), claim 8; paragraphs [0047], [0075] & US 6774148 B2 & US 2003/0236312 A1 & GB 2391014 A & GB 2409460 A & WO 2004/000772 A1 | 1-9 |
| A | AUDUS et al.CO ₂ Abatement in Gas-To-Liquid Plants, Stud.Surf.Sci.Catal., 2001, 136, p.519-524 | 1-9 |

PG/P/2011/00033





EspacenetPatent search

Deutsch English Français

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| WO2010098129 (A1) | Family list: WO | 2010098129 (A1) — 2010 | -09-02 RSS: family do | ssiers |
| Bibliographic data | Select all (0/12) | ■ Compact | Download covers | CD Print |
| Description | Ociect all (0/12) | Export (GGV XEG) | Download covers 7 Co | T Till |
| Claims | | · | | |
| Mosaics | 12 application(s) for: W | /O2010098129 (A1) | | |
| Original document | | | | |
| Cited documents | | | | |
| Citing documents | Cort by D. " | Cort order D | | atta |
| INPADOC legal status | Sort by Priority date | Sort order Descending | Sort show cita | ations |
| INPADOC patent family | 1. METHOD FOR CO | OLLECTING HYDROCARBON COMPOUNT | ND FROM GASEOUS BY-PRODU | JCT AND APPARATUS FOR |
| | COLLECTING HTDROC | DARBON | | |
| Quick help | nventor: | Applicant: JAPAN OIL GAS & METALS JOGMEC | CPC: IPC: B01D3/00 C10G2/00 | Publication info: Priority date: WO2010098129 (A1) 2009-02-27 |
| → Can I export this list? | amily (ASAKA (AZUHIKO [JP] | [JP] | B01D53/1425 | 2010-09-02 |
| → What happens if I click on | | INPEX CORP [JP] | B01D53/1475 | 1 Global Dossier |
| "Download covers"? → Can I sort the list? | | (+5) | (+10) | |
| → What happens if I click on the | 2. Method for collect | cting hydrocarbon compound from gase | ous by-product and apparatus | for collecting hydrocarbon |
| star icon? | ★ Inventor: | Applicant: | CPC: IPC: | Publication info: Priority date: |
| → What is a patent family? → What happens if I tick the "show | KAZUHIKO | JAPAN PETROLEUM EXPLORATION | B01D3/00 C10G2/00 | AU2010219005 (A1) 2009-02-27 |
| citations" box? | TASAKA | CO NIPPON STEEL ENG CO LTD | B01D53/1425 B01D53/1475 | 2011-09-15 AU2010219005 (B2) |
| → What is an INPADOC patent family? | | (+4) | (+10) | 2013-05-16 |
| A | | | | |

PG/P/2011/00033 Family list (partial)

4. A METHOD FOR RECOVERING HYDROCARBON COMPOUNDS AND A HYDROCARBON RECOVERY APPARATUS FROM A **GASEOUS BY-PRODUCT**

Inventor: TASAKA

JAPAN OIL GAS & METALS JOGMEC

KAZUHIKO [JP]

INPEX CORP [JP]

Applicant:

(+4)

CPC: B01D3/00

Grant

Grant

Grant

IPC: C10G2/00

Publication info: CA2752839 (A1) 2010-09-02

CA2752839 (C) 2014-02-18

5. Method for collecting hydrocarbon compound from gaseous by-product and apparatus for collecting hydrocarbon

Inventor:

Applicant:

KAZUHIKO JAPAN OIL GAS & METALS JOGMEC **TASAKA**

INPEX CORP

(+4)

CPC: R01D3/00 IPC:

C10G2/00

Publication info: CN102333846 (A)

2012-01-25 CN102333846 (B) 2014-01-29

Global Dossier

6. METHOD FOR COLLECTING HYDROCARBON COMPOUNDS FROM GASEOUS BY-PRODUCT AND APPARATUS FOR **COLLECTING HYDROCARBON**

Applicant: Inventor:

Тасака, Казухико ДЖЭПЭН ОЙЛ, ГЭЗ ЭНД МЕТАЛЗ

НЭШНЛ КОРПОРЕЙШН. ИНПЕКС КОРПОРЕЙШН,

(+4)

CPC: B01D3/00 IPC:

C10G2/00

Publication info: EA201170995 (A1)

2012-02-28 EA018772 (B1) 2013-10-30

7. METHOD FOR COLLECTING HYDROCARBON COMPOUND FROM GASEOUS BY-PRODUCT AND APPARATUS FOR COLLECTING HYDROCARBON

Inventor: Applicant:

JAPAN OIL GAS & METALS JOGMEC **TASAKA**

KAZUHIKO [JP]

INPEX CORP [JP]

(+4)

CPC: B01D3/00 IPC: B01D53/14

No grant

Publication info: EP2402418 (A1)

2012-01-04 EP2402418 (A4) 2012-11-21

Global Dossier

Priority date:

Priority date:

2009-02-27

Priority date:

Priority date:

2009-02-27

2009-02-27

A4: supplementary search report

PO

8. METHOD FOR COLLECTING HYDROCARBON FROM FT GAS COMPONENT AND APPARATUS FOR COLLECTING **HYDROCARBON**

Inventor: Applicant:

TASAKA JAPAN OIL GAS & METALS JOGMEC

KAZUHIKO INPEX CORP

(+4)

CPC: B01D3/00 IPC: C10G2/00

Grant

Publication info: JP2010202677 (A)

2010-09-16 JP5301318 (B2) 2013-09-25

Global Dossier

Priority date: 2009-02-27

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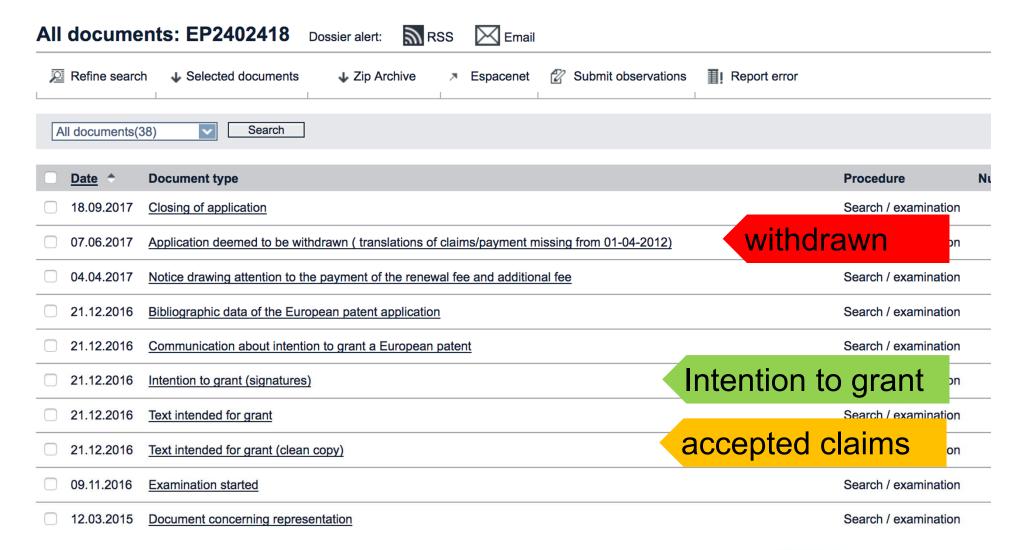
SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application Number

EP 10 74 6012

| | DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|----------|---|----------------------|--|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
| X | US 2 514 340 A (RUPP WALTER H) 4 July 1950 (1950-07-04) * column 1, line 50 - column 2, line 11 * * column 2, line 32 - column 3, line 19 * * column 5, line 4 - column 6, line 64 * * figure 1 * | 1-9 | INV. C10G2/00 B01D53/14 B01D53/78 C10G21/14 C10G21/28 C10K1/10 |
| X | US 2003/203983 A1 (O'REAR DENNIS J [US] ET AL MUNSON CURTIS L [US] ET AL) 30 October 2003 (2003-10-30) * paragraphs [0050] - [0052], [0069], [0089] - [0092] * * figure 2 * | 1-9 | C10K1/18 C10L3/12 |
| А | EP 1 887 072 A1 (SHELL INT RESEARCH [NL]) 13 February 2008 (2008-02-13) * paragraphs [0005] - [0008], [0016] - [0033] * | 1-9 | |
| A | US 4 401 450 A (SCHRAMM WALTER [DE]) 30 August 1983 (1983-08-30) * column 5, line 53 - column 7, line 35 * * claim 1; figure 1 * | 1-9 | TECHNICAL FIELDS SEARCHED (IPC) B01D C10G |
| Α | WO 2007/077137 A1 (SHELL INT RESEARCH [NL]; BRAS EDUARD COENRAAD [NL]; GEUZEBROEK FRANK H) 12 July 2007 (2007-07-12) * page 15, lines 16-20 * * page 15, line 29 - page 16, line 14 * * page 17, lines 16-26 * * page 18, lines 15-25 * | 1-9 | C10K C10L |
| A,D | US 6 958 364 B1 (MACPHERSON STUART R [GB] ET AL) 25 October 2005 (2005-10-25) * the whole document * | 1-9 | |

PG/P/2011/00033 Part of EP dossier





Family list PG/P/2011/00033

9. A METHOD FOR RECOVERING HYDROCARBON COMPOUNDS AND A HYDROCARBON RECOVERY APPARATUS FROM A **GASEOUS BY-PRODUCT**

Inventor:

TASAKA

Applicant: JAPAN OIL GAS & METALS JOGMEC

KAZUHIKO [JP] IJPI

INPEX CORP [JP]

(+4)

CPC:

B01D3/00 B01D53/1425 B01D53/1475

(+10)

Publication info:

MY158207 (A) 2016-09-15

Priority date:

2009-02-27

10. METHOD FOR RECOVERING HYDROCARBON COMPOUNDS AND A HYDROCARBON RECOVERY APPARATUS FROM A **GASEOUS BY-PRODUCT**

Inventor:

TASAKA KAZUHIKO [JP] Applicant:

TASAKA KAZUHIKO [JP]

CPC: B01D3/00

B01D53/1425 B01D53/1475

IPC:

IPC:

C10G2/00

B01J8/00 C07C27/00

Publication info:

Priority date: 2009-02-27 US2011306682 (A1)

2011-12-15 US8729139 (B2) 2014-05-20

Global Dossier

Access to US Dossier

11. METHOD FOR RECOVERING HYDROCARBON COMPOUNDS AND A HYDROCARBON RECOVERY APPARATUS FROM A **GASEOUS BY-PRODUCT**

Inventor:

JAPAN OIL GAS & METALS JOGMEC **TASAKA**

Applicant:

KAZUHIKO [JP] [JP]

INPEX CORP [JP]

(+4)

CPC:

B01D3/00 B01D53/1425

B01D53/1475 (+10)

IPC: B01D3/00 Publication info:

US2014322095 (A1) 2014-10-30

Global Dossier

12. A METHOD FOR RECOVERING HYDROCARBON COMPOUNDS AND A HYDROCARBON RECOVERY APPARATUS FROM A **GASEOUS BY-PRODUCT**

Inventor: **TASAKA** KAZUHIKO Applicant:

JAPAN OIL GAS & METALS JOGMEC

[JP]

INPEX CORP [JP]

(+4)

CPC: B01D3/00 B01D53/1425 B01D53/1475

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IPC: C10G

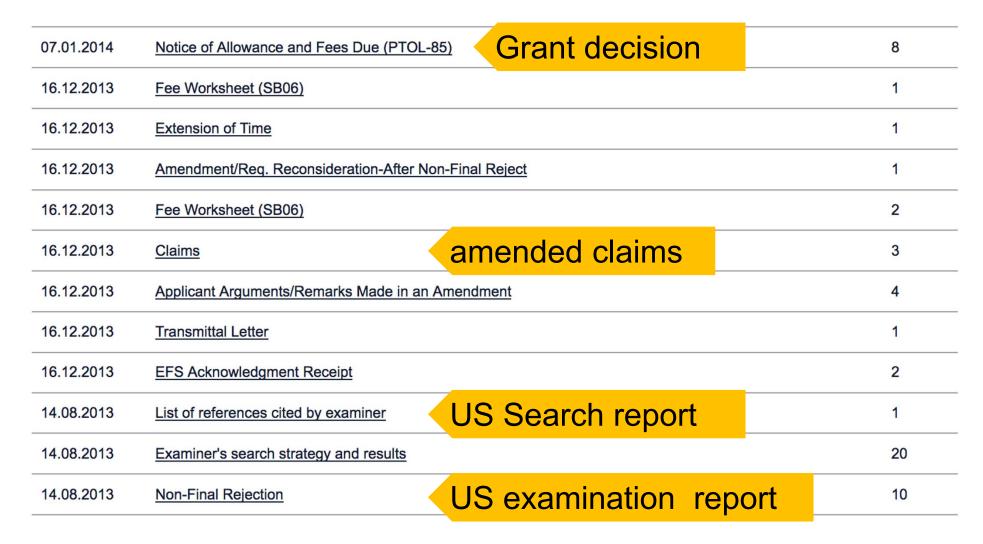
Publication info: ZA201105999 (B) 2012-10-31

Priority date: 2009-02-27

Priority date:

2009-02-27

PG/P/2011/00033 Part of US Dossier





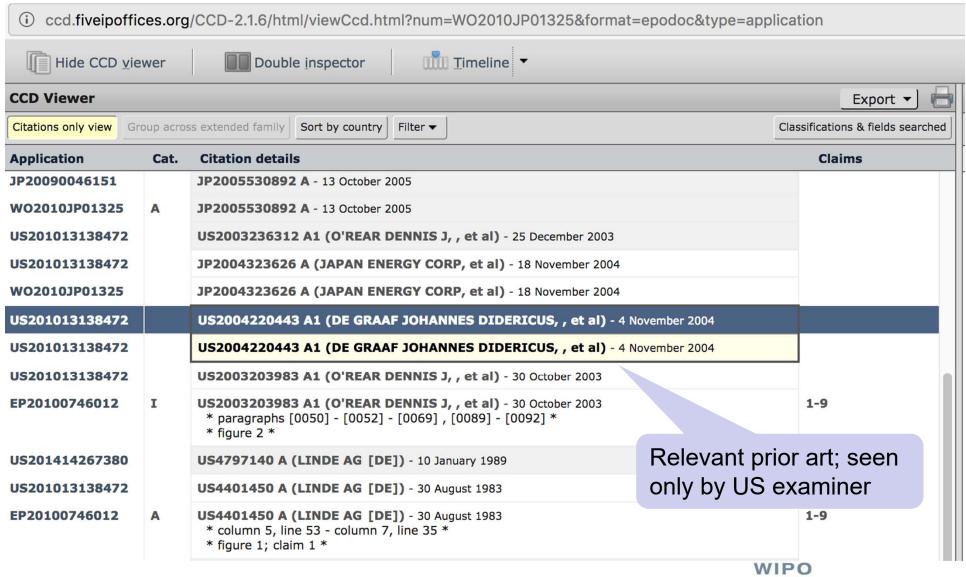
Claims 1-6 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over De Graaf et al (US 2004/0220443 A1) in view of MacPherson et al (USPN 6,958,364 B1) and/or further in view of Steynberg et al (US 20090186952 A1).

Applicant's claimed invention is directed to a method to recovering hydrocarbon compounds from gaseous by-products generated in a Fischer-Trops anthesis reaction, the method comprising: absorbing light hydrocarbon compounds and gaseous by-products using an absorption solvent including liquid other examiner



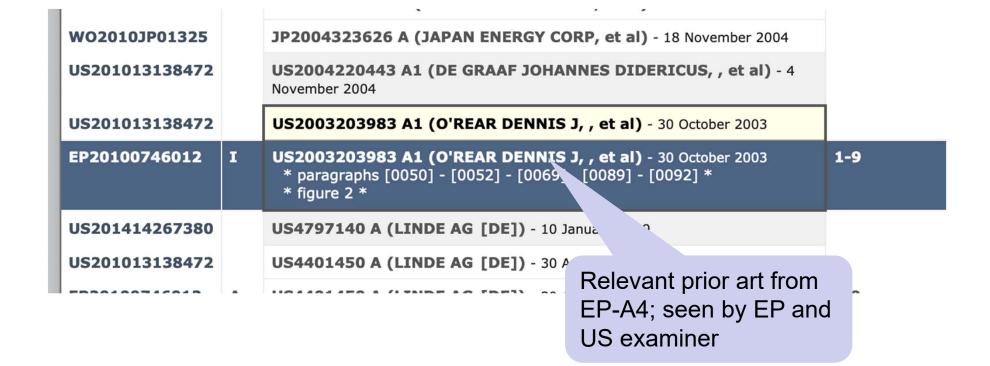
PG/P/2011/00033 Common Citation Document





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PG/P/2011/00033 Common Citation Document





Sample case PG/P/2011/00033

- AU, CA granted original claim of WO-A1
- PG: Applicant requests grant according to AU
- EP examiner has seen additional prior art
 - some also seen by US examiner (X-type)
 - some not seen by US examiner
 - Acceptable main claim different from WO-A1 main claim
- US examiner has seen additional prior art
 - Was not seen by EP examiner
 - Acceptance after EP intention to grant
 - Apparatus not patentable
 - Method main claim acceptable; different from WO-A1 main claim; different from EP main claim (intention to grant)

What would you do?



Amendments of US main claim over WO-A1

A method for recovering hydrocarbon compounds from gaseous by-products generated in a Fischer-Tropsch synthesis reaction, the method comprising:

absorbing light hydrocarbon compounds and a carbon dioxide gas from the gaseous by-products using an absorption solvent including liquid hydrocarbon compounds and a carbon dioxide gas absorbent; separating the absorption solvent which has absorbed to remove the light hydrocarbon compounds and the carbon dioxide gas into the from the gaseous by-products; separating the liquid hydrocarbon compounds and the containing absorbed light hydrocarbon compounds from the carbon dioxide gas absorbent; containing absorbed carbon dioxide gas; heating the separated liquid hydrocarbon compounds, which have been separated from the carbon dioxide gas absorbent, to recover the light hydrocarbon compounds from the separated liquid hydrocarbon compounds;

heating the separated carbon dioxide gas absorbent, which has been separated from the liquid hydrocarbon compounds, to strip the carbon dioxide gas from the separated carbon dioxide gas absorbent; and

reusing the gaseous by-products from which the light hydrocarbon compounds and the carbon dioxide gas are absorbed have been removed as a feedstock gas for the Fischer-Tropsch synthesis reaction.



Amendments of EP main claim over WO-A1

A method for recovering hydrocarbon compounds from gaseous by-products generated in a Fischer-Tropsch synthesis reaction, the method comprising:

absorbing light hydrocarbon compounds of which a number of carbon atoms is 3 or more and a carbon dioxide gas from the gaseous by products using in an absorption solvent which is a mixed liquid including liquid hydrocarbon compounds and a carbon dioxide gas absorbent containing an amine, to remove the light hydrocarbon compounds and the carbon dioxide gas from the gaseous by-products;

separating the absorption solvent which has absorbed the light hydrocarbon compounds and the carbon dioxide gas into the liquid hydrocarbon compounds, in which the light hydrocarbon compounds are absorbed, and the carbon dioxide gas absorbent, in which the carbon dioxide gas is absorbed;

heating the separated liquid hydrocarbon compounds, which have been separated from the carbon dioxide gas absorbent, to recover the light hydrocarbon compounds from the separated liquid hydrocarbon compounds;

heating the separated carbon dioxide gas absorbent, which has been separated from the liquid hydrocarbon compounds, to strip the carbon dioxide gas from the separated carbon dioxide gas absorbent; and

reusing the gaseous by-products from which the light hydrocarbon compounds and the carbon dioxide gas are absorbed-have been removed as a feedstock gas for the Fischer-Tropsch synthesis reaction.



Case study PCT/IB2012/000824

EPO as ISA, X documents in ISR

Grants:

- NZ 2015-10-30
- EP 2016-04-27
- GE 2016-11-10
- EA 2016-12-30
- **EP** opposition 2017-1-27
- JP 2017-03-08
- AU 2017-04-20
- CN 2017-06-09
- **UA** 2017-07-25
- IL 2017-11-30

Still pending:

US, CA, BR



EP main claim compared to WO-A1 claim

1. A liquid oral composition selected from the group consisting of a pharmaceutical composition, nutritional, medical food, functional food, clinical nutrition, medical nutrition or dietetic preparation, comprising a long chain polyunsaturated fatty acid (PIJFAPUFA) fraction, comprising eicosapentaenoic acid (EPA), docosahexaenoic acid (DMADHA), linoleic acid (LA) and gamma linolenic acid (GLA); one or more other omega-3 PUFAs; and one or more monounsaturated fatty acid (MUFA)...); and wherein the EPA is present in an amount of 500 mg to 5000 mg; and/or wherein the DHA is present in an amount of 1000 mg to 12000 mg.



AU main claim compared to EP main claim

1. A liquid oral composition selected from the group consisting of a pharmaceutical, nutritional, medical food, functional food, clinical nutrition, medical nutrition or dietetic preparation, comprising

a long chain polyunsaturated fatty acid (PUFA) fraction, comprising eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), linoleic acid (LA) and gamma linolenic acid (GLA); one or more other omega-3 PUFAs; and one or more monounsaturated fatty acid (MUFA); and and a therapeutically effective amount of gamma-tocopherol; wherein the EPA is present in an amount of about 500 mg to about 5000 mg; and/or wherein the DHA is present in an amount of about 1000 mg to about 12000 mg.



JP-B main claim

| Claims: JP6092843 (B2) — 2017-03-08 | | | | |
|---|---|-------------|--|--|
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| Compositions and Methods for Treating Neurologic Disorders | | | | |
| Claims of JP6092843 (B2) | | | | |
| A high quality text as facsimile in your desired language may be available amongst the following family members: | | | | |
| <u>MU2012235869 (A1)</u> <u>CA2831506 (A1)</u> <u>CN104010634 (A)</u> <u>DEX2691086 (T3)</u> <u>EA201391407 (A1)</u> <u>DEP2691086 (B1)</u> <u>ES2585066 (T3)</u> <u>DEP269108939 (T1)</u> <u>DEP2691086 (T2)</u> <u>MX2013011295 (A)</u> <u>DEP2691086 (T3)</u> <u>DEP2691086 (A1)</u> <u>DEP2691</u> | | | | |
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| | Original claims | Claims tree | | |
| The EPO does not accept any responsibility for the accuracy of data and information originating from other authorities than the EPO; in particular, the EPO does not guarantee that they are complete, up-to-date or fit for specific purposes. | | | | |
| ・ 1. エイコサペンタエン酸(EPA)、ドコサヘキサエン酸(DHA)、リノール酸(LA)およびガンマリノレン酸(GLA)を含む、長鎖ポリ不飽和脂肪酸(PUFA)フラクション; 一または複数の他のオメガー3 PUFA; 一または複数のモノ不飽和脂肪酸(MUFA);および治療的に効果的な量のガンマートコフェロール を含む、 神経変性疾患を治療または予防するための 液体経口用医薬組成物であって、アラキドン酸を本質的に含まない、医薬組成物。 | | | | |



Machine translation JP-B main claim

A long chain polyunsaturated fatty acid (PUFA) fraction including eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), linoleic acid (LA) and gamma linolenic acid (GLA); one or more other omega-3 PUFAs; A liquid oral pharmaceutical composition for treating or preventing a neurodegenerative disease comprising one or more monounsaturated fatty acids (MUFAs);

and a therapeutically effective amount of gammatocopherol,

wherein arachidonic acid pharmaceutical composition essentially free.

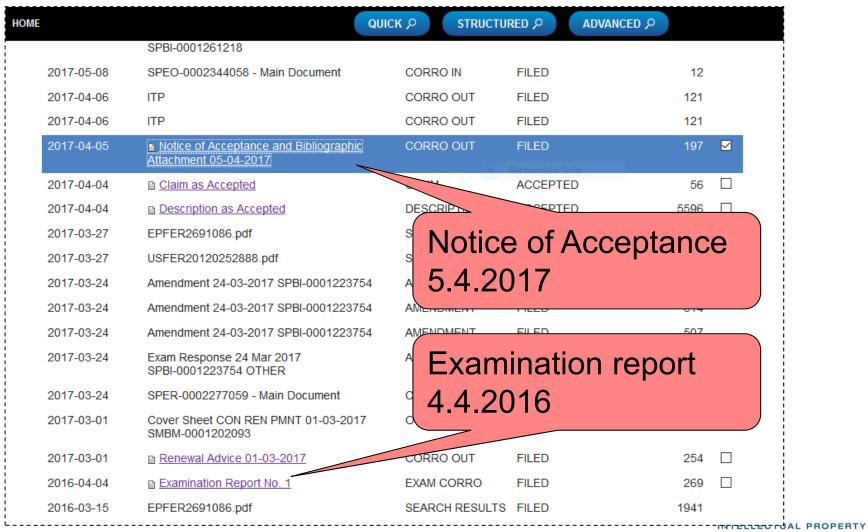


EP Register

| 27.01.2017 | Non-patent literature cited during the opposition procedure | Opposition | 15 |
|----------------------------------|---|---------------------------------|------|
| 27.01.2017 | Non-patent literature cited during the opposition procedure | Opposition | 4 |
| 27.01.2017 | Non-patent literature cited during the opposition procedure | Opposition | 4 |
| 27.01.2017 | Non-patent literature cited during the opposition procedure | Opposition | 4 |
| 27.01.2017 | Non-patent literature cited during the opposition procedure | Opposition | 11 |
| 27.01.2017 | Non-patent literature cited during the opposition procedure | Opposition | 9 |
| 27.01.2017 | Non-patent literature cited during the opposition procedure | Opposition | 6 |
| | | | |
| 27.01.2017 | Non-patent literature cited during the opposition procedure | Opposition 27 1 2017 | 11 |
| ☐ 27.01.2017 ☐ 27.01.2017 | | Opposition 27.1.2017 | 3 |
| | | Opposition 27.1.2017 Opposition | |
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Aus-Pat





Gosmann, Martin Gospat-Patentanwalt Schlägerstraße 23 30171 Hannover ALLEMAGNE

Questions about this communication ?

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Opposition publicly visible at the latest on 8.2.2017

Date

08.02.2017

| MBR12329889WOEP | Application No /Patent No. 12727411.6 - 1453 / 2691086 |
|----------------------|---|
| Applicant/Proprietor | |
| Palupa Medical Ltd. | |

Communication of a notice of opposition

You are hereby informed of a notice of opposition to the European patent specified above (see attached copy in the enclosure). The documents specified as patent documents in the notice of opposition are available for inspection via the European Patent Register at www.epo.org/register. Should you wish to receive these documents in paper format, they will be supplied to you free of charge if specifically requested on receipt of this communication (see O.J.EPO 2009, 434).

If oral proceedings are to take place, parties are advised to check the electronic file via European Patent Register in advance of the hearing to ensure they are in possession of all relevant documents.

An invitation to file observations and to file amendments, where appropriate, to the description, claims and drawings (R. 79(1) EPC) will be issued separately.

Notice of Acceptance



Australian Government

IP Australia

5 April 2017

Notice of acceptance for patent application

Davies Collison Cave Pty Ltd Level 15 MELBOURNE VIC 3000 Australia











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Date of Acceptance 27.3.2017

Your reference Application number 35208220/MAL/SXV/SZP

Applicant name

2012235869

Palupa Medical Ltd.

Dear Davies Collison Cave Pty Ltd,

This patent application was accepted on 27 March 2017. The accepted specification incorporates the following amendments:

S104 amendments up to and including item number: 2

The total number of claims at acceptance has been reported as: 28

EP opposition documents were already publicly accessible

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Thank you

lutz.mailander@wipo.int

