What the User community needs

Towards effective collaboration between East and West

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Agenda

- The Patent Documentation Group - Who we are
- How the patent information is used in information analyses
- What are the main challenges in accessing patent information?
- Questionnaire 2009
  - Achievements
  - PDG Workshop - What has improved?
- Questionnaire 2018
  - Improvements
  - Plans
  - Challenges
- Conclusion
Who are the PDG?

- Founded in 1957
- Objective: to facilitate and promote the efficient and effective use of patent information
- Non profit organization
- Registered in Switzerland
What is the PDG?

- 40 corporate members
- From different industries: Chemicals, Pharma, Electrical, Consumer Goods, Automotive, Oil and Gas, Cosmetics, Health Care, Agriculture...
- 3 PDG members among the top 10 EPO applicants
- PDG cooperates with all stakeholders
- Regular high-level meetings with EPO, WIPO, IP5 and individual patent offices

Companies:

- ABB
- Agfa Graphics
- AkzoNobel
- ASML
- AstraZeneca
- BASF
- Bayer
- Beiersdorf
- BMS
- Boehringer Ingelheim
- BP International
- Clariant International
- DSM
- Evonik
- FrieslandCampina
- F. Hoffmann-La Roche
- GlaxoSmithKline
- Henkel
- IFPEN
- Lanxess
- L'Oreal
- Lundbeck
- Merck KGaA
- MSD
- Nestec
- Novartis
- Pfizer
- Philips
- Philips Lighting
- Procter & Gamble
- Robert Bosch
- Sanofi
- Shell International
- SIEMENS
- Solvay
- Syngenta
- ThyssenKrupp
- Total Research
- Unilever
- Voestalpine
How does PDG work as organization?

Cooperation in patent information and documentation

Debate, discuss and stimulate improvements and new developments in patent information products

Exchange knowledge and experience in all areas relating to patent information

Determine and communicate proposals to third parties involved in IP information
The PDG WG IMPACT works as a Round Table - Who are our Partners?

- National Offices (Europe)
- Asian and Latin American Offices
- EPO
- IP5 Offices
- USPTO
- European Patent Institute epi
- Observer Status
- WIPO
- CAS, Clarivate, Questel, STN, Providers
- JIPA, CEPIUG, PIUG
Workflow for Patent Information Analyses

Search → Analysis → Visualization → Evaluation

Request → Search in Databases → Patent → Abstract → Full text → Legal status data
Why do user requirements exist? What information professionals in industry are doing

- Patentability searches
- State-of-the-art searches
- Opposition and invalidation searches
- Monitoring and current awareness searches
- Freedom-to-operate searches (FTO)
- Legal status and patent family searches
- Patent landscapes and patent portfolio analyses
- White Space Analyses and more….

Our needs go beyond those of the patent offices.
Patents go global:
Asia, Latin America, Gulf countries...

The number of patent applications
globally is still growing dramatically

Language barriers become a determining factor in accessing patent
information

Consequences:
- Streamlining and harmonization procedures are key: e.g. IP5 activities!
- Setting up priorities between patent offices, user groups and commercial
providers is indispensable!

We need an intensified cooperation because we have similar needs!
What are the main challenges in accessing patent information?

- The growth of application filings from Asia is continuing.
- > 50% of all patent applications published in non-Latin languages.
- Among the TOP 10 PCT applicants (2017) **seven** are from Asia, led by two Chinese companies (ZTE, Huawei).
- In 2011 the SIPO (China) became the largest patent office in the world. In 2017: **1,38 Mio patent** and **1,69 Mio utility model** applications have been registered!
What European industry thinks – Questionnaire 2008

In 2008, we consulted PDG members on their opinions on the needs for improvement of patent information from Asia, mainly with respect to the recent emergence of Asian offices as major players.

- All PDG-companies were asked
- 28 PDG-companies responded to a detailed questionnaire
- Results were distributed internally in February 2009
What European industry thinks - Some results from 2009 consultations

- Do you see need for improvement with respect to Asian patent information? 
  - Status 2009: 96%
- Availability of detailed legal status in English
  - Status 2009: 96%
- Searchable English full text (CN, KR)
  - Status 2009: 100%
- Images of documents
  - Status 2009: 68%
- Added value abstracts (by commercial providers)
  - Status 2009: 92%
- (High quality) machine translation
  - Status 2009: 96%
- Standardized applicants' names
  - Status 2009: 86%
What European industry thinks - Some results from 2018 consultations

- Do you see need for improvement with respect to Asian patent information?
  - Status 2018: 96%
- Availability of detailed legal status in English
  - Status 2018: 96%
- Searchable English full text (CN, KR)
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- (High quality) machine translation
  - Status 2018: 96%
- Standardized applicants' names
  - Status 2018: 86%
General Achievements of the PDG Asian Patent Information Initiative

- Availability of machine translations in English has improved dramatically:
  - Asian offices
  - EPO – Google
  - PATENTSCOPE
  - Commercial providers

- Searchable full text

- Added value abstracts of Asian countries

- Legal status data via the central source INPADOC (EPO)
The Users - Questionnaire 2018
Most impressive improvements for users

- International cooperation in IP5: Global Dossier, Patent Assignee Harmonization

- Improved machine translation (Asian offices, EPO, WIPO etc.) including neural translation technologies

- More legal status data available in EPO’s INPADOC: CN, JP, KR, TW and better access via national portals: IN, SG, TW

- More data available like citations, bibliography etc. and a better country coverage

- Classification of Asian documentation with CPC

- Solutions for double filing in China available
The Users - Questionnaire 2018
The challenges from users’ point of view

- Improved coverage of Asian and Arabian data beside CN, JP, KR
  - Legal status data in INPADOC: IN, ASEAN states, [RU (before 2005)]
  - Easy access to patent term extension data for some countries
  - English translation or descriptions of legal status terms/events

- Establishment of “one” portal for all kinds of patent information
- Improved machine translation
- Harmonized patent assignee names
- Quality and timeliness problems of added value abstracts
- Full coverage of documents including utility models with CPC
The Patent Offices - Questionnaire 2018

Recent developments at Rospatent

- The launch of a real-time publication system from state registers
- Start of publication of the new parts of patent documents: Search reports and SPC’s
- Start of publication of information from the state registers in the open data format

Recent plans at Rospatent

- Public search in the world's patent information base (abstracts only) in Russian based on Patstat
- Further development of selective information distribution system
- Further development of providing information in the open data format
- Implementation of the new WIPO Standards: ST.26, ST.27, ST.37

Challenges

- Public access to full text data of patent publications
- Provide correct patent information in the real time mode
- Image search
The Patent Offices - Questionnaire 2018
Recent developments at JPO

- Release of new functions of J-PlatPat:
  - Function 1: Combination search by patent classifications and key words
  - Function 2: Proximity search
  - Function 3: Text search in English for patent gazettes overseas (U.S., EU, and international applications)

Recent plans at JPO
- J-PlatPat is planned to be renewed in 2019
- Accuracy of Machine Translation is to be improved (Japanese to English)

Challenges
- Enhancement of Machine Translation
- Digitalization of Patent Documents in Asian countries
Recent developments at Japio

- Providing patent information of China via our online-service (Japio-GPG/FX)

Recent plans at Japio

- Providing patent information of Taiwan via our online-service (Japio-GPG/FX)
- Providing patent information of Korea (higher quality of machine translation) via our online-service (Japio-GPG/FX)

Challenges

- Bulk state of patent information of middle-south Asia
- High cost of machine for NMT (Neural Machine Translation)
The Patent Offices - Questionnaire 2018
Recent developments at IPO

- Users across the globe can see the granted claims and certificate of patent through InPASS
- SMS alert system has been introduced for FER as well as 18 months publication of application
- Indian patent office (IPO) has also launched the official Mobile APP for intellectual property rights (IPR)
- IPO reinforces its commitment to quality as International Searching Authority by sharing full Search Strategies also along with the International Search Reports established since 1st January 2018 for publication on Patent scope (www.wipo.int/patentscope). IPO is the seventh among 22 ISAs under the PCT to start this service
The Patent Offices - Questionnaire 2018
Recent plans at IPO

1. Video conference facility has been provided to the users to attend the hearings from their work place

2. Indian patent office (IPO) has started WIPO Digital access service (DAS) for priority documents submitted by the applicants from the participating patent offices

3. IPO has started WIPO-CASE, which enables patent offices to securely share search and examination documents

4. An official website for the Cell for IPR Promotion and Management (CIPAM) www.cipam.gov.in has been launched, users can get the regular updates
Controllers decisions including pre and post grant will be made available to the users through Inpass.

To bring down the average time taken to grant of patent with in 18 months from the current norms of 5 – 7 years

Development of modules for pre and post grant oppositions are under preparation

E-mail communication from the agents/applicant‘s to the file wrapper is under consideration

Suggestions received from the last stakeholders meeting regarding form -27 is under active consideration
The Patent Offices - Questionnaire 2018
Recent developments at IPPH

- Enrich legal status is open to customer.
  - organized status (300+ to 50)
  - license and assignment information
  - easy to search and find current status
  - all status in one xml
  - consistent translation for applicant and inventor

- Trade Mark and Litigation information
- Image Searching System
- Evaluation System

Recent plans at IPPH
- Promotion for Image searching system
- Explore the business possibility on Trade Mark
- Exploring the potential opportunities on Data Processing project and search service
- Promotion for Asian patent information together with Japio and KIPI
The Patent Offices – Questionnaire 2018
Recent Challenges at IPPH

- Not easy to get the demand of customers and potential opportunities
- Do not have local colleagues to support
The Commercial Providers – Questionnaire 2018
Developments at INCOPAT

- Translate CN patent legal data including litigation, assignment, licensing, pledge information into English. Support English searching
- Optimize the English version of incoPat. Support using English to search, read and analyze Chinese patents
- Release Image Search Function. Support searching design patents of CN and other countries through images
- Release 3D Sand Table Analysis Function. For users to get a picture of the patent applications and layout condition of global enterprises in China

Recent plans at INCOPAT

- Recruit overseas patent search experts feeling interested in CN patents to join incoPat, to further optimize incoPat EN version and CN data for English users
- Promote the AI technology of incoPat, set up the Chinese patent knowledge mapping
- Do further standardized processing on Chinese Corporate tree
The Commercial Providers - Questionnaire 2018
Challenges of INCOPAT

- For English users searching Chinese patents, based on current MT level, how to balance between searching/reading in English and getting accurate information and results?

- Will need to find local partners/channels in Europe to assist in exploring users demands and collecting users feedback for product further development.
The Commercial Providers - Questionnaire 2018

Developments at Questel

- Retranslation of Chinese patents
- Key content & concepts indexing from Chinese patents
- Chinese patents included in patent map
- Chinese designs

- Retranslation of Japanese patents
- Key content & concepts indexing from Japanese patents
- Japanese patents included in patent map
- Japanese designs

- Thailand patents in full text
- English machine translation indexing

- Australian patents in full text
The Commercial Providers - Questionnaire 2018
Developments at Questel

- Indian designs
- Thailand designs
- Vietnam designs
- Singapore designs
- Philippines designs
- Malaysia designs
- Cambodia designs
The Commercial Providers - Questionnaire 2018

Plans of Questel

- Retranslation of Korean patents
- Key content & concepts indexing from Korean patents
- Korean patents included in patent map
- Korean designs

- Indonesian patents in full text
- Singapore patents in full text
- Malaysian patents in full text
- Philippines patents in full text
The Commercial Providers - Questionnaire 2018
Plans of Questel

- Indian patents: new full text source (available very soon)

- Litigations from:
  - Japan
  - Korea
  - China
  - Indonesia
  - Philippines
  - Thailand
  - Malaysia
The Commercial Providers - Questionnaire 2018

Challenges of Questel

- Up-to-date legal status information
- Name translation and normalization
- Lack of consistency
- Translation quality (although making great progress)
The Patent Offices - Questionnaire 2018
Recent developments at IntelliSemantic

- At the moment no development so far, but we have plans (see the following slide)

Recent plans at IntelliSemantic

- To extend our solution with Asian patent information in forms directly processed by machine applications, as RESTAPI and Linked Open data

Challenges

- To identify Asian patent information (for the most relevant countries) in forms directly processed by machine applications, as RESTAPI and Linked Open data having:
  - Good documentation
  - Fair commercial offers
The Patent Offices - Questionnaire 2018
IntelliSemantic

IntelliSemantic (http://www.intellisemantic.com) is a value-added application provider.

IntelliSemantic bases on raw patent data to facilitate patent monitoring, patent analysis and patent searches by providing: a) standard platform (MyIntelliPatent) b) customized platform c) professional services.

IntelliSemantic is course also an user of raw patent data.
IntelliSemantic thinks that the increasing availability of information directly accessible by machines, in different formats (SOAP, RestAPIs, Linkeded Data), in patents as well in other related domains (science, finance):

- Is a great opportunity to extend the interest of patent extracted information to different enterprise departments with different backgrounds and needs
- is a good opportunity to better exploit the patent professionals visibility and role
- but also blurs the distinction between information users and information providers

The Patent Offices - Questionnaire 2018
IntelliSemantic position
Summary

- The **user community greatly appreciates** the offer of the Asian, Arabian and other offices and related organizations to cooperate.

- Comment of a participant this year: "**the workshop at East meets West has improved mutual understanding significantly!**"

- We in PDG are convinced that meetings like this workshop have **improved the cooperation** between the user community and other Patent Offices.

- Therefore, let us go on and improve quality, reliability, timeliness and consistency of patent information for **mutual** benefit!
Thank you for your contributions!