The world of Non-Patent Literature (NPL) for intellectual property matters

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Outline

- What is Non-Patent Literature (NLP)?
- Why should we consider Non-Patent Literature (NLP)?
- How/Where should we search for Non-Patent Literature (NLP)?
- Issues when searching in NPL
- Issues for intellectual property matters
Non-patent literature - What?

➢ Definition

❖ Patent information
   technical information you find in patent documents
   (legal/business information are associated)

❖ Non-Patent Literature
   covers any type of document or literature that is not a patent.

NPL vs PL – What?

➢ Patents Literature (PL) are structured documents, in a ordered environment

➢ NPL are limited/not structured documents, they are different kinds of documents, in a partially-ordered environment, where entropy is rising
Non-patent literature - Why?

- Non-patent literature is essential
  - for R&D
    - innovation
  - for Patent Engineer/Attorney, IP Lawyer in the context of
    - applying and breaking a patent
    - fighting against patent infringement/monitor infringement risk
  - for investor and business decision-makers
    - to monitor technology trends and
    - identified business opportunities

- Non-patent literature
  - around 20% of the published information
    World Patent Information Journal, “80% of technical information found only in patents” – is there proof of this?, Geert Asche, vol. 48, March 2017, pp 16-28
  - become aware of the technical/business information during the blind period of 18 months (18 months for accessing to the patent publication after the patent filing)
Patent/non-patent information - How?

- **FEE-BASED SOURCES**
  - Non patents
  - Patents
  - Advantages

- **FREE-BASED SOURCES**

**HOW TO SEARCH FOR TECHNOLOGY**

<table>
<thead>
<tr>
<th>Non patents</th>
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<tr>
<td>Patents</td>
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<td>Advantages</td>
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### FEE-BASED SOURCES/Non patents

<table>
<thead>
<tr>
<th>Source</th>
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<tbody>
<tr>
<td>STN International</td>
</tr>
<tr>
<td>IP.com Prior Art database</td>
</tr>
<tr>
<td>ACM Digital Library</td>
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<tr>
<td>ACM Digital Library</td>
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<tr>
<td>SCOPUS</td>
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<tr>
<td>Engineering Village</td>
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<td>.....</td>
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- Publications->Journals->Editor-> Aggregator « Peer reviewed »
- Global indexing or per technical sector only
- no full text search? (except GoldFire?) => titles, abstracts searches
- no fully comprehensive database, all technical sectors not in one place
Non-Patent Literature - How?

FEE-BASED SOURCES/Advantages

- Value added data
  - Corrected bibliographic data
  - Enhanced title and abstract/concepts
  - Improved classification/indexing

- Sophisticated search and analysis tools
  - Chemical formula/sequence search tools
  - Patent topographical maps
  - Citations analysis
  - Semantic search

- Integrated access to multiple sources of Patent & Non Patent Literature
Non-Patent Literature - How?

FREE-BASED SOURCES/Non patents

- Google Scholar
- Science Direct
- IBM Journal of Research and Development – registration required
- Tech Web – Technology encyclopedia
- Japan Science and Technology Information Aggregator, Electronic (J-STAGE)
- BioFind – account needed
- MatWeb – Searchable material properties
- PubMed – Biomedical articles from Medline and life science journals.
- ChemSpider Allows search for chemical images
- NIST Chem Web Book – chemical structure and property database
- ZDNet – Free technical white papers
- ….

FREE-BASED SOURCES/Clinical trials

- Clinicaltrials.gov advanced research
- PMC advanced research
- Tirals4me (ECPC) advanced research
- The Clinical Trials Search Portal advanced research
- Clinical Trials Search Tool advanced research
- Global Clinical Trials Data advanced research
- Motrial advanced research
- ClinicalKey : payant advanced research
- Clinical Trials Register advanced research
- NIH : advanced research
- Neals advanced research
- ISRCTN advanced research
- CisCRP : you must sign in, advanced research?
Non-Patent Literature - How?

- **FREE-BASED SOURCES/Academic Papers Found In Conference Proceedings**
  - *Scopus* advanced research
  - *AGRIS*: field of Agricultural Science and Technology Information + advanced research
  - *DBLP*: about computer science journals + advanced research
  - *NCJRS*: field of the criminality research + advanced research
  - *SPIE*: search for conference proceedings + advanced research

Patent/non-patent information - How?

- **FREE-BASED SOURCES/ Journal Or Thesis Work**
  - *CiteSeer*: field of computer science + advanced research
  - *GetCited*: field of science + must sign + advanced research
  - *Microsoft Academic Research*: the academic field + advanced research
  - *Bioline International*: field of academic journals on public health, food and nutritional security, food and medicine and biodiversity + advanced research, it’s a bit strange
  - *DOAJ*: field of science and scholar resources + advanced research
  - *Plos One*: field of science + advanced research
  - *BioOne*: field of biology and ecology + advanced research, it’s a bit strange
  - *Science and Technology of Advanced Materials*: advanced research, it’s a bit strange
  - *New Journal Of Physics*: field of physics + advanced research, it’s a bit strange
  - *ScienceDirect*: articles and journals about science + advanced research
  - *Elsevier Journal Finder*: to find journals + advanced research
  - *ProQuest*: need to sign in + advanced research
  - *OATD*: free access for thesis and dissertations + advanced research
  - *JSTOR*: a bit more academic than professional + advanced research
Non-Patent Literature - How?

➢ "Open Access" only publications
  ❖ "Proven value"? No peer review
  ❖ How to search for them?

Non-Patent Literature – How

➢ Some platforms to search for e-books, eg Knovel, EBSCO, ...
➢ But still millions of books only available on paper form
  ❖ Mainly oldest ones?
  ❖ In some cases we don’t even know the book even existed
➢ How to find them?
  ❖ Amazon?
  ❖ Google Books?
Non-Patent Literature – How

- Internet publications
  - Only published there
  - When? Difficult to be sure
  - Volatility? Will it stay there?
  - Reliable? Is the value proven?

- How to find it?
  - Google?
  - What if it disappears?
Non-Patent Literature - How?

How to search for technology
- Using keywords
  - Language dependant
  - Synonyms, variations
- Using author
- Using organization: Company name, University, ...
- Starting from one given document (Patent or NPL) and search for similar documents (search report, cited, citing ...)
- Reiteration, refinement by review of results

Use platform from Editors
- Often limited to keywords searches in titles/abstracts
- Need to search all of them separately

Multi-Editor Search Platforms
- Scopus
- GoldFire
- Google Scholar
à retravailler

Desmedt Amélie; 04-10-2018
Non Patent Literature– issues when searching

➢ How to be sure the search was comprehensive?
   - Need to first identify the correct databases where to search
   - One database is not enough
   - Consider each database limitation

➢ Difficult to run full text search, still more difficult doing it in different databases in one step

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Non Patent Literature– issues when searching

➢ How to be sure we are not missing some “open access only” data source?
   - What is the value of an “open access only” data?

➢ Keywords are the main resources
   - Need to think of all possible way to describe what you are searching for
   - No classification (eg CPC, IPC, …)
     - Exceptions: CAS section codes, CAS numbers, Google indexation of Google Scholar with IPC, …
Non Patent Literature— issues for IP matters

➢ Patentability (prior art) search
   - Done before grant
   - Try to find documents that
     - Includes all features of at least one independent claim (novelty search)
     - cover as many features included in the claims (inventive step search)
   - Need to search additional feature from the description
     - fallback position (examination, opposition, litigation)

!!! Research Disclosure
   defensive publication so as to prevent all others from obtaining a patent on that invention

Non Patent Literature— issues for IP matters

➢ Non Patent Literature / Free-based sources

Not everything can be done

"Free based sources" are not intended for...
exhaustive research; establishing the state of the art in its entirety.

If reliable and extensive research is required as the basis for important investments/litigation/opposition, the help of expert from the area of patent information should always be called upon
Conclusions

- Patent documents remain a key tool for accessing trends/innovation in key technologies as well as to prior art for IP matters.

- Consulting non-patent literature is often obligatory to get a complete picture but the road for accessing is still complex.