Industry's Expectation on Classification

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Who are the PDG?

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

- 39 corporate members
- From different industries: Chemicals, Pharma, Electrical, Consumer Goods, Automotive, Oil and Gas, Cosmetics, Health Care, Agriculture...
- 4 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

Corporate Members:

- 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
- Procter & Gamble
- Robert Bosch
- Sanofi
- Shell International
- SIEMENS
- Solvay
- Syngenta
- ThyssenKrupp
- Total Research
- Unilever
- Voestalpine
PDG Organization

Annual Members’ Conference
Striving to ensure that comprehensive patent information is made available and can be used by PDG member companies in an effective and efficient manner

- **Exchanging of knowledge and experience among PDG member companies**
- **Debating, discussing and encouraging improvements and new developments in patent information services with third parties active in the field of patent information**
- **Sharing searching practices among PDG-members to enhance professional skills**
- **Exploring future services (semantic searching, etc.)**
PDG Main Working Groups

**IMPACT**
- IMPACT on the provision of patent information globally; data quality, availability, timeliness and user-friendly access

**PDV**
- Discussions with providers on strategic issues to influence the development of products

**ONLINE**
- Advising providers and exchanging knowledge and experience in the field of patent information search & retrieval

**A&V**
- Exchanging knowledge and experience and advising providers in the field of patent information analysis & visualization
PDG and international organizations
Classification – Publication
Classification – Objectives

Guide to the IPC – Version 2016, page 2:

The Classification, furthermore, has the important purposes of serving as:

(a) an instrument for the orderly arrangement of patent documents in order to facilitate access to the technological and legal information contained therein;
(b) a basis for selective dissemination of information to all users of patent information;
(c) a basis for investigating the state of the art in given fields of technology;
(d) a basis for the preparation of industrial property statistics which in turn permit the assessment of technological development in various areas.
Classification – How is it used

In Industry:

- Assessing the State of the Art in technological fields (e.g. for patentability or as technological background information)

- Finding Prior Art (that can be used) in an Opposition or Nullity Procedure

- Identifying IP that could be relevant in a “Freedom To Operate (FTO) Opinion” or a “Product Clearing”

- Comparing technology positions of competitors
Successful Examples:

- H04W [2009.01] : WIRELESS COMMUNICATION NETWORKS
- G01Q [2010.01] : SCANNING-PROBE TECHNIQUES OR APPARATUS; APPLICATIONS OF SCANNING-PROBE TECHNIQUES, e.g. SCANNING-PROBE MICROSCOPY [SPM]
- G04R [2013.01] : RADIO-CONTROLLED TIME-PIECES
- H02S [2014.01] : Generation of electric power by conversion of infra-red radiation, visible light or ultraviolet light, e.g. using photovoltaic [PV] modules
- B33 [2015.01] : ADDITIVE MANUFACTURING TECHNOLOGY
Classification – Revisions

Overdue Revisions (in our humble view)

– G06F 17 [2006.01] : Digital computing or data processing equipment or methods, specially adapted for specific functions
  IPC has 20 sub-groups
  CPC has 540 sub-groups, FI has 534 sub-divisions
  Providers list over 600,000 patent families in this group

– G06F 3 [2006.01] : Input arrangements for transferring data to be processed into a form capable of being handled by the computer; Output arrangements for transferring data from processing unit to output unit, e.g. interface arrangements
  IPC has 41 sub-groups
  CPC has 310 sub-groups, FI has 679 sub-divisions
  Providers list over 550,000 families in this group
Food for thought

Why not think outside of the “A to H” box?

− Section “I” for computer-implemented inventions
− Section “K” for genetic engineering
− Section “L” for business methods

Advantages:

− Start from a blank slate / get rid of legacy entanglements
− Allow for sea changes in technology
− Aid landscaping / statistics assessments (see objective (d) above)
Two examples

Crispr (genetic engineering)

Automobile with touch sensitive interface
Learn from other classification schemes
From the past

– IPC Revision Handling (Reclassification)

– PCTs without classification symbols

– Core-only (now main class-only) classifying offices
IPC Revision Handling

**G07B 15/06** – introduced in 2011.01 : (314 results in PATENTSCOPE)
Definition: Arrangements for road pricing or congestion charging of vehicles or vehicle users, e.g. automatic toll systems

Formerly more general Classifications: **G07B 15/00, G07B 15/02 and G07B 15/04**

had to be searched together with keywords. (still 238 results in PATENTSCOPE)

(\text{IC:"G07B 15/00" OR IC:"G07B 15/02" OR IC:"G07B 15/04"})\text{AND}( \text{EN\_AB:toll OR EN\_AB:(congestion charge) OR EN\_AB:(road charge*) OR EN\_AB:(road pric*) OR EN\_AB:toll }) \text{Office(s):wo Language:EN Stemming: true}

Of these 238 hits up to 71 relevant hits can still only be found by the old approach

(\text{IC:"G07B 15/00" OR IC:"G07B 15/02" OR IC:"G07B 15/04"})\text{AND}( \text{EN\_AB:toll OR EN\_AB:(congestion charge) OR EN\_AB:(road charge*) OR EN\_AB:(road pric*) OR EN\_AB:toll }) \text{NOT (IC:"G07B 15/06" ) Office(s):wo Language:EN Stemming: true}

Interpretation: A larger number of relevant documents have not been reclassified after 6 years!
And looking at other offices the numbers are comparable!
Incomplete reclassification of backlog

Provide warning message within the classification scheme
Thanks to WIPO’s collaboration with the PDG Working Group “Impact” the number of PCT publications published without IPC on the documents could be significantly reduced from 2.9% in 2013 to 0.6% in 2016.

The problems in the production process have been identified and work is in process to eliminate the remaining issues.
Main Group only IPCs

Incomplete Classification

It is well understood that smaller offices do not have the resources to classify subject matter using the entire depth offered by the IPC when being the office of first application.

Nevertheless for a fully comprehensive search these “incomplete” classification symbols have to be included, leading to lots of retrieval noise. Only with some intricate searching arithmetic is it feasible to identify “overly broad” classified documents for further inspection and to separate them from the results containing the appropriate subgroups.
We find it desirable to substitute main group only classification in the MCD as soon as the document receives refined classification.
Conclusion

Accomplishments

− Established good working relations and exchange of information
− Resolved some issues
− Raised awareness and mutual understanding of needs

Future prospects

− Ongoing consultation on development of IPC
− Exchange of differences in requirements regarding IPC
− Discussion of extensions to the IPC e.g. Indexing Classes
Thank you for your attention!