

Industry's Expectation on Classification

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Who are the PDG?



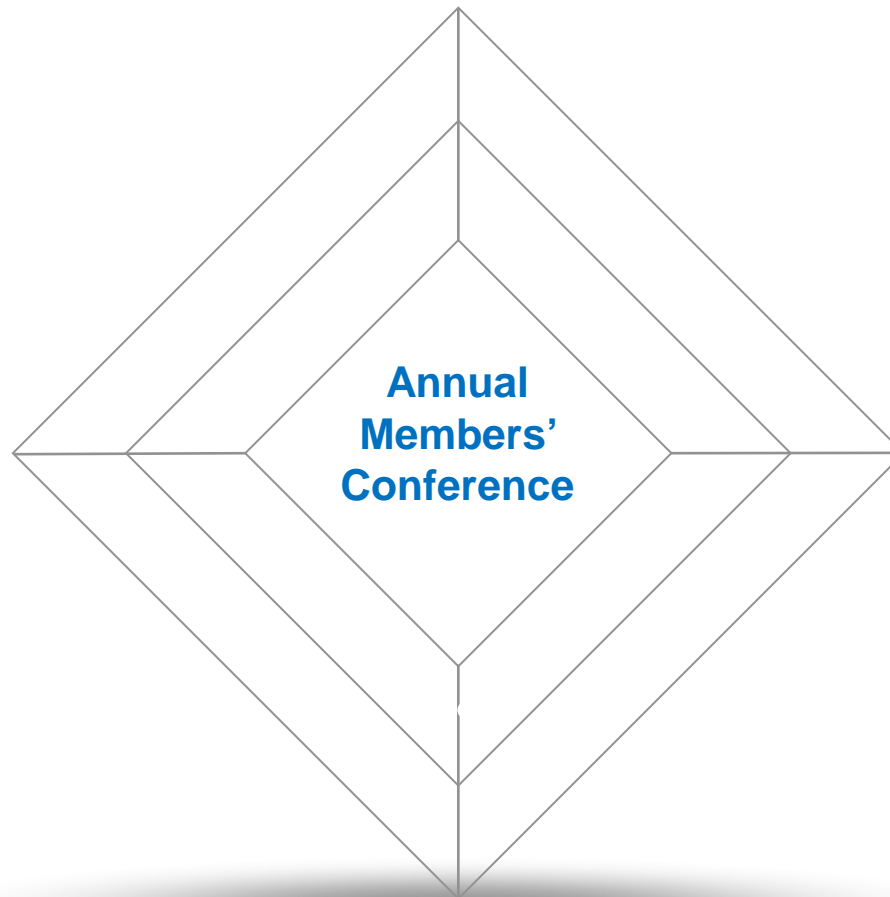
- Founded in 1957
- The objective is to facilitate and promote the efficient and effective use of patent information
- Non profit organization
- Registered in Switzerland

What is the PDG ?

- 39 corporate members
- From different industries
Chemicals, Pharma, Electrical, Consumer Goods, Automot
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

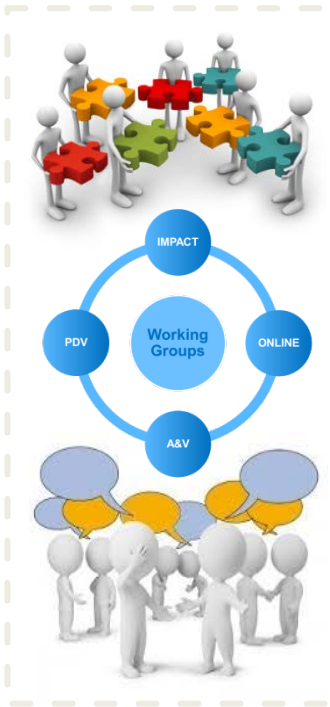
ABB	Lanxess
Agfa Graphics	L'Oreal
AkzoNobel	Lundbeck
ASML	Merck KGaA
AstraZeneca	MSD
BASF	Nestec
Bayer	Novartis
Beiersdorf	Pfizer
BMS	Philips
Boehringer Ingelheim	Procter & Gamble
BP International	Robert Bosch
Clariant International	Sanofi
DSM	Shell International
Evonik	SIEMENS
FrieslandCampina	Solvay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


PDG Organization





PDG Mission


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



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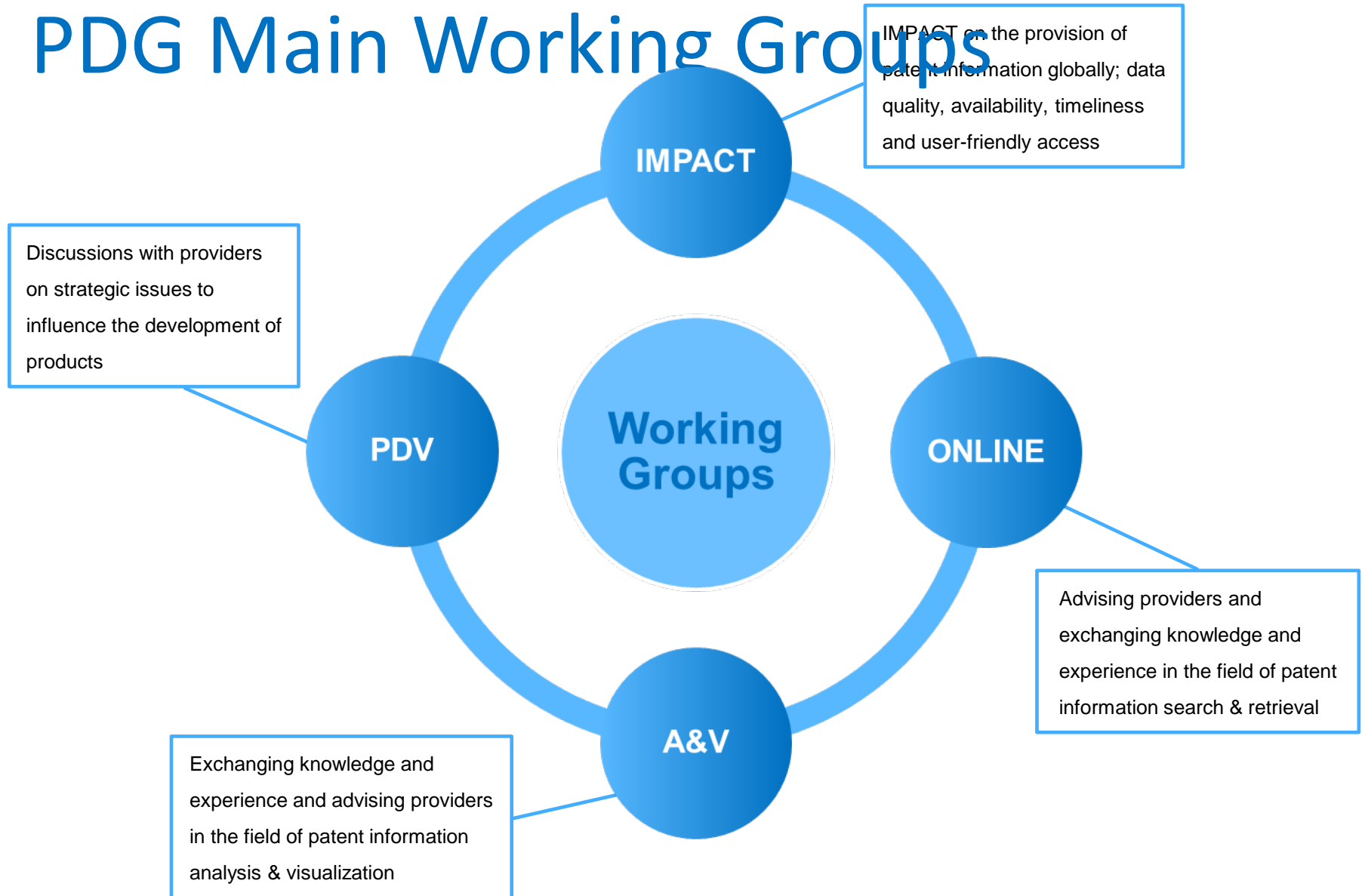
Exchanging of knowledge and experience among PDG member companies
- 

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



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

Classification – Revisions

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)

Class	Frequency
<input type="checkbox"/> C12N15	626
<input type="checkbox"/> C12N9	183
<input type="checkbox"/> C12N5	154
<input type="checkbox"/> A61K48	134
<input type="checkbox"/> C12Q1	130
<input type="checkbox"/> C07K14	89
<input type="checkbox"/> A61K38	88
<input type="checkbox"/> A61K31	84
<input type="checkbox"/> A01K67	77
<input type="checkbox"/> A01H5	73
<input type="checkbox"/> A61K35	71
<input type="checkbox"/> C12N1	66
<input type="checkbox"/> C07H21	64
<input type="checkbox"/> A61P31	45
<input type="checkbox"/> A61P35	39
<input type="checkbox"/> G01N33	39
<input type="checkbox"/> A61K9	36
<input type="checkbox"/> A61K47	34
<input type="checkbox"/> A61K39	33
<input type="checkbox"/> C12N	33
<input type="checkbox"/> A01H1	30
<input type="checkbox"/> C07K16	29
<input type="checkbox"/> C12N7	29
<input type="checkbox"/> A61K45	28
<input type="checkbox"/> C12P19	27

Automobile
with touch
sensitive
interface

Class	Frequency
<input type="checkbox"/> B60R16	359
<input type="checkbox"/> G06F3	326
<input type="checkbox"/> B60R11	267
<input type="checkbox"/> B60K37	205
<input type="checkbox"/> B60K35	174
<input type="checkbox"/> B60R1	96
<input type="checkbox"/> B60R25	90
<input type="checkbox"/> G01C21	85
<input type="checkbox"/> G08G1	75
<input type="checkbox"/> B60Q1	69
<input type="checkbox"/> B60W50	69
<input type="checkbox"/> B60L11	63
<input type="checkbox"/> B60W30	57
<input type="checkbox"/> G06F1	54
<input type="checkbox"/> G06F17	53
<input type="checkbox"/> H04N7	50
<input type="checkbox"/> B62B3	49
<input type="checkbox"/> B60H1	48
<input type="checkbox"/> B62D1	47
<input type="checkbox"/> G05D1	47
<input type="checkbox"/> G09G5	47
<input type="checkbox"/> H04M1	47
<input type="checkbox"/> B60N2	44
<input type="checkbox"/> H04B1	40
<input type="checkbox"/> H02J7	39

Learn from other classification schemes

<input type="checkbox"/>	F	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING ENGINES OR PUMPS		
ENGINES OR PUMPS				
<input type="checkbox"/>	F05	INDEXING SCHEMES RELATING TO ENGINES OR PUMPS IN VARIOUS SUBCLASSES OF CLASSES F01-F04		
<input type="checkbox"/>	F05B	<input type="checkbox"/> F05B INDEXING SCHEME RELATING TO MACHINES OR ENGINES OTHER THAN NON-POSITIVE-DISPLACEMENT MACHINES OR ENGINES, TO WIND MOTORS, TO NON-POSITIVE DISPLACEMENT PUMPS, AND TO GENERATING COMBUSTION PRODUCTS OF HIGH PRESSURE OR HIGH VELOCITY		
<input type="checkbox"/>	F05C	<input type="checkbox"/> F05B 2200/00 Mathematical features <input checked="" type="checkbox"/> F05B 2210/00 Working fluid		
<input type="checkbox"/>	F05D	<input type="checkbox"/> F05B 2210/10 • Kind or type <input type="checkbox"/> F05B 2210/11 •• liquid, i.e. incompressible <input type="checkbox"/> F05B 2210/12 •• gaseous, i.e. compressible <input type="checkbox"/> F05B 2210/13 •• mixed, e.g. two-phase fluid <input type="checkbox"/> F05B 2210/132 ••• Pumps with means for separating and evacuating the gaseous phase <input type="checkbox"/> F05B 2210/14 •• Refrigerants with particular properties, e.g. HFC-134a <input type="checkbox"/> F05B 2210/16 • Air or water being indistinctly used as working fluid, i.e. the machine can work equally with air or water without any modification <input type="checkbox"/> F05B 2210/18 • Air and water being simultaneously used as working fluid <input type="checkbox"/> F05B 2210/20 • Properties <input type="checkbox"/> F05B 2210/30 • Flow characteristics <input type="checkbox"/> F05B 2210/301 •• with Mach-number kept constant along the flow <input type="checkbox"/> F05B 2210/302 •• Pressure kept constant along the flow <input type="checkbox"/> F05B 2210/40 • Flow geometry or direction <input type="checkbox"/> F05B 2210/401 •• upwards due to the buoyancy of compressed air <input type="checkbox"/> F05B 2210/402 •• Axial inlet and radial outlet <input type="checkbox"/> F05B 2210/403 •• Radial inlet and axial outlet <input type="checkbox"/> F05B 2210/404 •• bidirectional, i.e. in opposite, alternating directions		
		<input type="checkbox"/> F05B 2220/00 Application		
		<input checked="" type="checkbox"/> F05B 2230/00 Manufacture		
		<input checked="" type="checkbox"/> F05B 2240/00 Components		
		<input checked="" type="checkbox"/> F05B 2250/00 Geometry		
		<input checked="" type="checkbox"/> F05B 2260/00 Function		
		<input checked="" type="checkbox"/> F05B 2270/00 Control		
		<input checked="" type="checkbox"/> F05B 2280/00 Materials; Properties thereof		

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)

(IC:"G07B 15/00" OR IC:"G07B 15/02" OR IC:"G07B 15/04")AND(EN_AB:toll OR EN_AB:(congestion charge) OR EN_AB:(road charge*) OR EN_AB:(road pric*) OR EN_AB:toll) 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

((IC:"G07B 15/00" OR IC:"G07B 15/02" OR IC:"G07B 15/04")AND(EN_AB:toll OR EN_AB:(congestion charge) OR EN_AB:(road charge*) OR EN_AB:(road pric*) OR EN_AB:toll)) 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

F03D 13/00

Assembly, mounting or commissioning of wind motors; Arrangements specially adapted for transporting wind motor components 

Warnings

-  Group **F03D13/00** is incomplete pending reclassification of documents from group **F03D80/00**.
Groups **F03D80/00** and **F03D13/00** should be considered in order to perform a complete search.

PCT Publications without IPC

Improvements

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.

Main Group only IPCs

Results 1-10 of **5,670** for Criteria:IC:"G07F15/00" Office(s):all Language:EN Stemming:true

prev 1 2 3 4 5 6 7 8 9 10 next

Refine
Search

IC:"G07F15/00"

Results 1-10 of **2,608** for Criteria:IC:"G07F15/00" ANDNOT (IC:"G07F15/02" OR IC:"G07F15/04" OR IC:"G07F15/06")
Stemming:true

prev 1 2 3 4 5 6 7 8 9 10 next Page: 1 / 261

Refine
Search

IC:"G07F15/00" ANDNOT (IC:"G07F15/02" OR IC:"G07F15/04" OR IC:"G07F15/06")

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!