



# 5<sup>th</sup> CPC Annual Meeting with industry users

Christopher Kim Marios Sideris

F16M11/2042

•••• { constituted of several dependent joints}

May 5 2018 PIUG Conference Alexandria VA

F16M11/205

••••• { the axis of rotation intersecting in a single point e.g. gimbals }





# Agenda

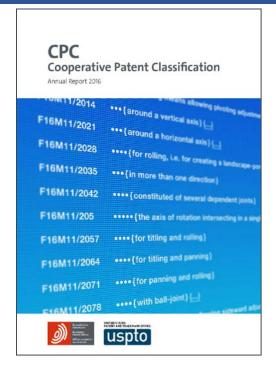
- CPC State of affairs
- Future Developments
- Feedback from the users and discussion
- AOB





# **CPC Annual Report 2016**

Published in August 2017



http://www.cooperativepatentclassification.org/publications/AnnualReports/CPCAnnualReport2016.pdf





# **CPC and National Offices**







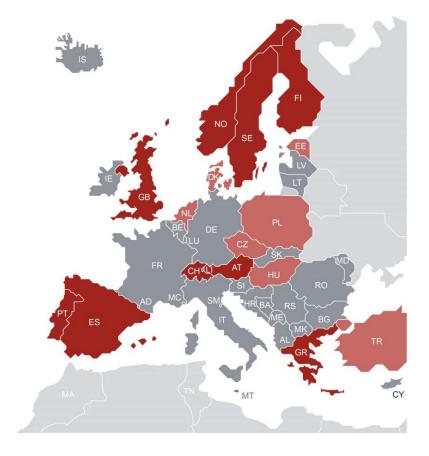
Offices in the CPC whose data is loaded in EPO's databases

Offices implementing the CPC

Offices to sign a CPC agreement







- National offices in the CPC
- National offices in the CPC which also deliver CPC data
- 9 Offices are already sending CPC data to the EPO





## Documentation Coverage in CPC

Country	Country Code	Number of documents	Number of publications classified in CPC (family or document level)	% publications classified in CPC (family or document level)
EPO	EP	3.254.456	3.252.119	99,9%
United States	US	12.398.741	12.019.335	99,9%
WIPO (PCT)	WO	3.201.414	3.191.752	99,7%
ARIPO	AP	9.744	9.042	92,8%
Austria	AT	1.005.363	651.706	64,8%
Australia	AU	1.773.206	1.608.650	90,7%
Belgium	BE	586.065	552.051	94,2%
Brazil	BR	623.032	396.665	63,7%
Bulgaria	BG	49.741	13.812	27,8%
Canada	CA	2.405.288	1.303.570	54,2%
Chile	CL	17.656	12.975	73,5%
China	CN	14.259.772	3.913.343	27,4%
Croatia	HR	20.657	15.912	77,0%
Cyprus	CY	14.395	13.021	90,5%
Czech Republic	CZ	91.794	43.127	47,0%
Denmark	DK	405.471	268.433	66,2%
EAPO	EA	47.767	42.760	89,5%
Estonia	EE	7.018	5.304	75,6%





### Documentation Coverage in CPC

Country	Country Code	Number of documents	Number of publications classified in CPC (family or document level)	% publications classified in CPC (family or document level)
France	FR	2,429,339	2,408,804	99.2%
Finland	FI	195,169	113,658	58.2%
GCC	GC	419	324	77.3%
German Democratic Republic	DD	234,072	47,863	20.4%
Germany	DE	5,610,449	4,807,060	85.7%
Greece	GR	100,073	53,272	53.2%
Hungary	HU	125,327	80,213	64.0%
Iceland	IS	7,475	5,306	71.0%
India	IN	81,662	46,126	56.5%
Ireland	ΙE	83,558	43,992	52.6%
Israel	L	98,986	85,052	85.9%
Italy	Π	607,878	339,719	55.9%
Japan	JP	17,881,260	4,659,924	26.1%
Korea	KR	3,423,236	2,004,580	58.6%
Latvia	LV	6,004	2,160	36.0%





### Documentation Coverage in CPC

			<u> </u>	
Country	Country Code	Number of documents	Number of publications classified in CPC (family or document level)	% publications classified in CPC (family or document level)
Luxemburg	LU	61.832	60.786	98,3%
Lithuania	LT	7.060	4.273	60,5%
Malaysia	MY	54.146	45.789	84,6%
Mexico	MX	284.610	258.684	90,9%
Monaco	MC	2.763	1.831	66,3%
The Netherlands	NL	547.379	535.150	97,8%
Norway	NO	202.605	173.385	85,6%
OAPI	OA	13.432	13.192	98,2%
Poland	PL	288.689	97.602	33,8%
Portugal	PT	119.082	108.739	91,3%
Romania	RO	72.390	15.374	21,2%
Russian Fed.	RU	1.207.886	331.832	27,5%
San Marino	SM	2.223	1.419	63,8%
Serbia	RS	9.974	7.184	72,0%
Slovakia	SK	27.145	27.145	100,0%
Slovenia	SI	36.953	26.268	71,1%
Soviet Union	SU	1.252.142	87.933	7.0%
Spain	ES	1.155.334	676.559	58,6%
Sweden	SE	520.377	332.310	63,9%
Switzerland	CH	716.607	577.499	80,6%
Turkey	TR	62.050	28.684	46,2%
United Kingdom	GB	2.385.057	2.129.113	89,3%





### Publications with CPC from 2/2017 to 1/2018

Country	Country Code	Number of publications classified in CPC (family or document level) as of February 2017	Number of publications classified in CPC (family or document level) as of January 2018	Growth % of Publications w/ CPC (family or document level) from February 2017 January 2018
EPO	EP	3,113,030	3,252,119	4.5%
United States	US	11,650,065	12,019,335	3.2%
WIPO (PCT)	wo	2,998,490	3,191,752	6.4%
ARIPO	AP	3,718	9,042	143.2%
Austria	AT	649,104	651,706	0.4%
Australia	AU	1,360,654	1,608,650	18.2%
Belgium	BE	551,554	552,051	0.1%
Brazil	BR	380,715	396,665	4.2%
Canada	CA	1,269,831	1,303,570	2.7%
Chile	CL	11,344	12,975	14.4%
China	CN	2,406,586	3,913,343	62.6%
Czech Republic	CZ	42,734	43,127	0.9%
Estonia	EE	5,278	5,304	0.5%
France	FR	2,395,208	2,408,804	0.6%
Finland	FI	112,202	113,658	1.3%
Germany	DE	4,740,975	4,807,060	1.4%
Greece	GR	52,753	53,272	1.0%





### Publications with CPC from 2/2017 to 1/2018

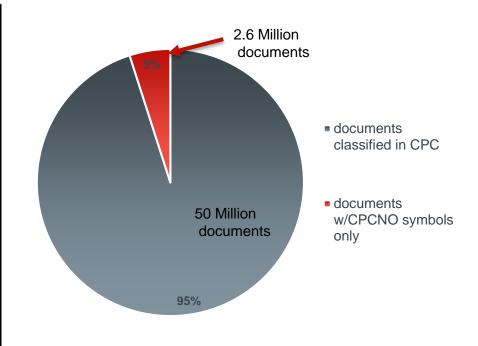
Country	Country Code	Number of publications classified in CPC (family or document level) as of February 2017	Number of publications classified in CPC (family or document level) as of January 2018	Growth % of Publications w/ CPC (family or document level) from February 2017 - January 2018
Hungary	HU	73,100	80,213	9.7%
Israel	IL	84,600	85,052	0.5%
Korea	KR	1,420,956	2,004,580	41.1%
Luxemburg	LU	60,773	60,786	0.0%
Mexico	MX	239,169	258,684	8.2%
The Netherlands	NL	532,843	535,150	0.4%
Norway	NO	171,479	173,385	1.1%
OAPI	OA	13,191	13,192	0.0%
Poland	PL	86,310	97,602	13.1%
Portugal	PT	100,790	108,739	7.9%
Russian Fed.	RU	306,103	419,765	37.1%
Spain	ES	629,519	676,559	7.5%
Sweden	SE	330,853	332,310	0.4%
Switzerland	СН	576,238	577,499	0.2%
Turkey	TR	28,661	28,684	0.1%
United Kingdom	GB	2,118,079	2,129,113	0.5%





### Publications with CPCNO allocations

Country	Country Code	Number of publications with CPCNO symbols (Document level) on 01/03/2018
Austria	AT	8.495
Brazil	BR	9.907
China	CN	1.985.683
Finland	FI	8.001
Greece	GR	5.812
Korea	KR	1.105.980
Mexico	MX	1.516
Norway	NO	3.822
Portugal	PT	364
Russian Fed.	RU	45.521
Spain	ES	33.376
Sweden	SE	141.726
Switzerland	СН	275
United Kingdom	GB	139.829



Updated 1 March 2018





# Intellectual Classification of WO Publications in CPC

Countries	ISA Offices	Classification of PCT
Australia	AU	No
Austria	AT	No
Brazil	BR	Yes
Canada	CA	No
Chile	CL	No
China	CN	No
Czech Republic	CZ	No
European Patent Offices	EP	Yes
Finland	FI	TBC
Hungary	HU	yes
Japan	JP	No
Korea	KR	Yes
Poland	PL	Yes
Israel	IL	Q4 - 2018
Russian Federation	RU	Yes
Spain	ES	No
Sweden	SE	Yes
Turkey	TR	Yes
United Kingdom	UK	Yes
United States	US	Yes





# **CPC Scheme Releases**

- Four releases in 2018:
  - 1 January 2018
  - 1 February 2018
  - 1 May 2018
  - 1 August 2018

- 2018.01
- 2018.02
- 2018.05
- 2018.08
- Planning for 2018 announced on <a href="www.cpcinfo.org">www.cpcinfo.org</a> under Latest News









# **CPC** products

"Bulk" section on cpcinfo:



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#### Bulk data

#### CPC XML Schemas:

- . For the CPC Scheme
- · For the CPC Definitions

#### Search Enter search term



#### List of CPC Valid symbols (2018.02)

#### CPC Validity file (2018.02)

#### Revision Concordance list (2018.02)

Complete CPC scheme in XML format (2018.02)

Complete CPC scheme in PDF format (2018.02)

#### CPC Definitions in PDF format (Last updated 01 February 2018)

- For the A section: <u>A01B-A45F</u>; <u>A46B-A63K</u>
- For the B section: <u>B01B-B29B</u>; <u>B29C-B65C</u>; <u>B65D</u>; <u>B65F-B82Y</u>
- For the <u>C section</u>
- For the D section
- · For the E section
- For the F section
- · For the G section
- · For the H section

#### CPC Definitions in XML format (Last updated 01 February 2018).

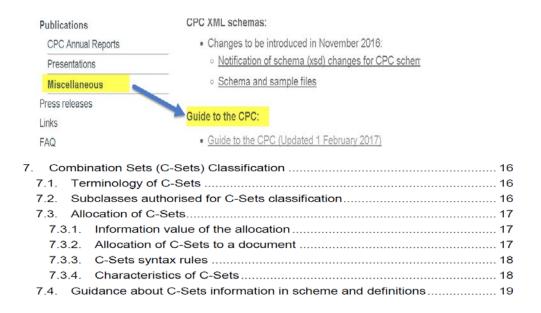
- For the A section: A01B-A45F: A46B-A63K
- For the B section: B01B-B29B; B29C-B65C; B65D; B65F-B82Y
- · For the C section
- · For the D section
- · For the E section
- · For the F section
- · For the G section
- For the H section





### **Guide to the CPC**

 New version of the CPC Guide available on <a href="http://www.cooperativepatentclassification.org/index.html">http://www.cooperativepatentclassification.org/index.html</a> since February 2017 under Publications (new section on C-Sets)



# Guide to the CPC (Cooperative Patent Classification)

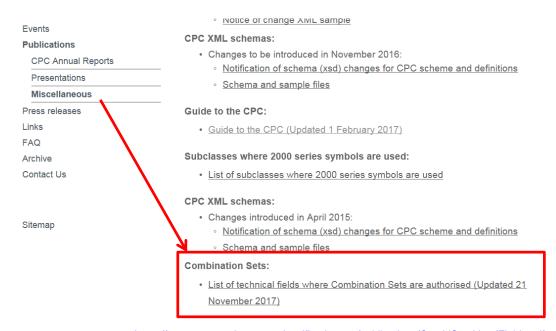
Document owner	EPO and USPTO
Office Contacts	EPO Directorate Classification & Documentation; USPTO Classification Standards and Development
EPO internal owners	Owner: Chairman DOC; Deputy: Director Classification & Documentation
USPTO internal owners	Owner: Director, Classification Standards and Development
Approved on	
Document ID	Version 1.0
Revision number	4.00





# **Combination Sets (C-Sets)**

Updated list of subclasses where combination Sets are authorised **published**:



https://www.cooperativepatentclassification.org/publications/CombiSetsListofFields.pdf





# **Combination Sets (C-Sets)**

Updated list of subclasses where combination Sets are authorised **published**:

CPC Sections	A	В	С	D	E	F	G	н
	A01N	B01D	C04B	D07B		-	G01N	H01L
	A23G	B01J	C05B				G02B	
	A23V	B05D	C05D					
	A61K	B22F	C05F					
	A61L	B29C	C05G					
	A61M	B32B	C07C					
CPC		B65H	C08F		NI	one		
Subclasses:			C08G		INC	ne		
			C08K					
			C08L					
			C09D					
			C09J					
			C10M					
			C12N					
			C12Q					



### **Combination Sets actions**

- In February 2018, clean up of C-Sets in non-authorised areas will be completed, i.e. deletion of C-Set and allocation as single symbols
  - Example: current C-Set "F04C2/18, A61B1/00" not in the list of authorized areas → C-Set deleted but F04C2/18 as well as A61B1/00 allocated to the family as single symbols (if not already present).
- Work continues on standardised wording for:
  - Notes in the scheme signalling use of C-Sets
  - Definitions specifying how to use C-Sets





# **C-Sets in Espacenet**

(http://worldwide.espacenet.com)



#### **Since 15 March 2016:**

- Also C-sets from CPCNO Offices are displayed ...
- ... and searchable in "Smart search" by using "cpcC"

#### Espacenet: free access to the database of over 90 million patents

Smart search: i	Siemens EP 2007
<u>cpcc</u> =C08F8/30 AND <u>cpcc</u> =C08F297/02	
	<u>Clear</u> <u>Search</u>





### **OPS** web services

New release in November 2017 (version 3.2)

- OPS Published-data service/search:
  - CQL query behaviour streamlined with Espacenet query implementation
  - Searchable field "classification combination (cpcc)" added to search for CPC combination sets

### **OPS Published-data service/biblio:**

- CPC combination set retrieval enabled
- Citations now provided in rich format where available

To access OPS version 3.2 documentation visit:

https://www.epo.org/searching-for-patents/technical/espacenet/ops.html#tab-3

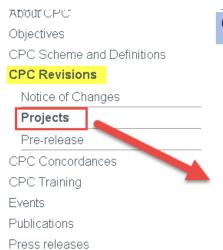




# **CPC Changes**

- CPC Revisions Projects (RP), Maintenance projects (MP) and Definition projects (DP)
- Advance information? <u>www.cpcinfo.org</u>

Short summary of the ongoing CPC revision projects:



#### **Ongoing CPC Projects**

The CPC areas currently undergoing maintenance (MP) or revision (RP) are listed in the table below together with the corresponding project number. Once finalized, the outcome of these projects will be summarized in a Notice of Change to be published one to two months before the corresponding changes are implemented in the CPC Scheme.

Project number	Status		CPC	Title
RP0221	active	A01G		Horticulture; Cultivation of vegetables, flowers, rice, fruit vines





# Published Notice of Changes in CPC:

Year	CPC Projects					
real	Maintenance	Revision	Definition			
	Projects	Projects	Projects			
	(MP)	(RP)	(DP)			
2018	23	19	06			
2017	61	29	09			
2016	68	55	52			
2015	16	57	21			
2014	06	31	00			
2013	03	09	00			

About CPC Objectives CPC Scheme and Definitions **CPC Revisions** Notice of Changes Projects Pre-release CPC Concordances CPC Training Events **Publications** Press releases Links FAQ Archive Contact Us Sitemap

#### **Notice of Changes**

#### CPC 2018.02:

- CPC Notice of Changes 457-DP0187 (A01K)
- CPC Notice of Changes 458-DP0188 (B60Q)
- CPC Notice of Changes 461-MP0388 (F21K)
- CPC Notice of Changes 471-RP0483 (VARIOUS)
- CPC Notice of Changes 472-RP0485 (VARIOUS)
- CPC Notice of Changes 474-RP0487 (VARIOUS)
- CPC Notice of Changes 481-RP0495 (B60N)
- CPC Notice of Changes 484-RP0498 (H04W)
- CPC Notice of Changes 485-RP0501 (H04VV)
- CPC Notice of Changes 488-RP0504 (G06F)
- CPC Notice of Changes 491-RP0507 (VARIOUS)
- ODO NI-E-- -1 OF----- 103 MD0307 (D300)
- CPC Notice of Changes 493-MP0387 (B29C)
- CPC Notice of Changes 495-MP0349 (H01T)
- CPC Notice of Changes 496-MP0355 (A41C)
- CPC Notice of Changes 497-MP0365 (E04C)
- CPC Notice of Changes 500-RP0460 (A45C)
- CPC Notice of Changes 503-RP0500 (G01N)
- CPC Notice of Changes 505-MP0346 (H01S)

http://www.cooperativepatentclassification.org/CPCRevisions/NoticeOfC hanges.html





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### CPC Pre-Release section

ADDUL UPU

Objectives

CPC Scheme and Definitions

**CPC** Revisions

Notice of Changes Projects

Pre-release

**CPC Concordances** 

**CPC Training** 

Events

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#### Pre-release

In this area of the website, CPC related material such as scheme files, notices of changes, concordances, etc. will be published about one month before official entry into force of this material.

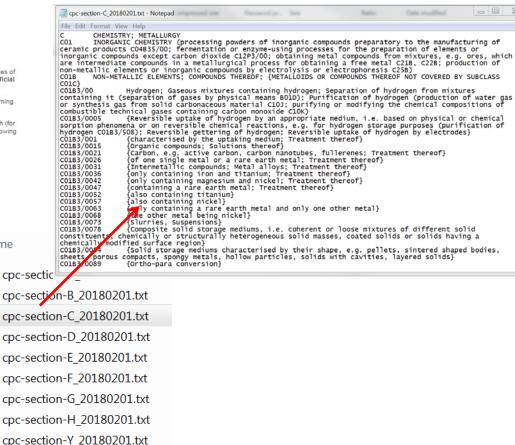
The publication of the "pre-released" material started on 6 May 2014 concerning the June 2014 CPC scheme version (2014-06).

The "pre-release" will normally happen on the first Tuesday of a given month (for example Tuesday 6 May 2014) for entry into force on the first day of the following month (for example 1 June 2014).

Name

#### 16 January 2018: 2018.02 pre-released material:

- · 2018.02 CPC Scheme in PDF and in XML
- 2018.02 CPC to IPC concordance in PDF, XML and TXT
- . Notices of Changes related to the "2018.02 CPC Scheme"
- CPC Notice of Changes 457-DP0187 (A01K)
- CPC Notice of Changes 458-DP0188 (B60Q)
- CPC Notice of Changes 461-MP0388 (F21K)
- CPC Notice of Changes 471-RP0483 (VARIOUS)
- CPC Notice of Changes 472-RP0485 (VARIOUS)
- CPC Notice of Changes 474-RP0487 (VARIOUS)
- CPC Notice of Changes 481-RP0495 (B60N)
- . CPC Notice of Changes 484-RP0498 (H04W)
- CPC Notice of Changes 485-RP0501 (H04W)
- CPC Notice of Changes 488-RP0504 (G06F)
- CPC Notice of Changes 491-RP0507 (VARIOUS)
- CPC Notice of Changes 493-MP0387 (B29C)
- CPC Notice of Changes 495-MP0349 (H01T)
- CPC Notice of Changes 496-MP0355 (A41C)
- CPC Notice of Changes 497-MP0365 (E04C)
- CPC Notice of Changes 500-RP0460 (A45C)
- CPC Notice of Changes 503-RP0500 (G01N)
- CPC Notice of Changes 505-MP0346 (H01S)
- Notice of Editorial Corrections February
- List of valid CPC symbols for the 201 .02 CPC Scheme.
- CPC Validty File (2018.02)
- Revision Concordance List (2/18.02)
- CPC Title List (2018.02)

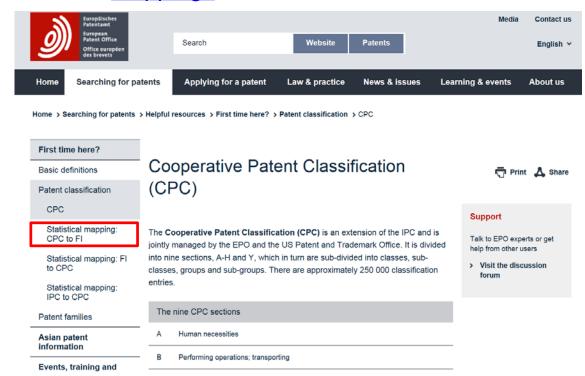








### **CPC-FI-IPC Statistical Mappings**







Home Searching for patents

Applying for a patent

Law & practice News & issues

Learning & e

Home > Searching for patents > Helpful resources > First time here? > Patent classification > CPC > Statistical mapping: CPC to FI

	here?

Basic definitions

#### Patent classification

CPC

Statistical mapping: CPC to FI

Statistical mapping: FI to CPC

Statistical mapping: IPC to CPC

Patent families

#### Asian patent information

### Events, training and publications

Patent information centres

#### Raw data

### Information on EPO data

Patent Translate

### Statistical mapping: CPC to FI

The table is produced by using a statistical analysis of symbols allocated to families of documents present in DOCDB and classified simultaneously in the CPC and FI schemes. Each CPC symbol is statistically mapped to the first three most significant FI symbols.

For example, CPC symbol G01B 11/002 (in between brackets: first the number of families bearing this CPC allocation - 3063, then the number of families bearing this CPC allocation and classified in the FI scheme - 304) can be statistically mapped to FIs G01B11/00,H (71 families out of 304 families, i.e. 23%), G01B 11/00,A (59 families out of 304 families, i.e. 19%) and G01B 11/00,G (27 families out of 304 families, i.e. 9%).

We display the three most pertinent FI symbols, in decreasing order of relevance. Note that the confidence level of the mapping is low when the number of families statistically processed is small and/or when the statistical dispersion of the mapping of one CPC symbol to many FI symbols is significant.

- ヌ JPO IPC/CPC/FI Parallel Viewer
- Full data set in XML

Status: January 2018

#### Supp

Talk to

> Vis

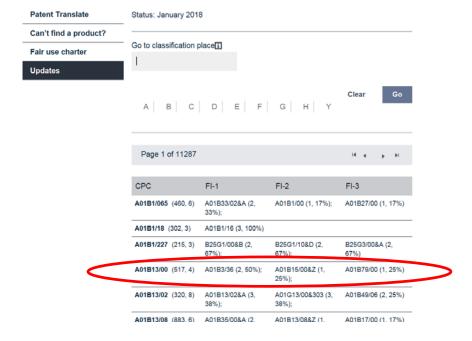




# Statistical mapping CPC to FI

http://www.epo.org/searching-for-patents/helpful-resources/first-time-here/classification/cpc/cpc-fi.html

Based on statistical analysis of allocations on documents







# Statistical mapping FI to CPC

http://www.epo.org/searching-for-patents/helpful-resources/first-time-here/classification/cpc/fi-cpc.html

Based on statistical analysis of allocations on family members

		4 4 ▶ ▶
CPC-1	CPC-2	CPC-3
<b>C01B13/10</b> (21, 38%);	<b>C02F1/78</b> (16, 29%);	<b>C01B13/11</b> (16, 29%)
<b>C01B13/10</b> (15, 36%);	C01B13/11 (6, 14%);	C25B1/13 (6, 14%)
<b>B01J19/088</b> (3, 33%);	<b>C01B13/115</b> (3, 33%);	<b>B01D53/047</b> (2, 22%)
<b>C01B13/11</b> (19, 73%);	H01T19/04 (2, 8%);	H05H1/2406 (2, 8%)
C01B13/11 (7, 70%);	B01J19/088 (2,	<b>A23B7/157</b> (1, 10%)
	C01B13/10 (21, 38%); C01B13/10 (15, 36%); B01J19/088 (3, 33%); C01B13/11 (19, 73%);	C01B13/10 (21, 38%);  C01B13/10 (15, C01B13/11 (6, 14%); 36%);  B01J19/088 (3, C01B13/115 (3, 33%);  C01B13/11 (19, H01T19/04 (2, 8%); 73%);





# Statistical mapping IPC to CPC

http://www.epo.org/searching-for-patents/helpful-resources/first-time-here/classification/cpc/ipccpc.html#

Based on statistical analysis of allocations on family members

Page 11 of 812			I4 4 ▶ M
IPC	CPC-1	CPC-2	CPC-3
G01B5/06 (5287, 2265)	<b>G01B5/06</b> (542, 24%);	<b>G01B5/061</b> (530, 23%);	<b>G01B5/068</b> (481, 21%)
G01B5/08 (5981, 2078)	<b>G01B5/08</b> (1591, 77%);	<b>G01B7/12</b> (152, 7%);	<b>G01B5/12</b> (131, 6%)
G01B5/10 (589, 382)	<b>G01B5/10</b> (253, 66%);	<b>G01B7/125</b> (44, 12%);	<b>B24B49/04</b> (31, 8%)
G01B5/10 (589, 382) G01B5/12 (3985, 1397)	•		B24B49/04 (31, 8%) G01B5/08 (120, 9%)
G01B5/12 (3985,	66%); <b>G01B5/12</b> (1003,	12%); <b>G01B7/13</b> (182,	





# **Future Developments**

Machine readable products





### **CPC Products after CPC revisions**

Products delivered in a **machine-readable** format, e.g. XML (available on <a href="http://www.cooperativepatentclassification.org/cpcSchemeAndDefinitions/Bulk.html">http://www.cooperativepatentclassification.org/cpcSchemeAndDefinitions/Bulk.html</a>)

- Scheme and Definitions (and corresponding XML schemas)
- RCL (Revision Concordance List)
- CICL (CPC-to-IPC Concordance List)
- List of CPC Valid symbols
- Validity File

### In progress...

- Compilation of changes (planned for CPC 2018.08 or 2019.01)
- CRL (Cross-Reference List)





# **Future Developments**

A new approach for CPCNO data (CPC-INTL project)





### **CPC data from National Offices**

Currently, CPC data from National Offices are stored at **document level**, in the C(PC)NO fields.

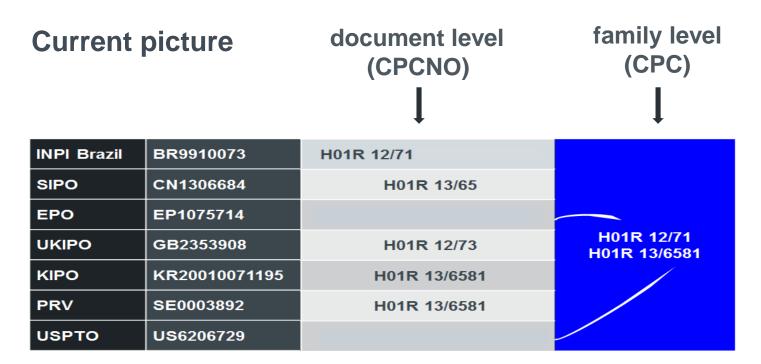
After CPC International project (CPC-INTL):

- Promotion of allocations from National Offices to simple patent family level
- Visibility of name of the office endorsing allocation
- New CPCDB infrastructure

Switch over to new system planned April 2019











# **Future picture**



INPI Brazil	BR9910073	H01R 12/71	
SIPO	CN1306684	H01R 13/65	
EPO	EP1075714	H01R 12/71; H01R 13/6581	H01R 12/71 (EP, US, BR)
UKIPO	GB2353908	H01R 12/73	H01R 13/6581 (EP, US, SE, KR) H01R 13/65 (CN) H01R 12/73 (GB)
KIPO	KR20010071195	H01R 13/6581	
PRV	SE0003892	H01R 13/6581	
USPTO	US6206729	H01R 12/71; H01R 13/6581	

**Expected by April 2019** 

H01R 12/73 (GB)





# **CPC-INTL:** work in progress

- Requirements for the display of CPC allocations in Epoque have been collected and are specified.
- Requirements for the display of CPC allocation in Espacenet are currently collected.
- All internal and external systems that are requiring adaptions are evaluated in view of the planning.
- New bilateral infrastructure between USPTO and EPO to support the equal level of all CPC allocations is in user verification status for the first stage.





# Thank you for your attention!

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