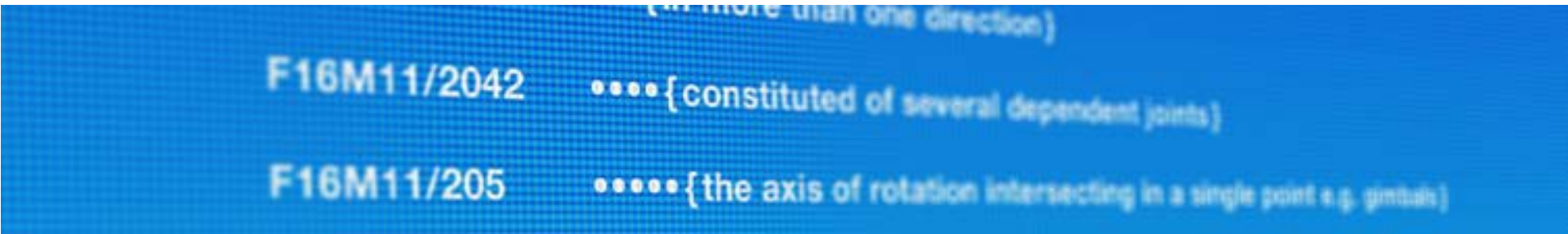


# Recent Developments in the CPC

## WIPO Fourth IPC WORKSHOP



# Agenda

- CPC and National Offices
- CPC coverage – Much more than EP and US documents and update
- IT matters
- CPC: Latest Status and Future Development

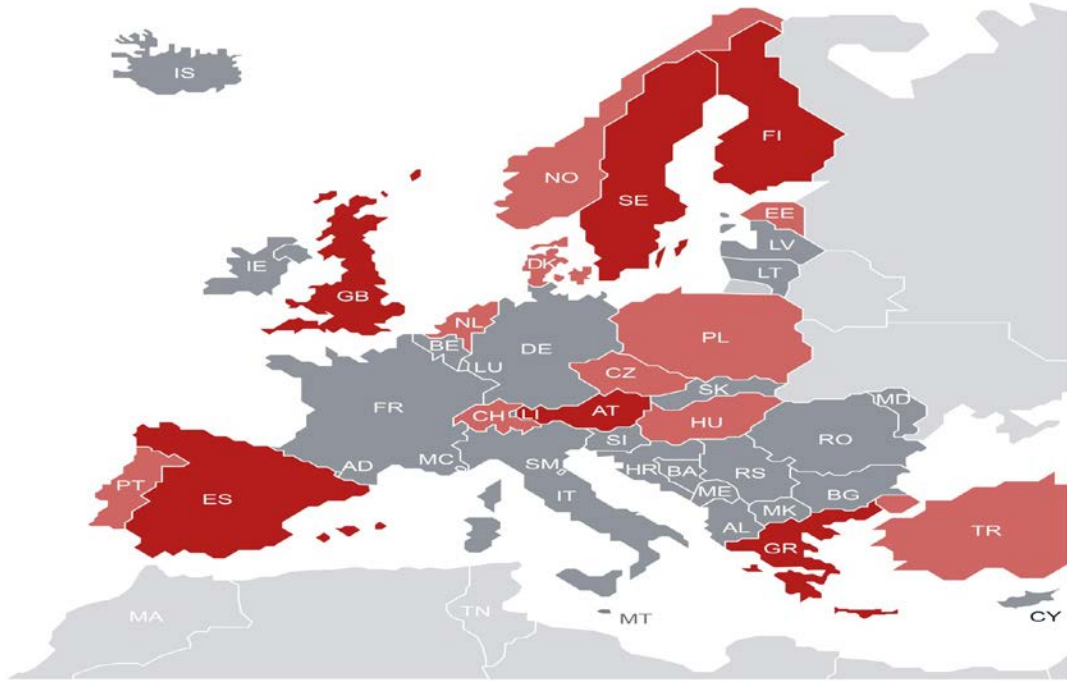
# CPC and National Offices

# Around the world



- National offices in the CPC
- National offices in the CPC which also delivers CPC data
- Potential National Offices to incorporate the CPC

# 16 Offices within the European Patent Organisation



■ National offices in the CPC  
■ National offices in the CPC which also delivers CPC data

Furthermore, CPC is used for search by more than **45 Patent Offices** and by more than **25 000 examiners**

# CPC coverage - Much more than EP & US documents...

# CPC documentation coverage

Country	CC	Code	Systematically classified**	Non-systematically classified
ARIPO	AP		complete from 1 (3/7/1985)	
Austria	AT*	A,B	from 288 286 (15/1/1971)	from 100 022 (1925)
Australia	AU*	B,D	from 18/1/1973 (first filing: 1971)	from 1 019 332 (1933)
Belgium	BE		from 100 486 (1892)	years 1959-1962
Canada	CA*		from 848 159 (4/8/1970) for first filling residents from 939 101 (1/1/1974)	from 114 746 (1908)
Switzerland	CH	A,B D	from 208 320 (31/1/1939) from 1968	from 1 (1888)
Germany	DE	A,B,C U	from 1 (1877) from 6 609 798 (04/1/1973)	from 1 037 492 (1928)
EPO	EP	A	complete from 1 (20/12/1978)	
France	FR	A,B E	from 292 (1844) from 92 701 (20/12/1968)	
United Kingdom	GB	A,B	from 1909 02 488 (27/1/1910)	from 1817 04 136 (1817)
Luxembourg	LU		from 555 (<1920)	
The Netherlands	NL		from 28 (1913)	
OAPI	OA		complete from 1 (15/01/1966)	
The United States	US	A,B	complete from 1 (13/07/1836)	
		E	complete from 8 (23/4/1839)	
		I (defensive)	complete from 120 (04/10/1855)	
		I (trial, project)	complete from 1 (03/12/1985)	
		H	complete from 1 (03/12/1985)	
World(PCT)	WO		complete from 7800001 (19/10/1978)	

\* for first filings only ie. without foreign priorities

\*\* when the indication "complete" is not present, this means that some documents in the collection may not be classified in CPC

## CPC Coverage (EPODOC, 1 February 2017)

Country	Country Code	Number of documents (source: EPODOC on 01/02/2017)	Number of publications classified in CPC (family or document level)	% publications classified in CPC (family or document level)
EPO	EP	3.115.428	3.113.030	99,9%
United States	US	12.001.112	11.650.065	97,1%
Austria	AT	1.003.656	649.104	64,7%
Belgium	BE	585.582	551.554	94,2%
Switzerland	CH	715.369	576.238	80,6%
Germany	DE	5.544.142	4.740.975	85,5%
France	FR	2.415.748	2.395.208	99,1%
United Kingdom	GB	2.374.136	2.118.079	89,2%
Luxembourg	LU	61.825	60.773	98,3%
The Netherlands	NL	544.678	532.843	97,8%
ARIPO	AP	3.910	3.718	95,1%
Australia	AU	1.510.265	1.360.654	90,1%
Canada	CA	2.361.563	1.269.831	53,8%
OAPI	OA	13.432	13.191	98,2%
WIPO (PCT)	WO	2.994.234	2.998.490	100,1%



## CPC Coverage of other patent collections (EPODOC, 1 February 2017)

Country	Country Code	Number of documents (source: EPODOC on 01/02/2017)	Number of publications classified in CPC (family or document level)	% publications classified in CPC (family or document level)
Portugal	PT	110.967	100.790	90,8%
Mexico	MX	263.843	239.169	90,6%
Israel	IL	98.571	84.600	85,8%
Norway	NO	200.974	171.479	85,3%
Estonia	EE	6.958	5.278	75,9%
Chile	CL	15.496	11.344	73,2%
Sweden	SE	519.265	330.853	63,7%
Brazil	BR	605.674	380.715	62,9%
Hungary	HU	117.983	73.100	62,0%
Finland	FI	194.071	112.202	57,8%
Spain	ES	1.089.296	629.519	57,8%
Greece	GR	99.533	52.753	53,0%
Czech Republic	CZ	90.041	42.734	47,5%
Turkey	TR	62.045	28.661	46,2%
Korea	KR	3.245.572	1.420.956	43,8%
Poland	PL	273.302	86.310	31,6%
China	CN	12.159.983	2.406.586	19,8%
Russian Fed.	RU/SU	2.183.555	306.103	14,0%

**Overall, 46.7 million documents classified in CPC**

Geneva, 21 February 2017

# Overview of CPC implementation (1/3)

Country	Front file national invention applications	CPC Printed?	CPC data delivered to the EPO	classification over whole CPC scheme	PCT applications	Backfile	Utility models
AUSTRIA	Yes (ECNO office)	No	Yes	yes	No	No	Yes
BRAZIL	2014	Yes	Yes	Currently partial coverage (from the 12 divisions trained out of 20 divisions of INPI incl. Utility Model division)	Yes (transmitted to WIPO in SR – data exchange with EPO to be defined)	Not yet - Under consideration	Yes (all)
CHINA	Yes, since 2014	No	Yes	Partial from 2014 Over whole scheme since January 2016	Under consideration	Under consideration	Under consideration
CZECH REPUBLIC	Yes	No	No	Yes	No (Only within VPI appl. as ISA)	No	Yes
EAPO	Yes, starting Jan 2019	No	No	Limited to fields where advanced training provided	N/A	Yes, starting Jan 2020	TBC
DENMARK	TBC	No	No	TBC	N/A	TBC	TBC
ESTONIA	Starting 2016	No	No	Yes	Yes	No commitment	Yes

# Overview of CPC implementation (2/3)

Country	Front file national invention applications	CPC printed?	CPC data delivered to the EPO	classification over whole CPC scheme	PCT applications	Backfile	Utility models
<b>FINLAND</b>	Yes (ECNO office)	No	Yes	yes	TBC	No commitment	N/A
<b>GREECE</b>	2015	Yes	Yes	yes	N/A	No commitment	N/A
<b>ISRAEL</b>	Sept 2016	No	Planned by the end of 2017	TBC	TBC - Receiving classification data from USPTO(started at September 2016)	None	None
<b>HUNGARY</b>	TBC	No	No	TBC	N/A	TBC	TBC
<b>KOREA</b>	2014	No	Yes	Partial in 2014 (25 areas) Over whole scheme since January 2015	Yes, since 7 June 2016. Way to exchange data to be defined	2004 to 2014; done by end 2018	N/A
<b>MEXICO</b>	yes	No	yes	yes	N/A	Expected to start in January 2017 subject to availability of resources	Yes (acc. to MoU)
<b>NETHERLANDS</b>	Expected in 2017	No	No	yes	N/A	No commitment	N/A

# Overview of CPC implementation (3/3)

Country	Front file national invention applications	CPC printed?	CPC data delivered to the EPO	classification over whole CPC scheme	PCT applications	Backfile	Utility models
NORWAY	October 2015	No	No	yes	N/A	Planned to start in 2018	N/A
POLAND	TBC	No	No	TBC	N/A	TBC	TBC
PORTUGAL	March 2015	No	No	yes	N/A	No commitment	N/A
RUSSIAN FEDERATION	January 2016	Yes	Yes (May 2016)	yes	Yes for national ap / Not yet for international – delivery method to be defined	Under consideration	Yes
SPAIN	Yes (ECNO office)	No	Yes (2013)	yes	TBC	partially	N/A
SWEDEN	Yes (ECNO office)	No	Yes (2013)	yes	TBC	Yes (+ DPK)	N/A
SWITZERLAND	(expected) second half 2016	No	No	yes	N/A	No commitment	N/A
TURKEY	Expected in 2017	No	No	TBC	N/A	TBC	TBC
UNITED KINGDOM	CPC has been applied to all new applications from 28/10/2013	No	Supplied weekly via ST36XML file (sent via FTP)	UK examiners classify in CPC across CPC sections A-H	When PCT applications enter the national phase, Examiners add CPC (and revise IPC) prior to republication.	CPC classification is not applied to the backfile	N/A

# IT matters

# OPS RESTful web services (classification)

These provide access to the EPO's raw data via a standardised XML interface.

The web services focussing on classification relate to:

- CPC Search
- CPC Media retrieval
- CPC Retrieval

[OPS - RESTFul](#)

# CPC schema changes

- **Schema changes** for the CPC scheme and definitions in November 2016 !!!

Impacted areas:

- References in Definitions
  - Enhanced references in Scheme and Definitions
  - Change in Synonyms and Keywords
- Details were made available on [www.cpcinfo.org](http://www.cpcinfo.org) in May 2016, to be effective as of the **November 2016** CPC release

# CPC: Latest Status



# CPC Scheme and Definitions

- <http://www.cooperativepatentclassification.org/cpcSchemeAndDefinitions.html>

## CPC Scheme and Definitions

Table

**Bulk**

CPC Revisions

CPC Concordances

CPC Training

Events

Publications

Press releases

CPC XML Schemas:

- [For the CPC Scheme](#)
- [For the CPC Definitions](#)

[CPC Validity file \(2017.02\)](#)

[Complete CPC scheme in XML format \(2017.02\)](#)

[Complete CPC scheme in PDF format \(2017.02\)](#)

- [www.uspto.gov/web/patents/classification/index.html](http://www.uspto.gov/web/patents/classification/index.html)
- [worldwide.espacenet.com/classification](http://worldwide.espacenet.com/classification)

# Published Notice of Changes in CPC:

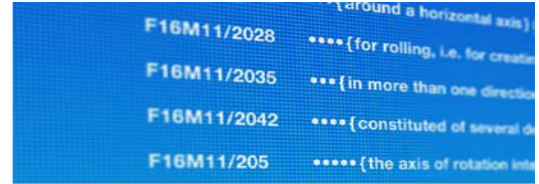
Year	CPC Projects		
	Maintenance Projects (MP)	Revision Projects (RP)	Definition Projects (DP)
2017	12	17	01
2016	68	55	52
2015	16	57	21
2014	06	31	00
2013	03	09	00

<http://www.cooperativepatentclassification.org/CPCRevisions/NoticeOfChanges.html>

**Cooperative Patent Classification**  
 European Patent Office  
 United States Patent and Trademark Office

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### CPC Revisions

In this area, information regarding changes made to the CPC scheme will be published in the form of "Notice of Changes" (formerly know as CPC Classification orders).

Information will also be provided about ongoing CPC Scheme revision projects.

Under the navigation title "Pre-release", as of May 2014, material such as the scheme, notices of changes, concordances, will be made available to the public about one month ahead of official entry into force of the corresponding material.



### Notice of Changes

- CPC 2015.04:**
- [CPC Notice of Changes 65-RP0022 \(B60N\)](#)
  - [CPC Notice of Changes 66-RP0031 \(B65H\)](#)
  - [CPC Notice of Changes 67-RP0036 \(F24D\)](#)
  - [CPC Notice of Changes 68-RP0047 \(B81C\)](#)
  - [CPC Notice of Changes 69-RP0049 \(A61F\)](#)

# CPC Scheme Releases

- Four to five times per year
- Announced on

<http://www.cooperativepatentclassification.org/CPCRevisions/prereleases.html>

## 2017

- 1 January 2017
- 1 February 2017
- 1 May 2017
- 1 August 2017

# List of subclasses where 2000 series are used

Available on <http://www.cooperativepatentclassification.org/index.html> under Publications

CPC subclasses with indexing codes (2000 series)

A	B < B60	B ≥ B60	C	D	E	F	G	H
A01C	B01D	B60B	C01B	D01H	E01B	F01B	G01B	H01F
A01D	B01F	B60C	C01P	D03C	E01C	F01C	G01C	H01G
A01F	B01J	B60D	C02F	D03D	E01D	F01L	G01G	H01H
A01G	B01L	B60F	C03B	D03J	E01H	F01M	G01J	H01J
A01K	B02C	B60G	C03C	D05B	E02B	F01N	G01K	H01L
A01M	B03B	B60H	C04B	D05D	E02D	F01P	G01L	H01M
A01N	B03C	B60J	C07B	D06B	E03B	F02B	G01N	H01R
A22B	B03D	B60K	C07C	D06C	E03C	F02D	G01P	H01S
A22C	B04B	B60L	C07K	D06F	E03D	F02F	G01R	H02B
A23C	B04C	B60M	C08C	D06H	E03F	F02G	G01S	H02G
A23F	B05B	B60N	C08F	D06M	E04B	F02M	G01V	H02J
A23G	B05D	B60Q	C08G	D06N	E04C	F02N	G01W	H02K
A23N	B06B	B60R	C08J	D06P	E04D	F02P	G02B	H02M
A23P	B07B	B60S	C08K	D07B	E04F	F02W	G02C	H02P
A23V	B07C	B60T	C08L	D10B	E04G	F03G	G02F	H03B

# Guide to the CPC

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

Publications


- CPC Annual Reports
- Presentations
- Miscellaneous**
- Press releases
- Links
- FAQ

CPC XML schemas:

- Changes to be introduced in November 2016:
  - [Notification of schema \(xsd\) changes for CPC schem](#)
  - [Schema and sample files](#)

**Guide to the CPC:**

- [Guide to the CPC \(Updated 1 February 2017\)](#)



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## Guide to the CPC (Cooperative Patent Classification)

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

# Combination Sets (C-Sets)

List of 37 subclasses where combination Sets are used in the CPC published:

The screenshot shows the Cooperative Patent Classification website. On the left is a navigation menu with 'Publications' highlighted. The main content area features a blue box with a list of subclasses: F16M11/2021, F16M11/2028, F16M11/2035, F16M11/2042, F16M11/205, F16M11/2057, F16M11/2064, and F16M11/2071. Below this is a news article titled 'News' dated 28 September 2016, which states: 'The list of technical areas where Combination Sets are authorized for classification was published. The list is available here.' A red arrow points from this text to a table on the right side of the page. The table is titled 'LIST OF TECHNICAL AREAS AUTHORISED FOR USING C-SETS' and lists 33 subclasses. A red arrow also points from the 'Combination Sets' section in the 'Publications' menu to the table.

**Miscellaneous publications**

**CPC XML schemas:**

- Changes to be introduced in November 2016:
  - Notification of schema (xslt) changes for CPC scheme and definitions
  - Schema and sample files

**Guide to the CPC:**

- Guide to the CPC (Updated 16 June 2015)

**Subclasses where 2000 series symbols are used:**

- List of subclasses where 2000 series symbols are used

**CPC XML schemas:**

- Changes introduced in April 2015:
  - Notification of schema (xslt) changes for CPC scheme and definitions
  - Schema and sample files

**Combination Sets:**

- List of technical fields where Combination Sets are authorised

**LIST OF TECHNICAL AREAS AUTHORISED FOR USING C-SETS**

THE FOLLOWING 33 SUBCLASSES AND A23Y, B29K, C10N AND C22C AS SUBSEQUENT SYMBOLS ARE AUTHORISED BY J014 FOR ALLOCATION OF C-SETS.

SUBCLASS	Base symbols	Subsequent symbol(s)
1 A01N	A01N25/00-A01N65/48	A01N25/00-A01N65/48, A01N200/00
2 A23G	A23G1/305, A23G1/356, A23G3/345, A23G3/346, A23G4/062, A23G9/022, A23G9/52	A23G2200/00-A23G22/22
3 A23V	A23V2000/00	A23V2000/00-A23V2000/00, A23V

<http://www.cooperativepatentclassification.org/publications/CombiSetsListofFields.pdf>

## Combination Sets actions-followed

- **Standardized wording** for Notes in the Scheme signalling usage of C-Sets (in the places where C-Sets are used)
- **Standardized wording for Definitions** specifying the usage of C-Sets (in the places where C-Sets are used)
- In Q3 2017, **clean up of not-anymore-authorized C-sets** i.e. deletion of C-set and allocation of “split” symbols as single ones

*Example: current C-set “F04C2/18, A61B1/00” is not on the list of authorized ones. Will disappear but F04C2/18 as well as A61B1/00 will be allocated to the family as single symbols (if not already present)*

# C-Sets from National Offices in Espacenet (<http://worldwide.espacenet.com>)

**Classification:**

- international: C09J201/00; C09J5/00; C09J7/02; H01L21/301
- cooperative default: C09J7/0207; H01L21/6836; H01L21/78; H01L24/27; H01L24/29; H01L24/83; C09J2201/36; C09J2203/326; H01L21/67132; H01L2221/68318; H01L2221/68327; H01L2221/68336; H01L2221/68359; H01L2224/27436; H01L2224/2919
- CPCNO: C09J7/0207; H01L21/6836; H01L21/78; H01L24/27; H01L24/29; H01L24/83; C09J2201/36; C09J2203/326; H01L21/67132; H01L2221/68318; H01L2221/68327; H01L2221/68336; H01L2221/68359; H01L2224/27436; H01L2224/2919

**C-sets:**

- H01L2224/2919, H01L2924/0665, H01L2924/00,
- H01L2924/0665, H01L2924/00,
- H01L2924/0132, H01L2924/01031, H01L2924/01033, H01L2224/73265,
- H01L2224/32225, H01L2224/48227, H01L2924/00012, H01L2924/15311,
- H01L2224/73265 %2, H01L2224/32225 %2, H01L2224/48227 %2, H01L2924/00,
- H01L2224/92247, H01L2224/73265,
- H01L2224/32225, H01L2224/48227, H01L2924/00,
- H01L2924/3512, H01L2924/00

→ less

**Past:**

- only C-Sets from EPO/USPTO were displayed
- C-Sets not searchable

**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:  Siemens EP 2007



## C-Set attributes in XML of CPC scheme

**Starting with CPC release of February 2017, population of the XML attributes for CPC symbols as follows:**

- “**@c-set-base-allowed**” attribute from the authorised list set to “**true**”, all other symbols set to “false”
- “**@c-set-subsequent-allowed**” attribute set to “false” for all “Y section” symbols. Set to “true” for all other symbols.

# Future Developments

## Machine readable products

# CPC Products after CPC revisions

Products will be delivered in a **machine-readable** format, e.g. XML (available on <http://www.cooperativepatentclassification.org/index.html;jsessionid=1pn6q6z70vchj>)

- RCL (Revision Concordance List)
- CICL (CPC-to-IPC Concordance List)
- Validity File

→ **Completed in January 2017**

- CRL (Cross-Reference List)
- Compilation of changes

→ **For later ...**

# Future Developments

**A new approach for CPCNO data (CPC-INT project)**

## Current picture

## document level (CPCNO)

## family level (CPC)



<b>INPI Brazil</b>	<b>BR9910073</b>	<b>H01R 12/71</b>	
<b>SIPO</b>	<b>CN1306684</b>	<b>H01R 13/65</b>	
<b>EPO</b>	<b>EP1075714</b>		
<b>UKIPO</b>	<b>GB2353908</b>	<b>H01R 12/73</b>	
<b>KIPO</b>	<b>KR20010071195</b>	<b>H01R 13/6581</b>	
<b>PRV</b>	<b>SE0003892</b>	<b>H01R 13/6581</b>	
<b>USPTO</b>	<b>US6206729</b>		

# Future picture

family level  
(CPC)



<b>INPI Brazil</b>	<b>BR9910073</b>	<b>H01R 12/71</b>	
<b>SIPO</b>	<b>CN1306684</b>	<b>H01R 13/65</b>	
<b>EPO</b>	<b>EP1075714</b>	<b>H01R 12/71; H01R 13/6581</b>	
<b>UKIPO</b>	<b>GB2353908</b>	<b>H01R 12/73</b>	
<b>KIPO</b>	<b>KR20010071195</b>	<b>H01R 13/6581</b>	
<b>PRV</b>	<b>SE0003892</b>	<b>H01R 13/6581</b>	
<b>USPTO</b>	<b>US6206729</b>	<b>H01R 12/71; H01R 13/6581</b>	

Expected by the end of 2018

**H01R 12/73 (GB)**

# Thank you for your attention!

[www.cpcinfo.org](http://www.cpcinfo.org)

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[cpc@uspto.gov](mailto:cpc@uspto.gov)