

CPC

COOPERATIVE PATENT CLASSIFICATION

ANNUAL REPORT 2014

UNITED STATES
PATENT AND TRADEMARK OFFICE



Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

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Introductory Words by the USPTO and EPO Heads of Offices

Introductory words by Under Secretary of Commerce for Intellectual Property and Director of the USPTO Michelle K. Lee

On October 25, 2010, the United States Patent and Trademark Office (USPTO) and the European Patent Office (EPO) issued a joint statement that both Offices would “work toward the formation of a partnership to explore the development of a joint classification system based on the European Classification system that will incorporate the best classification practices of the two offices.” This promising collaborative agreement between the USPTO and the EPO marked the beginning of what is now known as the Cooperative Patent Classification System (CPC).

The CPC is designed to develop a common internationally compatible classification system for technical documents used in the patent granting process and has provided a more robust and agile classification system for both the USPTO and EPO user communities. As a result of our collaborative efforts, on January 1, 2015, the USPTO successfully transitioned from the United States Patent Classification (USPC) system to the CPC. Throughout the transition process, we have kept patent applicants and intellectual property owners and stakeholders informed about system changes. Since the launch, the USPTO has successfully issued approximately 47,000 U.S. Patent documents under the CPC.

Additionally, we made sure to keep patent applicants and owners updated on the status of the USPC system and USPC symbols on U.S. patent grants. Leading up to the changeover, throughout 2013 and 2014, numerous bilateral CPC events were held with external stakeholders, providing notice that the USPC would

Introductory words by the EPO President Benoît Battistelli

Two years after the official entry into force of the Cooperative Patent Classification (CPC) which we jointly developed with our partner, the USPTO, time has arrived to make a first balance of what has been achieved so far. I am therefore glad that we can report to you in the “2014 CPC Annual Report,” the first edition of its kind, regarding the 2014 activities. It follows the 2012 and 2013 issues of the “CPC News” in our endeavour to make the CPC a fully transparent system.

The CPC, when in its project phase, was a true challenge for our implementation teams across both sides of the Atlantic Ocean. Now that CPC is fully operational, it is part of the daily life of our examiners. Nevertheless, challenges still exist: our experts continue putting tremendous efforts in refining the system, by improving the suitability of the scheme with the new technological developments; in increasing its understanding by improving the definitions and also, in guaranteeing its reliability by ensuring a consistent usage of the classification symbols.

Some of the major patent offices around the world have demonstrated their confidence in the CPC by taking the decision to classify their own patent publications therein. Patent searchers have praised our endeavours in increasing the technical harmonisation via the CPC. Indeed, in very few years the CPC has become a world standard thereby paving the way for an increase in quality of the global patent system.

I am particularly pleased that the CPC has developed so well among the EPO’s Member States. There are already

**Introductory words by Under Secretary of Commerce
for Intellectual Property and Director of the USPTO
Michelle K. Lee (continued)**

become a static document collection for utility patents after December 2014. Throughout the beginning of 2015, stakeholders saw a limited amount of U.S. patent grants still issuing with USPC symbols due to allowed applications already in the publication cycle, and the USPTO will no longer actively assign USPC symbols to issued utility patents. However, plant and design patents are not covered in the CPC and therefore will continue to be published with USPC symbols.

To facilitate searching for documents, the USPTO's existing tools have been modified to provide all users with the ability to search documents classified in the CPC, USPC (a static document collection, as of January 2015), and International Patent Classification systems. USPTO Examiners are now required to classify and search using the CPC, and I want our user community to understand that the CPC will be continuously updated through bilateral revision and reclassification projects between the USPTO and EPO. Additional steps are being taken to create a bilateral examiner-focused collaborative environment for discussions, work-sharing initiatives, and training opportunities.

As a leader in the global patent community, the USPTO is dedicated to providing a quality classification system for employees and stakeholders that is compatible with the international patent classification community. Most importantly, we will ensure that the quality of the classification system remains strong and agile for generations to come. The CPC provides a more comprehensive search result set including Chinese and Korean national documents as well as several other countries classifying their national documents into the CPC that were not available under the USPC classification system. We intend to keep the quality high by facilitating additional countries classifying their national documents into the CPC as well as working with the EPO to perform an appropriate number of CPC revision projects each year.

**Introductory words by the EPO President Benoît Battistelli
(continued)**

12 European patent offices which are classifying into the CPC, or which have indicated that they are about to classify into the CPC, namely; Austria, Czech Republic, Denmark, Finland, Greece, Hungary, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. Therefore, the CPC is proving to be a motor for technical harmonisation also in Europe to the benefit of users worldwide. Speaking of users, I am also pleased that they have participated so actively in shaping the CPC. During the numerous regular meetings that the EPO has with the user community, CPC has been a standing point on the various agendas. We should bear in mind that legal certainty, achieved to a large extent through a high quality search, is extremely important to the users of the patent system. Through the implementation of the CPC we are increasing the accessibility of technical information to applicants who in turn can improve the quality of their patent applications. This is indeed where quality starts, at the very beginning, i.e. with the drafting of the patent application.

All users of the CPC can rest assured of our full commitment to maintaining the CPC as the best possible and most efficient system for refined patent classification.

I am convinced that the following pages, focusing on the 2014 CPC activities, provide for interesting reading and shed some light on the remarkable progress achieved in this important endeavour of harmonisation.



EPO President Benoît Battistelli and
Under Secretary and Director of the USPTO Michelle K. Lee

From project to reality

Back in 2010, the EPO and USPTO had already been working together in the area of classification harmonization for almost a decade, first in a Trilateral framework together with the Japan Patent Office (JPO), later within the IP5 program with additionally the patent offices from Korea (KIPO) and China (SIPO).

Although harmonization was not impossible, both offices realized that tremendous efforts, resources and time were needed to make progress to bring closer two (or even) three classification systems which had been designed with different philosophies. At that point in time, a breakthrough was about to happen owing to the vision of two leaders, Mr Battistelli, President of the EPO and Mr Kappos, at the time Deputy under Secretary of Commerce and Director of the USPTO.

During a working dinner in September 2010 in Geneva, both discussed the concept which paved the way for what would become the Cooperative Patent Classification (CPC). No later than a month later, on 25 October 2010, they signed an agreement "to work toward the formation of a partnership to explore the development of a joint classification system based on the European Classification system (ECLA) that will incorporate the best classification practices of the two offices."

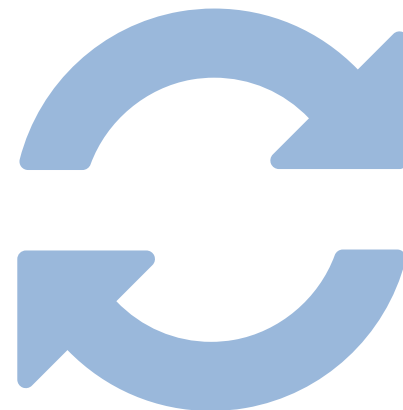
The first cornerstones of the CPC were laid: project structures were put in place in Europe and in the USA and the joint work started with the firm objective to launch the CPC on 1 January 2013. On 25 October 2011, to mark the signature of the agreement and to reach out about the project, a CPC dedicated bilateral website was launched at www.cpcinfo.org.

After 13 bilateral CPC Implementation Group meetings, several meetings dedicated to the related information systems and others to the required quality assurance, the contours of the new classification system were defined and agreed between the two offices.

On 1 October 2012, the so called "CPC launch scheme" was made publicly available via the CPC website to enable all to be prepared for the official launch.

And finally, on 1 January 2013, the CPC entered into force becoming the official patent classification system for the EPO and the USPTO. The giant leap forward imagined by two visionary leaders around a table turned into a reality for 12,000 examiners at both offices and many more external users of patent classification.

The rest is history for the future...



2014 statistics

USPTO and EPO examiners collaborate jointly to maintain the CPC schemes and definitions. All changes are agreed by both the EPO and USPTO resulting in the same understanding of the new scheme in both offices, and the possibility to share reclassification resources are shared in order to classify documents, to revise the scheme when necessary and to subsequently reclassify documents. Revision are made by both Offices on a regular basis allowing for a rapid response to filing trends and emerging technologies. Scheme changes and developments are negotiated by USPTO and EPO examiners jointly via a collaboration tool by exchanging comments to establish a common position.

In 2014, the USPTO and EPO jointly completed 33 revision projects and 4 maintenance projects. As a result of these projects 828 new symbols were created and 92 new definitions were added to the CPC.

[The list of CPC projects completed in 2014 is included in appendix 1.](#)

CPC Coverage

CPC is the classification system used by the USPTO and EPO as of 1 January 2013. CPC covers the patent documentation as presented in the table below in the column entitled "Systematically classified." This table refers to dates from which priorities of documents were systematically recorded and documents systematically circulated to the EPO classifiers for intellectual classification into ECLA until 2013, then into CPC from January 2013 onwards. (Note that WO documents in non EPO languages are classified into CPC based on their title, abstracts and figures).

While in 2014 the EPO kept classifying US documents in CPC, since 1 January 2013 also the USPTO started to classify all US documents, all A-publications (PG-Pubs) and some B-publications in CPC.

CPC 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 filing resident 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)	
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 E I -defensive I -trial, project H	complete from 1 (13/07/1836) complete from 8 (23/4/1839) complete from 120 (04/10/1855) complete from 1 (03/12/198)	
World(PCT)	WO		complete from 7800001 (19/10/1978)	

* for first filings only, i.e. without foreign priorities

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

*** this means that some documents in the specified range of the collection are classified in CPC

Since classification by the EPO or USPTO into CPC is done at family level, as soon as one member of a simple family is classified by the EPO or USPTO, all documents of the simple family receive the same allocation(s). This results in a substantial number of, e.g. Chinese, Korean, Japanese, Brazilian or Russian patent documents to be classified in CPC. The data below are from mid-March 2015:

Country	Number of documents available in DocDB	Number of documents classified in CPC (DocDB & CPCDB)	% of documents classified in CPC
China	8,579,224	1,627,479	18.8%
Korea	2,810,926	878,787	31.3%
Brazil	527,234	310,234	58.8%
Russian Fed.	2,070,407	244,158	11.8%

*source: DocDB

Country Code	Total number of documents (DocDB)	Number of publications with CPC or CPCNO	Number of publications with CPCNO
AT	999,778	643,087	2,098
ES	1,017,109	589,522	27,853
FI	191,815	110,446	4,563
GB	2,351,431	2,094,392	104,312
GR	98,582	51,990	4,654
SE	518,545	327,845	136,940
CN	8,579,098	1,627,479	29,560
Total	13,756.358	5,447,761	309,980

Furthermore, a growing number of National Offices classify their own documents into CPC at document level and deliver their CPC data to DocDB and CPCDB. These data are presented below (mid-March 2015).

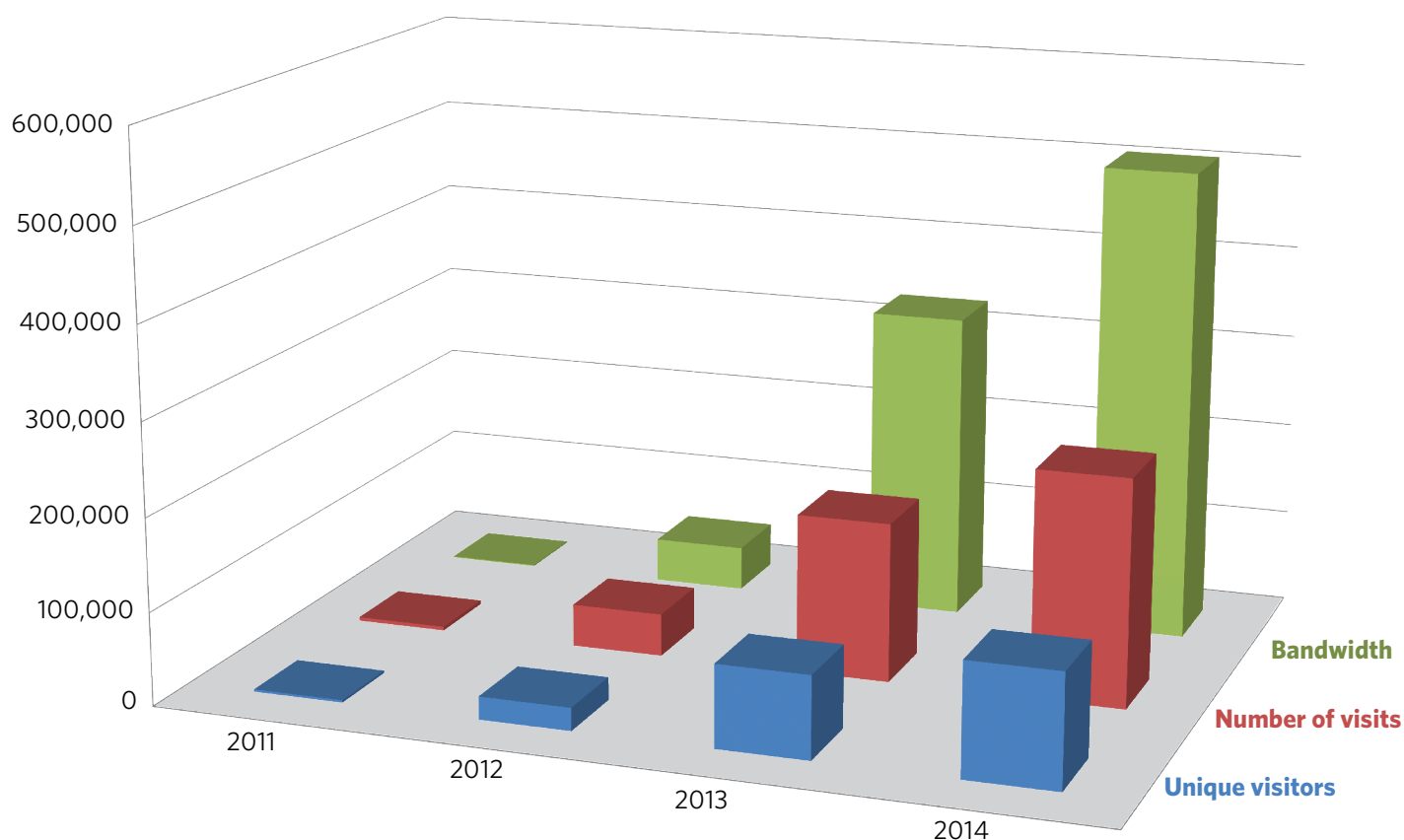
All in all, almost 42 million documents from all around the world carry CPC symbols and can be used directly for searching prior art.

Usage statistics for the www.cpcinfo.org website

www.cpcinfo.org, launched on 25 October 2011, is the official website of the CPC. Its content is jointly administered by the EPO and the USPTO. On the occasion of the present annual report, the EPO and the USPTO would like to present you some key statistical information about the site.

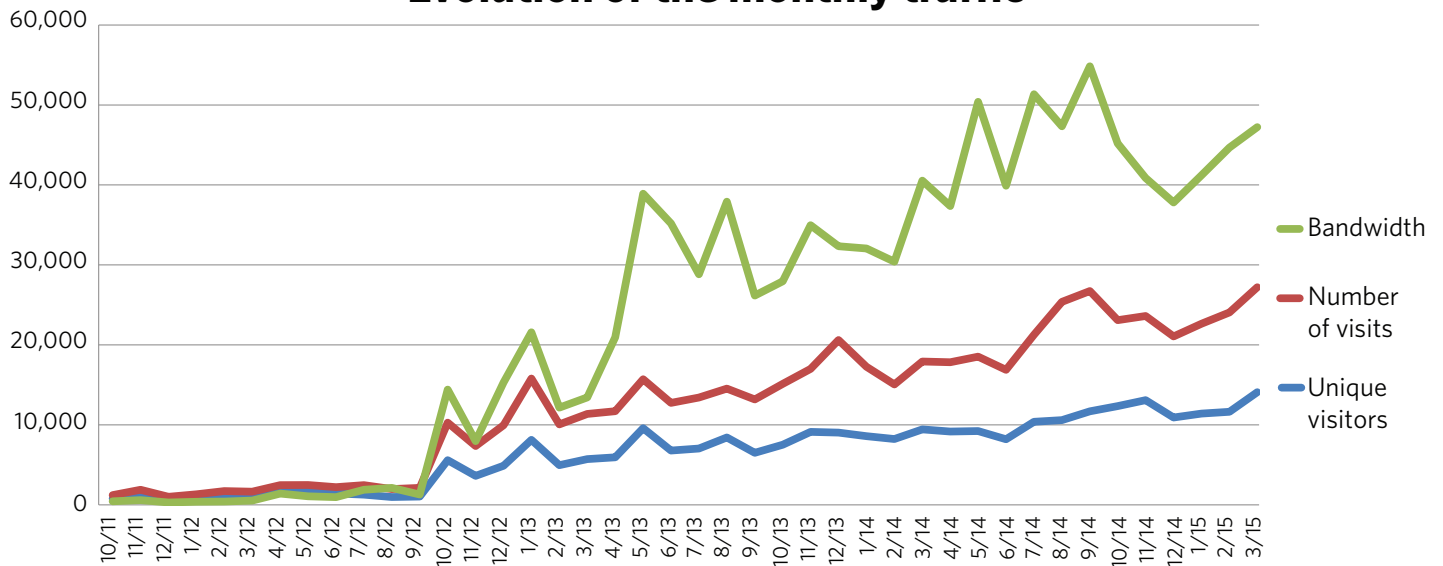
With a steady increase in the number of visitors and in the bandwidth used 2014 saw the highest number of visits (244,638) as well as unique visitors (121,924) since the launch of the website. In parallel, 2014 saw an unprecedented 500 GB of data traffic via the website.

2011-2014 Traffic Evolution



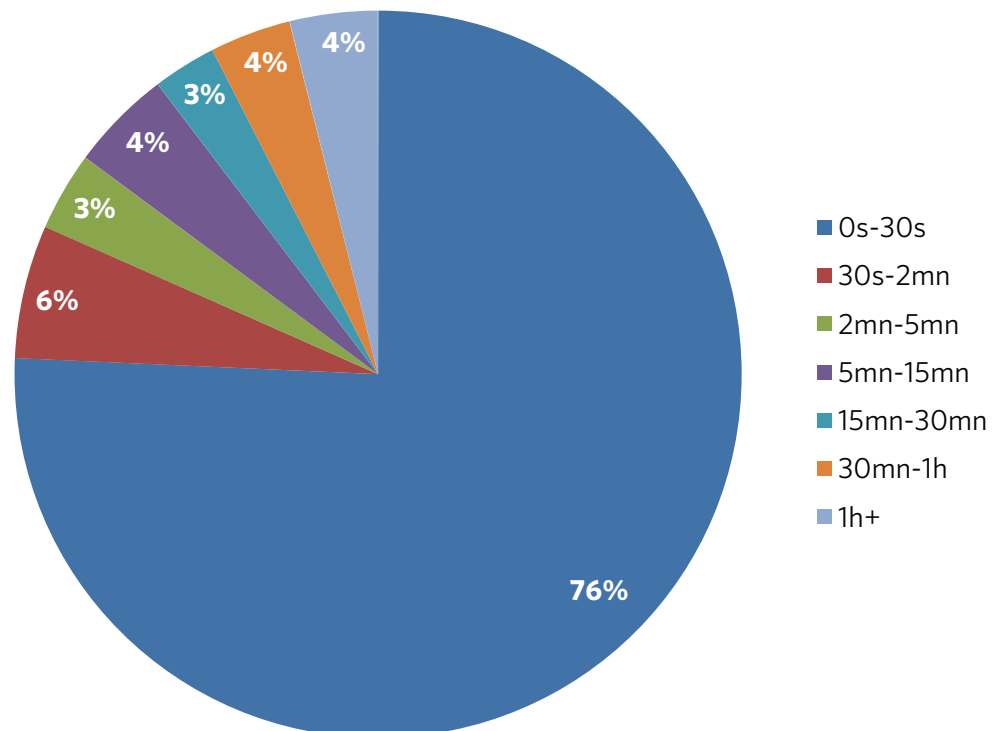
Also, when looking at the monthly progression, the steady increase mentioned above is clearly visible. When new revisions of the CPC were published, localized peaks in the bandwidth usage occurred.

Evolution of the monthly traffic



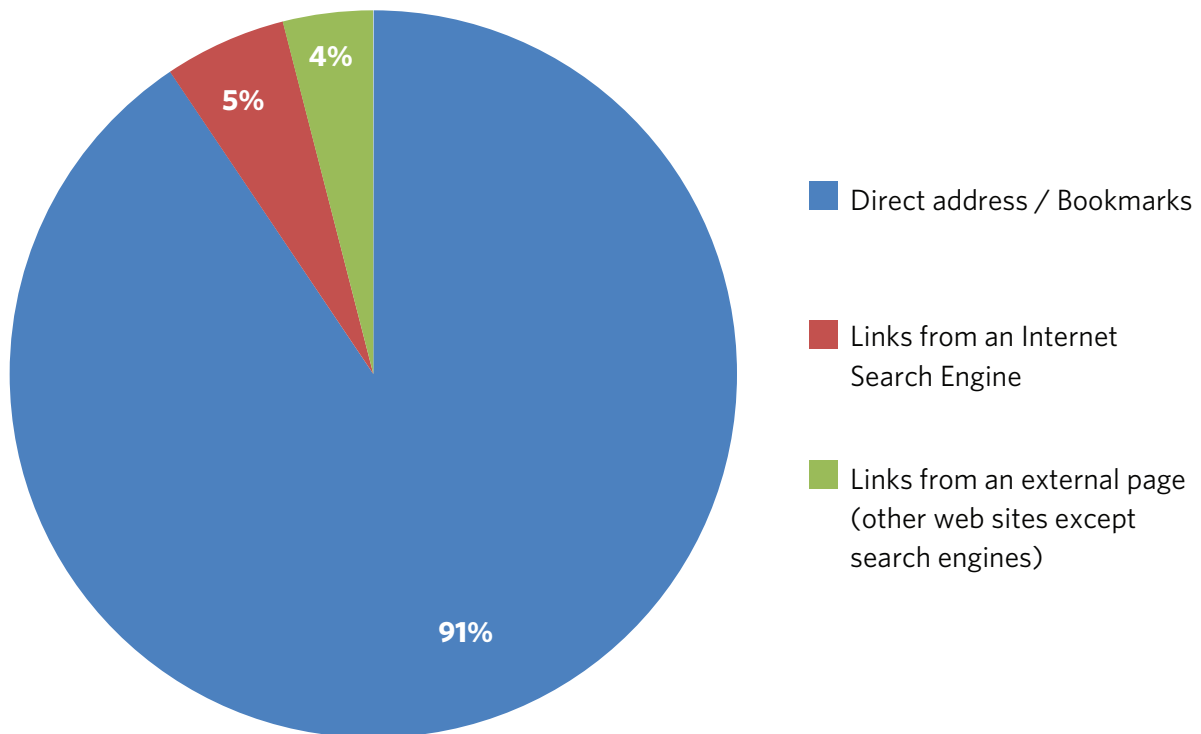
Another interesting statistic is the time spent per visit, with 76% of the visits lasting less than 30s. However, the average duration of a visit was of 329s, i.e. between 5 and 6 minutes.

Visits duration



Finally, when observing that more than 90% of the visitors arrive at the www.cpcinfo.org website using a direct URL or a bookmark and only 5% arrive at the site via a search engine, it is clear that the vast majority of the visitors who consult www.cpcinfo.org are specialists who already know about the existence of the website.

Origin of visits



USPTO transition to CPC

The USPTO Management and its examiner union worked collaboratively during transition of its examiners to CPC. USPTO provided examiners with the necessary learning adjustments during their CPC transition. The EPO and USPTO collaboratively worked together to publish CPC Schemes and Definitions as much as possible and still continue working on this important task progressively to provide definitions for the subclasses and groups which require definitions to further improve clarification of the classification practice.

USPTO First Line managers and experienced examiners in different technical fields were early entrants into CPC by taking computer based "Block Training" modules and Field Specific Training (FSTs) to become familiar and acquainted with the basic structure of CPC, classification rules, tools and resources and the classification practice in their designated technical fields in which they examine and search. These managers and examiners served as "Quality Nominees" (QNs) for their technical fields. These QNs are a resource to other examiners and have been assisting other examiners in learning CPC.

The second part of transition included transition of all examiners into CPC. The examiners had to go through the same rigorous training as the QNs to get acquainted with

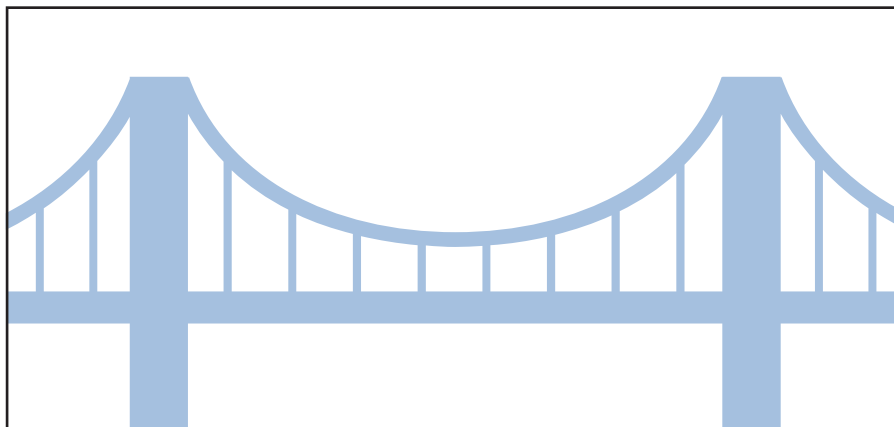
the CPC classification practice in their technical fields. The QNs have been instrumental in helping examiners within their art units for successfully transitioning into CPC.

Y10S and Y10T are temporary tools created to assist USPTO examiners to transition into CPC. The subject covered by Y10S was originated from former USPC Cross-Reference Art Collections and Digests. The Y10S subgroups created in July 2013 were populated for both the back-file and front-file with patent families classified in the selected USPC XRACs and Digests based on a 1:1 mapping of Y10S-USPC concordance.

Y10T covers subject matter of primary USPC subclasses that do not properly map to CPC subgroups.

These collections in section Y are for accommodating cross-sectional technologies that may not fit in another section of CPC; the classification symbols applied do not in any way replace the required classification symbols or indexing codes of the other sections.

As of the end of 2014, the scheduled transition at the USPTO ended.



Summary of training activities in 2014

As part of the preparations for its transition into CPC, the USPTO has conducted cascading multi-phased training program for its examiners to ensure efficient and smooth transition.

Classification workshops

CPC Quality Enhancement Training Events are organized when EPO examiners visit the USPTO. EPO and USPTO Quality Nominees/experts/examiners participate in a discussion in specific CPC fields and share their classification and search practices in the fields to improve the classification consistency.

Selected USPTO QNs and their corresponding EPO experts participated in a series of successful CPC workshops. USPTO's classification contractor also participated in the workshops either in person or via WebEx. The objectives for the workshops were to (1) increase EPO classification practice knowledge transfer to the USPTO and its classification contractor, (2) determine where ambiguities in CPC classification practice, the CPC scheme, or CPC definitions exist and how these ambiguities could be eliminated, e.g. by changes to the CPC scheme and definitions via CPC revision efforts and (3) to improve the consistency in the classification/search of the technical fields. These workshops provided valuable insight into EPO classification practices while also highlighting areas where the current guidance in the CPC definitions could be improved, and which were considered for either CPC revision or definition change proposals. In 2014, USPTO and EPO experts conducted nine workshops in which experts discussed the classification practice in their related technical fields.

Examiner exchanges

Examiners from the USPTO met with EPO examiners in their related technical fields. These visits further promoted classification harmonization and cooperation between the two offices. These visits are considered as classification enhancement and a learning experience for examiners from both offices. In 2014, 22 USPTO examiners visited the EPO to meet with their corresponding EPO examiners in related art to discuss classification issues.



Summary of activities with other National Offices (NOs)

Since 1 January 2013, the Cooperative Patent Classification (CPC) is the official internal classification scheme used by the EPO and the USPTO as a result of the joint agreement signed in October 2010 by the EPO President Battistelli and the USPTO Director Kappos.

EPO Member State National Offices which were already classifying their documents into the European Classification (ECLA), continued to do so under CPC, and adapted their processes and IT infrastructure accordingly. In 2014, the following EPO Member State National Offices were classifying their documents in CPC and delivering them to the EPO: AT, ES, FI, GB, GR and SE, as can be seen in the “CPC coverage table” below. It is envisaged that additionally in 2015 CZ, DK, HU, NO and PT will follow.

Since the start of the CPC, a number of other National Offices (NOs) have signed agreements with the EPO and/or USPTO in order to start classifying in the CPC and delivering the corresponding classification data for incorporation into the CPC database. The table below indicates the dates of these agreements:

NO	MoU/Agreement Signed with	Date
SIPO	EPO	3 June 2013
KIPO	USPTO	5 June 2013
KIPO	EPO	3 June 2014
ROSPATENT	EPO	25 September 2013
INPI Brazil	EPO	17 December 2013

Three major elements were part of the CPC cooperation with these Offices in 2014:

1. Training on CPC of examiners and classifiers from the NO in 2014
 - General and advanced CPC training was provided at ROSPATENT;
 - Field-specific training was provided at the EPO in The Hague and Munich to examiners and classifiers from SIPO, KIPO, INPI Brazil and Rospatent in a number of selected, particularly relevant technical fields.
2. Provision by the NO of CPC data to the EPO for storage in DocDB and CPCDB; EPO technical support to achieve it
 - In 2014, SIPO classified its newly published documents from 43 technical fields, KIPO from 25 pilot fields, and INPI Brazil from areas covered by the 11 divisions trained.
 - In 2014, the IT teams from the NO and the EPO have been in contact to agree on the format and exchange processes for CPC data. This resulted in SIPO being in a position to deliver CPC production data since the end of 2014.

Provision of quality measures to support the NO in the consistent usage of the CPC

- Following the field-specific training sessions at the EPO, Offices were invited to classify a few documents into CPC. The results of the classifications by the National Office were then evaluated at the EPO and feedback provided to the National Offices.

A successful story: CPC Scheme for Additive Manufacturing into IPC2015.01

Towards the middle of 2014, WIPO pre-released the version of the International Patent Classification (IPC) scheme that would enter into force on 1 January 2015. The IPC2015.01 version was afterwards officially released at the end of 2014.

Remarkable was the creation of a new class (B33) and subclass (B33Y), to provide users with a scheme to classify and search additive manufacturing technology – also known as “3D printing.”

The revision was initiated by the USPTO & EPO, which together quickly came in agreement to a consolidated CPC “secondary supplementary classification scheme” for Additive Manufacturing.

This CPC scheme was offered to the IP5 partners first and the IPC community afterwards.

The scheme was finalized and approved by the IPC Revision Working Group at WIPO, taking into account some linguistic and layout improvements.

The B33Y scheme was ready for IPC2015.01 less than one year after starting its preparation in CPC.

For full details about the changes to the classification symbols of IPC2015.01, please go to www.wipo.int/ipcpub/. Set the “Version” in the left-hand column to “2015.01” and then open the “Compilation” tab.

The IPC sub-classes/main groups shown in the table below contain the most substantive modifications of this IPC version. The EPO & USPTO have already undertaken the necessary steps to bring the CPC scheme in line with the new IPC.

IPC sub-classes/main groups with the most substantive modifications in IPC2015.01

A61K 35/00	Medicinal preparations containing materials or reaction products thereof with undetermined constitution
A63B 49/00 - 102/00	Stringed rackets (e.g. for tennis) and golf clubs, including new indexing scheme for clubs, bats and rackets (A63B 102/00)
B33, B33Y	Additive manufacturing technology - also known as “3D printing”
E05F 15/00	Power-operated mechanisms for wings
F21V 29/00	Protecting lighting devices from thermal damage; Cooling or heating arrangements specially adapted for lighting devices or systems
G02B 1/00	Optical elements characterised by the material of which they are made
H01Q 5/00	Arrangements for simultaneous operation of aerials on two or more different wavebands Indexing scheme for special adaptation of control arrangements for generators
H04B	Transmission

Summary of 2014 Communication activities

Since the early days of the CPC, the EPO and the USPTO have strived to make the CPC a very transparent system to all. Efforts were made to reach out to all parties possibly impacted by the change to a new classification system at as many events as possible.

With this objective in mind, the EPO and USPTO co-organized the first CPC Annual Meeting on 24 and 25 February 2014. The World Intellectual Property Organization (WIPO) kindly hosted the event at its premises in Geneva.

Over two days, one dedicated to industry users, the second to the national patent offices classifying or intending to classify in the CPC, recent and upcoming changes to the CPC were presented and discussed. This forum was a unique opportunity for all involved closely with the CPC to meet with the experts.

Valuable feedback for possible improvements was also collected. The vast majority of the suggestions formulated were implemented along the year 2014 (e.g. pre-release of CPC products prior to entry into force, publication of a list of areas where Combination Sets are used, etc.).



The table below itemizes events where CPC was presented/discussed:

Date		Meeting	Host/Venue
February 5	2014	CPC Lunch and Learn Sessions for Examiners	USPTO, Alexandria, VA
February 11	2014	CPC Lunch and Learn Sessions for Examiners	USPTO, Alexandria, VA
February 18	2014	CPC Examiner Expo Event	USPTO, Alexandria, VA
February 24	2014	1st EPO-USPTO CPC Annual Meeting with Industry	Geneva, CH
February 25	2014	1st EPO-USPTO CPC Annual Meeting with CPC National Offices	Geneva, CH
February 25	2014	CPC Examiner Expo Event	USPTO, Alexandria, VA
February 26	2014	CPC Examiner Expo Event	USPTO, Alexandria, VA
February 27	2014	PIUG Conference	Boston, MA
March 3-5	2014	IPI Confex	Berlin, DE
March 20	2014	SACEPO	Vienna, AT
March 24-27	2014	IP5 Working Group 1 meeting	Beijing, CN
April 2	2014	Handelskammer Hamburg	Hamburg, DE
April 3	2014	Search Matters	EPO, The Hague, NL
April 10-11	2014	East Meets West	EPO, Vienna, AT
April 14-15	2014	PDG/IMPACT meeting	Vienna, AT
April 26-May1	2014	PIUG Annual Conference	Orange County, CA
July 7-11	2014	IP Executive week	EPO, Munich, DE
July 8	2014	EPO-UIBM	Rome, IT
October 14-17	2014	IP5 Working Group 1 meeting	Munich, DE
October 16	2014	PDG/IMPACT meeting	Munich, DE
October 22	2014	Partnering in Patents	Alexandria, VA
November 4-6	2014	EPO Patent Information Conference	Warsaw, PL

CPC Information services available

CPC Information services available

Cooperative Patent Classification on the World Wide Web: The USPTO and EPO jointly maintain an internet site providing CPC information to the public, such as, the CPC Scheme and Definitions, bulk data and Notice of Changes to the schemes and definitions.

See www.CPCinfo.org or www.cooperativepatentclassification.org/index.html

Joint products and services

CPC scheme, notes, warnings and definitions

The CPC scheme including its notes and warnings gives the information necessary to search and classify in a technical area. The corresponding definitions provide further information on the classification practice in the technical area as well as clarify the meaning of terms and the relationships between technical areas, according to a well-defined format based on the one used for IPC Definitions. The CPC scheme and definitions are available under www.cpcinfo.org or via Espacenet (www.worldwide.espacenet.com).

- CPC Scheme - 250 000 symbols (PDF, XML)
 - organized per section, from A to H and Y, and subdivided at subclass level
 - 1 PDF file per subclass
 - all XML files are compressed together in a ZIP file
 - previous versions are stored in an "Archive" area
- CPC definitions (PDF, XML)
 - 626 CPC Definitions (one per subclass)
 - 1 PDF file per subclass
 - all XML files are compressed together in a ZIP file
 - Normally no CPC Definitions are created for indexing subclasses
 - CPC Definitions are adapted when the corresponding part of the CPC Scheme is revised

Guide to the CPC

A "Guide to the CPC" was prepared in 2014. This guide explains the CPC system and defines the terminology used in CPC ("further breakdown symbols, 2000 series, etc.). At the time of publication, the "Guide to the CPC" is available on www.cpcinfo.org under the item "Publications."

Publications

In this section, information material is available for download.

Guide to the CPC:

- Guide to the CPC (Updated 16 June 2015)

List of valid symbols

The list of valid symbols is published for each new version of the CPC scheme on www.cpcinfo.org under "CPC revisions."

List of technical areas where 2000 series are used

A list of technical areas where 2000 series are used was prepared and published early 2015 on www.cpcinfo.org.

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	HO1F
A01D	B01F	B60C	C01P	D03C	E01C	F01C	G01C	HO1G
A01F	B01J	B60D	C02F	D03D	E01D	F01L	G01G	HO1H
A01G	B01L	B60F	C03B	D03J	E01H	F01M	G01J	HO1J
A01K	B02C	B60G	C03C	D05B	E02B	F01N	G01K	HO1L
A01M	B03B	B60H	C04B	D05D	E02D	F01P	G01L	HO1M
A01N	B03C	B60J	C07B	D06B	E03B	F02B	G01N	HO1R
A22B	B03D	B60K	C07C	D06C	E03C	F02D	G01P	HO1S
A22C	B04B	B60L	C07K	D06F	E03D	F02F	G01R	HO2B
A23C	B04C	B60M	C08C	D06H	E03F	F02G	G01S	HO2G
A23F	B05B	B60N	C08F	D06M	E04B	F02M	G01V	HO2J
A23G	B05D	B60Q	C08G	D06N	E04C	F02N	G01W	HO2K
A23N	B06B	B60R	C08J	D06P	E04D	F02P	G02B	HO2M
A23P	B07B	B60S	C08K	D07B	E04F	F02W	G02C	HO2P
A23V	B07C	B60T	C08L	D10B	E04G	F03G	G02F	HO3B

Concordances (TXT, PDF, XML)

One-to-one concordances were generated and published on www.cpcinfo.org under the heading “Concordances”:

- a. CPC-to-IPC (adapted after each CPC or IPC revision)
- b. CPC-to-ECLA (static table, not updated after CPC revisions)

Support for revisions

a. List of revision projects

A list of CPC revision projects is made available to the public on www.cpcinfo.org.

The screenshot shows the 'Ongoing CPC Projects' section of the website. On the left is a navigation menu with 'Projects' highlighted and a red arrow pointing to the table. The table lists several projects with their numbers, statuses, and CPC codes. A search bar and logos for the European Patent Office and the United States Patent and Trademark Office are also visible.

Project number	Status	CPC	
MP0139	active	A	Deletion of Warnings Section A
RP0174	active	A01H1/00-1/08;5/00-5/12	Flowering Plants 2
MP0156	active	A21D	Note
RP0137	active	A24B15/16	Chemical features of tobacco substitutes
RP0073	active	A47B83/02	Tables combined with seats
RP0019	active	A47C	Chairs

Screen shot of projects listing on www.cpcinfo.org site.

b. Notices of Changes (NoCs)

Notices of Changes (NoCs) are PDF documents detailing the changes made to the scheme following a CPC scheme revision.

They are available one to two months prior to the entry into force of a new version of the CPC Scheme. An indication of the revised area in the hyperlink is present since early 2015.

The screenshot shows a website interface with a blue header containing 'F16M11/205' and a search bar. On the left is a navigation menu with the following items: Home, Latest news, About CPC, Objectives, CPC Scheme and Definitions, CPC Revisions (with sub-items: Notice of Changes, Projects, Pre-release), CPC Concordances, CPC Training, Impact, Events, Publications, Press releases, Links, FAQ, Archive, Contact Us, and Sitemap. The main content area is titled 'Notice of Changes' and lists 'CPC 2015.07:' followed by a bulleted list of 14 links, each representing a Notice of Change with a specific CPC class (e.g., 83-MP0109 (C07H), 84-MP0119 (various subclasses), etc.). A red arrow points from the 'Notice of Changes' link in the left menu to the first item in the list.

Screen shot of list of Notice of Changes

c. Scheme pre-releases

New CPC scheme versions enter into force on the first day of a month (on an up-to-monthly basis). On the first Tuesday of the preceding month, the CPC scheme is pre-released on www.cpcinfo.org under the heading "Pre-release."

USPTO products and services

The USPTO maintains World Wide Web (WWW) sites on the Internet, which permit the public free access to selected information related to patents and trademarks through interactive search requests or downloadable data files. See <http://www.uspto.gov>.

Examples of products available for free online access are CPC schemes and definitions, CPC deliverables, CPC Notice of Changes (NoCs) which are documents detailing the changes made to the scheme following a CPC scheme revision and seven step strategy for searching U.S. patents and published applications in CPC. See <http://www.uspto.gov/patents-application-process/patent-search/classification-standards-and-development>.

EPO products and services

In order to help users worldwide to better understand the CPC classification system and use it in an efficient way, a number of CPC products and support means have been developed.

E-learning modules

The European Patent Academy has developed some e-learning modules to support CPC in 2014. New modules were made available in early 2015 on www.cpcinfo.org under the heading "CPC Training":

- Course main page
- Course content
- Introduction
- Level 1 - Understand...
- Level 2 - Classifying...
- Level 3 - Tools and...
- Level 4 - CPC defini...

Using CPC in classification

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

[Click here to know more about the course](#)

▼ Open all ▲ Close all

- Introduction
- Level 1 - Understanding the CPC
- Level 2 - Classifying with the CPC
- Level 3 - Tools and practical matters
- Level 4 - CPC definitions

Web services

a. Upload of classification data from National Offices

In July 2014 EPO's web services were put in production to upload CPC data from National Offices. These services make it possible for an office to also deliver reclassification as well as correction data to the EPO.

b. Open Patent Services (OPS) RESTFUL classification web services

These services allow the download of classification information: <http://www.epo.org/searching/free/ops.html>

- CPC Retrieval
- CPC Media retrieval
- CPC Search (find CPC symbols by searching title and abstract)
- Concordance mapping service (ECLA/CPC/IPC)

CPC in Espacenet

In 2014, further improvements were brought to the Espacenet browser for CPC:

a. Interleaved presentation of further breakdown CPC symbols

The screenshot shows the Espacenet search interface. At the top, there is a search bar with the text "a keyword or a classification sy" and a "Search" button. To the right, there are navigation links: "View section", "Index", and a series of letters A through Y, with "G" highlighted. Below the search bar, there are social media icons and a "2000" filter button. A red arrow points to this button with the text "display 2000 series (interleaved)".

The main content area displays a list of classification symbols and their descriptions. The symbols are: G01, G01W, G01W 1/00, G01W 2001/003, G01W 2001/006, G01W 1/02, G01W 1/04, and G01W 1/06. The descriptions are: MEASURING (counting G06M); TESTING; METEOROLOGY (influencing weather conditions A01G 15/00; dispersing fog E01H 13/00; instruments for measuring single variable in general, see the appropriate subclass of G01, e.g. G01K, G01L; obtaining meteorological information by radar G01S 13/95); Meteorology; Clear air turbulence detection or forecasting, e.g. for aircrafts; Main server receiving weather information from several sub-stations; Instruments for indicating weather conditions by measuring two or more variables, e.g. humidity, pressure, temperature, cloud cover, wind speed (G01W 1/10 takes precedence); giving only separate indications of the variables measured; giving a combined indication of weather conditions (catathermometers for measuring "cooling value" related either to weather conditions or to comfort of other human environment G01W 1/17; computers per se G06).

On the left side, there is a "Quick help" section with several questions and answers, and a "Selected classifications" section with the text "nothing selected".

b. Display of C-sets and CPCNO data:

b. Display of C-sets and CPCNO data:

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](#)

in 2014: AT, CN, ES, FI, GB, SE, GR (document level)

c. Embedded definitions

Definitions were already available in PDF format (www.cpcinfo.org). In 2014, further improvements were brought to the Definitions: they are now also available displayed embedded in the CPC scheme at each hierarchical level where they are available.

C07C 50/00 **Quinones** (for quinone methides, see unsaturated ketones with a keto group being part of a ring) D i

C07C 51/00 **Preparation of carboxylic acids or their salts, halides or anhydrides** (of acids by hydrolysis of oils, fats or waxes [C11C](#)) D

Definitions

Definition statement
This subclass/group covers:

The preparation, separation, purification and stabilisation of acyclic or carbocyclic carboxylic acids or their salts, carboxylic acid anhydrides or carboxylic acid halides.

References relevant to classification in this group
This subclass/group does not cover:

Fatty acids by chemical modification of fats, oils or fatty acids obtained therefrom	C11C3/00
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Appendix 1 CPC Projects Completed in 2014

Project	Subclass	Date
MP0018	A63F, B01D, B29C, E05B, F23M, H01M, H01R, H02K, H02P, H02S, H04L, and H04N	14-Jan
MP0112	B60C, F24F, and G06Q	14-Jan
MP0102	A61B, A61C, A61F, A61J, A61K, A61M, A62D, A63B, A63F, F01C, F04C, H01G	14-Feb
RP0004	A61M	14-Feb
RP0005	A61M	14-Feb
MP0114	C12Q, C23C, E02D, F02B, F25D, G03B, G10K, H04L, and B63B	14-Jun
RP0034	F23G	14-Jun
RP0037	F41H	14-Jun
RP0039	F02M	14-Jun
RP0067	F01N	14-Jun
RP0042	H02G	14-Jul
RP0045	F02M	14-Jul
RP0061	H03K and G10H	14-Jul
RP0068	E05B, B60R, and B61D	14-Jul
RP0072	H03M	14-Jul
RP0032	H01L	14-Sep
RP0040	A61H	14-Sep
RP0063	A63F	14-Sep
RP0069	C09D	14-Sep
RP0001	B60R	14-Oct
RP0043	H05K	14-Oct
RP0044	H05K	14-Oct
RP0053	A61K	14-Oct
RP0111	A61H, B65H, C07C, E0D4, F01N, F16D, F16H,	14-Oct
MP0108	C12P, F16H, F01N, F16D, B22F, and A61B	14-Nov
RP0038	C12N	14-Nov
RP0046	C07K	14-Nov
RP0062	H04N	14-Nov
RP0079	B62B	14-Nov
RP0088	H01L	14-Nov
RP0015	B33Y	14-Dec
RP0017	B60R	14-Dec
RP0025	B64D	14-Dec
RP0058	A47B	14-Dec
RP0070	G01R, H01L, H02N, H02S, F24J, E04D and E02S	14-Dec
RP0071	G01N	14-Dec