10th CPC annual meeting with offices classifying in the CPC

08-09 March 2023
Topics

• 10 years in the CPC

• CPC data coverage

• CPC harmonisation and training

• A dynamic CPC Scheme

• Update on Collaboration Environment tool
10 years in the CPC

From a bilateral initiative to a global international classification system
The start of an incredible adventure – October 2010

USPTO and EPO Work Toward Joint Patent Classification System

"In view of the significant benefit to stakeholders of developing a transparent and harmonized approach to a global classification system for patent documents; in order to make the search process more effective; and in the belief that cooperation between their two offices will facilitate progress in undertaking classification harmonization projects under the IP5 Common Hybrid Classification initiative, the USPTO and the EPO have agreed together 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. This system would be aligned with the World Intellectual Property Organization (WIPO) classification standards and the International Patent Classification (IPC) structure. Accordingly, they have initiated discussions on governance and operational aspects of such a partnership.

The IP5 partner offices will be continually apprised of progress at appropriate IP5 forums. Stakeholders will receive regular updates on the substance and progress of classification partnership discussions between the two offices."

October 25, 2010
CPC scheme – sections A-H

Classification (INV/ADD)

“Main trunk”

Indexing code (ADD)

Indexing (ADD)

“2000-series” or “Indexing” area

IPC + {CPC}

{CPC only}

“Further Breakdown” CPC

“Orthogonal” CPC and IPC indexing codes
CPC backfile

Automated conversion from ECLA/ICO/KW to CPC

USPTO input

CPC backfile available at the start of the CPC in 2013
CPC on EP publications

In 2021:

- CPC in the European publication server
  [https://data.epo.org/publication-server](https://data.epo.org/publication-server)

- CPC in the European Patent Register


- CPC on EPO Bulletin PDFs
In 2022 (since week 3/2022 - 19 January 2022)
CPC displayed on the PDFs of EP publications!

First
Invention
Additional
CPC on EP publications (3)

See Patent Knowledge News for detailed information

14.2.2022

Making CPC available at the time of publication

Availability of the Cooperative Patent Classification (CPC) on the day of publication on published EP documents
The USPTO’s journey of CPC in past 10 years

• January 2013
  • EPO and USPTO launch CPC

• March 2013
  • First US Patent applications published with CPC symbols

• May 2013
  • First US Patent Grant published with CPC symbols

• January 2015
  • US Patent applications are no longer classified in USPC (except designs and plants)
The USPTO’s journey of CPC in past 10 years

The effective date for Pre-Grant Publication (A) change was 09 April 2015.
The effective date for Patent Grant (B) change was 07 April 2015.

The USPTO’s journey of CPC in past 10 years
The USPTO’s journey of CPC in past 10 years

• June 2013
  • The USPTO and Korea signed an Agreement to classify into the CPC

• May 2016
  • The USPTO and Israel signed an Agreement to classify into the CPC

• September 2018
  • The USPTO and Chile signed an Agreement to classify into the CPC in near future
The USPTO’s journey of CPC in past 10 years

• January 2019
  • Research on Artificial Intelligence (AI) for classification

• March 2020
  • The USPTO transitions from USPC (United States Patent Classification) to CPC for internal purposes

• December 2020
  • The USPTO began to use Artificial Intelligence (AI) for preclassification
Patent Public Search at the USPTO:

Welcome to Patent Public Search

This Patent Public Search tool is a new web-based patent search application that will replace internal legacy search tools PubEast and PubWest and external legacy search tools PatFT and AppFT. Patent Public Search has two user-selectable modern interfaces that provide enhanced access to prior art. The new, powerful, and flexible capabilities of the application will improve the overall patent searching process.

If you are new to patent searches or want to use the functionality that was available in the USPTO's PatFT/AppFT, select Basic Search to look for patents by keywords or common fields, such as inventor or publication number. Select Advanced Search to use full query options as well as to further filter a patent search by database or organize documents through tags.

Basic Search | Advanced Search

Help
Information and support
FAQs
Answers to frequently asked questions
Training materials
Learn about Patent Public Search features and functionalities

Patent Public Search | USPTO
Patent Public Search at the USPTO:
Patent Public Search at the USPTO:

Patent Public Search | USPTO
Patent Public Search at the USPTO:
From 2 to 38 CPC offices: a growing CPC community

There are now 38 offices in the CPC (including the EPO and USPTO)
- **Morocco** and **Bulgaria** joined the CPC in 2021
- **Peru** signed a CPC MoU with the EPO (April 2022)
- **Monaco** and **Belgium** joined the CPC in July 2022
- **Italy** joined the CPC in September 2022
- **Luxembourg** joined the CPC in December 2022
- **Latvia** joined the CPC in February 2023

Out of these 38 offices, 23 are EPO member states
23 EPO member states (besides the EPO) and 1 validation state in CPC

Poland started exchanging CPC data with the EPO in May 2022
Some 2023 events where CPC will be presented:

• 10th CPC Annual meeting with National Offices, 08-09 March 2023, will be virtual

• 10th CPC Annual meeting with Industry users, 23 March 2023, will be virtual

• Patent Information Users Group (PIUG) 2023 Annual conference, 30 April – 03 May, 2023, will be at Alexandria, VA
CPC data coverage
CPC coverage of systematically classified collection
(1 January 2023)

<table>
<thead>
<tr>
<th>Country</th>
<th>Country Code</th>
<th>Total number of applications (source: EPDOC on 01/01/2023)</th>
<th>Number of applications classified in CPC by national office</th>
<th>% of applications classified in CPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPO</td>
<td>EP</td>
<td>4.098.629</td>
<td>4.096.762</td>
<td>100.0%</td>
</tr>
<tr>
<td>Austria</td>
<td>AT</td>
<td>1.013.446</td>
<td>729.761</td>
<td>72.0%</td>
</tr>
<tr>
<td>Belgium</td>
<td>BE</td>
<td>594.286</td>
<td>560.856</td>
<td>94.4%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>CH</td>
<td>722.578</td>
<td>584.098</td>
<td>80.8%</td>
</tr>
<tr>
<td>Germany</td>
<td>DE</td>
<td>5.970.705</td>
<td>5.171.866</td>
<td>86.6%</td>
</tr>
<tr>
<td>France</td>
<td>FR</td>
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<td>2.481.396</td>
<td>99.2%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>GB</td>
<td>2.441.097</td>
<td>2.185.906</td>
<td>89.5%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>LU</td>
<td>66.467</td>
<td>65.438</td>
<td>98.5%</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>NL</td>
<td>559.518</td>
<td>546.766</td>
<td>97.7%</td>
</tr>
<tr>
<td>ARIPO</td>
<td>AP</td>
<td>5.538</td>
<td>4.300</td>
<td>77.6%</td>
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<tr>
<td>Australia</td>
<td>AU</td>
<td>1.618.994</td>
<td>1.307.194</td>
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<td>Canada</td>
<td>CA</td>
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<td>1.495.979</td>
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<tr>
<td>OAPI</td>
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<td>13.433</td>
<td>13.222</td>
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</tr>
<tr>
<td>WIPO</td>
<td>WO</td>
<td>4.484.513</td>
<td>4.475.523</td>
<td>99.8%</td>
</tr>
</tbody>
</table>

| TOTAL                 |              | 40.810.462                                               | 37.809.284                                                  |                                     |
CPC coverage in past 10 years:
CPC data sent by 22 CPC offices (1 January 2023)

<table>
<thead>
<tr>
<th>Country</th>
<th>Country Code</th>
<th>Total number of applications (source: EPODOC on 01/01/2023)</th>
<th>Overall number of publications classified in CPC (Family level)</th>
<th>Number of applications classified in CPC by national office on 01/01/2023</th>
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<td>1,618,994</td>
<td>1,307,194</td>
<td>18,831</td>
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<tr>
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<td>AT</td>
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<td>729,761</td>
<td>16,666</td>
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<tr>
<td>Brazil</td>
<td>BR</td>
<td>828,858</td>
<td>590,581</td>
<td>42,728</td>
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<tr>
<td>China</td>
<td>CN</td>
<td>33,630,811</td>
<td>12,595,182</td>
<td>8,922,381</td>
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<td>Czech Republic</td>
<td>CZ</td>
<td>100,098</td>
<td>50,747</td>
<td>6,608</td>
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<tr>
<td>Denmark</td>
<td>DK</td>
<td>454,847</td>
<td>320,096</td>
<td>2,991</td>
</tr>
<tr>
<td>EAPO</td>
<td>EA</td>
<td>62,667</td>
<td>56,386</td>
<td>9,401</td>
</tr>
<tr>
<td>Finland</td>
<td>FI</td>
<td>200,657</td>
<td>123,621</td>
<td>16,602</td>
</tr>
<tr>
<td>Greece</td>
<td>GR</td>
<td>107,166</td>
<td>58,186</td>
<td>8,079</td>
</tr>
<tr>
<td>Hungary</td>
<td>HU</td>
<td>151,927</td>
<td>107,772</td>
<td>2,278</td>
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<tr>
<td>Israel</td>
<td>IL</td>
<td>155,566</td>
<td>140,821</td>
<td>36,322</td>
</tr>
<tr>
<td>Korea</td>
<td>KR</td>
<td>4,886,339</td>
<td>4,279,287</td>
<td>4,072,365</td>
</tr>
<tr>
<td>Mexico</td>
<td>MX</td>
<td>331,189</td>
<td>303,839</td>
<td>1,600</td>
</tr>
<tr>
<td>Norway</td>
<td>NO</td>
<td>212,982</td>
<td>187,546</td>
<td>13,755</td>
</tr>
<tr>
<td>Poland</td>
<td>PL</td>
<td>424,378</td>
<td>216,126</td>
<td>554</td>
</tr>
<tr>
<td>Portugal</td>
<td>PT</td>
<td>146,043</td>
<td>135,722</td>
<td>1,500</td>
</tr>
<tr>
<td>Romania</td>
<td>RO</td>
<td>76,906</td>
<td>17,212</td>
<td>661</td>
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<tr>
<td>Russian Fed.</td>
<td>RU</td>
<td>1,178,100</td>
<td>445,852</td>
<td>218,880</td>
</tr>
<tr>
<td>Spain</td>
<td>ES</td>
<td>1,540,827</td>
<td>824,456</td>
<td>42,443</td>
</tr>
<tr>
<td>Sweden</td>
<td>SE</td>
<td>526,755</td>
<td>341,048</td>
<td>150,240</td>
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<tr>
<td>Switzerland</td>
<td>CH</td>
<td>722,578</td>
<td>584,098</td>
<td>7,325</td>
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<tr>
<td>United Kingdom</td>
<td>GB</td>
<td>2,441,097</td>
<td>2,185,906</td>
<td>194,524</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>50,387,853</strong></td>
<td><strong>25,385,313</strong></td>
<td><strong>13,786,734</strong></td>
</tr>
</tbody>
</table>

- EPO core collection
- + CPC data from other offices
- + Family propagation
- + 1.5 Million NPL documents

68.7 million documents are now classified in the CPC as of 1 January 2023
CPC data sent by National Offices in past 10 years:
CPC harmonisation and training
Harmonisation plan EPO-USPTO

• Bilateral agreement on classification practice

• ~800 USPTO technical and classification experts discuss with ~680 EPO Classification Quality Nominees (Class-QNs)

• Standardisation of classification practice.
Want to know more about CPC classification practice?

- CPC Scheme and Definitions
- CPC General and Advance training
- E-learning modules:
  - Using CPC in classification
  - Practical and strategic aspects of the CPC
  - CPC essentials
  - General training on Combination sets
- CPC Field-specific training material
  - Recorded lectures on CPCinfo.org (European Patent Academy)

[https://www.cooperativepatentclassification.org/Training](https://www.cooperativepatentclassification.org/Training)
CPC collective training events

CPC Training went online!

Collective Training Events in 2022:
B64G, B65G, A61B 5/00, A24F, H02K, H01L33 (spring sessions)

Collective Training Events in 2023 (March – June 2023)
A61K33, B25B, C01G, C08F14, F28, G01C, G01P, H01P
Registration is open until 22 March 2023) via OS08-2023
(full url: https://www.epo.org/learning/training/details.html?eventid=16058)
CPC training on the CPC website

CPC Training

The EPO and the USPTO have jointly prepared CPC training material to support users in their learning process of the CPC classification system.

Use the links below to access the material:

- Introduction to the Cooperative Patent Classification (CPC)
- Using CPC in classification (basic level)
- Practical and strategic aspects of the CPC (for experienced users)

CPC Essentials
  - Part A - Introduction to CPC Essentials and Patent Classification Systems
  - Part B - CPC Scheme
  - Part C - CPC Scheme Definitions

CPC Field Specific training

Following this link you can access the EPO learning platform (registration required, free of charge) where you can consult some CPC Field Specific lectures where CPC experts explain the classification practice in their respective fields of expertise.

https://www.cooperativepatentclassification.org/Training
USPTO updates on CPC Training

Customize unique technical expert training for each office (at USPTO or National Office location)

- General training
- Master level training
- Advanced training in specific technical field
- C-set training
- Computer Based Training (CBT) e-learning modules
- Field-Specific Training (FST) on CPC Scheme/Definitions
USPTO updates on CPC Training

Customize unique classification workshop for external stakeholders (at Regional Offices of the USPTO)

• General training
• Advanced training
• Field specific training on CPC Scheme/Definition
  • New Emerging Technologies
• C-set training
A dynamic CPC scheme

Keeping CPC updated with on-going technological developments
Adaptations of the CPC scheme are triggered by:
- EPO / USPTO / patent offices’ examiners
- Classification departments

CPC bilateral revision process:
CPC Release Schedule

- Four releases per year
- Announced under "Latest News" section on www.cpcinfo.org

- Four CPC releases in 2023:
  - 1 January 2023  CPC 2023.01
  - 1 February 2023  CPC 2023.02
  - 1 May 2023  CPC 2023.05
  - 1 August 2023  CPC 2023.08
CPC revisions – pre-release area

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).

5 January 2021: 2021.02 pre-released material:

- 2021.02 CPC Scheme in PDF and in XML
- 2021.02 CPC to IPC concordance in PDF, XML and TXT
- Notices of Changes related to the “2021.02 CPC Scheme”:
  - CPC Notice of Changes 1036-MP0499 (various)
  - CPC Notice of Changes 1037-MP0501 (C09J)
Scheme Changes in 2021/2022:

- Number of created new symbols
- Number of deleted symbols
Definition Changes in 2021/2022:

- Number of new definitions
- Number of deleted definitions

![Definition changes in 2021/2022](chart)
CPC Notices of Changes (NoC) 2013 – 2023:

2013-2023 CPC NoC Publication data

<table>
<thead>
<tr>
<th>Year</th>
<th>RP</th>
<th>MP</th>
<th>DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2023</td>
<td>870</td>
<td>357</td>
<td>178</td>
</tr>
</tbody>
</table>
Reclassification efforts at the USPTO and the EPO:

• After CPC revisions group inventories need to be reclassified accordingly; this constitutes the maintenance of the system, which is carried out by the USPTO, the EPO and other CPC offices.

• EPO’s and USPTO’s objective is to reclassify documents within a year past the publication date of their respective CPC releases.

• In past 10 years, the USPTO and the EPO reclassified more than 2.2M family documents.
Update on the CPC Collaborative Environment (CPC-CE)
Background

• Goal: Increase the quality and efficiency of Classification revision by enhancing work-sharing and information exchange between Intellectual Property (IP) Offices for revision projects

• Suite of bilateral collaboration tools, commonly referred to as the CPC Collaborative Environment (CPC-CE or CE), that replaced CPC e-Forum (CEF)
Current State

• Minimum Viable Product (MVP) launched bilaterally between the USPTO and the European Patent Office on 1 January 2022

• CEF decommissioned on 31 December 2021 by migrating all active projects to CE

• No access for other IP Offices
Next Steps

• Increase bilateral tool performance and capabilities
  – Platform stability
  – Complete WMS functionality
  – Project Management Dashboards
  – Expand Advanced Editor functionalities to include enhanced Quality Validation and Direct Data Feed to Scheme Publication

• Phased expansion of CE to other IP Offices
  – Static data feeds on project status and timelines
  – Read capability of certain aspects of the CE Workflow Management System (WMS)
  – Ability to provide input on current, as well as future, projects within CE
Thank you for your attention!

More info?

www.cpcinfo.org

cpc@uspto.gov   cpc@epo.org