COOPERATIVE PATENT CLASSIFICATION

Prepared by USPTO and EPO

CPC Compilation File Specification

Date	By	Version	Status	Modification
May 25, 2018	USPTO	0.1	Draft	Creation
July 7, 2018	USPTO	1.0	Revised	Clarified description, updated example
June 5, 2023	USPTO	1.1	Revised	Updates to amendment-type usage, presentation details, and project-info

Table of Contents

1. <u>Introduction</u>

The Cooperative Patent Classification (CPC) Scheme Compilation File contains the list and types of differences between two consecutive editions of the CPC Scheme; it also contains corresponding revision project information.

The CPC Compilation file is published in XML and PDF format.

The XML format of the Compilation File is provided for easy interface between IT systems of different types.

The PDF format of the Compilation File is provided for end users to view all the Scheme changes and relevant project information for a given publication

This document describes the structure and content of the CPC Scheme Compilation File and documents information found in the corresponding XML schema. It also describes the features provided in PDF format.

2. <u>Scope of the Compilation File</u>

2.1. Scope

The CPC Scheme Compilation file provides all Scheme changes for each revision project included in each publication: new/modified/deleted groups and updates to the cross references in the Scheme.

It contains the list of CPC entries (Subclasses, Groups, Guidance headings, etc.) that are modified during the revision period.

For each CPC entry, changes may have occurred in the title, indent, notes, and/or warnings.

The CPC Scheme Compilation file does not include changes to attribute values, which are not visible in the Official Scheme Publication (e.g. IPC-concordant values that are instead reflected in the CPC-to-IPC Concordance List).

2.2. Source of the Compilation Items

The Compilation File is an automatically generated file produced from:

- The comparison of the current and previous Versions of the CPC Scheme XML.

- The Notices of Changes (NOCs) which show project information for the current Version of CPC in force.

- The current Version of the CPC RCL XML files (for some deleted entries).

For each Symbol in the Compilation File, relevant amendments are indicated.

3. Compilation File XML structure

3.1. Root element: scheme-compilation

This is the root tag of the Compilation File. It contains a flat list of CPC entries reflecting the compilation of changes to the CPC Scheme. Entries are new, modified, deleted, frozen, or unchanged. Unchanged entries are generally provided for hierarchical context. Changed entries reflect changes implemented via Maintenance Projects, Revision Projects, or Editorial Corrections. This element also contains the following attributes:

3.1.1. publication-date attribute

The CPC publication associated with this file, indicates the date of entry into force of the corresponding CPC version.

Value: yyyy-mm-dd format

3.2. compilation-item element

This is the entry tag of the Compilation File. It contains new, modified, deleted, frozen, or unchanged CPC entries. If an entry was deleted with an administrative transfer to other CPC groups, the transfer information from the Revision Concordance List is also provided.

This element also contains the following attributes:

3.2.1. sort-key attribute

Formatted symbol for sorting purpose

3.2.2. project-info attribute

The project number wherein the changes to the compilation entry originated. Indicated as "Unknown" if the originating project could not be found. Though rare, it is possible that an entry has changes originating from multiple projects. In those cases, the attribute has a comma-separated list of project information. Projects ending in "-F" indicate finalisation after reclassification was completed.

3.2.3. amendment-type

An amendment-type value describes the type of change made to the entries and is generally derived from associated project information. In cases where multiple projects impact the same symbol, a single type is given reflecting the most complex change made (e.g. types corresponding to changes involving reclassification take precedence over those corresponding to changes which do not impact file scope).

Unchanged entries are always given the amendment-type 'U'. By default, amendment-type will be 'M' for modifications of existing entries, unless otherwise indicated by a project (e.g. as C-type). Likewise, new entries will have a default value of 'N' and deleted entries will be indicated with a default value of 'D'.

Note: Beginning with the 2023.05 release, all entries will have an amendment-type, including modifications without corresponding project information.

C   Entries with modified file scope where reclassification of documents from the entries is involved;

D   Deleted entries;

E   Existing entries with enlarged file scope, which receive documents from other entries (e.g. C or D entries), e.g. when a limiting reference is removed from the entry title; E type was deprecated in lieu of T type (effective 2019.05);

F   Frozen entries will be deleted once reclassification of documents from the entries is completed;

M   Modified entries with no change to the file scope (no reclassification);

N   New entries where reclassification into entries is involved;

Q   New entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification;

T   Existing entries with enlarged file scope, which receive documents from other entries (e.g. C or D entries), e.g. when a limiting reference is removed from the entry title; T type replaced E type (effective 2019.05);

U   Entries that are unchanged.

3.2.4.   former-level attribute

Corresponds to the former level of a group when an indent change occurs.

3.2.5. level attribute

Corresponds to the current indent level in the Scheme hierarchy.

3.2.6. former-heading-end-symbol attribute

In cases where the end interval of a guidance or subsection heading is changed, the former main group or class defining the end interval is provided.

3.2.7. heading-end-symbol attribute

The current end interval of a guidance or subsection heading.

3.2.8. parent attribute

The parent group is provided for hierarchical context.

3.2.9. is-frozen attribute

Indicates whether a symbol is currently frozen, or in the case of a deleted symbol, whether the symbol was frozen and underwent finalisation to delete the symbol after reclassification was completed.

3.3. classification-symbol element

CPC symbol corresponding to each compilation-item entry.

3.4. transferred-to element

Contains one or more target symbols for the reclassification of documents corresponding to the source classification symbol. If an entry was deleted with an administrative transfer to other CPC groups, the transfer information from the Revision Concordance List is provided here.

3.5. title element

For the purposes of comparison, CPC titles were "flattened". Only class-ref, insertion/deletion markup, and inline formatting markup are present in a title.

The inline formatting elements are media, sub, sup and u.

3.6. ins and del elements

3.6.1. Element ins

Text which was inserted into an existing CPC entry (i.e. in the title, notes, or warnings). Includes inline and block-level text (e.g. note-content, table rows, etc.)

3.6.2. Element del

Text which was deleted from an existing CPC entry (i.e. in the title, notes, or warnings). Includes inline and block-level text (e.g. note-content, table rows, etc.).

Element ins and del have the same content model, which contains elements class-ref, sub, sup, br, u and new elements tr, ul, li, note-content, warning-content, content-item, content-table.

3.7. note-content, warning-content and content-item elements

Separate entries are provided for the Notes and Warnings—note-content and warning-content. The content-item, list and table elements were introduced to clearly indicate insertion and deletion markup within the Scheme Notes and/or Warnings.

3.7.1. content-item

An individual Note or Warning. For the purposes of comparison, if there are multiple Notes or Warnings, the Note or Warning number is provided prior to the Note/Warning content.

3.7.2. content-table and tr, td elements

Table content located in a Note or Warning

3.7.3. ul and li elements

A list representing 'subnote' content of the Scheme XML

4. Compilation File PDF Format Features

4.1. Order

The default presentation arranges entries according to Scheme order (by symbols).

An alternative PDF is also provided with entries arranged by project. Duplicate entries may appear where multiple projects impact the same symbol.

4.2. Entries are grouped according to a combination of the main group (or higher) symbol and the project. Presentation of differences

In order to distinguish differences between the current and previous versions of CPC, the normal CPC presentation of colours is superseded by the presentation rules described below. In particular, CPC-specific text is apparent **only** through the use of curly brackets.

The text of the entries and their amendments is displayed according to the following convention:

Entries for new symbols and headings: *Black text in italics*

Entries for existing symbols and headings

    —text insertions: *Green text in italics*

    —text deletions: ~~Red strikethrough text with grey background~~

Entries for deleted symbols and headings: ~~Black strikethrough text~~

- In cases when the originating project cannot be found, "Unknown" is given for the Project information.
- Projects ending in "-F" indicate finalisation after reclassification was completed.

For example:

Project: MP12037 (B60S)

U	**B60S 1/00**	**Cleaning of vehicles (by apparatus not integral with vehicle B60S 3/00; cleaning in general B08B; de-icing of aircraft B64D; heating arrangements specially adapted for transparent or reflecting areas H05B 3/84)**
U	B60S 1/02	· Cleaning windscreens, windows or optical devices {(wind deflectors specially adapted for preventing soiling of windows or windscreens B60J 1/2002)}
U	B60S 1/04	· · Wipers or the like, e.g. scrapers
U	B60S 1/0452	· · · {Position of the wipers relative to the vehicle}
U	B60S 1/0458	· · · · {Arrangement wherein the windscreen frame cooperates with the wipers}
M	B60S 1/0463	· · · · · {Arrangement of the ~~cow~~*cowl*}
U	B60S 1/0475	· · · {Cleaning of wiper blades}
M	B60S 1/0483	· · · · {the cleaning device being ~~separated~~*separate* from the vehicle ~~(renovating blade rubbers B60S 2001/3846)~~}

5. <u>XML Format Samples</u>

5.1. Modified symbol

In this example, Symbol E04C3/38 was unchanged, E04C3/46 was modified.

```
        <compilation-item sort-key="E04C3/38" project-info="MP0365" amendment-
type="U" level="8" parent="E04C3/00" is-frozen="false">
              <classification-symbol>E04C3/38</classification-symbol>
              <title>Arched girders or portal frames (straight girders able to
be bent <class-ref scheme="cpc">E04C3/02</class-ref>; inflatable <class-ref
scheme="cpc">E04H15/20</class-ref>)</title>
        </compilation-item>
        <compilation-item sort-key="E04C3/46" project-info="MP0365" amendment-
type="M" level="9" parent="E04C3/38" is-frozen="false">
              <classification-symbol>E04C3/46</classification-symbol>
              <title>of <del>other </del>materials not covered by groups
<class-ref scheme="cpc">E04C3/40</class-ref> - <class-ref
scheme="cpc">E04C3/44</class-ref>; of a combination of two or more
materials</title>
        </compilation-item>
```

In this example, the Note corresponding to G01N21/00 was modified.

```
        <compilation-item sort-key="G01N21/00" project-info="RP0500" amendment-
type="M" level="7" is-frozen="false">
              <classification-symbol>G01N21/00</classification-symbol>
              <title>Investigating or analysing materials by the use of optical
means, i.e. using infra-red, visible or ultra-violet light (<class-ref
scheme="cpc">G01N3/00</class-ref>-<class-ref scheme="cpc">G01N19/00</class-
ref> take precedence)</title>
              <note-content>
                    <content-item> This group <u>does not cover</u> the
investigation of spectral properties of light <u>per se</u>, or measurements
of the properties of materials where spectral properties of light are sensed
and primary emphasis is placed on creating, detecting or analysing the
spectrum providing that the properties of the materials to be investigated are
of minor importance<del> (</del>
                          <del>
                                <u>see</u>
                          </del>
                          <del> also Note (4) after the title of class </del>
                          <del>
                                <class-ref scheme="cpc">G01</class-ref>
                          </del>
                          <del>)</del>. Those subjects are covered by group
<class-ref scheme="cpc">G01J3/00</class-ref>. </content-item>
              </note-content>
        </compilation-item>
```

5.2. New symbol

In the following snippet, three symbols were added to the CPC Scheme.

```xml
        <compilation-item sort-key="F21V3/06" project-info="RP0483" amendment-
type="N" level="9" parent="F21V3/04" is-frozen="false">
            <classification-symbol>F21V3/06</classification-symbol>
            <title>characterised by the material</title>
        </compilation-item>
        <compilation-item sort-key="F21V3/061" project-info="RP0483" amendment-
type="N" level="10" parent="F21V3/06" is-frozen="false">
            <classification-symbol>F21V3/061</classification-symbol>
            <title>{the material being glass}</title>
        </compilation-item>
        <compilation-item sort-key="F21V3/0615" project-info="RP0483" amendment-
type="N" level="11" parent="F21V3/061" is-frozen="false">
            <classification-symbol>F21V3/0615</classification-symbol>
            <title>{the material diffusing light, e.g. translucent
glass}</title>
        </compilation-item>
```

5.3. Deleted symbol

In the following snippet, symbol A01B45/04 was deleted.

```xml
        <compilation-item sort-key="A01B45/00" project-info="RP0485" amendment-
type="U" level="7" is-frozen="false">
            <classification-symbol>A01B45/00</classification-symbol>
            <title>Machines for treating meadows or lawns {, e.g. for sports
grounds}</title>
        </compilation-item>
        <compilation-item sort-key="A01B45/02" project-info="RP0485" amendment-
type="U" level="8" parent="A01B45/00" is-frozen="false">
            <classification-symbol>A01B45/02</classification-symbol>
            <title>for aerating</title>
        </compilation-item>
        <compilation-item sort-key="A01B45/04" project-info="RP0485" amendment-
type="D" level="8" parent="A01B45/00" is-frozen="false">
            <classification-symbol>A01B45/04</classification-symbol>
            <transferred-to transfer-type="administrative">
                <target-symbol>A01G20/12</target-symbol>
            </transferred-to>
            <title>for cutting sods or turves {(machines for lifting and
treating soil <class-ref scheme="cpc">A01B77/00</class-ref>)}</title>
        </compilation-item>
```

End of document