Guide to the CPC
(Cooperative Patent Classification)

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Table of Contents

1. HISTORY

On 25 October 2010, the European Patent Office (EPO) and the U.S. Patent and Trademark Office (USPTO) 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 (ECLA) that will incorporate the best classification practices of the two offices" This marked the beginning of the development of what is now known as the Cooperative Patent Classification (CPC), a patent classification system based on the European classification system, but including practices from the United States Patent Classification (USPC). Brief histories of these two systems are now presented.

1.1. EUROPEAN CLASSIFICATION (ECLA)

Initially, the former "Institut International des Brevets" (IIB) used a classification system called "Indeling der Techniek" (IdT), developed by the Dutch Patent Office, and largely based on the "Deutsche Patentklassifikation" (DPK). After the first edition of the International Patent Classification (IPC) had entered into force in 1968, the IIB decided to convert its search documentation from IdT to a system based on IPC. This classification system would later become the "European Classification" (ECLA) system. In view of the large differences between both systems, and in order to guarantee the quality of the system, it was decided to transfer the documents gradually, by "closing" the IdT at a certain date (different per technical field), and "opening" ECLA at the same time. Subsequently, new documents were then classified according to ECLA, the "backfile" being reclassified systematically or "ad hoc", e.g. during searches.

From 1991 all the documents were classified via EC codes according to ECLA only. An additional indexing system of "In Computer Only" codes (ICO codes) was also developed.

1.2. UNITED STATES PATENT CLASSIFICATION (USPC)

In 1898, the U.S. Congress directed the Commissioner of Patents to "revise and perfect" the classification of patents and authorized him to appoint personnel to accomplish this task. Four months later, the Classification Division was created. This was the first time at USPTO that personnel were organized and directed to work exclusively on the classification of patents. In 1899, the Classification Division issued Class 20, Wooden Buildings, the first patent classification to be issued by professional classifiers at USPTO.

From this beginning, the USPC developed into a system consisting of over 400 classes and 160,000 subclasses that was used successfully for over 100 years to organize and search U.S. patent, and other, documents.

2. THE COOPERATIVE PATENT CLASSIFICATION (CPC)

The CPC system consists of the Scheme complemented by the Definitions, which further define the subject matter and related references of the classification place under consideration.

Questions related to the CPC system and the cooperation with other patent offices should be directed to Directorate Classification & Documentation at the EPO (cpc@epo.org) and/or Classification Standards and Development Division at the USPTO (cpc@uspto.gov).

The structure of the CPC Scheme and Definitions is generally similar to that of the IPC (though with a more detailed hierarchical structure).

The IPC is available at:

web2.wipo.int/classifications/ipc/ipcpub7

Information on the structure, classification rules and principles of the IPC can be found in the "Guide to the IPC", available at:

http://www.wipo.int/export/sites/www/classifications/ipc/en/guide/guide_ipc.pdf

Relevant material about the CPC is to be found on the CPC website at:

www.cpcinfo.org

or www.cooperativepatentclassification.org

Unless otherwise stated, CPC structure, rules and principles are identical to those of the IPC.

Therefore, only the distinguishing features of the CPC with regard to the IPC will be described in this Guide.

For each technical field, specific classification practices are further specified in the corresponding CPC Definitions.

3. THE CPC SCHEME

The CPC Scheme is divided into three parts:

- the “main trunk” symbols;
- the “indexing codes” or “2000-series”;
- the “Y-section”.

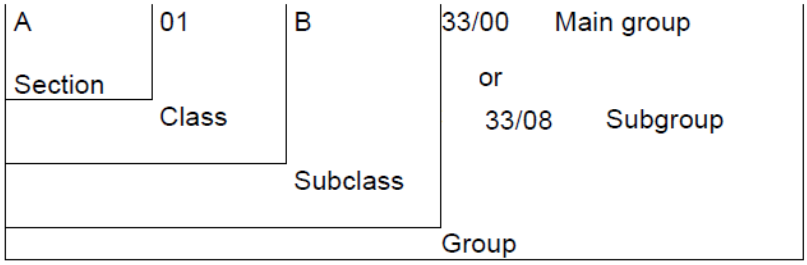
In the following the three parts are explained in more detail.

3.1. MAIN TRUNK

CPC is in most of the cases a refinement of the current IPC, which includes more subdivisions and more text additions, compared to the IPC.

CPC symbols in the "*main trunk*" consist of a string of letters and numbers compliant with the IPC standard, wherein a subclass symbol is followed by a one- to three-digit number, an oblique stroke, and a two- to six-digit number.

A complete classification symbol comprises the stringed symbols representing the section, class, subclass and main group or subgroup.
Example:



In the main trunk, the title of each level of CPC is normally the same as that of the corresponding IPC level (if this IPC level exists). Any CPC specific title or CPC specific addition of text to an existing IPC title is captured between **curly brackets { }.**

Example:

Explanation	Symbol	Hierarchical level	Title
IPC main group and CPC corresponding main group (unchanged)	A01C 15/00		Fertiliser distributors
CPC-only subgroup	A01C 15/005	•	{Undercarriages, tanks, hoppers, stirrers specially adapted for seeders or fertiliser distributors}
CPC-only subgroup	A01C 15/006	• •	{Hoppers}
IPC subgroup {with CPC additions}	A01C 15/06	•	with distributing slots {, i.e. for dosing, e.g. adjustable openings}
IPC subgroup and CPC corresponding subgroup (unchanged)	A01C 15/08	• •	with pushers or stirrers in the slots
IPC main-group {with CPC additions}	C07C 403/00		Derivatives of cyclohexane or of a cyclohexene {or of cyclohexadiene}, having a side-chain containing an acyclic unsaturated part of at least four carbon atoms, this part being directly attached to the cyclohexane or cyclohexene {or cyclohexadiene} rings, e.g. vitamin A, beta-carotene, beta-ionone

As in the IPC, hierarchy among CPC subgroups is solely determined by the number of dots, and not by the numbering of the subgroups.

3.2. 2000 SERIES: (FURTHER) BREAKDOWN INDEXING CODES AND ORTHOGONAL INDEXING CODES; IPC INDEXING CODES

CPC symbols in the "*2000 series*" are similar to main trunk CPC symbols, but the subclass symbol is followed by a **four-digit number beginning with '2'**.

There are no 2000 series symbols in the Y section (see below).

The 2000-series symbols can be used only for allocation of "**additional information**".

There are three different kinds of indexing codes:

- the “breakdown” indexing codes,
- the “orthogonal” indexing codes, and
- the IPC indexing codes

3.2.1. Breakdown indexing codes

The breakdown indexing codes are subdivisions dependent on a hierarchically superior main-trunk group and cover deeper-refined technical aspects of that group. They provide “breakdowns” of the technical subject under consideration.

It is the EPO and USPTO policy to progressively reduce the number of (further) breakdown indexing codes in the CPC Scheme (in favour of “main-trunk” symbols) and not to promote the creation of new breakdown indexing codes.
Curly brackets {...} are used for the breakdown indexing codes, as they are interspersed within CPC main-trunk symbols.

Example:

Further breakdown code G08B 2001/085

Main trunk	G08B 1/00		Systems for signalling characterised solely by the form of transmission of the signal
Main trunk	G08B 1/08	•	using electric transmission; {transformation of alarm signals to electrical signals from a different medium, e.g. transmission of an electric alarm signal upon detection of an audible alarm signal}
Breakdown code	G08B 2001/085	• •	{Partner search devices}

3.2.2. Orthogonal indexing codes

The orthogonal (indexing) codes do not depend on a single hierarchically superior main-trunk group, as it is the case for the further breakdown indexing codes.

As a matter of fact, they usually relate to multiple groups of the subclass in question, and hence they are called “orthogonal” in the sense that they offer further dimensions to the classification: they are “orthogonal” to the classification line of the main trunk.

Typically they link to a very “high” level classification place, e.g. subclass or main group.

New orthogonal indexing codes should be created only if the creation of new groups in the main-trunk is not feasible.

Curly brackets {...} are not used for the orthogonal indexing codes.

Example:

Main trunk	H05K 1/00		
Orthogonal code	H05K 2201/00		Indexing scheme relating to printed circuits covered by H05K1/00
Orthogonal code	H05K 2201/01	•	Dielectrics

Example:

Main trunk	F05		INDEXING SCHEMES RELATING TO ENGINES OR PUMPS IN VARIOUS SUBCLASSES OF CLASSES F01-F04
Main trunk	F05B		INDEXING SCHEME RELATING TO MACHINES OR ENGINES OTHER THAN NON-POSITIVE-DISPLACEMENT MACHINES OR ENGINES, TO WIND MOTORS, TO NON-POSITIVE DISPLACEMENT PUMPS, AND TO GENERATING COMBUSTION PRODUCTS OF HIGH PRESSURE OR HIGH VELOCITY
Orthogonal code	F05B 2200/00		Mathematical features
Orthogonal code	F05B 2200/10	•	Basic functions

3.2.3. IPC indexing codes

IPC indexing schemes are also copied (if appropriate) into CPC.

For the sake of consistency with the numbering used for any CPC indexing code (2000+), IPC indexing codes carry a 2 in front of the original IPC number.

Example:

IPC	F21Y 101/00	Point-like light sources
CPC	F21Y **2**101/00	Point-like light sources

3.3. COMBINATION SETS (C-SETS) SYMBOLS

The CPC allows allocation of a combination of symbols as a single classification, referred to as Combination Sets (C-Sets), in certain CPC subclasses. See Chapter 7 of this Guide for C-Sets classification.

3.4. SECTION Y: GENERAL TAGGING; FORMER USPC CODES

The IPC sections A to H are complemented by a CPC-specific section Y. This section includes the subclasses Y10S and Y10T which accommodate a number of former USPC subclasses, cross-reference art collections [XRAC], and Digests. Allocations were derived directly from existing USPC. No intellectual allocation is possible with Y10S and Y10T symbols. Y10T is meant as a temporary subclass and is planned to disappear in due time.

The other subclasses of the Y section cater for the “tagging” of emerging technologies, which span many sections of the IPC (cross-sectional).

By “tagging” is meant a process where relevant documents are captured automatically by search strategies (developed by EPO specialists) and given relevant symbols from the Y-section. Hence, there is no direct intellectual allocation in the Y-section. The only direct intellectual investment is in the intellectual allocation of CPC symbols in other areas of CPC and in the development and update of the search strategies, which are run periodically (almost on a monthly basis). Hence the allocation of Y symbols should not be done by the EPO classifiers during the normal process of classification.

In the Y-section curly brackets {...} are not used.

Y section symbols are allocated for **"additional information"** only**.**

4. SPECIFICITIES OF THE CPC SCHEME

4.1. INDICATIONS OF CHANGES

The date-stamp [YYYY-MM] is added to end of the titles of groups in order to indicate the year and month of introduction or scope change of a CPC group — note that editorial changes with no impact on the scope of the group are not date stamped.

Example

B41M 7/0063 --- {archival material, e.g. by de-acidifying} [2013-01]

4.2. REFERENCES OR ADDITIONS TO IPC REFERENCES

IPC references can be modified, and/or CPC references can be added to the original IPC titles.

As in the IPC, references are always put between round brackets, and references to groups in the same subclass should include the full subclass symbol.

The order for the types of references remains as in the IPC:

I. precedence references, (i.e. of the type "(--- takes precedence");

II. references within the same subclass;

III. references to other subclasses.

Additionally, within each type I-III, references follow the alphanumerical order.

Example:

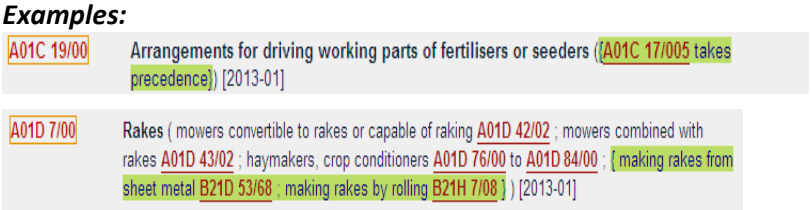
G02F 1/0147 . . based on thermo-optic effects (G02F1/132 takes precedence; tenebrescent compositions C09K9/00; radiation pyrometry G01J5/00; thermometers using change of colour or translucency G01K11/12)

Any CPC addition to a reference of an IPC title can have the effect of misaligning the IPC and CPC in that area.

These scope-affecting additions should only be used when there is no other possibility, e.g. creation of a CPC subgroup, to cover the subject matter in question.

The CPC text is always put between curly brackets { }.

Examples:



References to the indexing codes of the 2000-series are not allowed, as indexing schemes are secondary to the CPC main trunk. Moreover, indexing codes are meant for classification of Additional Information only, which further removes the need for limiting references to the indexing codes.

The availability and intended usage of indexing codes in an area should be signalled by Notes and Definitions in that area.

4.3. NOTES OR ADDITIONS TO IPC NOTES

IPC Notes can be modified and/or CPC-specific Notes can be added into the original IPC text. As for the references, care should be taken not to misalign the coverage of the affected IPC and CPC groups.

The CPC text is always put between curly brackets { }.

4.4. WARNINGS

A warning is a piece of information specific to CPC, not available in the IPC.

Generally speaking, a warning is needed in CPC to draw the attention of the user to incompleteness or deviations from the standard practice.

There are a number of typical situations, which are listed below.

See Annex I for the standardized wording of Warnings and Notes in CPC.

4.4.1. Reclassification in progress

Whenever a new group is introduced in CPC, while the corresponding reclassification work has not been completed, i.e. when reclassification is “in progress”, a warning is needed to signal the “incompleteness” of the group in question and of its predecessor(s). The warning appears just below the group affected or, in case of a list of groups, under the hierarchically highest group of the list.

The warning shall be removed as soon as reclassification is completed.

Another typical situation is a group that is tobe deleted, and therefore is no longer used for the classification of front-file documents. This group is however still available for search, which means that there are still documents in the group that are being continuously reclassified.

Such a group is considered “frozen” (for classification). Also in this case a warning is needed to signal the “incompleteness” of the group.

The group, together with the warning, shall be removed as soon as reclassification is completed.

4.4.2. IPC groups not used in the CPC

IPC groups should always be replicated in the CPC, as the IPC is the “backbone” of the CPC.

Yet in some exceptional cases, in the past (pre-CPC) age, “deviations from the IPC” were allowed in some areas.

The general policy of CPC is not to allow such deviations any longer. In addition, existing deviations should progressively, and insofar as possible, be eliminated, in order to progressively reduce the differences between the two systems.

When IPC groups are not used in the CPC, a warning is placed after the subclass title to inform the users of the deviation from the IPC practice, and to indicate where the corresponding subject matter is classified in CPC.

5. CPC CLASSIFICATION RULES

As in the IPC, CPC symbols from the “main-trunk” of the Scheme are called “classification symbols”.

CPC symbols from the 2000-series, as well as symbols from the Y-section, are called “indexing codes”.

As in the IPC (see §§77-78 of the Guide to the IPC), "Invention information" is technical information in the total disclosure of a patent document (for example, description, drawings, claims) that represents an addition to the state of the art (i.e. all novel and unobvious subject matter specifically disclosed in a document).

Also, as in the IPC "Additional information" (Guide to the IPC, §§79-80) is non-trivial technical information which does not in itself represent an addition to the state of the art but might constitute useful information for the searcher.

Moreover, as in the IPC, “invention information” (Guide to the IPC, §116) is only represented by classification symbols, i.e. other than indexing codes.

Furthermore, as in the IPC, “additional information” (Guide to the IPC, §117) is represented by classification symbols, by indexing codes or by both. Classification symbols from any place in the scheme, together with any indexing codes associated with those symbols, may be used for indicating additional information.

It is important to note that, as in the IPC (Guide to the IPC, §§141-142), the CPC adopts the “common rule” of classification as the default classification rule in all CPC areas where priority classification rules (first place priority rule; last place priority rule) or special classification rules are not specified.

Furthermore, also as in the IPC (Guide to the IPC, §143), when classifying subject matter characterised by several aspects or when assigning additional classification symbols representing useful information for searching, principles of “multiple classification” (Guide to the IPC, §§102-106) apply.

5.1. ALLOCATION OF CPC INDEXING CODES

In the IPC, indexing codes may be applied (IPC Guide, §113) when it is desirable for search purposes to identify elements of information about a technical subject of the invention already classified as such.

In the CPC, it remains the practice to assign the indexing codes of the 2000-series, i.e. (further) breakdown and/or orthogonal indexing codes and/or IPC indexing codes, to identify further elements of information about a technical subject of the invention already classified as such by appropriate main-trunk classification symbols. In particular, allocation of the indexing codes can cater for a more accurate classification than the main-trunk symbols or can reflect another aspect of the inventive subject matter.

Application of CPC indexing codes can be either desirable only (as in the IPC) or obligatory, and the specifications as to the intended usage of the indexing codes (namely desirable vs. obligatory) should be found in the Definitions.

In absence of information about the usage of indexing codes, it shall be deemed that their usage is desirable only.

The information value of applied indexing codes remains in any case of the type “additional information”.

5.2. ALLOCATION OF C-SETS

See Chapter 7 of this Guide for terminology of C-Sets.

6. CPC DEFINITIONS

The CPC Scheme is complemented by Definitions that form an integral part of the CPC system.

They provide complementary information and serve for the clarification of classification entries without changing their scope. Special rules of classification may be clarified in the CPC Definitions. CPC Definitions follow a similar structure to that of IPC Definitions, with nine headings:

- Definition statement
- Relationships with other classification places (*usually at subclass level*)
- Limiting references
- Application-oriented references
- References out of a residual place
- Informative references
- Special rules of classification (*within the place*)
- Glossary of terms
- Synonyms and Keywords

The official Definitions are available on the CPC website (www.cpcinfo.org) for each subclass (including all main groups and many subgroups).

They are also available at the EPO and USPTO sites.
For example, as far as the EPO is concerned, in Espacenet (http://worldwide.espacenet.com/) they are displayed per subclass and main group or subgroup, when available.

Definitions are normally not used for indexing-only subclasses (e.g. A23V, F05B) and for the whole of section Y (e.g. Y04S, Y10S).

7. COMBINATION SETS (C-SETS) CLASSIFICATION

C-Sets classification is a special classification technique, providing a mechanism for searching combined features that are otherwise not easy to find by single symbols, resulting in more precise and efficient retrieval of technical information from CPC.

7.1. TERMINOLOGY OF C-SETS

A C-Set comprises a group of at least two ranked valid CPC symbols (main-trunk symbols or indexing codes), separated by commas.

A C-Set brings together symbols from different groups within the same subclass or from different subclasses, in a certain order.

- The first symbol is designated as the "**base symbol**", and has the Rank 1 in the database.
- The second symbol is designated as the "**subsequent symbol**", and has the Rank 2 in the database.
- Any further symbol, if present, is also designated as "subsequent symbol", and has the Rank 3 or higher in the database.
- At the end of the C-Set, the **information value** (in the sense of Chapter 5 of this Guide).

Example of C-Sets presentation in patent documents and in the CPC database:

C05C9/005,	**C05D9/02,**	**C05G3/0058,**	**INV**
Base	subsequent	subsequent	information value
rank 1	rank 2	rank 3	

7.2. SUBCLASSES AUTHORISED FOR C-SETS CLASSIFICATION

To ensure classification accuracy and consistency, C-Sets classification is authorised only in a limited number of CPC subclasses. The table in Annex III lists those subclasses authorised for C-Sets allocation. As shown in the Table, not all groups within the authorized subclasses are allowed for C-Sets allocation.

Example

In subclass C07C it is not allowed to allocate a C-Set with a base symbol in group C07C9/00. It is also not allowed to allocate a C-Set with a subsequent symbol in group C07C1/00.

Furthermore, the table in Annex IV lists those orthogonal indexing codes that are used only as subsequent symbols in C-Sets, but should not be allocated as CPC single symbols.

Symbols of section Y shall never be used in C-Sets.

7.3. ALLOCATION OF C-SETS

7.3.1. Information value of the allocation

Each CPC allocation carries an "information value", in the sense of Chapter 5 of this Guide. It applies to C-Sets as well.

In each C-Set, the **base symbol** determines the information value as a whole.

Hence, if the **base symbol** is a main trunk symbol, then the information value of the C-Set can be INV or ADD. If the **base symbol** is an indexing code, then the information value of the C-Set can only be ADD.

Examples

1. G01N30/64, G01N30/70 INV or ADD
2. G01N30/64, G01N2030/8881 INV or ADD
3. G01N2030/025, G01N30/70 ADD

Notes:

- In Example 1, since the **base symbol** is from the main trunk, the information value of the C-Set can be either INV or ADD (depending on the contribution to the prior art).
- In Example 2, a breakdown indexing code, G01N2030/8881, is listed among the C-Set symbols as a subsequent symbol. The information value of the C-Set can be either INV or ADD, because the **base symbol** is from the main trunk.
- In Example 3, since the **base symbol** is an indexing code, the information value of the C-Set can only be ADD (even if the subsequent symbol G01N30/70 belongs to the main trunk).

7.3.2. Allocation of C-Sets to a document

Application of C-Sets is obligatory in the subclasses authorised for C-Sets if it is applicable to the document.

By default, when allocating a C-Set, the base symbol is also allocated as a single symbol having the same information value (INV or ADD)

While C-Sets classification is used for classifying some combined technical features, CPC single symbols may be allocated in conjunction with the C-Sets in order to classify any other technical information of interest. The classification picture for a patent family will consist of as many C-Sets as needed to classify all relevant technical features, in addition to single CPC

allocations, either INV-type or ADD-type, as specified in the appropriate classification definitions, in order to classify any technical information of interest.

Selection of CPC symbols that are to be incorporated into a C-Set should follow CPC scheme and definitions. The specific C-Sets rule is placed in the section labelled "Special rules of classification" in the definitions (see sections 7.3.3 and 7.4 of this Guide). It's very important to select the base and subsequent symbols from the allowed groups as indicated in the specific C-Sets rules in the definitions. When selecting the base and subsequent symbols for a C-set construction, applicable limiting and/or precedence references should be taken into consideration.

It should also be noted in the definitions that some orthogonal indexing codes that are used only as subsequent symbols in C-Sets, but should not be allocated as CPC single symbols.

> Example
> A01N2300/00 is used in a C-Set only, but not allowed to be allocated as a single symbol.

7.3.3. C-Sets syntax rules

Since C-Sets rules are customarily specific to the different technical areas, they vary greatly due to different technical features. In certain areas, for example, duplicate symbols are allowed in a C-Set, e.g. to reflect the multiple occurrences of a process step corresponding to the repeated CPC symbol. In other areas, the C-Sets should have exactly one subsequent symbol, e.g. for indicating the combination of a process with a product.

The CPC Definitions provide the C-Sets syntax rules, which are detailed instructions for how to construct C-Sets in the specific technical areas, e.g. to specify the number of symbols in a C-Set; whether duplicate symbols and breakdown codes are allowed or not; the relevance of the order in the string of symbols; and any other special rule relevant for the C-Sets in question.

7.3.4. Characteristics of C-Sets

C-Sets rules are customarily specific in each technical field and are used for classifying combined technical features that cannot be adequately covered by the allocation of a single symbol.

> Examples
> The C-Set (A, B) may denote a specific mixture of chemical compounds A and B.
> The C-Set (A, B) can also denote a chemical compound A and its specific process of making B.

C-Sets can also define the relationship of related technical features.

Example
The C-Set (S1, S2, S3), displaying a specific order of symbols, may denote a specific order or sequence of operations S1, S2, S3 in a multi-step process.

In certain areas duplicate symbols are allowed in a C-Set, e.g. to reflect the multiple occurrences of a process step corresponding to the repeated CPC symbol.

In other areas, the C-Sets should have exactly one subsequent symbol, e.g. for indicating the combination of a process with a product.

In yet other areas, the C-Sets may have more than one subsequent symbol. In these areas, the order of the symbols may disclose a technical relevance (e.g. B22F2998/10: specific ordered sequence of operations in a multi-step process), or the symbols may be arranged in alphanumerical order (e.g. class C05: specific mixture of compounds in fertilisers.

There may be also special rules related to the information value carried by the C-Set (INV or ADD in the sense of section 7.3.1 above).

A last but important remark is that a CPC patent family may have as many C-Sets as needed to classify all relevant technical features. In addition, further CPC single symbols may be allocated in conjunction with the C-Sets in order to classify any features of interest.

7.4. GUIDANCE ABOUT C-SETS INFORMATION IN SCHEME AND DEFINITIONS

Instructions about the C-Sets construction and syntax are presented in a standard format in all C-Sets authorised subclasses (see section 7.2 above; see Annexes III and IV for C-Sets authorised subclasses).

As a general guidance, the specific C-Sets rule is located at only one place of the base symbol in the definitions. The placement of the specific C-Sets rule follows the CPC scheme hierarchy. If the C-Sets rule is applicable to all groups of a subclass, it is located at the subclass level only. If the same C-Sets rule is applicable to multiple groups or subgroups within the same subclass, the C-Sets rule is placed at the highest group or subgroup of the multiple groups. A reference usually is placed in the lower groups, indicating the location of the C-sets rule

With respect to the presentation of C-Sets information in the CPC, first, in the Scheme, a Note at the subclass level states the use of C-Sets in the subclass, and also refers to the Definitions for the detailed C-Sets rules. As further notification, a similar Note may be also placed at the specific group level where C-Sets are applied.

Secondly, in the Definitions, specific guidance about the intended usage and syntax of C-Sets is detailed in the section “Special rules of classification”.

At subclass level, a table indicates the pertinent types of C-Sets using symbols of the subclass as base and/or subsequent, and the place where the corresponding C-Sets rule can be found.

Example: summary of all C-Sets in subclass C12Q

Base Symbols	Subsequent Symbols	C-Sets Rules
C12Q1/68-C12Q1/6874, C12Q1/6897, C12Q1/70	C12Q2500/00-C12Q2565/634	C12Q1/68
C12N15/10-C12N15/1096	C12Q2500/00-C12Q2565/634	C12N15/10

As shown in the above table, there are two types of C-Sets in C12Q.

In the first type, both base symbols and subsequent symbols are from C12Q and the C-Sets construction is explained in the “Special rules” of C12Q1/68.
In the second type, the base symbols are from C12N, while the subsequent symbols are from C12Q and the C-Sets rules are in the “Special rules” of C12N15/10.

Finally, at the subclass, group or subgroup level, the specific C-Sets rules describe the detailed information about the C-Sets construction and the associated syntax.

C-Sets rules are presented with the following three subheadings under the heading Special rules of classification:

- C-Sets statement
- C-Sets syntax rules
- C-Sets examples

The **C-Sets statement** indicates which technical features are classified in the base and subsequent symbols of the C-Sets.

The **C-Sets syntax rules** specify the number of symbols in a C-Set; whether duplicate symbols and breakdown codes are allowed or not; the relevance of the order in the string of symbols; and any other special rule relevant for the C-Sets in question.

The **C-Sets examples** illustrate how the combinations of features are classified in the C-Sets.

The standardised wording to be used in Scheme Notes and Definitions is available in Annex V.

8. CONCORDANCE LIST BETWEEN CPC AND IPC SYMBOLS

A CPC to IPC concordance list (CICL) is available in XML, PDF and TXT formats on the CPC website:

http://www.cpcinfo.org/cpcConcordances.html

The list offers the concordance between the current CPC version (e.g. 2016.11) and the current IPC one (e.g. 2016.01).

In the CICL, CPC symbols of section Y and “orthogonal indexing codes” (2200+) do not have any corresponding IPC symbol. Therefore they are marked with "CPCONLY" in the IPC column of the table.

On the other hand, a further breakdown indexing code maps to the same IPC symbol as the hierarchically superior main-trunk symbol on which it depends.

Example:

CPC	**IPC**
G06K 9/685	G06K 9/68
G06K 9/6857	G06K 9/68
G06K 2009/6864	G06K 9/68
G06K 2009/6871	G06K 9/68
G06K 9/6878	G06K 9/68
G06K 2207/00	CPCONLY

The CICL is revised whenever the CPC changes (left column) or the IPC changes (right column).

It is to be noted that the IPC concordant to a particular CPC symbol is available as a property of the CPC symbol in the XML version of the CPC scheme.

9. COVERAGE OF THE CPC SYSTEMATICALLY CLASSIFIED DOCUMENTATION

The coverage of the "CPC systematically classified documentation" is available on the CPC website, under "Publications":

http://www.cooperativepatentclassification.org/publications.html

ANNEX I. STANDARDIZED WORDINGS FOR WARNINGS IN CPC

A. Warnings for ongoing reclassification in an area

1. Warnings at “source” groups

These warnings should be located in the scheme at "source" groups XX-XX, at the hierarchically most relevant place — e.g. after the head-group when a number of sub-groups is impacted, or after the main-group or even after the subclass when many groups are impacted:

> **F group(s) XX-XX (source)**
> Group(s) XX-XX is/are no longer used for the classification of documents as of Month Day, Year (e.g. August 1, 2013). The content of this/these group(s) is being reclassified into group(s) YY-YY. Group(s) XX-XX and YY-YY should be considered in order to perform a complete search.

> **C or Q group(s) XX-XX (source)**
> Group(s) XX-XX is/are impacted by reclassification into group(s) YY-YY. Group(s) XX-XX and YY-YY should be considered in order to perform a complete search.

Warnings at F groups do not require project coordinators to fill out the corresponding date: this date will be populated automatically by the Publications Team based on the scheduled publication date of the project.

To condense the warning language for F, C and Q groups in cases where there are a large number of groups involved in the reclassification, the last sentence “Group(s) XX-XX and YY-YY should be considered in order to perform a complete search” in the above F and C group warnings may be substituted with the following:

> All groups listed in this Warning should be considered in order to perform a complete search.

2. Warnings at “destination” groups

These warnings should be located in the scheme at "destination" groups YY-YY, at the hierarchically most relevant place — e.g. after the head-group when a number of sub-groups is impacted, or after the main-group or even after the subclass when many groups are impacted:

> **N or E group(s) YY-YY (destination)**
> Group(s) YY-YY is/are incomplete pending reclassification of documents from group(s) XX-XX. Group(s) XX-XX and YY-YY should be considered in order to perform a complete search.

> Classification symbols XX-XX and YY-YY should be indicated in full, i.e.:
> Subclass/group-Subclass/group

Warnings at E groups should only be used if reclassification of documents into E groups is ongoing.

3. Combined ("source" and "destination") warnings

These warnings should be located in the scheme at groups XX-XX that are at the same time both a "destination" and a "source", at the hierarchically most relevant place — e.g. after the head-group when a number of sub-groups is impacted, or after the main-group or even after the subclass title when many groups are impacted:

C or Q group(s)

Text in scheme for YY-YY (destination) and XX-XX (source) subgroup:

Group YY is incomplete pending reclassification of documents from group(s) XX-XX. Group YY is also impacted by reclassification into group(s) ZZ-ZZ. Group(s) XX-XX, YY, and ZZ-ZZ should be considered in order to perform a complete search.

Note: YY is a source/destination group. YY can be a C-group or a Q-group receiving documents reclassified from F or C groups, and also is reclassified into other group(s) or range of groups.

This type of warning is used only if necessary, in **rare cases**.

For example (bold font added only to highlight relevant items):

Scheme:

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
C	**H01M 8/0258**	3	characterised by the configuration of channels, e.g. by the flow field of the reactant or coolant	H01M8/0258 H01M8/2483
…			…	
C	H01M 8/0267	3	having heating or cooling means, e.g. heaters or coolant flow channels	H01M8/0267 **H01M8/0258** H01M8/026 H01M8/0263 H01M8/0265 H01M8/2483
…			…	

Corresponding "combined" Warning:

Type*	Location	Old Warning notice	New/Modified Warning notice
N	H01M 8/0258		Group H01M8/0258 is incomplete pending reclassification of documents from group H01M8/0267. **Group H01M8/0258 is also impacted by reclassification into groups H01M8/2483. Groups H01M8/0258, H01M8/0267 and H01M8/2483 should be considered in order to perform a complete search**.

B. Warnings indicating areas where IPC groups are not used in CPC

These warnings are displayed after the subclass title, in places where IPC groups are not used in the CPC.
This situation is exceptional, because the strategy for the CPC scheme is to make it and keep it as most as possible IPC compliant.

The following IPC group(s) is/are not used in the CPC scheme. Subject matter covered by this/these group(s) is classified in the following CPC group(s):

IPC_XX covered by CPC_YY

…

e.g. "A61K 9/133 covered by A61K 9/127" (where A61K9/133 is an IPC group and A61K9/127 is the corresponding CPC group).

ANNEX II. STANDARDIZED WORDINGS FOR NOTES IN CPC

1. Notes relating to the subject matter covered by the place in question should be presented as follows:

(a) This subclass covers:

- apparatus which is not provided for in----;
- the working of materials which----;
- features specific to----.

(b) This subclass does not cover:

- multi-step processes, which are covered by class (or subclass)---- ;
- details or accessories which form part of ----, e.g.----, which are covered by subclass----.

2. Notes defining terms or expressions (referred to under 1(b), above) should be presented as follows:

In this subclass, the following terms or expressions are used with the meaning indicated:

- “working” covers also----;
- “combined operation” means----.

3. Notes stating general priority rules should be presented as follows:

(a) First place priority rule:

In this subclass / main group(s) / group(s), the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

(b) Last place priority rule:

In this subclass / main group(s) / group(s), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

4. Notes prescribing multiple classification should be presented as follows:

(a) Obligatory multiple classification:

“----, when it is determined to be novel and non-obvious, must also be classified in----”.

(b) Non obligatory multiple classification:

"----, which is considered to represent information of interest for search, may also be classified in----".

5. Notes stating other classification rules can, for example, be presented as follows:

In this subclass:

– Groups----to---- are limited to----;

– after-treatment of materials is classified in groups----;

– subject matter relating to both----is classified in groups----.

6. The following model wordings of the different notes relating to indexing schemes should be observed:

(a) Note for a class containing a subclass which constitutes an indexing scheme:

The codes of subclass----are only for use as indexing codes associated with subclass(es)----, so as to provide information concerning----.

(b) Note for an area to which an indexing scheme is associated:

In this----, it is desirable to add the indexing code(s) of----.

All Notes above follow the standard IPC Notes.
The Notes below are instead specific to CPC only.

A. Notes indicating use of combination sets (C-Sets):

In this [class/subclass/group], C-Sets are used with the base symbol selected from [subclass/subclasses/group/groups] [BB_1 ... BB_m] [and the subsequent [symbol/symbols] selected from [subclass/subclasses/group/groups] [SS_1 ... SS_n]].

The detailed information about the C-Sets construction and the associated syntax rules is to be found in the Definitions for the base symbols, section "Special rules of classification".

B. Notes indicating exclusive use as subsequent symbols in combination sets (C-Sets):

"In this [subclass/group], orthogonal indexing codes [CC_1 ... CC_n] are only used as subsequent symbols in C-Sets and should not be allocated as single symbols."

ANNEX III. LIST OF TECHNICAL AREAS USING C-SETS

The following table summarises the technical areas where allocation of C-Sets is authorised.

	Subclass	Base symbols	Subsequent symbol(s)
1	A01N	A01N25/00-A01N65/48	A01N25/00-A01N65/48, A01N2300/00
2	A23G	A23G1/305, A23G1/56, A23G3/343, A23G3/346, A23G4/062, A23G9/322, A23G9/52	A23G2200/00-A23G2220/22
3	A23V	A23V2002/00	A23V2200/00-A23V2300/50, A23Y
4	A61K	A61K6/0011-A61K6/0044, A61K6/08-A61K6/10	C08L1/00-C08L101/16 (excluding breakdown codes, e.g. C08L2023/40)
	A61K	A61K31/00-A61K41/0095 (including breakdown codes, e.g. A61K2039/505)	A61K2300/00
5	A61L	A61L15/12, A61L15/125, A61L15/225-A61L15/32, A61L15/58-A61L15/60, A61L17/10, A61L17/105, A61L17/145, A61L24/0073-A61L24/0094, A61L24/043-A61L24/10, A61L24/108, A61L26/0014-A61L26/0028, A61L26/0047, A61L26/0052, A61L26/008, A61L26/0095, A61L27/16-A61L27/22, A61L27/227, A61L27/26, A61L27/34, A61L27/44-A61L27/48, A61L27/52, A61L28/0011-A61L28/0026, A61L28/0049, A61L28/0069, A61L28/008-A61L28/0096, A61L29/041-A61L29/044, A61L29/048-A61L29/06, A61L29/085, A61L29/126, A61L29/145, A61L31/041-A61L31/043, A61L31/047-A61L31/06, A61L31/10, A61L31/125-A61L31/129, A61L31/145, A61L33/0017-A61L33/0035, A61L33/062-A61L33/12, A61L33/128	C08L1/00-C08L101/16 (excluding breakdown codes, e.g. C08L2023/40)
6	A61M	A61M2202/00, A61M2202/02-A61M2202/30	A61M2202/0007-A61M2202/0092
	A61M	A61M2210/00, A61M2210/02-A61M2210/168	A61M2210/005
	A61M	A61M2230/00, A61M2230/04-A61M2230/65	A61M2230/005
7	B01D	B01D15/00-B01D15/428 (excluding breakdown codes, e.g. B01D2015/3838)	B01D15/00-B01D15/428 (excluding breakdown codes, e.g. B01D2015/3838)

	Subclass	Base symbols	Subsequent symbol(s)
	B01D	B01D19/04-B01D19/0495	B01D19/04-B01D19/0495
	B01D	B01D2311/02, B01D2311/04, B01D2311/06, B01D2311/08	B01D2311/02-B01D2311/2696
8	B01J	B01J39/00-B01J49/02	B01J39/00-B01J49/02
	B01J	B01J2523/00	B01J2523/10-B01J2523/847
9	B05D	B05D2401/00-B05D2602/00	B05D2401/00-B05D2602/00
10	B22F	B22F2998/00, B22F2998/10, B22F2999/00	B22F1/00-B22F2304/15, C22C1/00-C22C2204/00 (including breakdown codes, e.g. B22F2003/248, C22C2026/002), other subclasses
11	B29C	B29C66/71	B29K2001/00-B29K2096/04
	B29C	B29C66/7212	B29K2201/00-B29K2311/14
	B29C	B29C66/8122	B29K2801/00-B29K2911/14
12	B32B	B32B17/10	B32B2319/00-B32B2386/00
13	B65H	B65H2301/44331	B65H2701/131-B65H2701/1322
	B65H	B65H2301/447-B65H2301/44795	B65H2220/01, B65H2220/02
	B65H	B65H2511/00-B65H2519/00, B65H2701/13-B65H2701/139	B65H2220/01-B65H2220/11
14	C04B	C04B2/00-C04B32/02, C04B38/00-C04B41/91, C04B2103/00-C04B2111/94	C04B2/00-C04B2201/52, C04B2290/00-C04B2290/20
15	C05B	C05B1/00-C05B19/02	C05B1/00-C05F11/10, C05G1/00-C05G3/08
16	C05C	C05C1/00-C05C11/00	C05C1/00-C05F11/10, C05G1/00-C05G3/08
17	C05D	C05D1/00-C05D9/020	C05D1/00-C05F11/10, C05G1/00-C05G3/08
18	C05F	C05F1/00-C05F11/10	C05F1/00-C05F11/10, C05G1/00-C05G3/08
19	C05G	C05G1/00-C05G3/08	C05G1/00-C05G3/08
20	C07C	C07C1/00-C07C7/20	C07C9/00-C07C15/62
	C07C	C07C17/00-C07C17/42	C07C19/00-C07C25/28
	C07C	C07C29/00-C07C29/94	C07C31/00-C07C35/52
	C07C	C07C37/00-C07C37/88	C07C39/00-C07C39/44
	C07C	C07C41/00-C07C41/60	C07C43/00-C07C43/32
	C07C	C07C45/00-C07C45/90	C07C47/00-C07C49/92
	C07C	C07C46/00-C07C46/10	C07C50/00-C07C50/38
	C07C	C07C51/00-C07C51/64	C07C53/00-C07C66/02
	C07C	C07C67/00-C07C67/62	C07C69/00-C07C69/95
	C07C	C07C68/00-C07C68/08	C07C69/96
	C07C	C07C201/00-C07C201/16	C07C203/00-C07C207/04
	C07C	C07C209/00-C07C209/90	C07C211/00-C07C211/65
	C07C	C07C213/00-C07C213/10	C07C215/00-C07C219/34
	C07C	C07C221/00	C07C223/00-C07C225/36
	C07C	C07C227/00-C07C227/44	C07C229/00-C07C229/76
	C07C	C07C231/00-C07C231/24	C07C233/00-C07C237/52
	C07C	C07C241/00-C07C241/04	C07C243/00-C07C243/42
	C07C	C07C249/00-C07C249/16	C07C251/00-C07C251/88

	Subclass	Base symbols	Subsequent symbol(s)
	C07C	C07C253/00-C07C253/34	C07C255/00-C07C255/67
	C07C	C07C263/00-C07C263/20	C07C265/00-C07C265/16
	C07C	C07C269/00-C07C269/08	C07C271/00-C07C271/68
	C07C	C07C273/00-C07C273/189	C07C275/00-C07C275/70
	C07C	C07C277/00-C07C277/08	C07C279/00-C07C279/36
	C07C	C07C303/00-C07C303/46	C07C305/00-C07C311/65
	C07C	C07C315/00-C07C315/06	C07C317/00-C07C317/50
	C07C	C07C319/00-C07C319/30	C07C321/00-C07C323/67
	C07C	C07C407/00-C07C407/006	C07C409/00-C07C409/44
21	C08F	C08F6/00-C08F6/28	C08L23/00-C08L57/12
	C08F	C08F8/00-C08F8/50	C08F8/00-C08F34/04, C08F38/00-C08F38/04, C08F110/00-C08F134/04, C08F138/00-C08F138/04, C08F210/00-C08F234/04, C08F238/00-C08F299/08
	C08F	C08F10/00-C08F10/14	C08F2/00-C08F2/60, C08F4/00-C08F4/82
	C08F	C08F12/00-C08F12/36	C08F2/00-C08F2/60, C08F4/00-C08F4/82
	C08F	C08F14/06	C08F2/00-C08F2/60
	C08F	C08F14/18-C08F14/28	C08F2/00-C08F2/60
	C08F	C08F20/12, C08F20/14, C08F20/44	C08F2/00-C08F2/60
	C08F	C08F36/00-C08F36/22	C08F2/00-C08F2/60, C08F4/00-C08F4/82
	C08F	C08F110/00-C08F110/14	C08F2/00-C08F2/60, C08F4/00-C08F4/82
	C08F	C08F110/02-C08F110/14	C08F2500/01-C08F2500/26
	C08F	C08F112/00-C08F112/36	C08F2/00-C08F2/60, C08F4/00-C08F4/82
	C08F	C08F136/00-C08F136/22	C08F2/00-C08F2/60 , C08F4/00-C08F4/82
	C08F	C08F210/00-C08F246/00 (including breakdown codes, e.g. C08F2220/286)	C08F210/00-C08F246/00 (including breakdown codes, e.g. C08F2220/286)
	C08F	C08F210/00-C08F210/18	C08F2/00-C08F2/60, C08F4/00-C08F4/82
	C08F	C08F210/02-C08F210/18	C08F2500/01-C08F2500/26
	C08F	C08F212/00-C08F212/36	C08F2/00-C08F2/60, C08F4/00-C08F4/82
	C08F	C08F236/00-C08F236/22	C08F2/00-C08F2/60, C08F4/00-C08F4/82
	C08F	C08F251/00-C08F292/00	C08F210/00-C08F246/00 (including breakdown codes, e.g. C08F2220/286)
	C08F	C08F265/06	C08F2/00-C08F2/60
	C08F	C08F279/02,C08F279/04	C08F2/00-C08F2/60
	C08F	C08F283/01-C08F283/14	C08F2/00-C08F2/60, C08F4/00-C08F4/82
	C08F	C08F291/00	C08F2/00-C08F2/60
22	C08G	C08G18/10, C08G18/12	C08G18/02-C08G18/027, C08G18/09-C08G18/097, C08G18/2805,

	Subclass	Base symbols	Subsequent symbol(s)
			C08G18/30-C08G18/38, C08G18/40-C08G18/64, C08G18/65-C08G18/66, C08G18/70-C08G18/80
	C08G	C08G18/67, C08G18/671-C08G18/679	C08G18/0804-C08G18/0833
	C08G	C08G18/671-C08G18/672	C08G18/40-C08G18/64, C08G18/65-C08G18/6696, C08G18/6705, C08G18/6795-C08G18/698
	C08G	C08G18/81-C08G18/8191	C08G18/0804-C08G18/0833
	C08G	C08G18/8158-C08G18/8175	C08G18/40-C08G18/64, C08G18/65-C08G18/6696, C08G18/6705, C08G18/6795-C08G18/698
23	C08K	C08K3/00-C08K13/08 (excluding breakdown codes, e.g. C08K2003/385)	C08L1/00-C08L101/16 (excluding breakdown codes, e.g. C08L2023/40)
24	C08L	C08L1/00-C08L101/16 (excluding breakdown codes, e.g. C08L2023/40)	C08K3/00-C08K13/08, C08L1/00-C08L101/16 (excluding breakdown codes, e.g. C08K2003/385, C08L2023/40)
25	C09D	C09D1/00-C09D201/10	C08K3/00-C08K13/08, C08L1/00-C08L101/16 (excluding breakdown codes, e.g. C08K2003/385, C08L2023/40)
26	C09J	C09J1/00-C09J201/10	C08K3/00-C08K13/08, C08L1/00-C08L101/16 (excluding breakdown codes, e.g. C08K2003/385, C08L2023/40)
27	C10M	C10M2201/00-C10M2229/0545	C10M2201/00-C10M2229/0545, C10N2210/00-C10N2220/306, C10N2250/00-C10N2260/14
28	C12N	C12N15/10-C12N15/1096	C12Q2500/00-C12Q2565/634
	C12N	C12N2310/00-C12N2310/533	C12N2310/00-C12N2330/51
29	C12Q	C12Q1/68-C12Q1/6874, C12Q1/6897, C12Q1/70	C12Q2500/00-C12Q2565/634
30	D07B	D07B1/00-D07B9/00	D07B2801/90
	D07B	D07B2201/00-D07B2501/2092	D07B2801/10-D07B2801/90
31	G01N	G01N27/447-G01N27/44795, G01N30/00-G01N2030/965 (including breakdown codes, e.g. G01N2030/3076)	B01D15/08-B01D15/428, G01N21/00-G01N2021/9586,G01N27/00-G01N27/92, G01N30/00-G01N2030/965, G01N33/00-G01N33/98, G01N35/00-G01N35/1097 (including breakdown codes, e.g. G01N2030/3076)
32	G02B	G02B1/04-G02B1/048	C08L1/00-C08L101/16 (excluding breakdown codes, e.g. C08L2023/40)
33	H01L	H01L2224/00-H01L2224/98, H01L2924/00-H01L2924/40503	H01L2224/00-H01L2224/98, H01L2924/00-H01L2924/40503, other subclasses

ANNEX IV. LIST OF ORTHOGONAL INDEXING CODES TO BE USED ONLY AS SUBSEQUENT SYMBOLS IN C-SETS

The following is the list of orthogonal indexing codes which shall not be allocated as CPC single symbols, but only as subsequent symbols in C-Sets:

a. A01N2300/00
b. A23G2200/00-A23G2220/22
c. A23V2200/00-A23V2300/50
d. A61K2300/00
e. A61M2202/007-A61M2202/0092, A61M2210/005, A61M2230/005
f. B01J2523/10-B01J2523/847
g. B65H2220/01-B65H2220/11
h. C08F2500/00-C08F2500/26
i. D07B2801/00-D07B2801/90

ANNEX V. COMBINATION SETS [C-SETS] STANDARDIZED WORDING FOR SCHEME NOTES AND DEFINITIONS

In SCHEME

1/Note at subclass level:

The following Note is added in the scheme at subclass level for each subclass comprising symbols used as base and/or subsequent in C-Sets.

{**Note(s)**

{#. In this subclass, combination sets [C-Sets] are used. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions.}

2/Note at group level

The following Note is added in the scheme at group or subgroup level where appropriate.

{**Note**
In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions.}

3/ Note for the orthogonal codes used only as subsequent symbols of C-Sets

{**Note**
In this group, symbol[s] [SS1-SSn] [is/are] only used as subsequent symbol[s] in C-Sets and should not be allocated as single symbol[s].}

In DEFINITIONS

1/ The following text is to be added in the Definitions, section "Special rules of classification" at subclass level.

Special rules of classification
Combination sets [C-Sets]
In this subclass, C-Sets classification is applied to the following groups, listed in the table below, if the document discloses a pertinent combination of technical features that cannot be covered by the allocation of a single symbol. The third column of the table indicates the place where the detailed information about the C-Sets construction and the associated syntax rules can be found, in the section "***Special rules of classification***".

Base Symbols	Subsequent Symbols	C-Sets Rules
[e.g. C08L1/00-C08L101/16] (*)	[e.g. C08K3/00-C08K13/08, C08L1/00-C08L101/16 (*)	[e.g. C08Lwith hyperlink] (**)
[e.g. A61K6/0011-A61K6/0044, A61K6/08-A61K6/10] (*)	[e.g. C08L1/00 to C08L101/16](*)	[e.g. A61K6/00 with hyperlink] (**)

(*) The blue font and the [...] denote optional text and/or choices to be finalized by the drafter.
(**) Please indicate the subclass, group or subgroup of the base symbol where the C-Sets rule can be found.

The specific C-Sets rule is located at the place of the base symbol. If the C-Sets rule is applicable to all groups of a subclass, it is located at the subclass level only. If the same C-Sets rule is applicable to multiple groups or subgroups within the same subclass, the C-Sets rule is placed at the highest group or subgroup of the multiple groups.

2/ The following text is to be added in the Definitions, section "Special rules of classification" at the subclass, group or subgroup level according to the base symbol.

C-Sets rules should always be inserted after any other existing special rule(s).

A complete C-Sets rule comprises the three following subheadings:

- ***C-Sets statement***
- ***C-Sets syntax rules***
- ***C-Sets examples (with at least 2 examples illustrating the syntax rules).***

In a few cases (e.g. C08F210/00), there may be different "types" of C-Sets applicable for certain base symbols, identified by "type A", "type B", etc.

Special rules of classification
Combination sets [C-Sets]
C-Sets statement

In groups [...] to [...] [the feature(s) relating to...] is / are (*) classified in the form of C-Sets.

In these C-Sets, the base symbol, representing [the feature(s) [...]] (*), is taken from the groups [...] to [...], whereas the subsequent symbol(s) representing [the feature(s) [...]] is / are (*) taken from the groups [...] to [...].

[For orthogonal codes used only as C-Sets subsequent symbols:
Orthogonal indexing [code/codes] [...] [is/are] only used as subsequent [symbol/symbols] in C-Sets and should not be allocated as single [symbol/symbols]]. (*)

C-Sets syntax rules

- Each C-Set shall contain exactly two symbols / can contain two or more symbols (*).
- Duplicate symbols are / are not (*) allowed in these C-Sets.
- Breakdown codes are / are not (*) allowed as base symbols.

- Breakdown codes are / are not (*) allowed as subsequent symbols.
- The order of symbols in these C-Sets is / is not (*) relevant [as it reflects ...] (*)
- [In these C-Sets the symbols are arranged in alphanumerical order.]
- [Additional syntax rules applied](*)

C-Sets examples
[Feature A (Symbol 1) combined with feature B (Symbol 2)] is classified as Symbol 1, Symbol 2 (*)

[The combination of feature A (Symbol 1), feature B (Symbol 2) and feature C (Symbol 3)] is classified as Symbol 1, Symbol 2, Symbol 3 (*)

[A process comprising specifically step A (Symbol 1), step B (Symbol 2) and step C (Symbol 3) in this order] is classified as Symbol 1, Symbol 2, Symbol 3 (*)

3/ The following text is to be added in the Definitions, section "Special rules of classification" at group or subgroup level, where appropriate. If multiple groups use the same C-Sets rule, the following text should be used in the further groups to refer to the place where the C-Sets rule is explained.

C-Sets rules should always be inserted after any other existing special rule(s)

Special rules of classification
Combination sets [C-Sets]
In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of [CPC subclass or symbol where the C-Sets rule is placed].} (*)

(*) The blue font and the [...] denote optional text and/or choices to be finalized by the drafter.