WORLD INTELLECTUAL PROPERTY ORGANIZATION

SPECIAL UNION FOR THE INTERNATIONAL PATENT CLASSIFICATION

(IPC UNION)

IPC Definitions Master File Specification

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| --- | --- | --- | --- | --- |
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| March 27, 2015 | Collioud | 1.07 | PF Revised | Removed GREF.  Replaced most content models by XHTML ones e.g. to replace “illustrations” attribute. XSD based.  Moved shared types of content to IPC Master Files Specification. |
| April 9, 2015 | Collioud | 1.08 | Revised | Clarified description of Glossary structure. |
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| January 23, 2016 | Collioud | 3.1.1 | Revised | Explicit list of authorized xhtml elements. |
| February 2, 2018 | Collioud | 3.1.2 | Revised | Authorization of xhtml elements *sub* and *sup* in *p, td, li, dt* and *dd*. |
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| May 8, 2019 | Collioud | 3.2.1 | Revised | Addition of element div in SYNONYMSANDKEYWORDS sub sections. |

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# Introduction

The purpose of this document is to provide complementary information to the “IPC Master File specification” used as reference document and to its related XML Schemas:

* ipc\_definitions\_3-2.xsd
  + inc-types\_3-1.xsd
  + xhtml\_strict\_1-0.xsd
    - xml\_1-0.xsd

It describes the structure and content of the International Patent Classification (IPC) definitions file (**DF**).

It uses, wherever possible, reference to International standards, in particular WIPO ST.8.

The format of this file is XML i.e. primarily an exchange format aiming at easy interface between IT systems of different types.

**CAUTION: although made reference to XHTML elements, only the ones specified in this document must be used in Definitions Master File.**

# General description

See brief content description, time dependency and file naming convention in “IPC Master File specification”.

# Scope of the DF file

## Definition of scope

Classification Definitions for the IPC are intended to provide more detailed explanations of the contents of IPC entries than the Scheme.

The Definitions are provided in a form of a sequence of independent IPC Definition elements, each of which contains a single Definition.

## References in IPC

In the Definitions, references relevant to classification are listed under the heading “References”.

## Special rules

In some places, special classification rules override the general classification rules. Wherever special rules are used, they are clearly specified in notes at the places concerned.

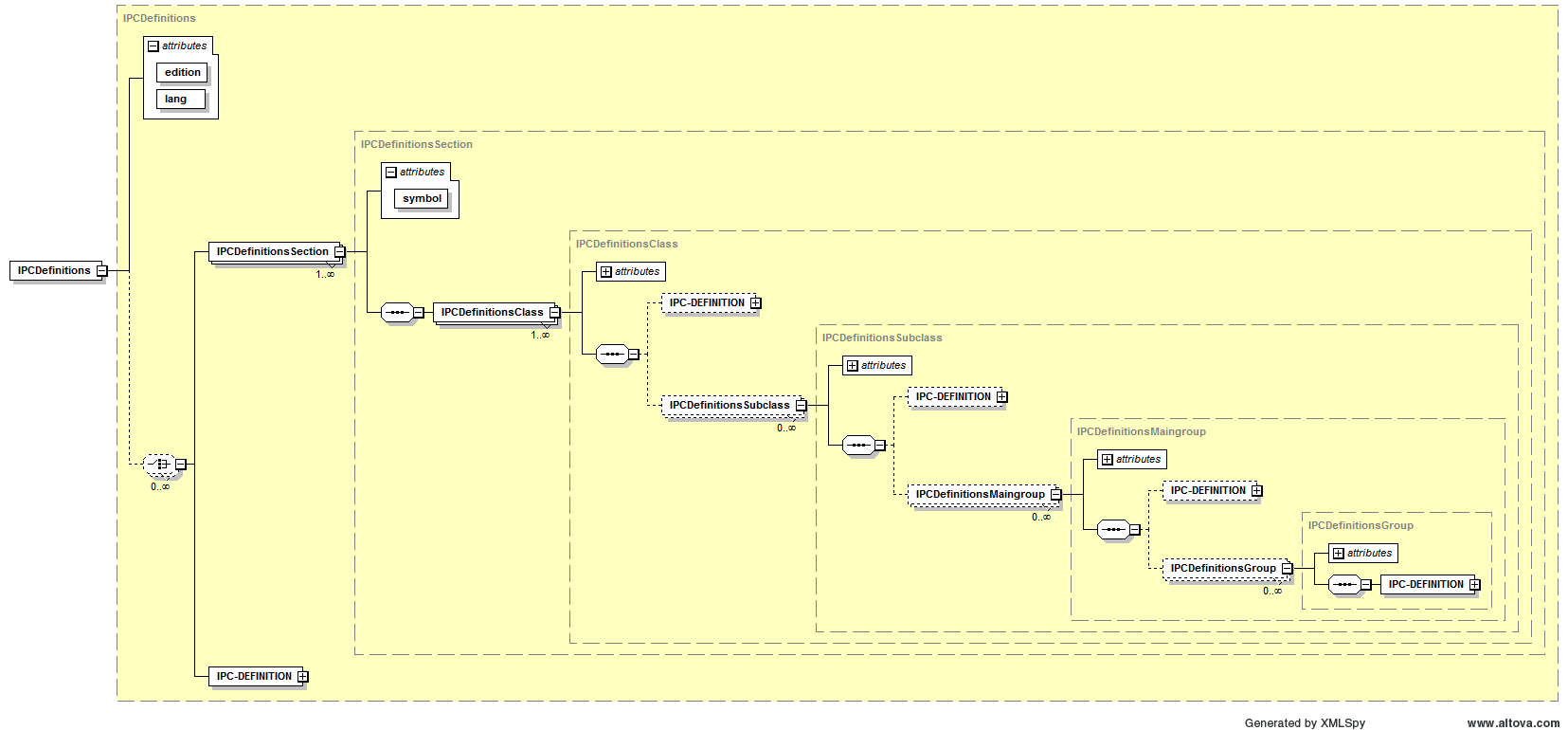
## Glossary, synonyms and keywords

Glossary presents a list of terms or expressions relating to principles and rules of the Classification, as requiring some explanation of their meaning and use.

# Content of the file

The definitions file includes Definitions in one of the two IPC authentic languages. The Definitions concerning Symbols are in hierarchic structure. Each Definition contains at least one element.

## Top level structure



### IPCDefinitions element

The root element of the Definitions file, embedding element for a language version of Definition items with the following attributes:

#### lang attribute

The language of the Definition explanations, descriptions and terms

Value: see description of “IPC data language code” in “IPC Master File Specification”.

#### edition attribute

The IPC Version associated to this file, indicates the date of entry into force of the corresponding IPC version.

Value: see description of “IPC Version” in “IPC Master File Specification”.

### IPCDefinitionsSection element

Embedding element for the Section parts of the file with the following attributes:

#### symbol attribute

The Symbol for the Definition entry's Section.

Values: An IPC Section Symbol, see description of “IPC Symbol” in “IPC Master File Specification”.

### IPCDefinitionsClass element

Embedding element for the Class parts of the file with the following attributes:

#### symbol attribute

The Symbol for the Definition entry's Class.

Values: An IPC Class Symbol, see description of “IPC Symbol” in “IPC Master File Specification”.

### IPCDefinitionsSubclass element

Embedding element for the Subclass parts of the file with the following attributes:

#### symbol attribute

The Symbol for the Definition entry's Subclass.

Values: An IPC Subclass Symbol, see description of “IPC Symbol” in “IPC Master File Specification”.

### IPCDefinitionsMaingroup element

Embedding element for the Main Group parts of the file with the following attributes:

#### symbol attribute

The Symbol for the Definition entry's Main Group.

Values: An IPC Main Group Symbol, see description of “IPC Symbol” in “IPC Master File Specification”.

### IPCDefinitionsGroup element

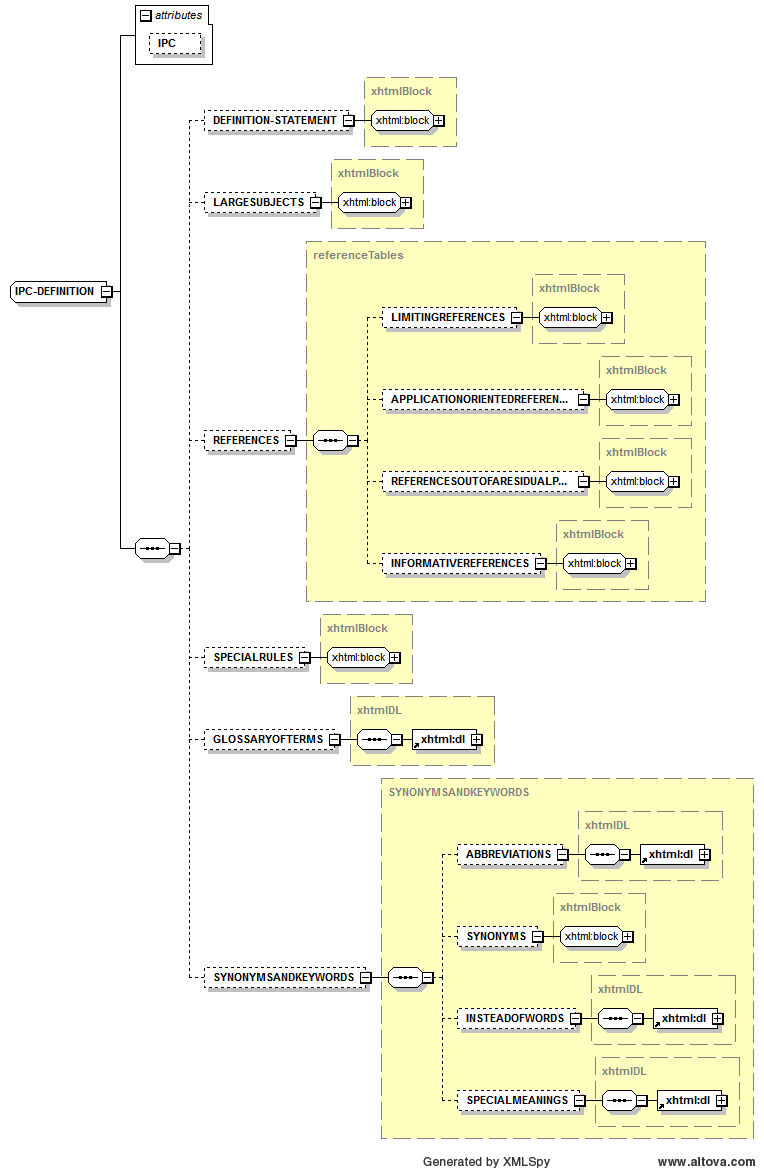
Embedding element for the Subgroup parts of the file with the following attributes:

#### symbol attribute

The Symbol for the Definition entry's Subgroup.

Values: An IPC Subroup Symbol, see description of “IPC Symbol” in “IPC Master File Specification”.

## Single definition structure



### IPC-DEFINITION element

Embedding element for a Definition item with the following attributes:

#### IPC attribute

The Symbol for the Definition entry.

Value: An IPC Symbol, see description of “IPC Symbol” in “IPC Master File Specification”.

The value of the IPC attribute must be equal to the value of the parent (i.e. IPCDefinitionsSection, IPCDefinitionsClass, IPCDefinitionsSubclass, IPCDefinitionsMaingroup or IPCDefinitionsGroup) Symbol attribute value.

This attribute is optional and must not be specified if parent element is IPCDefinitions root element (in such case IPC-DEFINITION contains the global Glossary only, see GLOSSARYOFTERMS below).

### DEFINITION-STATEMENT element

Embedding element for the “Definition statement” part.

Content is embedded in a root element (xhtml:div) and is made of paragraphs (xhtml:p).

### LARGESUBJECTS element

Embedding element for the “Relationships between large subject matter areas” part.

Content is embedded in a root element (xhtml:div) and is made of paragraphs (xhtml:p).

### REFERENCES element

Embedding element for the “References” part:

LIMITINGREFERENCES and/or one APPLICATIONORIENTEDREFERENCES and/or one REFERENCESOUTOFARESIDUALPLACE and/or INFORMATIVEREFERENCES (i.e one, two, three or four elements(s) in that order).

### LIMITINGREFERENCES element

Embedding one table.

The table is embedded in a root element (xhtml:div) and is made of 2 columns.

### APPLICATIONORIENTEDREFERENCES element

Embedding one table.

The table is embedded in a root element (xhtml:div) and is made of 2 columns.

### REFERENCESOUTOFARESIDUALPLACE element

Embedding one table.

The table is embedded in a root element (xhtml:div) and is made of 2 columns.

### INFORMATIVEREFERENCES element

Embedding one table.

The table is embedded in a root element (xhtml:div) and is made of 2 columns.

### SPECIALRULES element

Embedding element for “Special rules of classification” section.

Content is embedded in a root element (xhtml:div) and is made of paragraphs (xhtml:p).

### GLOSSARYOFTERMS element

Embedding element for “Glossary of terms” part:

Content of GLOSSARYOFTERMS element stand for either:

* the Glossary of the specified Symbol,
* or the global Glossary if attribute IPC of the parent IPC-DEFINITION element is not specified.  
  In such case the parent IPC-DEFINITION element must also be a child of   
  IPC-DEFINITIONS root element and must be unique within any Master File instance.

GLOSSARYOFTERMS embeds one xhtml:**dl** (definition list) element:



Constraint rules to apply over XHTML ones are:

1. xhtml:**dl** element content must be a list of xhtml:**dt** (Glossary term(s)) elements,
2. each sequence of xhtml:**dt** element(s) must be followed by one xhtml:**dd** (Glossary term(s) definition) element,
3. id attribute value of xhtml:**dt** element must be specified. Value of this attribute uniquely identifies a Glossary entry.

### SYNONYMSANDKEYWORDS element

Embedding element for “Synonyms and Keywords” part:

ABBREVIATIONS and/or one SYNONYMS and/or one INSTEADOFWORDS and/or SPECIALMEANINGS (i.e one, two, three or four elements(s) in that order).

### ABBREVIATIONS

Embedding one xhtml:**div that contains one** xhtml:**dl** (definition list) followed by one optional xhtml:p:

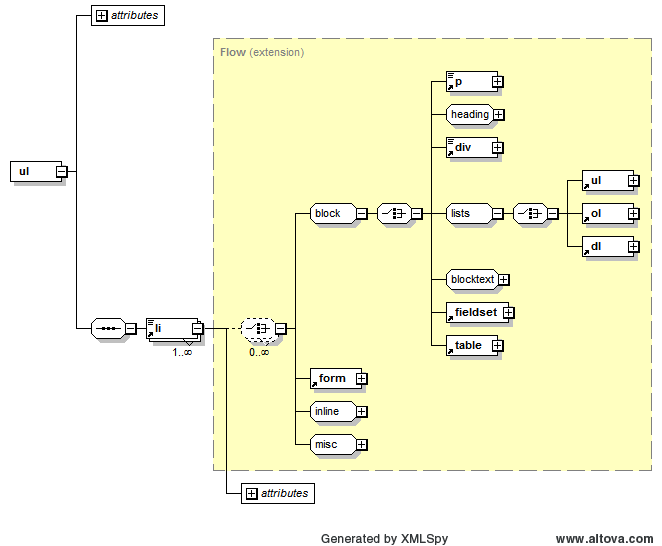


Constraint rules to apply over XHTML ones are:

1. xhtml:**dl** element content must be a list of xhtml:**dt** (Abbreviation) elements,
2. xhtml:**dt** elements must be followed by one xhtml:**dd** (Abbreviation definition) element.

### SYNONYMS

Embedding one xhtml:**div that contains one** xhtml:**ul** (unordered list) followed by one optional xhtml:p:



**3**

**2**

**1**

Constraint rules to apply over XHTML ones are:

1. xhtml:**ul** element content must contain one or more xhtml:**li** elements,
2. xhtml:**li** (child of root ul) element must contain one xhtml:**ul** (list of Synonyms) element,
3. xhtml:**ul** (child of li) element must contains one or more xhtml:**li** (text of a single Synonym) element.

### INSTEADOFWORDS

Embedding one xhtml:**div that contains one** xhtml:**dl** (definition list) followed by one optional xhtml:p:



Constraint rules to apply over XHTML ones are:

1. xhtml:**dl** element content must be a list of xhtml:**dt** (text of a single alternative word/expression) elements,
2. xhtml:**dt** elements must be followed by one xhtml:**dd** (text of a single word/expression) element.

### SPECIALMEANINGS

Embedding one xhtml:**div that contains one** xhtml:**dl** (definition list) followed by one optional xhtml:p:



Constraint rules to apply over XHTML ones are:

1. xhtml:**dl** element content must be a list of xhtml:**dt** (text of a single word/expression) elements,
2. xhtml:**dt** elements must be followed by one xhtml:**dd** (text of single meaning) element.

### xhtml:a element

The xhtml:**a** element can be used to reference an illustration or a place in the IPC.

Constraint rules to apply over XHTML ones are:

#### rel attribute

The type of referenced object.

Value:

* “symbol”: a single IPC Symbol, or
* “range”: a range of IPC Symbols, or
* “illustration”: an Illustration from Illustrations Master File.

#### href attribute

An Illustration id, a Symbol code or a range of Symbols in the IPC.

Value:

* Symbol code: an IPC Symbol (see description of “IPC Symbol” in “IPC Master File Specification”), or
* Symbol range: two character strings identifying an IPC symbol (as defined above) separated by a \_ (underscore character), or
* Illustration id: value of “label” attribute of an “illustration” element from related Illustration Master File (see “IPC Illustrations Master File specification”).

## Common formatting elements

The following elements can be used within above mentioned xhtml:p, xhtml:td, xhtml:li, xhtml:dt and xhtml:dd elements:

* xhtml:sub for subscripted text
* xhtml:sup for superscripted text

The following elements can be used within xhtml:p elements which are part of DEFINITION-STATEMENT, LARGESUBJECTS or SPECIALRULES:

* xhtml:b for bold text
* xhtml:i for italic text
* xhtml:em for underlined text

Any of b, i or em element may embed several occurrences of the others two.

# Samples

## IPCDefinitions

<**IPCDefinitions** edition="20160101" lang="EN"   
xmlns="http://www.wipo.int/classifications/ipc/masterfiles" xmlns:xhtml="<http://www.w3.org/1999/xhtml>" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wipo.int/classifications/ipc/masterfiles ipc\_definitions\_1-08.xsd">…</**IPCDefinitions>**

## IPCDefinitionsSection, IPCDefinitionsClass, IPCDefinitionsSubclass, IPCDefinitionsMaingroup

<**IPCDefinitionsSection** symbol="A">

<**IPCDefinitionsClass** symbol="A01">

<**IPCDefinitionsSubclass** symbol="A01B">

<**IPCDefinitionsMaingroup** symbol="A01D0003000000">

## IPC-DEFINITION

<**IPC-DEFINITION** IPC="A01"><**IPC-DEFINITION>**

## DEFINITION-STATEMENT

<**DEFINITION-STATEMENT**>

<xhtml:**div**>

<xhtml:**p**>New <xhtml:span class="emphasis">plants</xhtml:span> (including multicellular algae, multicellular fungi and lichens).</xhtml:**p**>

<xhtml:p>

<xhtml:**a** **rel**=”**illustration**” **href**=”**A01D0003000000\_0**”/>

</xhtml:p>

</xhtml:**div**>

</**DEFINITION-STATEMENT**>

## LARGESUBJECTS

<**LARGESUBJECTS**>

<xhtml:**div**>

<xhtml:**p**>Testing or determining the elasticity, or vibration-testing, or shock-testing of structures, e.g. apparatus, machine parts etc, is classified in <xhtml:**a rel=”symbol”** **href="G01M0001000000"**/**>**, as opposed to investigating, i.e. testing or determining, the strength properties of materialsamples, which is classified in this group.</xhtml:**p**>

</xhtml:**div**>

</**LARGESUBJECTS**>

## REFERENCES

Example with 2 of the 4 types of references:

**<REFERENCES>**

**<LIMITINGREFERENCES>**

**<xhtml:div>**

<xhtml:table><xhtml:tbody>

<xhtml:tr>

<xhtml:td>…</xhtml:td>

<xhtml:td><xhtml:**a rel=”symbol”** **href**="**G01M**"/></xhtml:td>

</xhtml:tr>

…

</xhtml:tbody></xhtml:table>

**</xhtml:div>**

**</LIMITINGREFERENCES>**

**<APPLICATIONORIENTEDREFERENCES>**

**<xhtml:div>**

<xhtml:table><xhtml:tbody>

<xhtml:tr>

<xhtml:td>…</xhtml:td>

<xhtml:td><xhtml:**a rel=”range”** **href**="**G01M\_G01H**"/></xhtml:td>

</xhtml:tr>

…

</xhtml:tbody></xhtml:table>

**</xhtml:div>**

**</APPLICATIONORIENTEDREFERENCES>**

**</REFERENCES>**

## GLOSSARYOFTERMS

<**GLOSSARYOFTERMS**>

<**xhtml:dl**>

<**xhtml:dt id="GT138"** >Plant growth regulator</**xhtml:dt>**

<**xhtml:dt id="GT139"** >Plant growth regulators</**xhtml:dt>**

<**xhtml:dd**>Materials which alter the plant or may affect plant growth through a chemical modification of the plant metabolism, such as auxins.</**xhtml:dd>**

**…**

</**xhtml:dl**>

</**GLOSSARYOFTERMS**>

## SYNONYMSANDKEYWORDS

<**ABBREVIATIONS**>

<**xhtml:div**>

<**xhtml:dl**>

<**xhtml:dt**>EBA</**xhtml:dt>**

<**xhtml:dd**>Electronic Break Assist</**xhtml:dd>**

**…**

</**xhtml:dl**>

</**xhtml:div**>

</**ABBREVIATIONS**>

<**SYNONYMS**>

<**xhtml:div**>

<**xhtml:ul**>

<**xhtml:li**>

<**xhtml:ul**>

<**xhtml:li**>Lyophilisation</**xhtml:li**>

<**xhtml:li**>freeze-drying</**xhtml:li**>

</**xhtml:ul**>

</**xhtml:li**>

…

</**xhtml:ul**>

**<xhtml:p>**Also, these terms can be used as keywords.**</xhtml:p>**

</**xhtml:div**>

</**SYNONYMS**>

<**INSTEADOFWORDS**>

<**xhtml:div**>

<**xhtml:dl**>

<**xhtml:dt**>bra</**xhtml:dt>**

<**xhtml:dd**>foundation garment</**xhtml:dd>**

**…**

</**xhtml:dl**>

**<xhtml:p>**which is used in the classification scheme of this subclass.**</xhtml:p>**

</**xhtml:div**>

</**INSTEADOFWORDS**>

<**SPECIALMEANINGS**>

<**xhtml:div**>

<**xhtml:dl**>

<**xhtml:dt**>step-in</**xhtml:dt>**

<**xhtml:dd**> mechanism that ensures that, when pressing the shoe on the binding, the shoe will be automatically locked to the holder </**xhtml:dd>**

**…**

</**xhtml:dl**>

</**xhtml:div**>

<**/SPECIALMEANINGS**>

End of document