

[illegible]

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Introduction

This document provides additional information regarding the Red Book XML that is not specified in the official DTD's.

Red Book XML is the USPTO implementation of WIPO Standard ST.36. Red Book XML refers to the structured text of a US Pre-Grant Publication or a US Patent document.

Statements regarding whether the element or attribute is mandatory are only noted when the component is otherwise listed as optional in the corresponding DTD.

Current DTDs in force

Red Book must contain a doctype declaration pointing to the specific DTD in force:

For grant:

```
<!DOCTYPE us-patent-grant SYSTEM "us-patent-grant-v47-2022-02-17.dtd" [ ]>
```

or

For PGPub:

```
<!DOCTYPE us-patent-application SYSTEM "us-patent-application-v46-2022-02-17.dtd" [ ]>
```

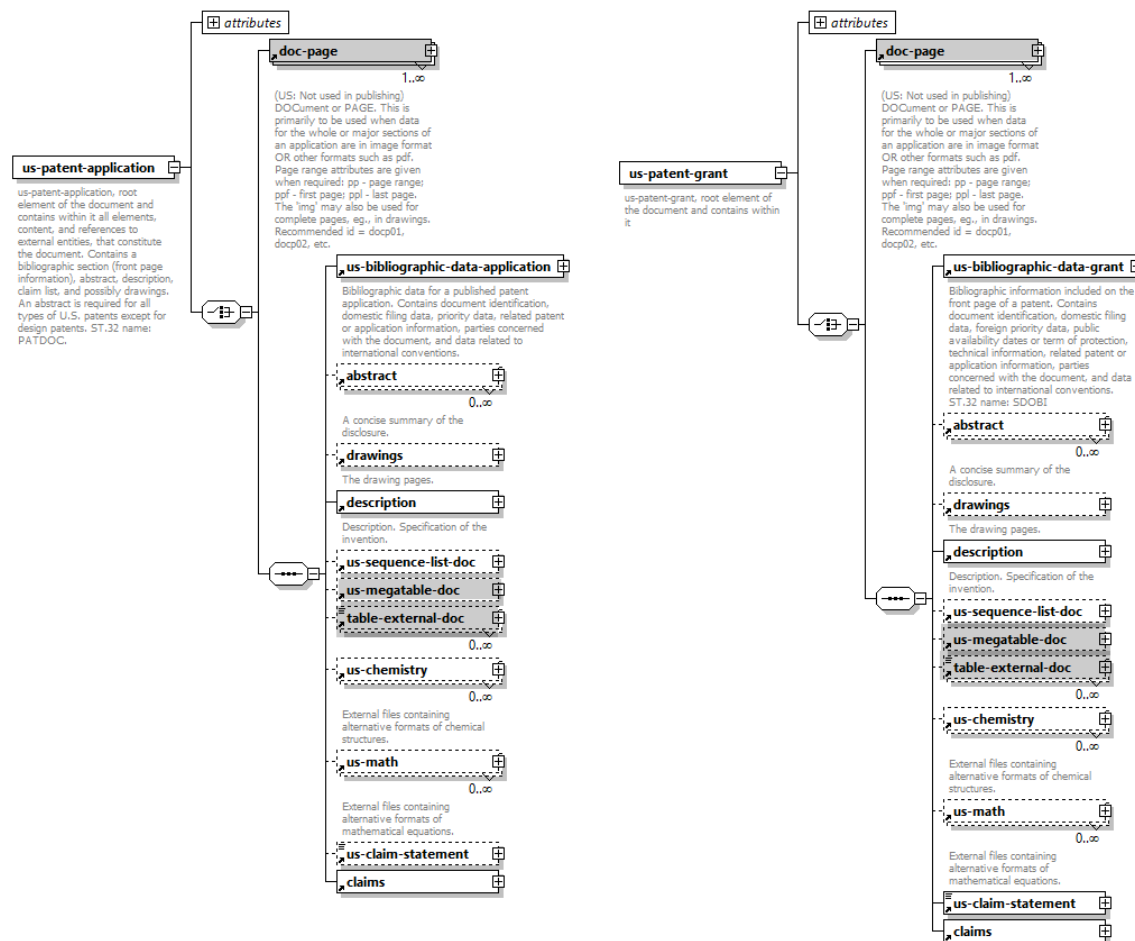
Graphical Technical Specification:

- <https://www.uspto.gov/learning-and-resources/xml-resources/application-red-book-document-type-definition>
- <https://www.uspto.gov/learning-and-resources/xml-resources/grant-red-book-document-type-definition>

Supplemental DTDs in force

- us-sequence-listing-v1_3-2020-10-08.dtd
- us-table-external-v42-2007-07-12.dtd
- ST26SequenceListing_V1_3.dtd

Root elements



us-patent-grant

(us-bibliographic-data-grant, abstract*, drawings?, description, us-sequence-list-doc?, us-chemistry*, us-math*, us-claim-statement, claims)

attribute country	"US"
attribute date-produced	
attribute date-publ	must correspond to the issue date
attribute dtd-version	"v4.7 2022-02-17"
attribute file	
attribute status	"PRODUCTION"
attribute id	"us-patent-grant"
attribute lang	"EN"

The elements doc-page, us-megatable-doc, and table-external-doc are not used.

us-patent-application

(us-bibliographic-data-application,abstract*, drawings?, description,
us-sequence-list-doc?, us-chemistry*, us-math*, us-claim-statement?, claims)

attribute country "US"

attribute date-produced

attribute date-publ must correspond to the publication or issue date

attribute dtd-version "v4.6 2022-02-17"

attribute file

attribute status "PRODUCTION"

attribute id "us-patent-application"

attribute lang "EN"

The elements doc-page, us-megatable-doc, and table-external-doc are not used.

Common Bibliographic fields**application-reference**

Identification of a patent application

1.1. Application type (attribute appl-type)

PGPub: "utility" or "plant"

Grant: "utility", "design", "plant", "reissue", or "sir"

Note that the "sir" attribute value is obsolete for filing dates on or after March 16, 2013.

1.1. Country (document-id/country)

Always "US"

1.2. Application number (document-id/doc-number)

INID Code (21)

8-position number representing the application number.

1.3. Application filing date (document-id/date)

INID Code (22).

Reflects the filing date of the application.

Refer to 1.32 *document-id/date* for the format of the date.

Note: for U.S. National Stage applications, this date is also the same as the PCT filing date.

us-application-series-code

2-digit number at the beginning of the application number

The series code corresponds to different types of applications

Note: Present in Red Book but not Yellow Book.

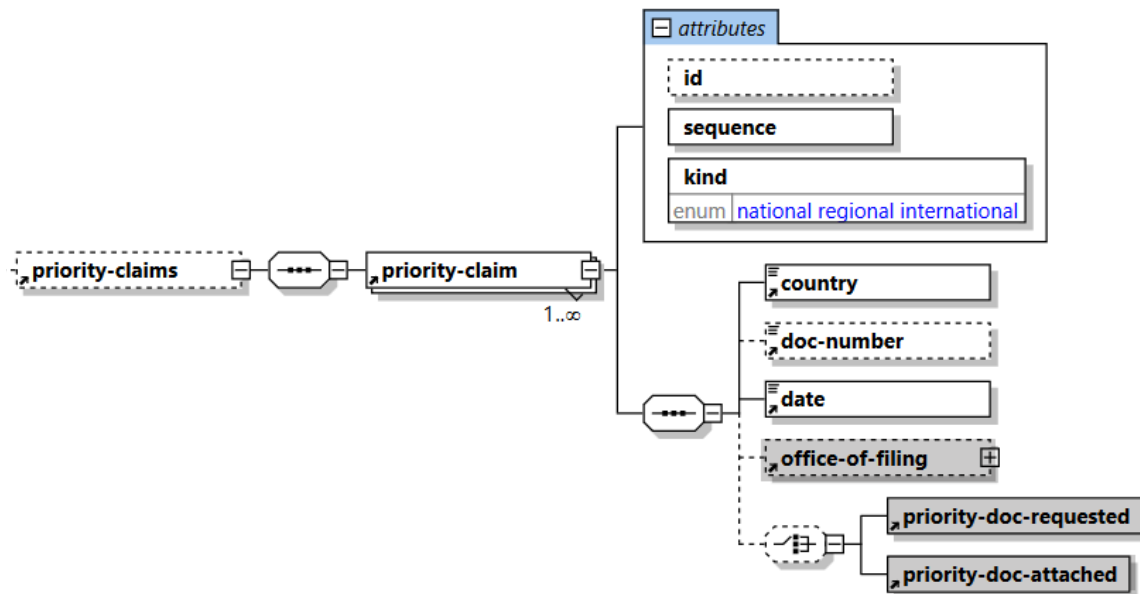
02 through 28	Utility (or Plant) application
02	through 1947-12-31
03	1948-01-01 through 1959-12-31
04	1960-01-01 through 1969-12-31
05	1970-01-01 through 1978-12-31
06	1979-01-01 through 1986-12-31
07	1987-01-01 through 1992-12-31
08	1993-01-01 through 1997-12-29
09	1997-12-30 and after
10	Dec. 2001 to Nov. 2004
11	Dec. 2004 to Dec. 2007
12	Dec. 2007 to Mar. 2011
13	Dec. 2010 to Aug. 2013
14	Aug. 2013 to July 2016
15	Jan. 2016 to June 2018
16	June 2018 to Aug. 2020
17	Aug. 2020 to Nov. 2022
18	Nov. 2022 to present
29	Design application through Apr. 2025
30	Design application starting Apr. 2025
35	International Design applications under the Hague Agreement (2015-05-13 and after)
60 through 69	Provisional application
90	Reexamination request

Filed under Rule 47: rule-47-flag

The application was filed under Rule 47, indicating the applicant(s) refused to execute the application or could not be found.

Applies only to applications filed before September 16, 2012.

Foreign Application Priority Data: priority-claims



INID Code (30)

Each priority claim indicates the priority sequence and kind of priority (national, regional, or international).

For example, priority to an EP application corresponds to regional priority, while priority to a PCT application corresponds to international priority.

When multiple applications are being listed in foreign priority data, they will be ordered as follows:

- Chronologically by filing date (earliest to latest).
- Whenever multiple applications with the same filing date have the same two-letter country/office code, then by ascending application number (lowest to highest).
- Whenever multiple applications with the same filing date have different two-letter country/office codes, then alphabetically by country/office code.

Note: a priority claim to a PCT application is different from an application which is a US National Stage of an international PCT application.

Also published in Official Gazette

1.4. priority-claim

Attribute sequence should be two-digit zero-padded number starting from “01”

Elements office-of-filing, priority-doc-requested, and priority-doc-attached are not used.

1.4.1. priority claim type (attribute kind)

“national”, “regional”, “international”

Regional organizations:

AP	African Regional Intellectual Property Organization (ARIPO)
BX	Benelux Designs Office (BBDM)
EA	Eurasian Patent Organization (EAPO)
EM	European Union Intellectual Property Office (EUIPO)
EP	European Patent Office (EPO)
EU	European Union (NOTE: WIPO Standard ST.3 states that code EU pertains “to other rights applicable in the European Union and not covered by codes ‘EP,’ ‘EM’ and ‘QZ.’” Therefore, in a utility application the two-letter code EP should be used. In a design application the two-character code EM should be used. In a plant application the two-character code QZ should be used.)
GC	Patent Office of the Cooperation Council for the Arab States of the Gulf (GCC Patent Office)
OA	African Intellectual Property Organization (OAPI)
QZ	Community Plant Variety Office (European Community) (CPVO)
XN	Nordic Patent Institute (NPI)
XV	Visegrad Patent Institute (VPI)

International organizations:

WO	World Intellectual Property Organization
XU	International Union for the Protection of New Varieties of Plants (UPOV)

Note: Present in Red Book but not Yellow Book.

1.4.2. priority-claim/country

Refers to the ST.3 code. This includes EP and WO.

Note: When priority is claimed to a PCT application, the code should always be “WO”

1.4.3. priority-claim/doc-number

The foreign application number.

1.4.4. priority-claim/date

Refers to the filing date of the foreign application.

Refer to *1.32 document-id/date* for the format of the date.

IPC: classifications-ipcr

INID Code (51)

IPC classification data.

Required for Utility and Plant applications

When there are multiple IPCRs, the first `classification-ipcr` will be the one with `symbol-position` F.

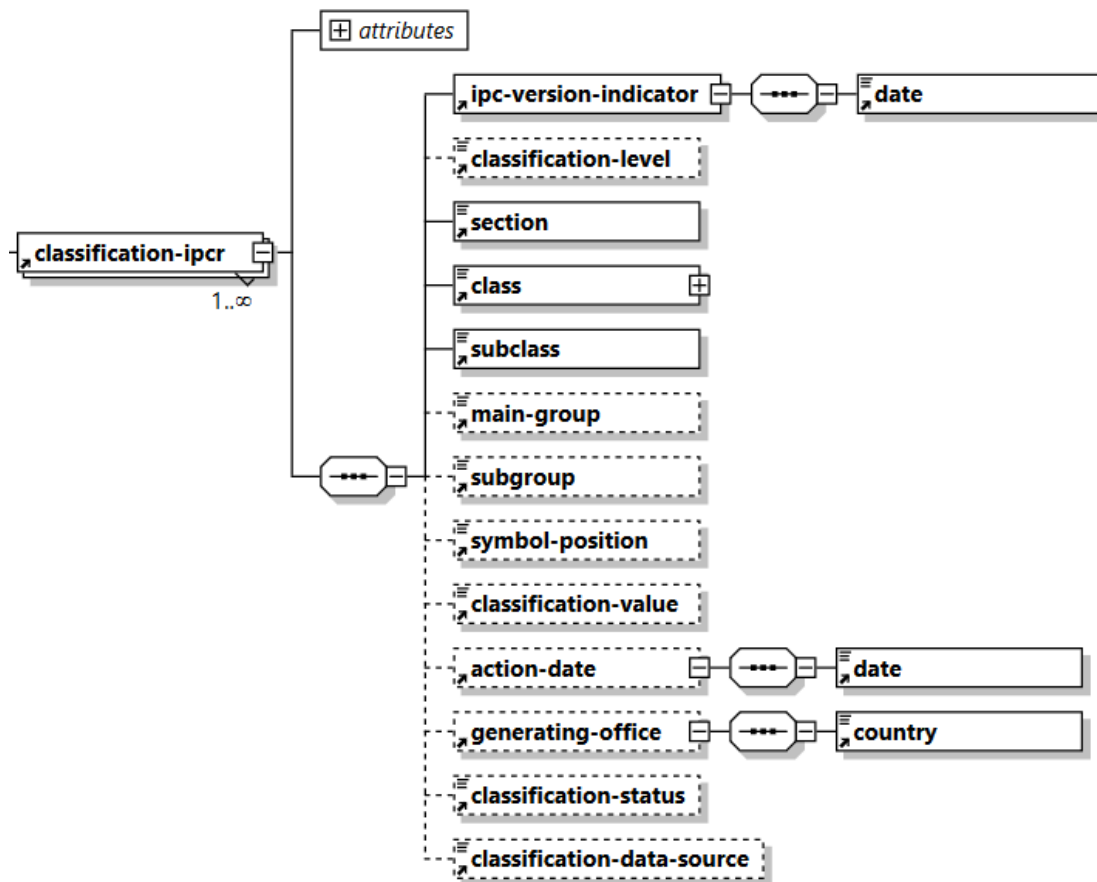
Next will be any IPCRs with `classification-value` I and `symbol-position` L, in alphanumeric symbol order.

Last will be any IPCRs with `classification-value` N and `symbol-position` L, in alphanumeric symbol order.

Note: the symbol slash is treated as a decimal for sorting purposes.

Also published in Official Gazette

1.5. classification-ipcr



1.5.1. ipc-version-indicator/date

Edition indicator for an IPC symbol.

Refer to 1.32 *document-id/date* for the format of the date.

1.5.2. classification-ipcr/classification-level

“A” (advanced level)

Note: Present in Red Book but not Yellow Book.

1.5.3. IPC section, class, subclass, main-group, subgroup
section a single capital letter (A ... H).
class two numerals.
subclass a single capital letter (A ... Z).
main-group up to three numerals, with four numerals possible in future.
subgroup two to six numerals.

1.5.4. symbol-position
“F” (first) or “L” (later)
The first IPC symbol should always have F. All other IPC symbols should have L.
The IPC symbol with `symbol-position` F must be the first symbol listed in Yellow Book.

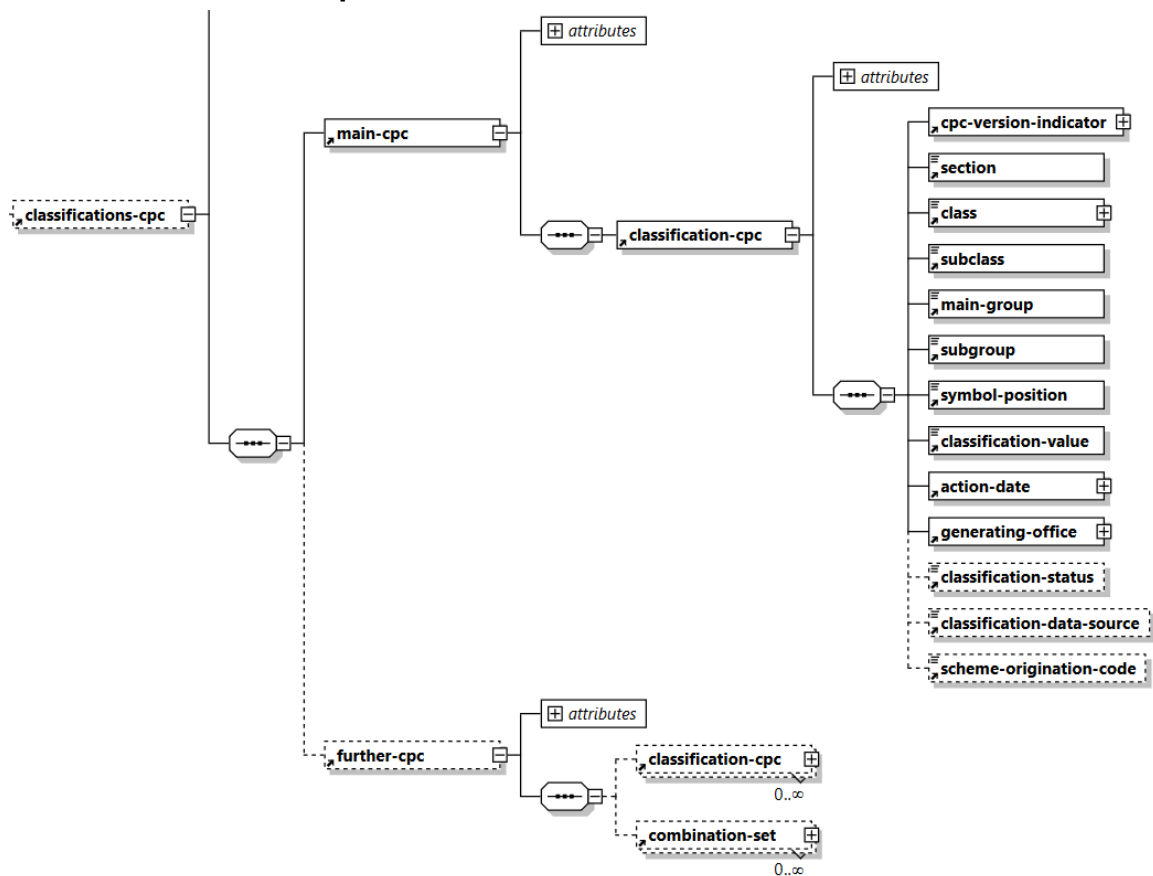
1.5.5. classification-value (IPC only)
“I” (invention information) or “N” (non-invention information)
The first IPC symbol (F) must always be an invention (I) symbol

1.5.6. action-date/date
The date that the symbol was allocated to the patent document. Corresponds to the publication date
Refer to 1.32 *document-id/date* for the format of the date.
Note: Present in Red Book but not Yellow Book.

1.5.7. generating-office/country
Always US
Note: Present in Red Book but not Yellow Book.

1.5.8. classification-status
Always “B” (basic as opposed to original)
Note: Present in Red Book but not Yellow Book.

1.5.9. classification-data-source
Always “H” (human-generated)
Note: Present in Red Book but not Yellow Book.

CPC: classifications-cpc**INID Code (52)****CPC classification data**

Always provided for Utility applications. Optional for Design and Plant applications.

Must include a `main-cpc` classification, and optionally `further-cpc` classification

Also published in Official Gazette

1.5.10. classification-cpc/cpc-version-indicator/date

Version for the CPC symbol

Refer to 1.32 *document-id/date* for the format of the date.

1.5.11. section, class, subclass, main-group, subgroup

Elements reflecting parts of a single CPC symbol

For example, the symbol “H04N19/86” corresponds to:

- section “H”
- class “04”
- subclass “N”
- main-group “19”
- subgroup “86”

1.5.12. symbol-position

“F” (first) or “L” (later)

The first CPC symbol (`main-cpc`) should always have F. All other CPC symbols (`further-cpc`) should have L.

The first CPC symbol must be the first symbol listed in Yellow Book.

1.5.13. classification-value (CPC only)

“I” (invention information) or “A” (additional information)

The first CPC symbol (F) must always be an invention (I) symbol

In Yellow Book, classification-value is distinguished according to WIPO ST.10/C¹.

1.5.14. action-date/date

The date that the symbol was allocated to the patent document. Corresponds to the publication date or issue date

Refer to *1.32 document-id/date* for the format of the date.

Note: Present in Red Book but not Yellow Book.

1.5.15. generating-office/country

Always “US”

Note: Present in Red Book but not Yellow Book.

1.5.16. classification-status

Always “B” (Basic or original data)

Note: Present in Red Book but not Yellow Book.

1.5.17. classification-data-source

Always “H” (Human generated data)

¹ [ST.10/C - Presentation of bibliographic data components](#)

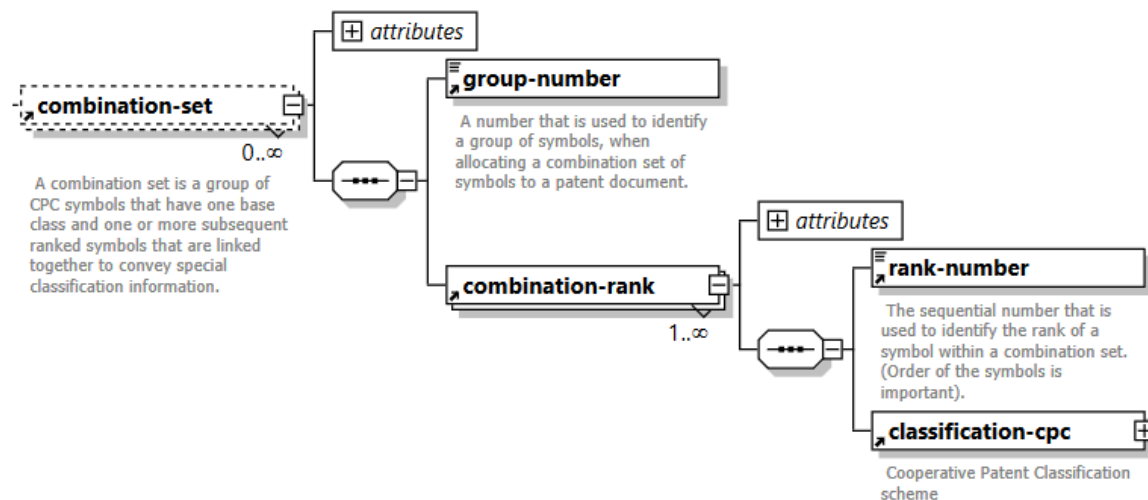
Note: Present in Red Book but not Yellow Book.

1.5.18. scheme-origination-code

Always “C” (CPC)

Note: Present in Red Book but not Yellow Book.

1.5.1. further-cpc/combination-set



(group-number, combination-rank+)

Combination set allocations (two or more symbols, whose arrangement uniquely identify specific features)

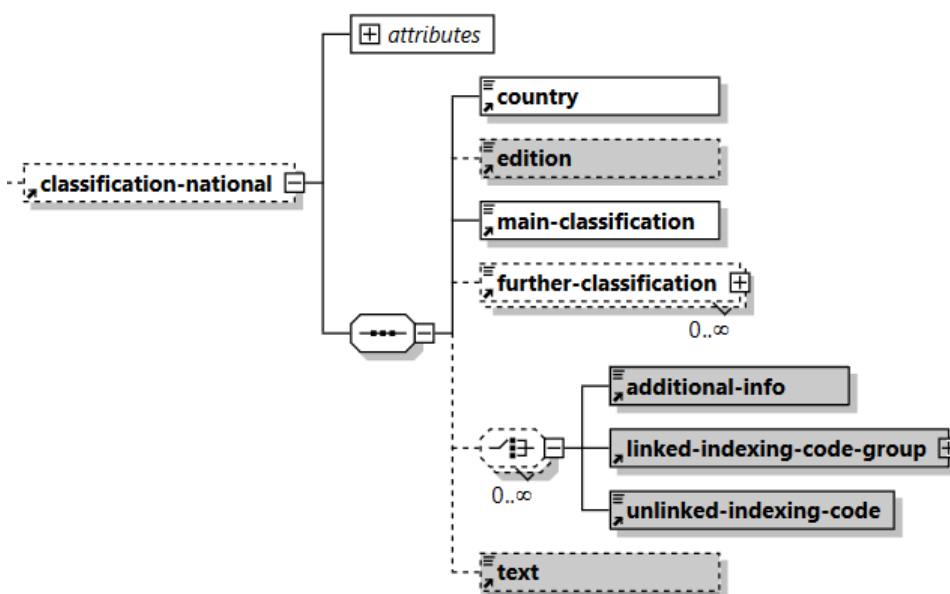
Element `group-number` identifies each distinct combination set allocation.

1.5.1.1. further-cpc/combination-set/combination-rank

Contains a symbol within the Combination set. A Combination set comprises a group of at least two ranked CPC symbols.

1.5.1.1.1. further-cpc/combination-set/combination-rank/rank-number

Indicates the rank of the symbol within the Combination set. The rank-number of “1” corresponds to the base symbol (i.e. the first symbol within the set). Ranks 2, 3, or higher are used for subsequent symbols within the set.

USPC: classification-national

INID Code (52)

USPC Classification

Required for Plant or Design applications

Elements `edition`, `additional-info`, `linked-indexing-code-group`, `unlinked-indexing-code`, and `text` are not used.

Also published in Official Gazette

1.6. `classification-national/country`

Always “US”

Note: Present in Red Book but not Yellow Book.

1.7. `classification-national/main-classification`

The USPC class and subclass, coded as a padded value, with a minimum of 6 characters.

For Design, must always correspond to a Design USPC symbol.

- Design class is D in Position #1 and right-justified numbers (with leading space) in Positions #2 and #3.
- Design subclass is right-justified (with leading spaces) in Positions #4, #5, #6.
- For example, the symbol D3/203.1 corresponds to: “D 32031”

For Plant, must always correspond to a Plant USPC symbol.

- Plant class is PLT in Positions #1 through #3.
- Plant subclass is right-justified with leading spaces in Positions #4, #5, #6 with possibility of left-justified Positions #7, #8, etc.
- For example, the symbol Plt./310 corresponds to “PLT310”

1.8. classification-national/further-classification

May correspond to Utility, Design, or Plant classes.

In addition to Design or Plant classes, it is possible to have Utility classes.

ALL-NUMERIC class is right-justified with leading spaces in Positions #1 through #3.

SUBCLASS is right-justified (with leading spaces) Positions #4, #5, #6, plus possibility of left-justified Positions #7, #8, etc.

justified (with leading spaces) numbers in Positions #7, #8, #9.

FOREIGN COLLECTION (in place of subclass) is FOR in Positions #4, #5, #6, plus three numbers in Positions #7, #8, #9.

E SUBCLASS (in place of subclass) is E in Position #4 plus right-justified numbers (with leading space) in Positions #5 and #6, plus numbers in Positions #7, #8, #9, etc.

invention-title

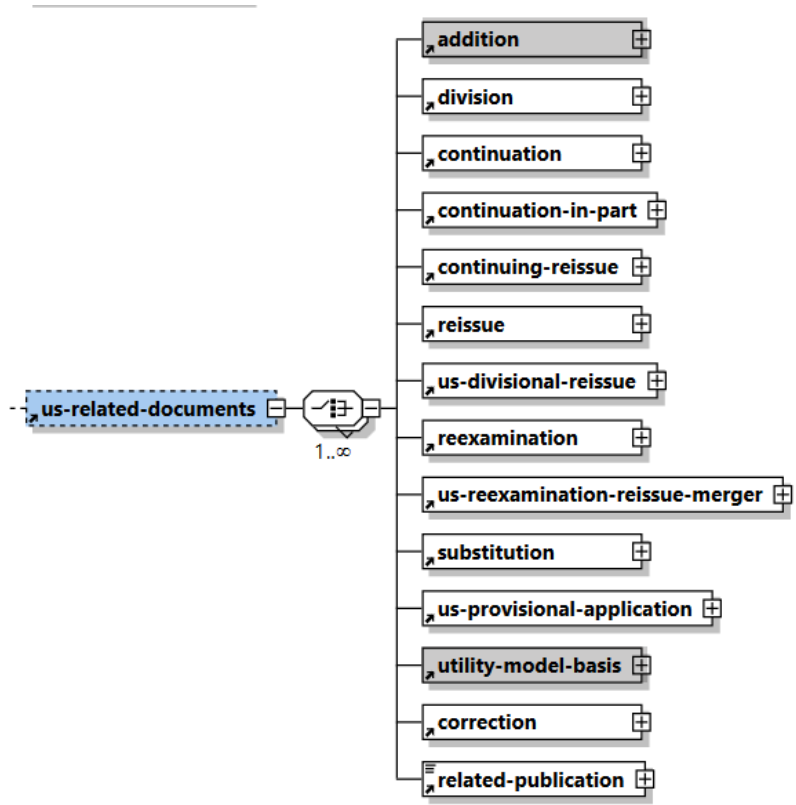
INID Code (54)

id attribute is unique and cryptic (e.g. “d0e71”).

(#PCDATA | i | o | sup | sub)*

Mixed-content element which may contain italics, subscripts, superscripts, or overscore.

Note: Although the title text in Grant Red Book must be in sentence case to facilitate the electronic Official Gazette’s List of Patentees, the invention title text will be formatted in uppercase in Yellow Book and in the Official Gazette for the individual Granted Patent (with some exceptions).

us-related-documents (Domestic benefit and prior published documents)

((division | continuation | continuation-in-part | continuing-reissue | reissue | us-divisional-reissue | us-reexamination-reissue-merger | substitution | correction)+, us-provisional-application+, related-publication+)

Related U.S. Applications

Information relating to domestic benefit and prior published documents.

Also published in the Official Gazette.

Elements `addition`, `reexamination`, and `utility-model-basis` are not used.

Note: Red Book follows Yellow Book composition rules for the order of elements reflecting benefit to non-provisional applications.

1.9. division

INID Codes (62); INID Code (60) when combination of divisional and continuation/continuation-in-part relationships

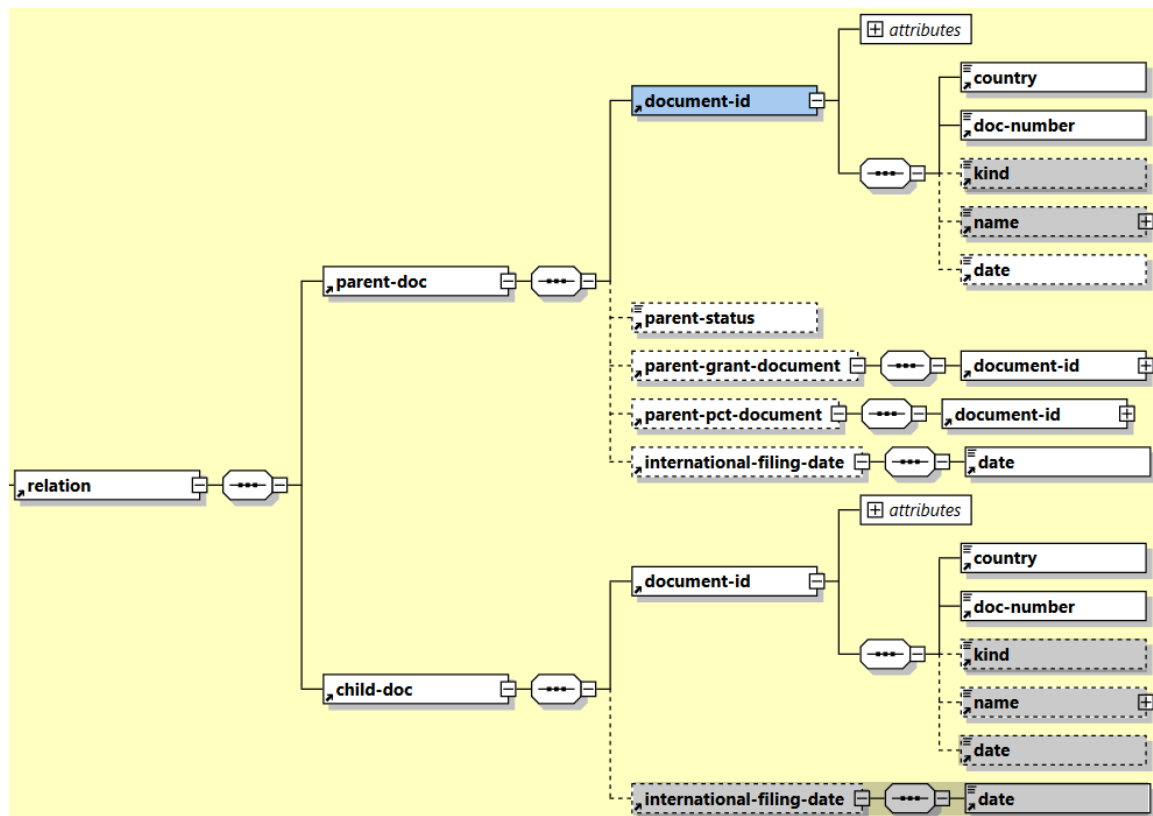
Wherein the child application is a divisional application of the parent application.

1.10. continuation, continuation-in-part

INID Codes (63); INID Code (60) when combination of divisional and continuation/continuation-in-part relationships

Wherein the child application is a continuation or a continuation-in-part of the parent application.

1.10.1. relation (division, continuation, continuation-in-part)



1.10.2. relation/parent-doc (division, continuation, continuation-in-part)

Either the U.S. non-provisional parent application, or a PCT application from which the child application is claiming continuity (as a division, continuation, or continuation-in-part). When the parent application is a PCT application, the child application is often referred to as a "bypass" application.

1.10.3. relation/parent-doc/document-id (division, continuation, continuation-in-part)

The application number (`doc-number`) and filing date (`date`) of the parent document must be supplied.

When the parent application is a PCT application, `doc-number` must be populated with the PCT application number.

Refer to *1.1 Application number (document-id/doc-number)* or *1.21.2 pct-or-regional-filing-data/document-id/doc-number*.

1.10.3.1. relation/parent-doc/document-id/country

Always “US”, even if the parent application is a PCT application.

1.10.3.2. relation/parent-doc/document-id/date

Filing date of the parent application.

Refer to *1.32 document-id/date* for the format of the date.

Note: When the parent application is a national stage of a PCT application, the date is the same as the date in parent-pct-document, not the 371c date.

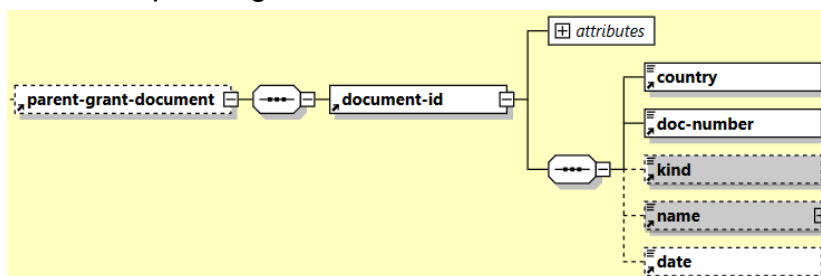
1.10.3.3. parent-status

Possible values: “PENDING”, “ABANDONED”, or “GRANTED”

Required, unless the parent-grant-document element is supplied.

Note: PCT applications should always be “PENDING”. In Yellow Book, for all other applications, if the status is not explicitly indicated as being abandoned or granted, the corresponding Red Book parent-status value must be “PENDING”.

1.10.3.4. parent-grant-document



When the parent application is granted, the patent document must be provided.

Refers to *1.39 publication-reference/document-id (Grant)* of the parent application.

1.10.3.4.1. parent-grant-document/document-id/country

Always “US”

Note: Present in Red Book but not Yellow Book.

1.10.3.4.2. parent-grant-document/document-id/doc-number

The patent number of the parent application.

1.10.3.4.3. parent-grant-document/document-id/date

The date the parent application was issued as a patent.

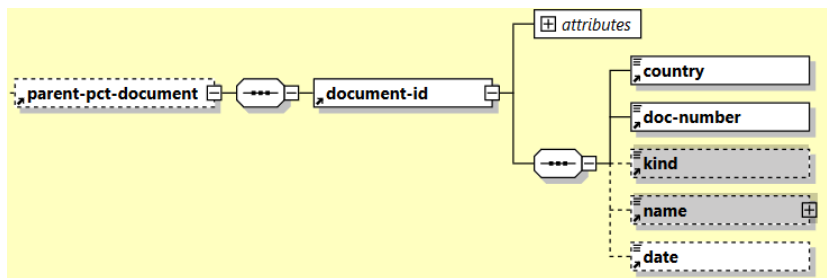
Optional

Note: Present in Red Book but not Yellow Book.

1.10.3.5. parent-pct-document

Indicates the PCT application when the parent application is a U.S. National Stage of a PCT application.

Required when parent document is a national stage application.



1.10.3.5.1. parent-pct-document/document-id/country

The code “WO” must be used

Note: Present in Red Book but not Yellow Book.

1.10.3.5.2. parent-pct-document/document-id/doc-number

The PCT application number

Note: refer to *1.21.2 pct-or-regional-filing-data/document-id/doc-number* for the PCT application number format.

1.10.3.5.3. parent-pct-document/document-id/date

The PCT application filing date

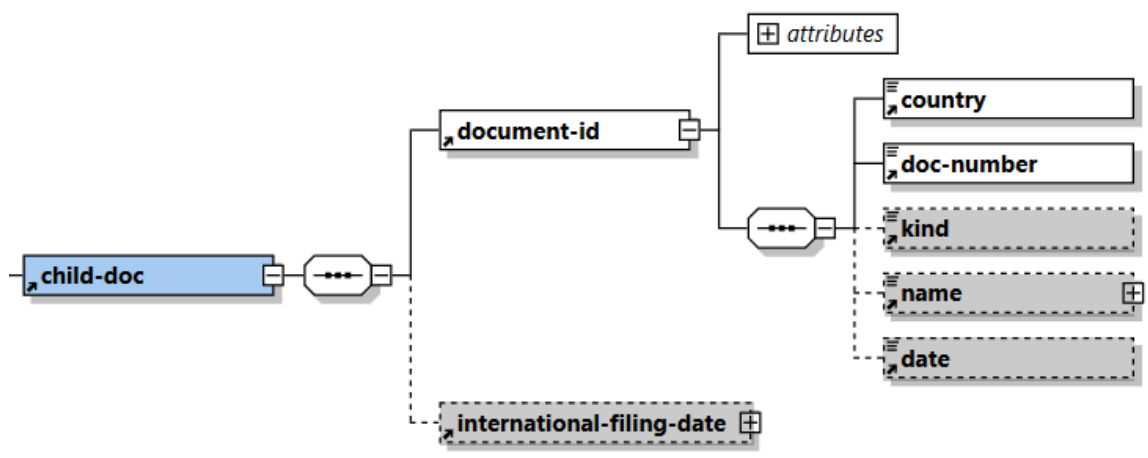
Refer to *1.32 document-id/date* for the format of the date.

1.10.3.6. parent-doc/international-filing-date

Provided only when the parent application is a Hague Agreement design application.

Refer to *1.32 document-id/date* for the format of the date.

1.10.4. relation/child-doc (division, continuation, continuation-in-part)



The application which is a division/continuation/continuation-in-part of the parent application.

1.10.4.1. relation/child-doc/document-id

The child application is identified by the country code and application number.

Refer to *1.1 Application number (document-id/doc-number)* or *1.21.2 pct-or-regional-filing-data/document-id/doc-number*.

The filing date of the child application is not provided.

1.10.4.2. relation/child-doc/international-filing-date

Not used.

1.11. reissue, continuing-reissue, us-divisional-reissue

An application for a reissue of a previously issued patent. More than one reissued patent may result from an original patent.

1.12. substitution

INID Code (66)

The application may be a substitute for a prior U.S. nonprovisional application.

1.12.1. substitution/relation/parent-doc

A "substitute" application is in essence the duplicate of an application by the same applicant abandoned before the filing of the later application.

Therefore, parent-status is expected to be "ABANDONED".

1.13. related-publication

INID Code (65)

Prior Publication Data, relating to prior A1 publications, as well as any prior A2 and/or A9 publications.

Element `text` is not used

1.13.1. related-publication/document-id/country

Always “US”

1.13.2. related-publication/document-id/doc-number

Previously published document number (e.g. Pre-Grant Publication number).

Refer to *1.41 publication-reference/document-id/doc-number (PGPub)*

1.13.3. related-publication/document-id/kind

Kind code associated with previously published document number

1.13.4. related-publication/document-id/date

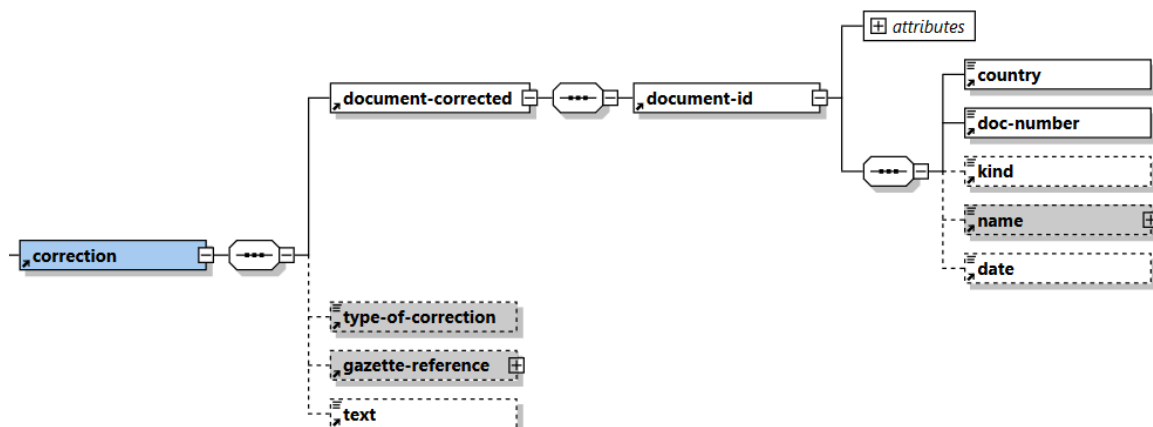
Publication date of previously published document

Refer to *1.32 document-id/date* for the format of the date.

1.13.5. us-reexamination-reissue-merger

Extremely rare. Used when a reissue application is merged with a reexamination proceeding.

1.13.6. correction



INID Code (15) under Prior Publication Data

1.13.6.1. document-corrected/document-id/country

Always “US”

1.13.6.2. document-corrected/document-id/doc-number

The publication number of the document which is being corrected

1.13.6.3. document-corrected/document-id/date

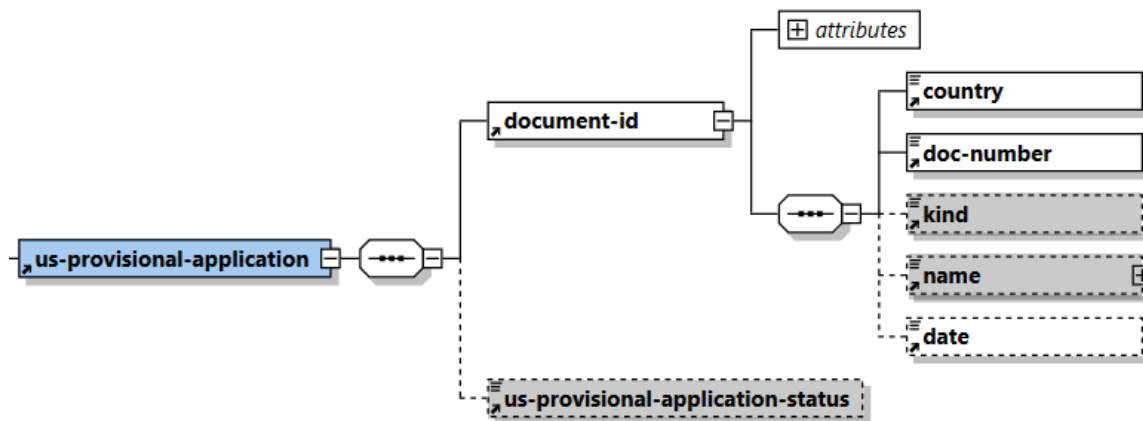
The publication date of the document which is being corrected

Refer to 1.32 *document-id/date* for the format of the date.

1.13.6.4. correction/text

Text describing the areas of the document which are being corrected.

1.14. us-provisional-application



INID Code (60)

A prior provisional application to which benefit is claimed under 35 U.S.C. 119(e).

Element `us-provisional-application-status` is not used.

1.14.1. us-provisional-application/document-id/country

Always “US”

Note: Present in Red Book but not Yellow Book.

1.14.2. us-provisional-application/document-id/doc-number

Application number for provisional application.

Note: Refer to *us-application-series-code* for the codes used for provisional applications.

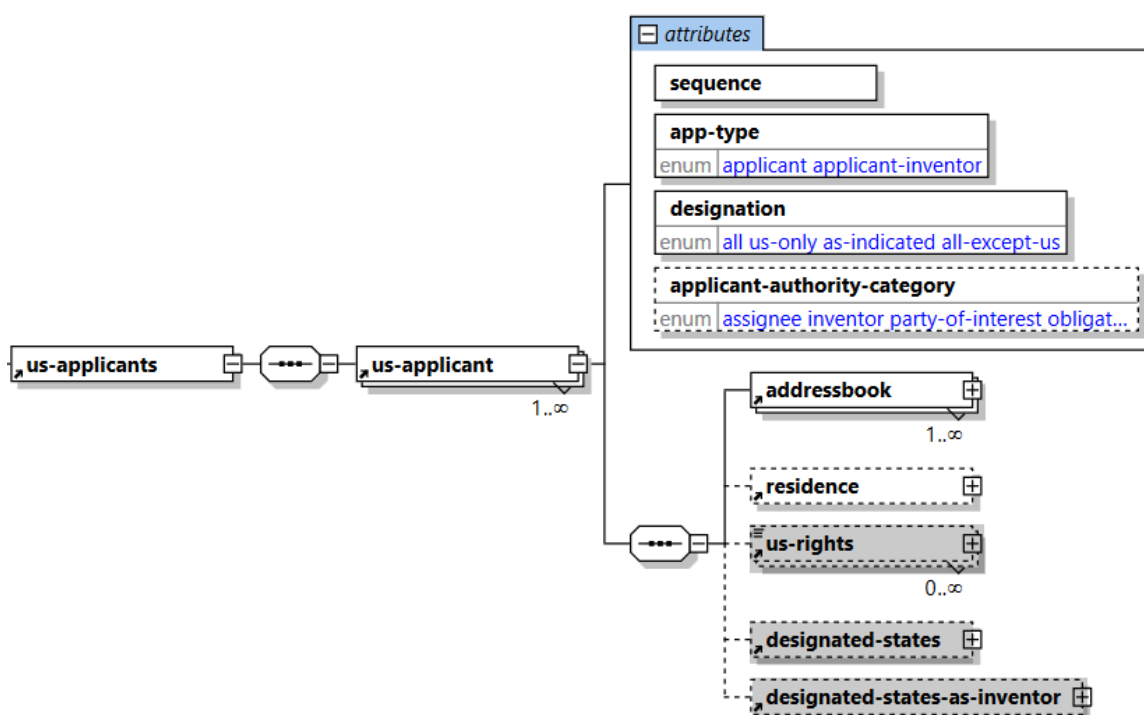
1.14.3. us-provisional-application/document-id/date

Filing date of provisional application

Refer to 1.32 *document-id/date* for the format of the date.

us-parties (Applicants and Inventors; Attorney/Agents)

1.15. us-applicants



INID Code (71) for applications filed on or after September 16, 2012; the applicant may be the inventor, assignee, or other party.

For applications filed before September 16, 2012, the applicant is always the inventor, except when there is a legal representative for a deceased/incapacitated inventor; applicant information is provided in Red Book only. The INID code for the inventor data is (75) when (73) Assignee data is being printed. The INID code for the inventor data is (76) when no (73) Assignee data is being printed.

Also published in Official Gazette.

1.15.1. us-applicant

attribute sequence

attribute app-type (applicant | applicant-inventor)

attribute applicant-authority-category (inventor | legal-representative | party-of-interest | obligated-assignee | assignee)

attribute designation “us-only”

Note: Attribute values are present in Red Book but not Yellow Book.

Attribute applicant-authority-category is optional. Do not populate if the value is uncertain or unknown.

(addressbook+, residence?)

Elements `us-rights` (obsolete), `designated-states`, and `designated-states-as-inventor` are not used

Observe the following correspondence between applicant-authority-category and app-type:

app-type (required)	applicant-authority-category (optional)	Comments
applicant-inventor	inventor	Applicant is the inventor
applicant	legal-representative	Legal Representative under 35 U.S.C. 117
	party-of-interest	Person who shows sufficient proprietary interest
	obligated-assignee	Person to whom the inventor is obligated to assign
	assignee	Assignee

1.16. us-applicant/addressbook

Refer to *addressbook*

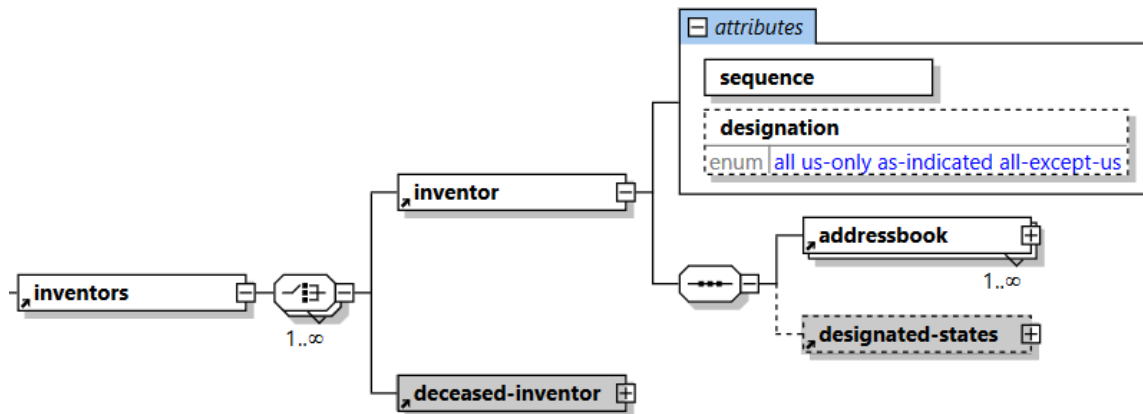
1.17. us-applicant/residence

Note: Present in Red Book but not Yellow Book. An applicant’s residence may differ from their mailing address.

1.17.1. us-applicant/residence/country

Corresponds to ISO 3166 two-letter country codes. May also include State Department recognized countries not in this list.

1.18. inventors



INID Code (72) for applications filed on or after September 16, 2012

element `deceased-inventor` is not used (obsolete)

Also published in Official Gazette.

1.19. inventor

attribute `sequence` reflects the order of the names of joint inventors

attribute `designation` “us-only”

element `designated-states` is not used

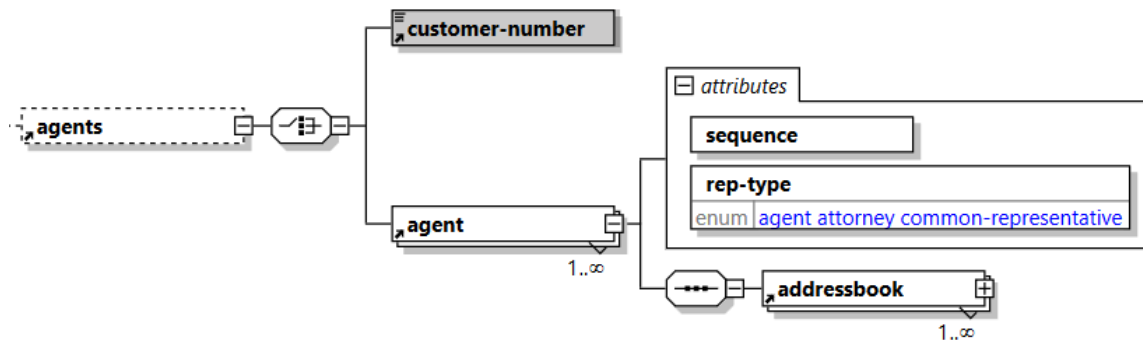
1.19.1. inventor/addressbook

The inventor’s name and residence.

Note: in the case of a deceased inventor, the residence may be omitted

Refer to *addressbook*

1.20. agents



INID Code (74)

Attorney, Agent, or Firm information

Not used for PGPub. Included only when information is provided for Patent Grants.

Element `customer-number` is not used

Not published in Official Gazette

1.20.1. agent

attribute `rep-type` always “attorney”

attribute `sequence`

Note: Attribute values are not present in Yellow Book.

1.20.1.1. agent/addressbook

Name of the attorney, agent, or firm

Use `orgname` when it is a firm and `last-name`, etc. when the attorney or agent is an individual person.

1.20.1.2. agent/addressbook/address

Country for an Attorney, Agent, or Firm is always “unknown”

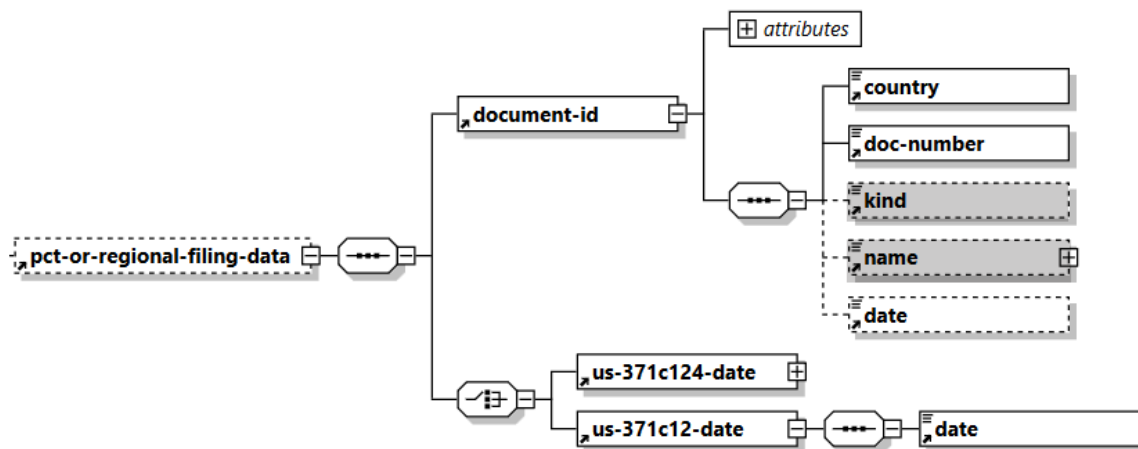
Note: Present in Red Book but not Yellow Book.

bio-deposit

Not used; information about biological deposits is not captured as part of the bibliographic data on the front page.

PCT: National stage applications

1.21. pct-or-regional-filing-data



INID Code (86)

The PCT application from which the current application is a national stage application.
Also published in Official Gazette

1.21.1. pct-or-regional-filing-data/document-id/country

Always “WO”

Note: Present in Red Book but not Yellow Book.

1.21.2. pct-or-regional-filing-data/document-id/doc-number

The PCT application number

The PCT application always begins with “PCT/”, followed by a two-character country code, a year, a slash (“/”), and a serial number

Note: for Grants, if the PCT filing date is on or after January 1, 2004, the PCT application number will be captured so that it shows a **four**-digit year and a **six**-digit serial number.

On the other hand, if the PCT filing date precedes January 1, 2004, the PCT application number will be captured so that it contains a **two**-digit year and a **five**-digit serial number.

1.21.3. pct-or-regional-filing-data/document-id/date

INID Code (22)

The PCT application filing date

The PCT application filing date is used as the application filing date (application-reference/document-id/date) for all Utility applications other than Reissue.

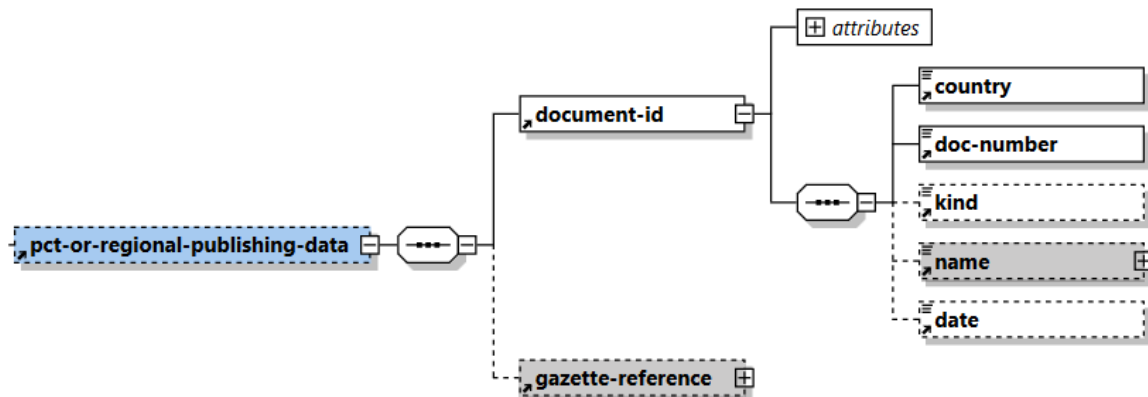
1.21.4. pct-or-regional-filing-data/us-371c124-date

When the National Stage application's filing is before September 16, 2012, the § 371(c)(1), (2), (4) Date is used as the National stage entry date

1.21.5. pct-or-regional-filing-data/us-371c12-date

When the National Stage application's filing is on or after September 16, 2012, the § 371(c)(1), (2) Date is used as the National stage entry date

1.22. pct-or-regional-publishing-data



INID Code (87)

The published PCT application.

Element `gazette-reference` is not used.

Also published in Official Gazette

1.22.1. pct-or-regional-publishing-data/document-id/country

Always “WO”

Note: Present in Red Book but not Yellow Book.

1.22.2. pct-or-regional-publishing-data/document-id/doc-number

The published PCT document number always begins with “WO”, followed by the year of publication, a slash (“/”), and a serial number.

If the WO publication date is on or after January 1, 2004, the WO publication number will be captured so that it contains a **four**-digit year and a **six**-digit serial number.

If the WO publication date is during the period from July 1, 2002, through December 31, 2003, the WO publication number will be captured so that it contains a **two**-digit year and a **six**-digit serial number.

If the WO publication date precedes July 1, 2002, the WO publication number will be captured so that it contains a **two**-digit year and a **five**-digit serial number.

1.22.3. pct-or-regional-publishing-data/document-id/kind

Note: Present in Red Book but not Yellow Book.

Current practice is to use value “A”

Code	Publication details
A1	International application published with ISR
A2	International application published without ISR
A2	International application published with declaration under Article 17(2)(a)
A3	Later publication of ISR with revised front page
A4	Later publication of amended claims and/or statement (Article 19) with revised front page
A8	International application republished with corrections to front page bibliographic data
A9	International application or ISR republished with corrections, alterations or supplements (see also WIPO Standard ST.50)

1.22.4. pct-or-regional-publishing-data/document-id/date

The publication date of the PCT application

Shared bibliographic data elements

country (non-address)

Corresponds to the two-letter WIPO ST.3 country code of the IP office or organization issuing the document, e.g. DE, FR, GB, NL, etc. Also includes EP, WO, etc.

date

8-position value corresponding to YYYYMMDD

addressbook

((((name|(prefix?, (last-name | orgname), first-name?, middle-name?, suffix?, iid?, role?, orgname?, department?, synonym*)), registered-number?), address?, phone*, fax*, email*, url*, ead*, dtext?) | text)

Contact information for applicants, inventors, assignees, and attorneys/agents

Elements name, prefix, middle-name, suffix, iid, synonym, registered-number, phone, fax, email, url, ead, dtext, text are not used

If a middle name is provided, it is appended to the element first-name

If a suffix is provided, it is appended to last-name

1.23. last-name

Append suffixes (e.g. “Jr.” or “III”) to the last-name element, preceded by a comma

1.24. orgname

The name of the organization or entity.

Note: in the case of assignees, if multiple names for the same assignee include phrases such as “doing business as”, “d.b.a.”, “also known as”, “a.k.a.”, “formerly known as”, “previously known as”, or “now known as”, only the first appearing name is captured.

1.25. first-name

Append middle name to the first name

address

(city? , state? , country)

The following address elements are not used: address-1, address-2, address-3, mailcode, pobox, room, address-floor, building, street, county, postcode, text

1.26. address/city

Includes overseas U.S. military (or diplomatic) addresses:

- APO “city” code for Army Post Office or Air Force Post Office
- FPO “city” code for Fleet Post Office (Navy, Marines, Coast Guard)
- DPO “city” code for Diplomatic Post Office

1.27. address/state

Only provided if country is US.

Includes overseas U.S. military (or diplomatic) addresses:

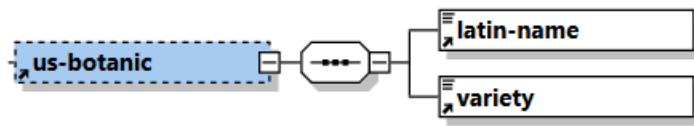
- AE “state” code for Armed Forces Europe (also includes Canada, Middle East, and Africa)
- AP “state” code for Armed Forces Pacific
- AA “state” code for Armed Forces Americas (Central and South America)

1.28. address/country

Two-character code for country of residence in the context of address.

Corresponds to ISO 3166 country codes. May also include State Department recognized countries not in the list.

Note: UK must always be replaced with GB

us-botanic (Plant only)

INID Code (50)

Required for Plant patents, optional for Pre-Grant publications

Also published in Official Gazette

1.29. latin-name

Latin name

Either genus + species OR genus + the abbreviation “sp.”

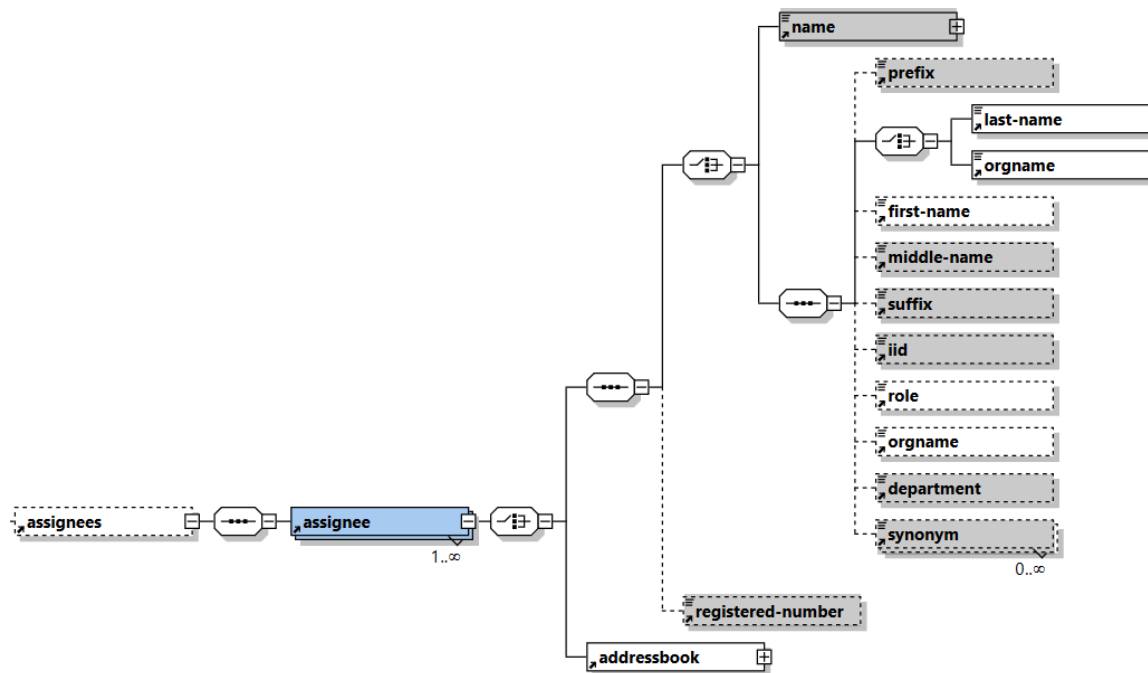
1.30. variety

Varietal denomination. Sometimes referred to as cultivar name/designation/denomination.

Should not include the single quotes

Note: The varietal denomination is always present in the title of the invention. The abbreviation “cv.” followed by a name is a less common alternative to indicating a cultivar name in single quotation marks.

assignees



INID Code (73)

Optional assignee information

Also published in Official Gazette

1.31. assignee

Use element `addressbook` if city/country information is available.

Otherwise, use `orgname` (or `last-name` and `first-name`) and `role`

1.31.1. Assignee type (role)

Two-position code reflecting the type of assignee.

1st position:

0 = 100% assigned; 1 = <100% assigned

2nd position:

2 = U.S. company or corporation

3 = Foreign company or corporation

4 = U.S. individual

5 = Foreign individual

6 = U.S. Federal government

7 = Foreign government

8 = U.S. county government

9 = U.S. state government

Note: Present in Red Book but not Yellow Book.

1.31.2. assignee/addressbook

Address information for the assignee.

Refer to *addressbook*

Context-dependent common bibliographic data elements

document-id

1.32. document-id/date

Refers to either filing date or publication date, depending on context

Date format is YYYYMMDD

Exception: US Patent documents listed in the `us-references-cited` include only the month and year, followed by “00”, e.g. 20150500

1.33. doc-number

Refers to either the application number or published document identifier.

In the context of `us-related-documents` and `priority-claims`, it refers to the application number, unless the parent element explicitly refers to a grant document in `parent-grant-document`.

In the context of reference citations, it refers to the number of the published document.

Bibliographic data elements (PGPub)

publication-reference (PGPub)

INID (10)

The US Pre-Grant Publication number

1.34. publication-reference/document-id/country (PGPub)

Always US

1.35. publication-reference/document-id/doc-number (PGPub)

Composed of year and 7-digit zero-padded sequential number.

Note: the slash separating the year and sequential number appears only in Yellow Book.

1.36. publication-reference/document-id/kind (PGPub)

INID code (12)

The kind code

1.37. publication-reference/document-id/date (PGPub)

INID code (43) corresponding to document kind A1, A2, P1, P4

INID code (48) corresponding to document kind A9, P9

Publication date

us-publication-filing-type (PGPub)

1.38. us-original-publication-voluntary, us-original-publication-redacted,
us-original-publication-amended, us-republication-corrected,
us-republication-redacted, or us-republication-amended

Indicates the particular publication filing type when an application is republished or corrected.

EMPTY element.

Note: Present in Red Book but not Yellow Book

Kind	Subsequent publication type	Expected us-publication-filing-type
A2	REPUBLICATION	us-republication-amended or us-republication-redacted
P4	REPUBLICATION	us-republication-amended or us-republication-redacted
A9	CORRECTED PUBLICATION	us-republication-corrected

P9	CORRECTED PUBLICATION	us-republication-corrected
----	-----------------------	----------------------------

us-publication-of-continued-prosecution-application (obsolete)

CPA notice when the filing date is before June 8, 1995. Obsolete, as the CPA procedure for utility and plant applications was eliminated as of July 14, 2003.

attribute cpa-text “This is a publication of a continued prosecution application (CPA) filed under 37 CFR 1.53(d).”

us-appendix-data

Not used.

dtext

Not used.

Bibliographic data elements (Grant)

publication-reference (Grant)

The US Patent Grant information

1.39. publication-reference/document-id (Grant)

INID Code (10)

Patent Number, including the country and kind code

1.40. publication-reference/document-id/country (Grant)

Always US

1.41. publication-reference/document-id/doc-number (Grant)

For Utility, an 8-digit serial number

For Design, “D” + 7-digit serial number

For Plant, “PP” + 5-digit serial number

For Reissue, “RE” + 5-digit serial number

For SIR, “H” + 4-digit serial number

1.42. publication-reference/document-id/kind (Grant)

2-position kind code from WIPO ST.16

Utility	B1 if no pre-grant publication B2 if the application was previously published as a Pre-Grant Publication
Design	S1
Plant	P2 if no pre-grant publication P3 if the application was previously published as a Pre-Grant Publication
Reissue	E1
SIR	H1

Note: for Design, Reissue, and SIR, the kind codes end in “1”, but if the document appears elsewhere in Red Book (e.g. Related U.S. Documents or References Cited), the kind code would be “S”, “E”, and “H”, respectively.

1.43. publication-reference/document-id/date (Grant)

INID Code (45)

Issue date

Refer to 1.32 *document-id/date* for the format of the date.

us-sir-flag (Grant)

Indicates Statutory Invention Registration.

attribute sir-text “A statutory invention registration is not a patent. It has the defensive attributes of a patent but does not have the enforceable attributes of a patent. No article or advertisement or the like may use the term patent, or any term suggestive of a patent, when referring to a statutory invention registration. For more specific information on the rights associated with a statutory invention registration see 35 U.S.C.157.”

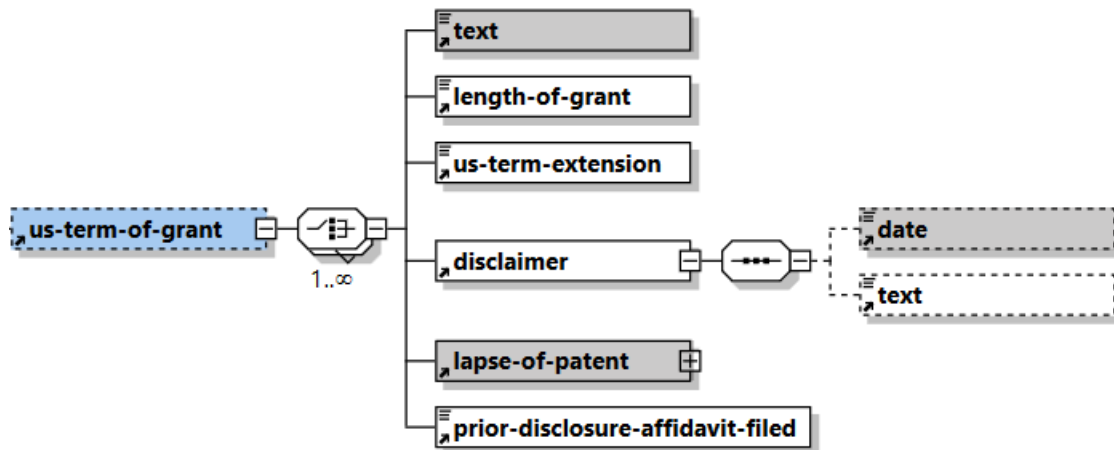
Obsolete for filing dates after March 16, 2013.

us-issued-on-continued-prosecution-application (obsolete)

Effective July 2007, the `us-issued-on-continued-prosecution-application` element is present within the `us-bibliographic-data-grant` element when the US Application Filing Date or the PCT Application Filing Date is prior to June 8, 1995.

attribute grant-cpa-text “This patent issued on a continued prosecution application (CPA) filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provision of 35 U.S.C. 154(a)(2).”

Applies only to Plant/Utility applications. CPA procedure for Plant/Utility is obsolete as of July 14, 2003.

us-term-of-grant (Grant)

Information relating to the patent term.

Elements `text` and `lapse-of-patent` are not used.

Also published in Official Gazette

1.44. `length-of-grant` (Design only)

Value should be "15" (corresponds to years).

For applications filed before May 13, 2015, the Design patent term was 14 years.

If the U.S. design patent is issuing from an application that was filed on or after May 13, 2015, the patent term is 15 years.

1.45. `us-term-extension`

The presence of this element indicates that the term of the patent has been extended under 35 USC 154(b). The content will be a numeric value identifying the number of days of the extension.

Note: should be included for all Utility and Plant, even when the extension is 0 days. This element does not apply to Design or any Reissues.

1.46. `disclaimer` (Terminal Disclaimer)

The presence of this element indicates that this granted patent is subject to a terminal disclaimer.

1.46.1. `disclaimer/text`

Contains the fixed value "This patent is subject to a terminal disclaimer."

1.47. `prior-disclosure-affidavit-filed` (37 CFR 1.130(b))

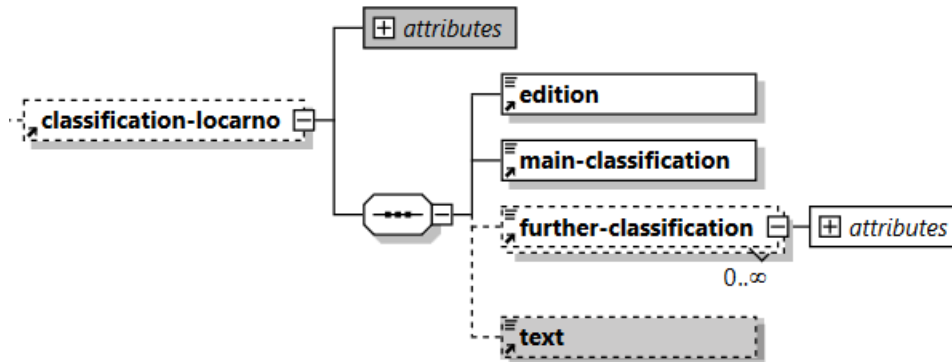
Indicates that an affidavit was filed under the provisions of 37 CFR 1.130(b).

May be present in Utility, Design, Plant, or Reissues.

1.47.1. prior-disclosure-affidavit-filed/text

Contains the fixed value “Patent file contains an affidavit/ declaration under 37 CFR 1.130(b).”

classification-locarno (Design patents only)



INID Code (51)

Locarno classification

Required for all Design patents

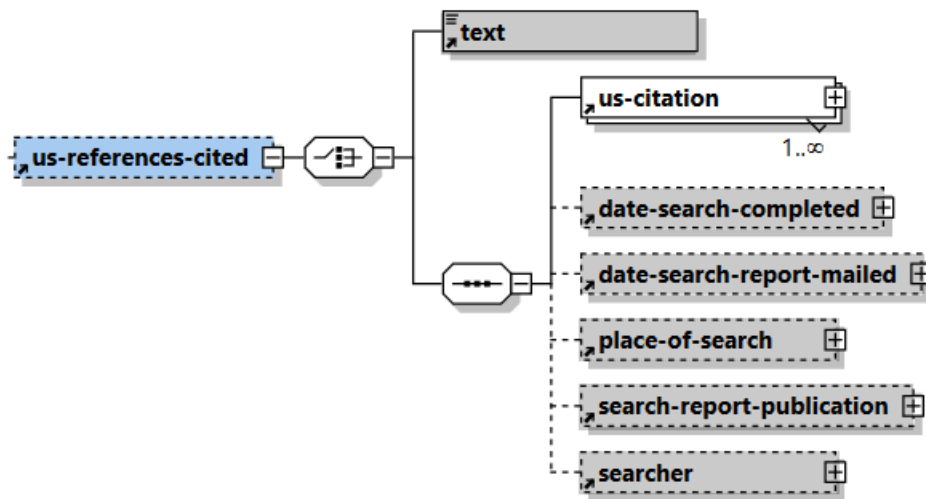
Also published in the Official Gazette for all Design patents

1.48. edition (Locarno)

16	Entry into force beginning January 1, 2027
15	Entry into force January 1, 2025
14	From January 1, 2023 to December 31, 2024
13	From January 1, 2021 to December 31, 2022
12	From January 1, 2019 to December 31, 2020
11	From January 1, 2017 to December 31, 2018

1.48.1. main-classification (Locarno)

Format nnnn. For example, Locarno classification 24-02 is “2402”

us-references-cited (Grant)

INID Code (56)

References Cited

Elements date-search-completed, date-search-report-mailed,
place-of-search, search-report-publication, and searcher are not used

Sequence of References cited:

- US patent documents (patcit)
- Foreign patent documents (patcit)
- Other Publications (nplcit)

Ordering of U.S. patent citations:

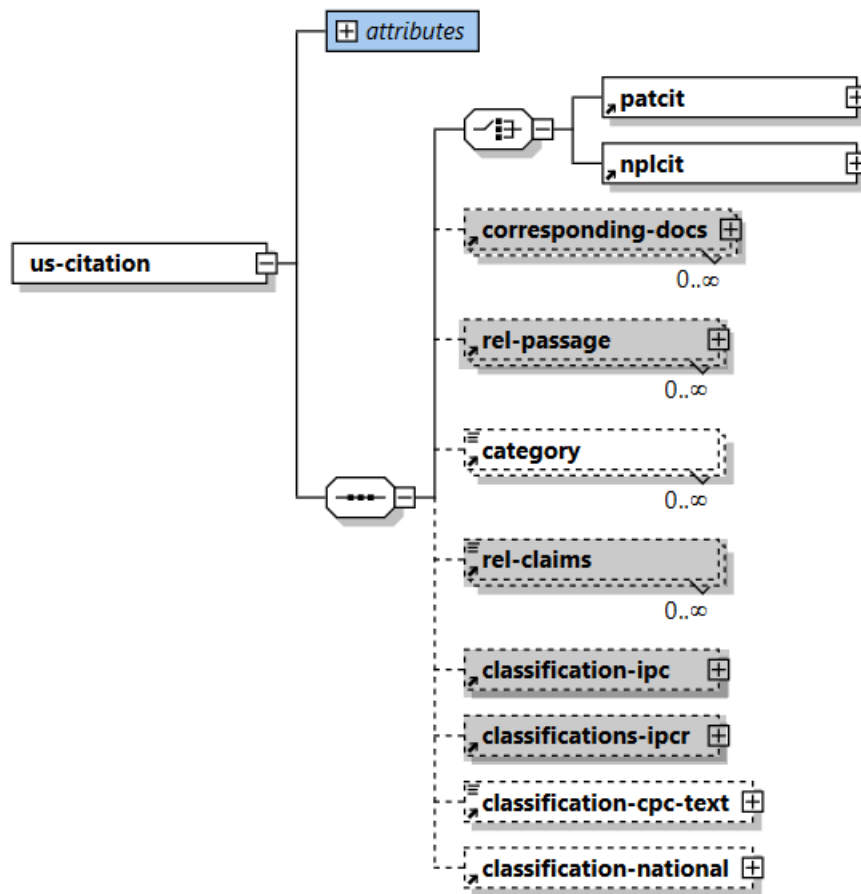
- Separate patent citations and patent application publication citations.
- Sort next by document date (month and year) in chronological order.
- Sort last by document number in ascending order.

Ordering of foreign patent citations:

- alphabetical order by two-letter country (or international organization) code
- sort next by document date in chronological order
- sort last in ascending order by document number.

Not published in Official Gazette

1.49. us-citation



((patcit | nplcit), category*, classification-cpc-text?, classification-national?)

Identifies the cited document

Attribute srep-phase is not used

Elements corresponding-docs, rel-passage, rel-claims, and classification-ipc are not used

1.49.1. us-citation/category

Possible values: “cited by examiner”, “cited by applicant”, “cited by third party”, “imported from a related application”

Required.

1.49.1. us-citation/classifications-ipcr (References cited)

Not used

1.49.2. us-citation/classification-national (References cited)

A USPC symbol associated with the patent document citation, e.g. “504100” corresponds to 504/100. Refer to *1.8 classification-national/further-classification* for the format of the symbol.

Only the first of multiple USPC classifications will be captured.

1.49.3. us-citation/classification-cpc-text (References cited)

A full CPC symbol associated with the patent document citation, e.g. “A01N 51/00”

Only the first of multiple CPC classifications will be captured.

1.49.4. us-citation/patcit

US Patent citation or foreign patent citation

Note: for US Patent citations, the document identification includes the inventor surname (“et al.” if there are multiple inventors).

Attribute num reflects the sort order of all citations. Five-digit zero-padded number.

1.49.4.1. patcit/document-id/country

ST.3 Office code which published the patent document

1.49.4.2. patcit/document-id/name

Attribute name-type is not used

Used only for US patent documents.

The last name of the first named inventor for the patent document citation. If multiple inventors, add “et al.”

1.49.4.3. patcit/document-id/date

Date of the published patent document

Refer to *1.32 document-id/date* for the format of the date.

1.49.4.4. patcit/document-id/doc-number

Document number of the patent document citation

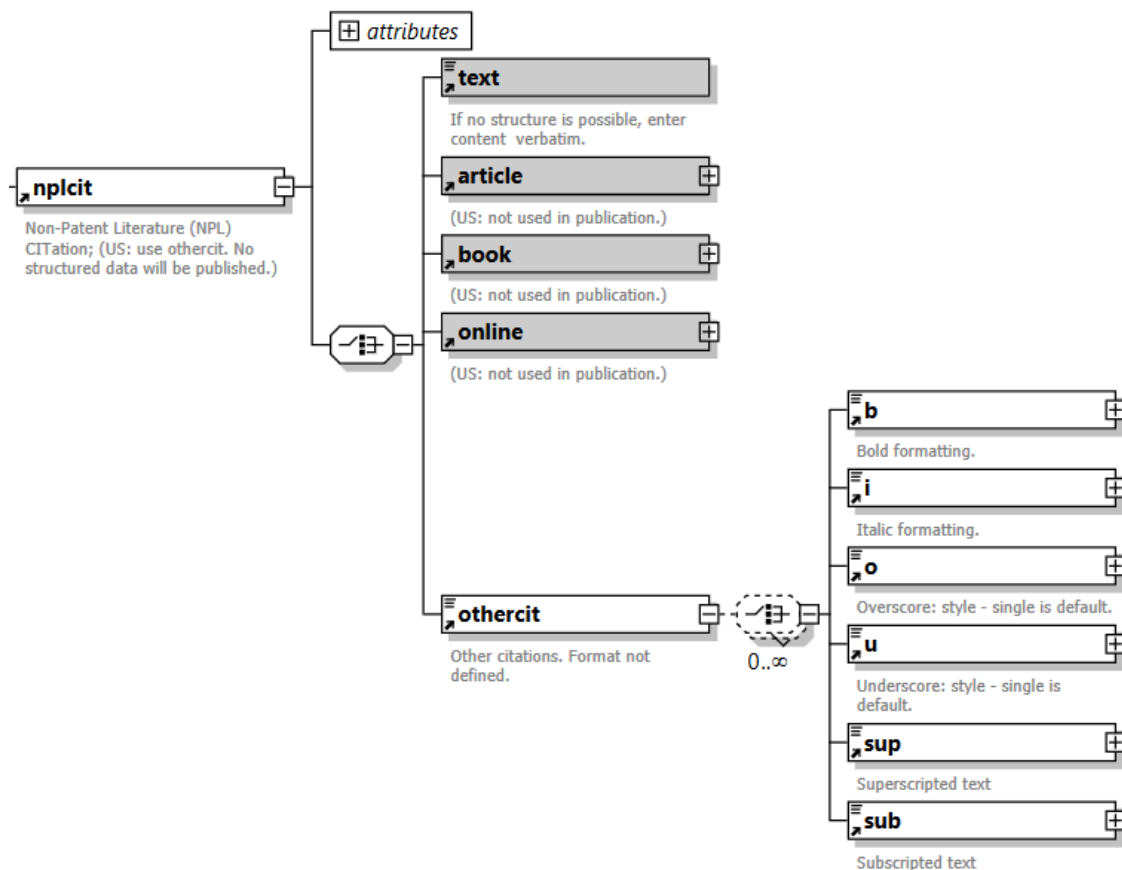
Note: the document number must not include any leading zero padding for US patent documents cited in References Cited.

1.49.4.5. patcit/document-id/kind

ST.16 kind code of the patent document citation

Required for US patent documents

1.50. us-citation/nplcit



Citation of non-patent literature

Attribute num reflects the sort order of all citations. Five-digit zero-padded number. Continues from any patent citations.

Elements text, article, book, and online are not used.

1.50.1. nplcit/othercit

(#PCDATA | i | o | sup | sub)*

Information about books, journals, or other publications cited. Includes citations of unpublished US applications, Office actions, patent prosecution documents, court documents, etc.

Typically includes title, author, date of publication, URLs, and/or relevant pages

number-of-claims (Grant)

This element refers to the total number of claims in the patent grant.

Note: for Design and Plant, the total is always 1. For reissues, the claim total should exclude claims which were cancelled, disclaimed, or held invalid by a prior post-patent action or proceeding. Refer to *claims (Reissue)*

Note: present in Yellow Book only for Utility patents.

Published in the Official Gazette for Utility and Plant patents.

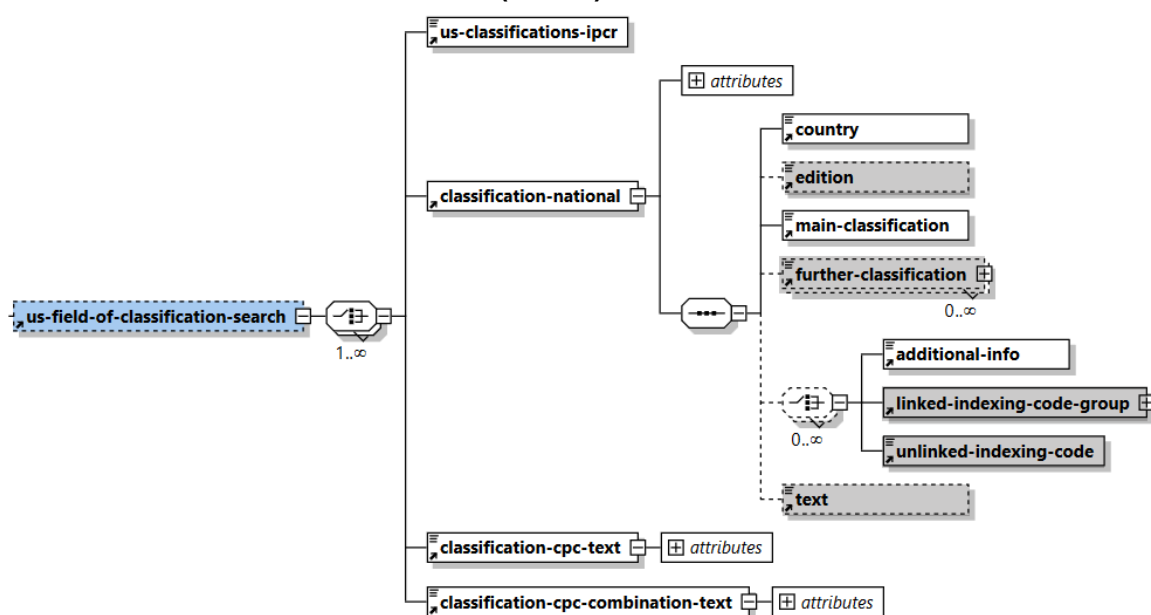
us-exemplary-claim (Grant)

The exemplary claim of the invention (also referred to as the print claim). Refers to the broadest claim(s) as designed by the examiner and is published in the Official Gazette.

Note: A maximum of five (5) claims can be designated as exemplary claims with only the first one always published in the Official Gazette. If a dependent claim is indicated, the independent claim from which it depends must also be indicated as an exemplary claim.

The default exemplary claim is claim 1.

Note: present in Red Book and the Official Gazette, but not Yellow Book

us-field-of-classification-search (Grant)

INID Code (58)

Field of Classification Search

Not published in Official Gazette

1.51. us-classifications-ipcr (Field of classification search)

Indicates which IPC symbols were searched. The formatted IPC symbol.

1.52. classification-national (Field of classification search)

(country, main-classification, additional-info?)

Indicates which USPC symbols were searched. Individual symbols follow the same padded format of USPC classifications (refer to 1.7 *classification-national/main-classification*).

When a range of symbols in the same subclass is searched, additional-info with value “unstructured” must be included. Otherwise, additional-info is not used.

Example: “119709-711” corresponds to the range 119/709-711

1.53. classification-cpc-text (Field of classification search)

Indicates individual CPC symbols or a range of CPC symbols which were searched.

Contains formatted symbols with a space between the subclass value and the group value.

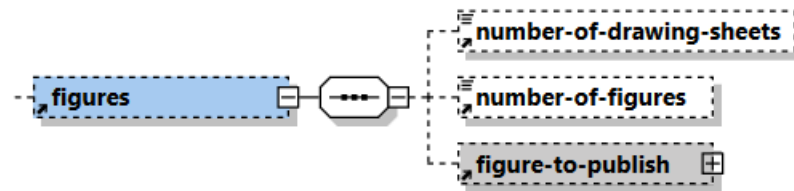
1.54. `classification-cpc-combination-text` (Field of classification search)

Indicates CPC combination sets were searched. This is a search of the Combination set allocations, which differ from the individual symbol allocations (shown under INID code (52)).

An ordered list of two or more formatted CPC symbols delimited by a semicolon and space. CPC Symbols in this list may repeat or appear in non-alphanumeric order.

Note: Present only in Red Book.

figures (Grant)



Bibliographic information relating to drawings.

When there are no drawings, this element should be omitted.

`figure-to-publish` is not used.

Required for Design and Plant

1.55. `number-of-drawing-sheets` and `number-of-figures`

Elements `number-of-drawing-sheets` and `number-of-figures` are required.

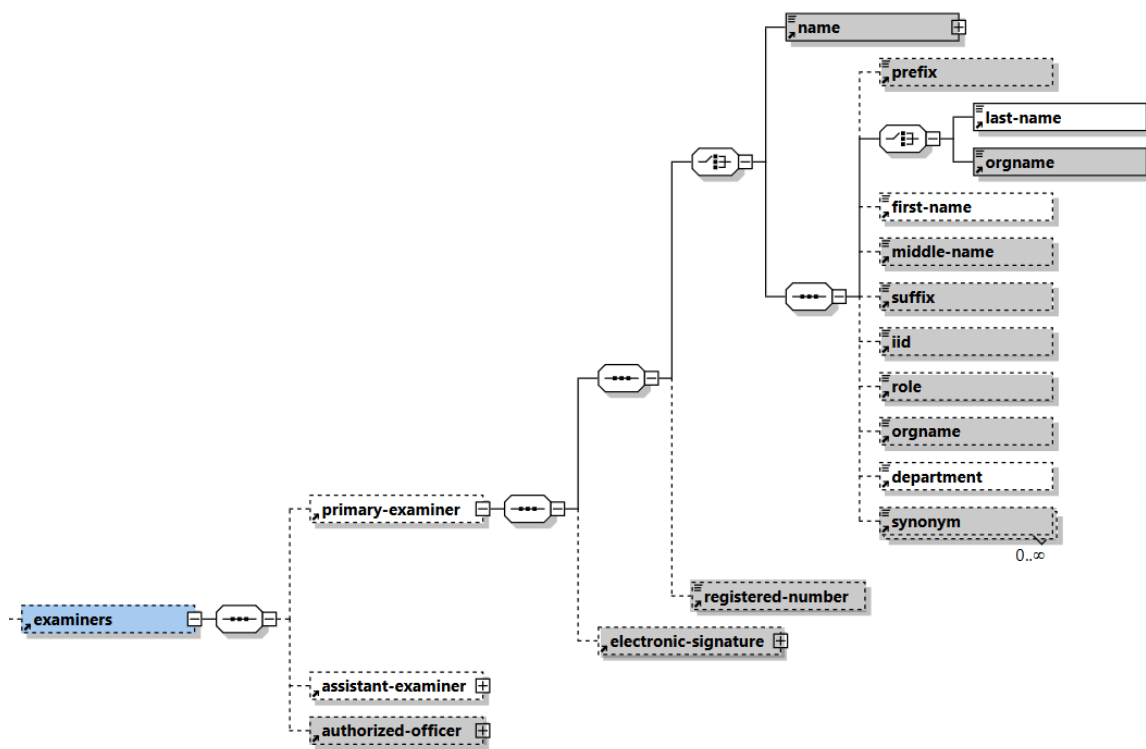
The number of figures may exceed the number of drawing sheets, as multiple figures may appear in a single sheet.

On the other hand, when a figure continues beyond one sheet and a label such as FIGURE 6 [continued] appears, a separate figure should not be counted.

Note: There is no element for indicating the number of drawing sheets filed in color. Element `number-of-figures` is present in Red Book but not Yellow Book.

`us-microform-quantity` (Grant)

Not used

examiners (Grant)

Not published in Official Gazette

1.56. primary-examiner

Information corresponding to the primary examiner

Includes last-name, first-name and department

Elements registered-number, electronic-signature are not used.

1.57. Art unit (department)

Element department corresponds to the Art Unit of the primary examiner

Note: Present in Red Book but not Yellow Book.

1.58. assistant-examiner

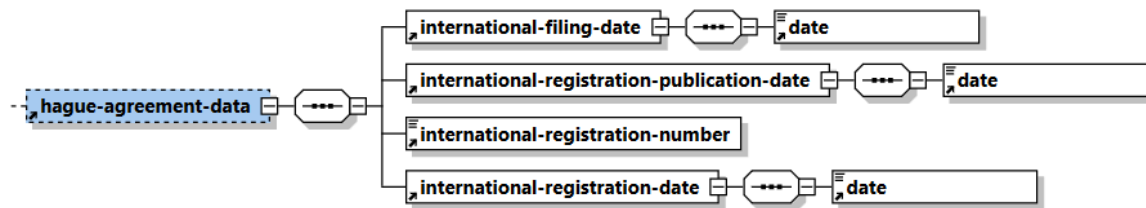
First and last name of the assistant examiner

Must also be accompanied by information corresponding to the primary examiner

Note: department is not populated, since the Art Unit information is already provided for the primary examiner

1.59. authorized-officer

Not used

hague-agreement-data (Design)**INID Code (80)**

Hague Agreement Data Concerning the International Registration of Industrial Designs Definitions (“Hague Agreement”) is administered by the International Bureau of WIPO (World Intellectual Property Organization). Under the Hague Agreement, an applicant from a Contracting Party (member country or member intergovernmental organization) can file a single application (in English, Spanish, or French) containing up to 100 industrial designs to obtain protection in designated Contracting Parties

Also published in Official Gazette

Note: Hague applications always use application series code “35”

1.60. international-filing-date

The filing date accorded to an international design application by the International Bureau when the international design application has met certain criteria under the Hague Agreement.

Refer to 1.32 *document-id/date* for the format of the date.

1.61. international-registration-publication-date

The date of publication of the international registration by the International Bureau in the International Designs Bulletin.

Refer to 1.32 *document-id/date* for the format of the date.

1.62. international-registration-number

The number assigned by the International Bureau when an industrial design is registered in the International Register

Note: always prefixed by “DM/”

1.63. international-registration-date

The date accorded by the International Bureau that is the later of the international filing date or the date of receipt of an additional mandatory content requirement under Article 5(2) of the Hague Agreement

Refer to 1.32 *document-id/date* for the format of the date.

patent-family

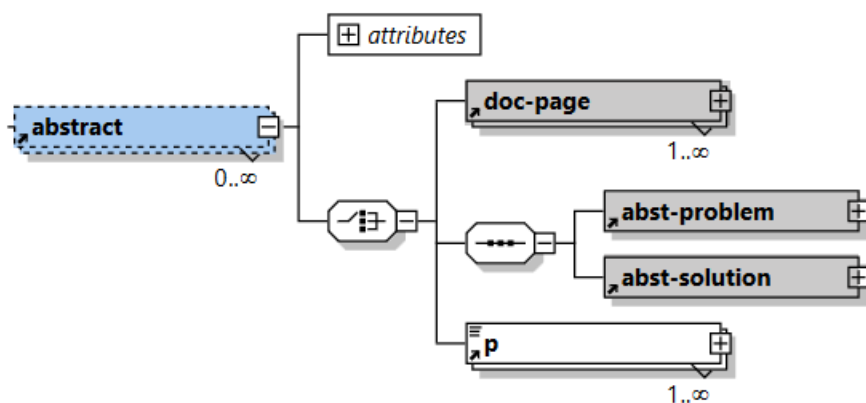
Not used

bio-deposit

Not used

text

Not used except within disclaimer

abstract (PGPub and Grant)

INID Code (57)

Attribute id “abstract”

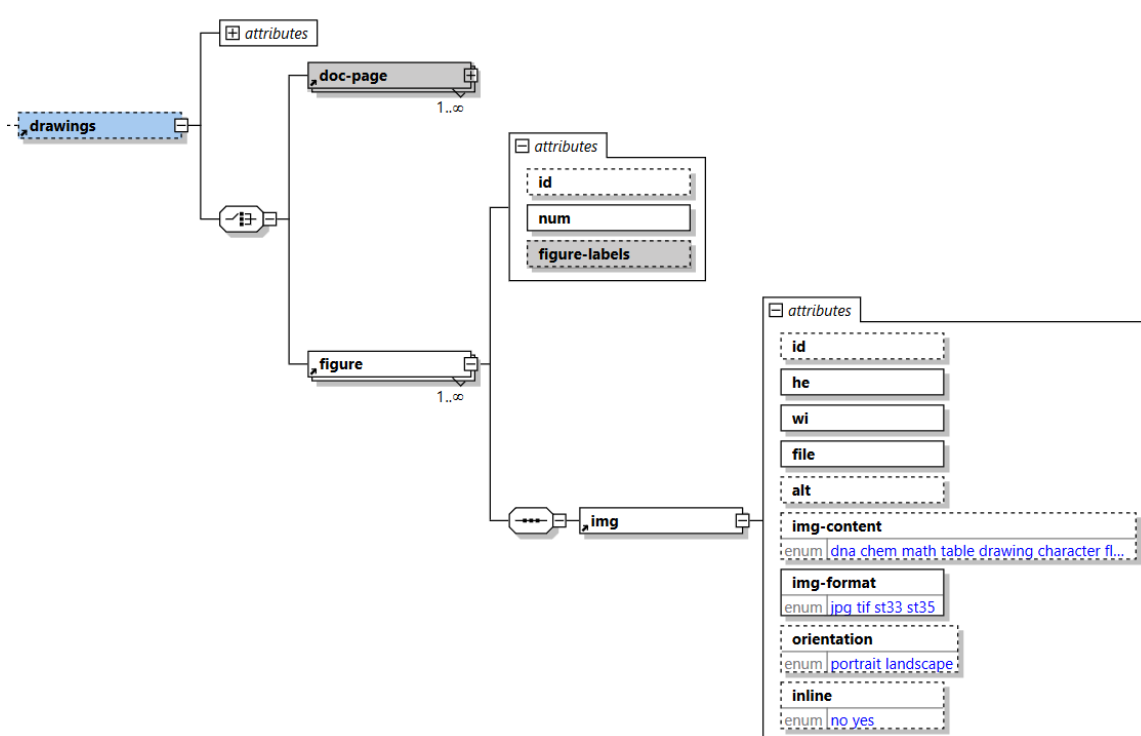
Contains one or more unnumbered paragraphs (@num=“0000”). Subparagraphs (lists) and math/chemical CWUs are possible in abstracts.

Not published in Official Gazette

Note: Designs do not have abstracts.

Elements `doc-page`, `abst-problem`, and `abst-solution` are not used.

drawings



attribute id “DRAWINGS”

Contains drawing sheets and optional representative drawing sheet.

figure

Equates to drawing sheet, which might contain multiple figures.

attribute id (e.g. “Fig-EMI-D00000”)

attribute num

Note: The representative figure must have num attribute value of '00000'. The image referenced in this element is published on the front page of Yellow Book (Utility and Design) and in the Official Gazette.

1.63.1. figure/img

attribute id

attribute he height measured in millimeters (two decimal places))

attribute wi width measured in millimeters (two decimal places))

attribute orientation Default value is “portrait”. Otherwise “landscape”.

attribute file image filename, including extension.

attribute alt “embedded image”

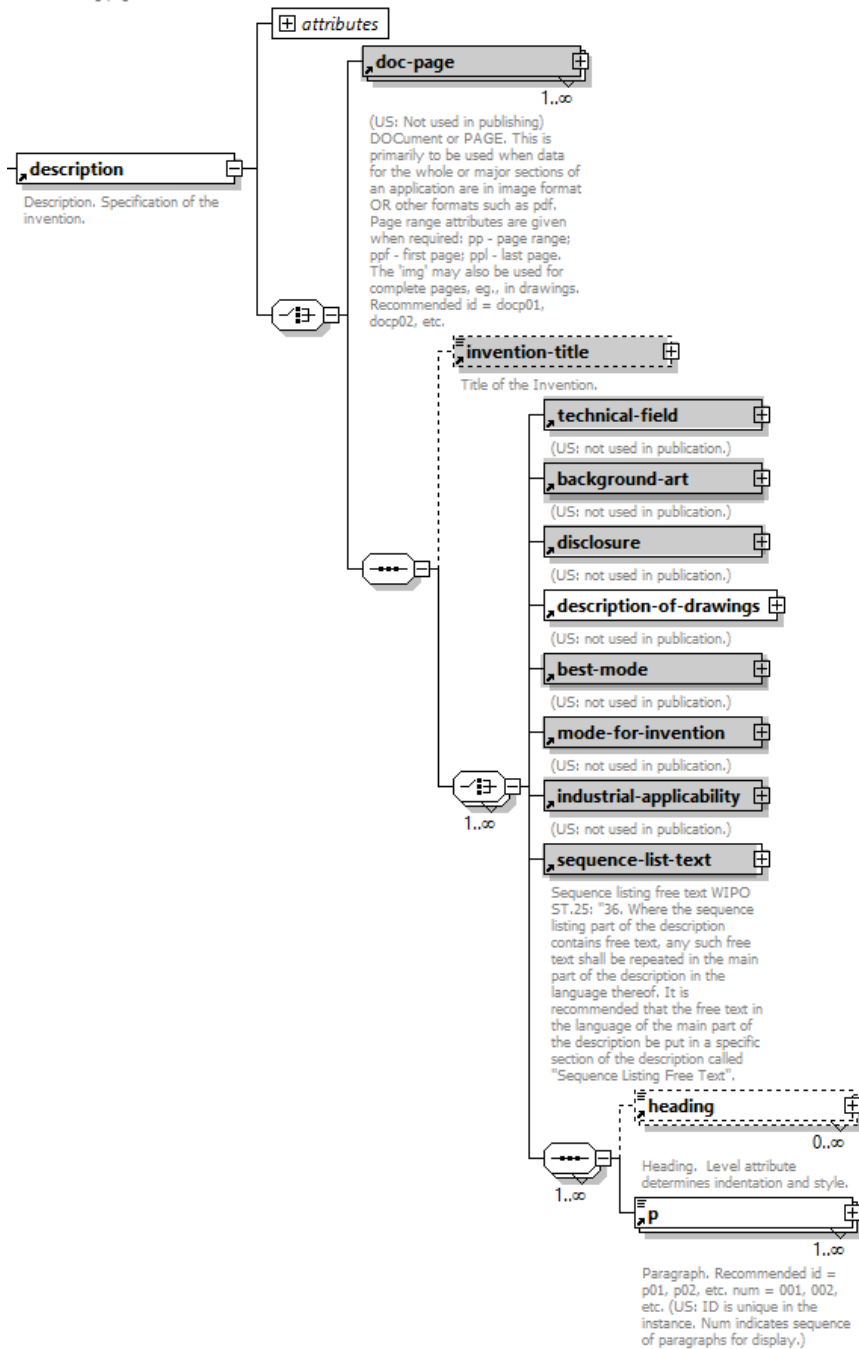
attribute img-content “drawing”

attribute img-format “tif”

Attribute inline is not specified since the default value is “no.”.

Common Description data elements

description



Specification

(description-of-drawings | ((heading*, p+)+)+

Elements doc-page, invention-title, technical-field, background-art, disclosure, best-mode, mode-for-invention, and industrial-applicability, and sequence-list-text are not used

Not published in Official Gazette

1.64. description-of-drawings

Section of the Specification corresponding to the Brief Description of the Drawings

Also encapsulated by processing instruction brief-description-of-drawings

Note: per 37 CFR 1.84(a)(2)(iii), if one or more of the drawings in a Utility or Design is in color, the brief description of the drawings must begin with the following introductory paragraph:

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Attribute id is not used

(heading*, p+)+

Required for Plant and Design.

1.65. heading

attribute id

attribute level chosen from 1 through 3

Uppercase headings (primary headings) are generally level 1, and are center-aligned in the corresponding Yellow Book.

Secondary headings are and typically in title casing and are center-aligned in the corresponding Yellow Book.

Tertiary headings are displayed flush left in the corresponding Yellow Book.

Supports limited emphasis elements:

- bold (b) (Note: used when referencing figures)
- italics (i)
- overscore (o)
- underline (u)
- superscript (sup)
- subscript (sub)
- smallcaps

Not present in Design grants.

1.66. p

Mixed element for paragraph text

attribute id prefixed by “p-”

attribute num

Note: num=”0000” corresponds to an unnumbered paragraph in Yellow Book (PGPub)

All paragraphs within `abstract` are unnumbered.

May contain (b | i | o | u | sup | sub | smallcaps | br | pre | ul | figref | img | chemistry | maths | tables)*

Elements `dl`, `ol`, `patcit`, `nplcit`, `bio-deposit`, and `table-external-doc` are not used

1.66.1. pre

Text content where white space is to be preserved.

Not used.

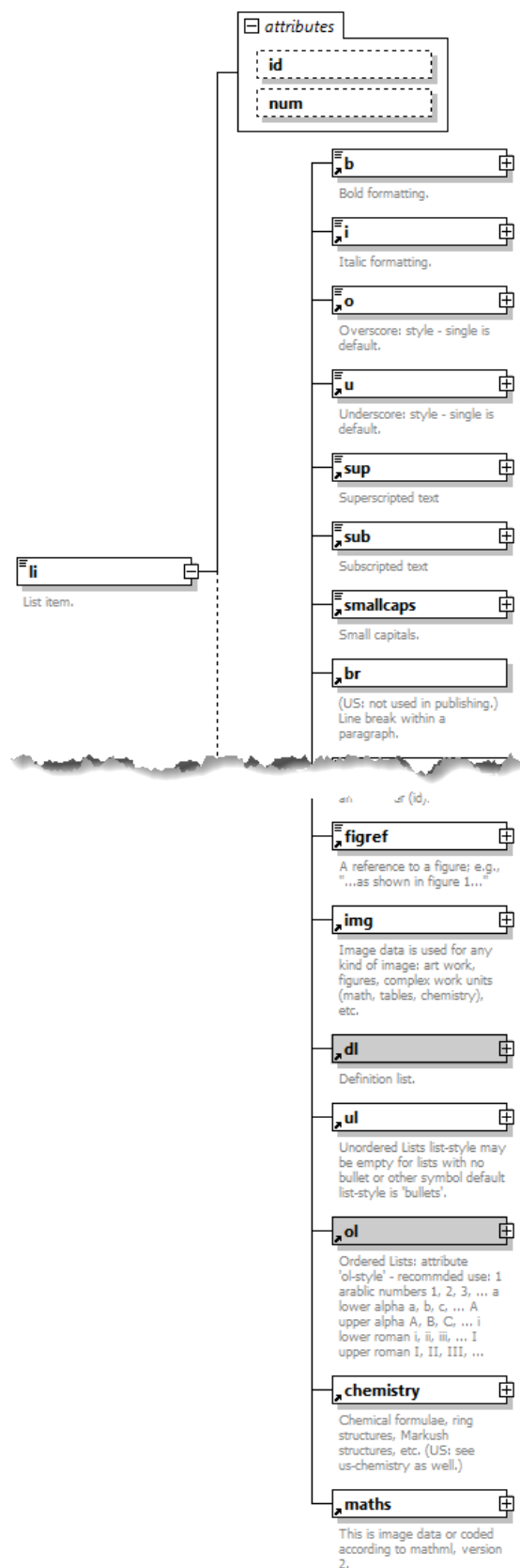
1.66.2. unordered list (ul)

attribute list-style must always be “none”

Used to capture subparagraphs which may be ordered or unordered.

Contains one or more list items (`li`).

1.66.3. list item (li)



(#PCDATA | b | i | o | u | sup | sub | smallcaps | br | figref | img | ul | chemistry | maths)*

Also referred to as subparagraphs.

attribute num is used to capture the paragraph number

Note: Ordered list labels (e.g. “a.”, “b.”, “c.”) are incorporated into the list item text. Unordered list labels (e.g. bullets or dashes) are not captured.

Elements `pre`, `patcit`, `nplcit`, `bio-deposit`, `crossref`, `dl`, and `ol` are not used.

1.66.4. ordered list (ol)

Not used

1.66.5. crossref

Cross reference to an element in the document with an identifier (id).

Not used

1.66.6. figref

Reference to a figure within this document

attribute `idref` is “DRAWINGS” (id of drawings element)

Bold is applied to the Arabic numeral of the numbered figure; italic is applied to lowercase letters in figure numbers.

Note: the content model for heading does not support `figref`

1.66.7. p/img

Inline images within the description are limited to image/character pullouts (used for the representation of characters that cannot be otherwise rendered). Refer to *1.6 img processing instruction* when unconventional material present in the description is captured as a camera-ready copy.

attribute `he` height measured in millimeters (two decimal places)

attribute `wi` width measured in millimeters (two decimal places)

attribute `file` filename including extension.

attribute `alt` alternative text

attribute `img-content` (drawing | photograph | **character** | dna | undefined | chem | table | math | program-listing | flowchart)

attribute `img-format` “tif”

attribute `inline` (yes | no) should be yes

attribute `orientation` Default value is “portrait”. Otherwise “landscape”.

Values for <code>img-content</code>	Values for <code>alt</code>	
-------------------------------------	-----------------------------	--

character	custom-character	Used when Unicode character
character	text missing or illegible when filed	Only PGPub Will appear in Yellow Book with “[text missing or illegible when filed]”

1.66.8. chemistry

Inline reference to chemical formula or structure. May be referenced from `p`, `table entry`, or `claim-text`.

attribute `id`

attribute `num`

1.66.8.1. chemistry/img

Image of chemical formula or structure. Should include any structure/formula labels.

attribute `he` height measured in millimeters (two decimal places)

attribute `wi` width measured in millimeters (two decimal places)

attribute `file` image filename, including extension.

attribute `alt` alternative text

attribute `img-content` (drawing | photograph | character | dna | undefined | **chem** | **table** | math | program-listing | flowchart)

attribute `img-format` “tif”

attribute `orientation` Default value is “portrait”. Otherwise “landscape”.

1.66.9. maths

attribute `id`

attribute `num`

Includes a single element `math`

Element `img` is not used.

1.66.9.1. maths/math

May also include the equation label

1.66.10. tables

CALS table with additional emphasis elements within table cells

1.66.10.1.tables/img

Not used.

1.66.10.2.table

Also used for embedded sequence listings and computer program listings. In these cases, the attribute `tabstyle` “monospace” is used and white space should be preserved.

Attribute `frame` should be “topbot” in accordance with the Yellow Book table style

Optional attribute `tabstyle`

Optional attribute `pgwide` should be “1” if the table is page-wide

Optional attribute `orient` (“port”|“land”) is required for landscape tables

attribute `colsep`

Contains one or more `tgroup` elements

1.66.10.3.tgroup

Table group

attribute `align`

attribute `cols`

attribute `colsep`

attribute `rowsep`

(`colspec*`, `thead?`, `tbody`)

1.66.10.3.1. colspec

Defines properties for the table columns, including column width

Attribute `colwidth` specifies the width for a column. Should be specified in pt units

Note: 1 pt is equal to 1/72 in (~0.353mm)

1.66.10.4.row

Table row

Attribute `valign` should be “top”, since corresponding Yellow Book tables do not use rule lines for every row

attribute `rowsep`

1.66.10.5.entry

(#PCDATA | `b` | `i` | `o` | `u` | `sup` | `sub` | `smallcaps` | `br` | `figref` | `img` | `ul` | `chemistry` | `maths`)*

Mixed content element containing table cell contents

attribute align

attribute char

attribute charoff

attribute colname

attribute colsep

attribute id

attribute morerows is used to indicate cells which span across multiple rows

attribute nameend

attribute namest

attribute rowsep may be used as needed to add a rule below the cell

attribute valign

May contain rich text (emphasis elements)

May contain `figref`, `img`, `ul`, `chemistry`, or `maths`

Elements `patcit`, `nplcit`, `bio-deposit`, `crossref`, `dl`, `ol` are not used

Table attributes

1.66.11. attribute colsep

Column separator. A value of 0 indicates no separators; 1 indicates separators.

Default is “0”

1.66.12. attribute rowsep

Row separator. A value of 0 indicates no separators; 1 indicates separators.

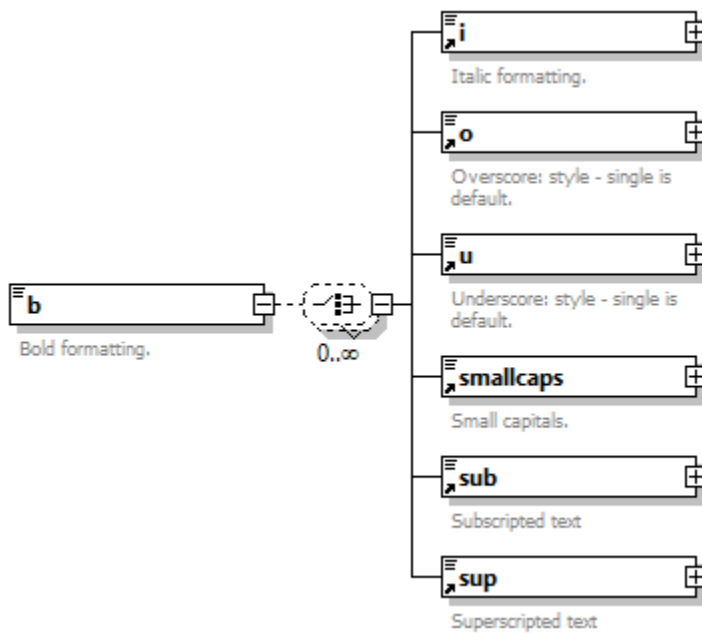
Default is “0”

1.66.13. attribute align

Describes the alignment of text in a table column. Allowable values are: left, right, center, and justify

Rich text (emphasis elements):

1.67. bold (b)

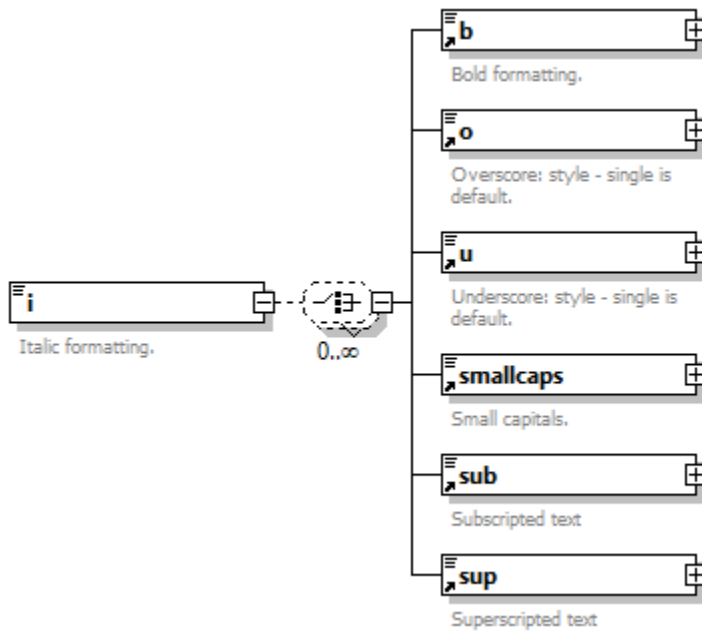


(#PCDATA | i | o | u | smallcaps | sub | sup)*

In the description, bold is typically used only for references to part numbers in the drawings.

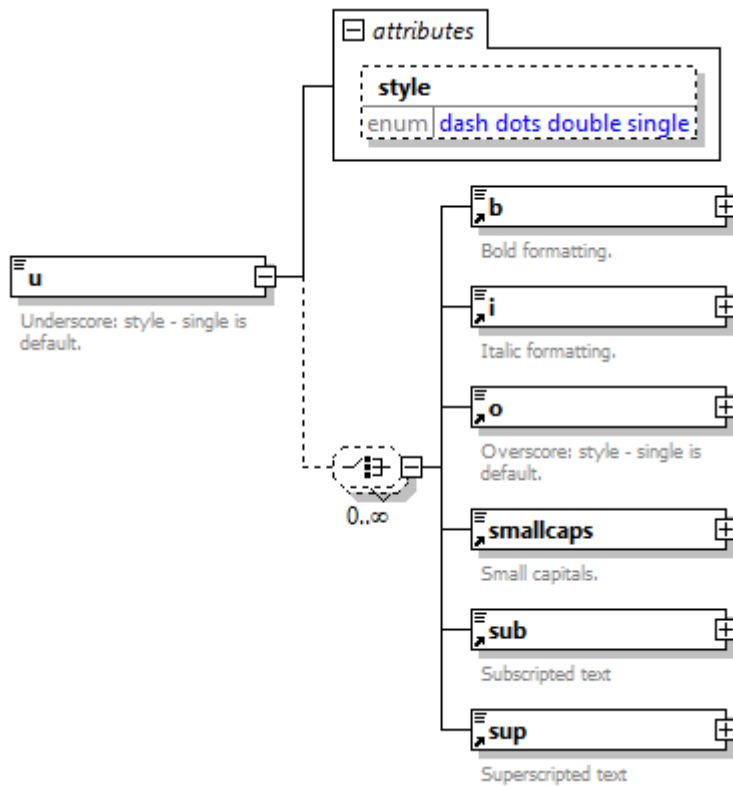
In the claims, the claim number is bolded.

1.68. italic (i)



(#PCDATA | b | o | u | smallcaps | sub | sup)*

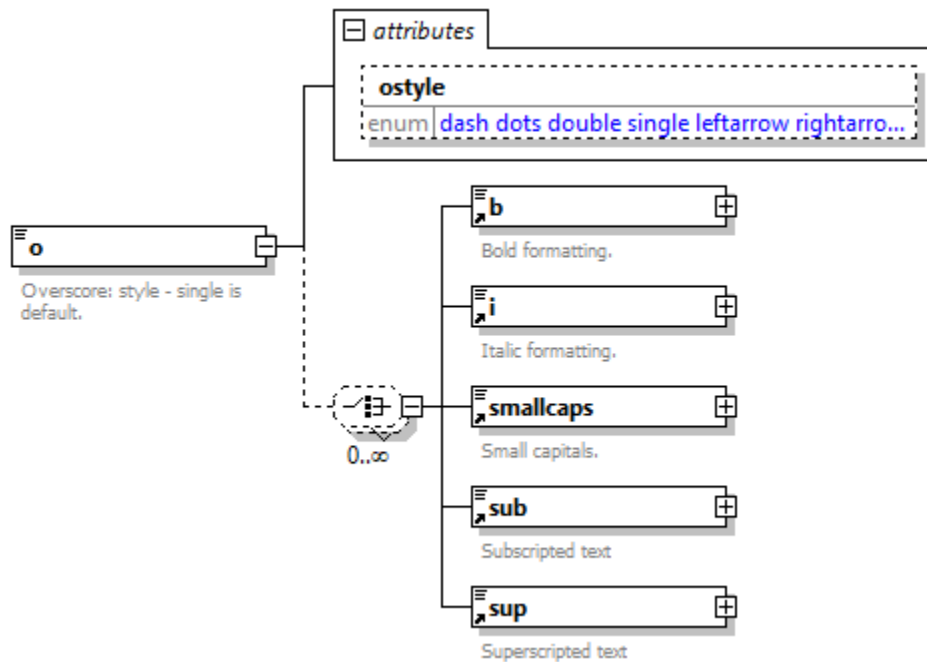
1.69. underline (u)



attribute style (**single** | double | dash | dots)

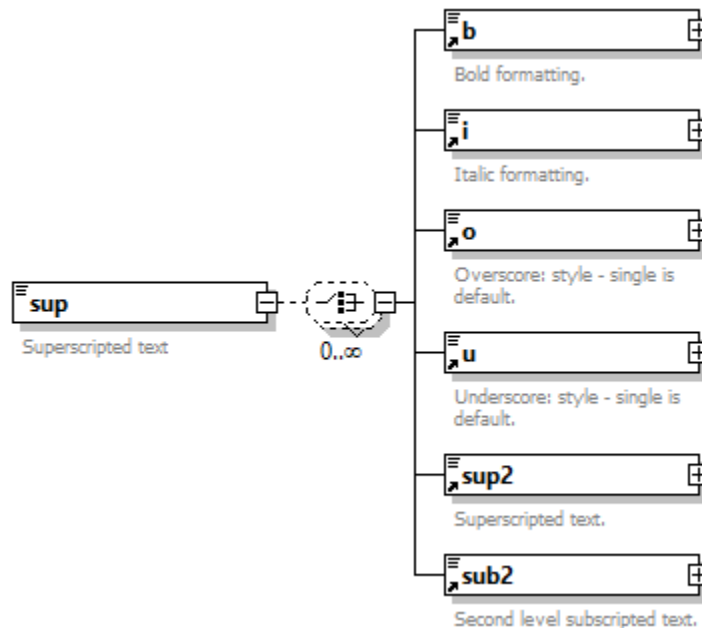
(#PCDATA | b | i | o | smallcaps | sub | sup)*

1.70. overscore (o)



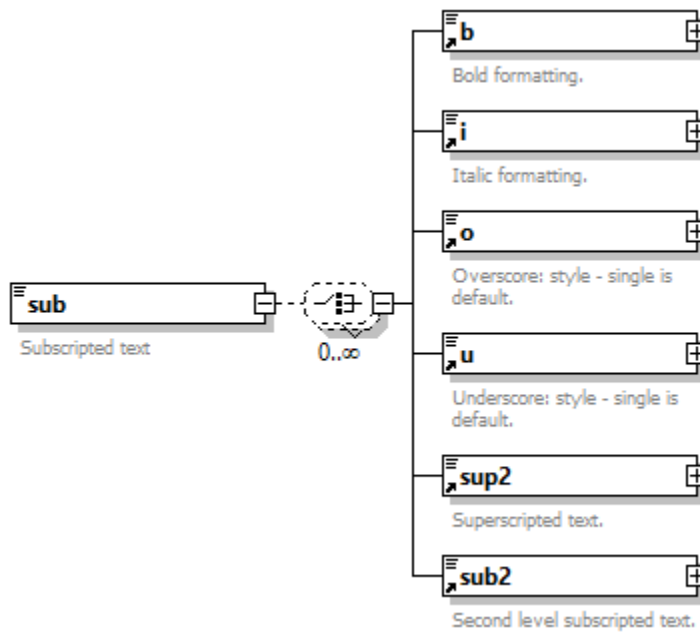
attribute ostyle (**single** | double | dots | dash | leftarrow | rightarrow | leftrightarrow)
 (#PCDATA | b | i | smallcaps | sub | sup)*

1.71. superscript (sup)



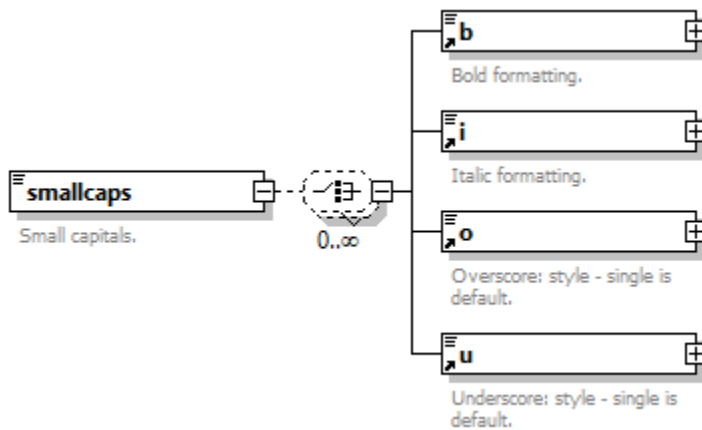
(#PCDATA | b | i | o | u | sup2 | sub2)*

1.72. subscript (sub)



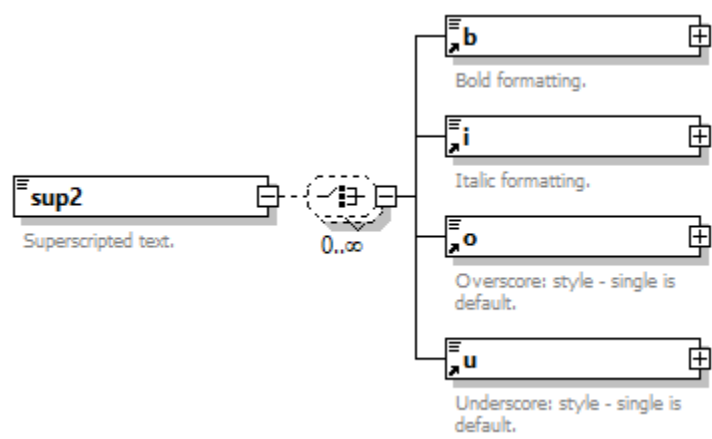
(#PCDATA | b | i | o | u | sup2 | sub2)*

1.73. smallcaps



(#PCDATA | b | i | o | u)*

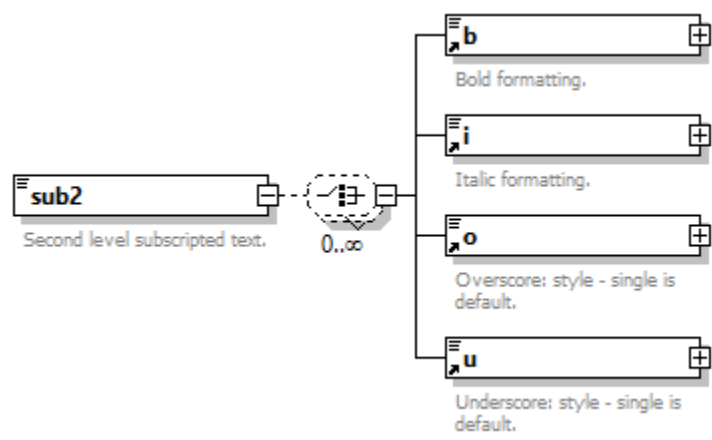
1.74. nested superscript (sup2)



(#PCDATA | b | i | o | u)*

A superscript of a subscript (e.g. F_2^k) or superscript (e.g. $e^{-t^2/2}$)

1.75. nested subscript (sub2)



(#PCDATA | b | i | o | u)*

A subscript of a subscript (e.g. T_{j_2}) or superscript (e.g. $\mathbb{R}^{d_j \times n_j}$)

1.76. line break (br)

Used to separate inline running text from CWUs in the same paragraph

Utility Description data elements

Cross-reference to related applications	Refer to <i>Processing instructions</i>	
---	---	--

Statement regarding federally sponsored research or development	Refer to <i>Processing instructions</i>	
Background of the invention		
Brief summary of the invention	Refer to <i>Processing instructions</i>	
Brief description of the several views of the drawing	Refer to <i>Processing instructions</i>	Required if drawings are present
Detailed description of the invention	Refer to <i>Processing instructions</i>	Required

Plant Description data elements

Cross-reference to related applications	Refer to <i>Processing instructions</i>	
Statement regarding federally sponsored research or development	Refer to <i>Processing instructions</i>	
Latin name of the genus and species of the plant claimed		
Variety denomination		
Background of the invention		
Brief summary of the invention	Refer to <i>Processing instructions</i>	
Brief description of the drawing	Refer to <i>Processing instructions</i>	Required if drawings are present
Detailed botanical description	Refer to <i>Processing instructions</i>	Required

Design Description data elements

Cross-reference to related applications	Refer to <i>Processing instructions</i>	
Statement regarding federally sponsored research or development	Refer to <i>Processing instructions</i>	
Description of the figure or figures of the drawing (required)	Refer to <i>Processing instructions</i>	Required

Feature description		
---------------------	--	--

Reissue data elements

Reissues have the same data elements as the original Utility, Plant, or Design patents, with the following exceptions.

application-reference

attribute appl-type is “reissue”, irrespective of whether it is a Utility, Plant, or Design Reissue

1.77. application-reference/document-id/date

INID Code (22)

The filing date of the reissue application.

If the original patent issued from a national stage PCT application, the filing date is still the filing date of the reissue application, not the PCT filing date of the application from which the original patent issued.

publication-reference/document-id (Reissue)

INID Code (10)

1.78. document-id/doc-number

Reissue patent numbers are prefixed with “RE” and followed by a 6-digit zero-padded sequential number

1.79. document-id/kind

Kind code is “E1” in Red Book only. The kind code “E” will be used in Yellow Book.

PCT: National stage applications (Reissue)

1.80. pct-or-regional-filing-data (Reissue)

If the original patent was a national stage application, the information is retained in the reissue. However, it will be present under “Related U.S. Patent Documents” in Yellow Book in the “Reissue of” information under INID Code (64).

The PCT filing date will not be the same as the reissue application filing date.

1.80.1. pct-or-regional-publishing-data (Reissue)

If the original patent was a national stage application, the information is retained in the reissue. However, it will be present under “Related U.S. Patent Documents” in Yellow Book.

hague-agreement-data (Design Reissue)

If the original patent was a Hague application, the information is retained in the reissue. However, it will be present under “Related U.S. Patent Documents” in the “Reissue of” information under INID Code (64).

us-related-documents (Domestic benefit and prior published documents) for Reissue

Information relating to domestic benefit and prior published documents.

Also published in the Official Gazette.

1.81. reissue

INID Code (64)

Information on the original patent which issued. It is possible to have a reissue of a reissue. Required.

For a reissue of a reissue, both original patent and the reissue patent would be provided (two or more generations of reissue elements)

1.81.1. reissue/relation/parent-doc/parent-grant-document/document-id

The patent number and issue date for the original patent which issued is required.

1.81.1. reissue/relation/child-doc/document-id

The country code and application number of the reissue application

1.82. continuing-reissue, us-divisional-reissue

Continuation or divisional **reissue** applications (application-reference/@app-type is “reissue”) differ from Bauman type continuation or divisional applications of a Reissue (application-reference/@app-type is one of “utility”, “design”, or “plant”). Bauman type continuation or divisional applications are indicated in us-related-documents/continuation or us-related-documents/division.

Divisional reissue and continuation reissue applications are applications for **reissue**, from an earlier reissue application.

1.82.1. relation/parent-doc (continuation reissue or divisional reissue)

It is possible that a parent reissue application will not have been granted but instead will have been abandoned.

1.82.2. relation/child-doc/document-id (continuation reissue or divisional reissue)

The country code and application number of the reissue application

1.82.3. us-divisional-reissue/us-relation
(parent-doc, child-doc+)

1.82.3.1. us-divisional-reissue/us-relation/child-doc

In a divisional reissue, each divisional sibling must cross-refer each other with multiple occurrences of child-doc.

1.83. us-reexamination-reissue-merger

The reissue application is merged with one or more reexamination proceedings.
Standard text must also be appended to the end of the abstract.

Foreign Application Priority Data: priority-claims (Reissue)

Included only when the applicant makes a foreign priority claim in the reissue application.

Changes in inventor or assignee (Reissue)

It is possible that there will be a change in inventorship or assignee in the reissue.

Changes in invention-title (Reissue)

It is possible for the title to change in a reissue application. These changes are not marked by delete/insert processing instructions. The processing instructions are only used in the abstract, description, and claims.

Changes in us-botanic (Reissue Plant only)

It is possible for the Latin name and varietal denomination to change in the reissue application. These changes are not marked by delete/insert processing instructions. The processing instructions are only used in the abstract, description, and claims.

Filed under Rule 47: rule-47-flag (Reissue)

Included only when the Reissue application (as opposed to the application from which the original patent issued) was filed under Rule 47 (37 CFR 1.47).

disclaimer (Terminal Disclaimer; Reissue)

Included only if the terminal disclaimer is part of the Reissue application.

prior-disclosure-affidavit-filed (37 CFR 1.130(b); Reissue)

Included only if the affidavit is present in the Reissue application.

length-of-grant (Design Reissue)

No length of term information is provided in a Design reissue.

us-term-extension (Reissue)

Any PTE/PTA notice from the original patent will not be present in the reissue.

us-references-cited (Reissue)

All reference citations printed on the front page of the original patent, as well as references cited in the reissue application file, will be included.

1.83.1. us-citation (Reissue)

Reference citations cited by third party are not permitted in reissue applications, but will be included if they were cited in the original patent.

1.83.1.1. us-citation/category (Reissue)

Categories for a reference citation will remain the same as the original patent.

1.83.1.2. us-citation/classification-national (References cited; Reissue)

If the original reference citation had a classification which is different than the reference citation in the reissue application, the more recent classification from the reissue application will be included. If the reference citation in the reissue application does not include a classification, the classification from the original patent will be retained.

1.83.1.3. us-citation/classification-cpc-text (References cited; Reissue)

If the original reference citation had a classification which is different than the reference citation in the reissue application, the more recent classification from the reissue application will be included. If the reference citation in the reissue application does not include a classification, the classification from the original patent will be retained.

drawings (Reissue)

A reissue application may have unchanged original drawings, amended drawings, new drawings, or canceled drawings.

For Utility and Plant Reissues, canceled drawings will not be part of the reissue.

For Design Reissue, all drawings, including canceled drawings, will be part of the reissue.

number-of-drawing-sheets (Design Reissue)

The drawing sheet total will include any canceled drawing sheets.

number-of-figures (Design Reissue)

The number of figures will not include canceled figures.

Note: Element `number-of-figures` is present in Red Book but not Yellow Book.

claims (Reissue)

For claims which were cancelled, disclaimed, or held invalid by a prior post-patent action or proceeding, delete-start-pppcancellation/delete-end-pppcancellation processing instructions surround all of the claim-text elements within the claim.

For claims which were cancelled in the reissue application (or a prior reissue application) are the delete-start/delete-end processing instructions surround all of the claim-text elements within the claim.

For claims which were added in the reissue application (or a prior reissue application) the insert-start/insert-end processing instructions surround all of the claim-text elements within the new claim.

Pairs of processing instructions may surround one another (e.g. a claim may include an amendment from a previous reissue but the claim is later cancelled in a subsequent proceeding or reissue).

Since the original patent claims are not renumbered, it may be possible for a claim to be dependent on a higher-numbered claim.

us-exemplary-claim (Reissue)

Typically, the broadest claim with changes or the broadest additional reissue claim.

Note: A reissue cannot have an exemplary claim (print claim) corresponding to a claim that was canceled/disclaimed/invalidated in the Reissue.

Rich text in Abstract, Description, and Claims (Reissue)

For the Abstract, Description, and Claims, bold and italics rich text elements are retained in Red Book only. That is, deleted data and newly added data in a Reissue are indicated in Yellow Book with bold single/double brackets and italics based on the presence of the delete/insert processing instructions and the `b` and `i` elements are otherwise ignored in Yellow Book for these sections.

description/heading (Reissue)

The delete/insert processing instructions will surround any text within the heading which was deleted or inserted in the reissue application (or a prior reissue application). If the entire heading is deleted, the processing instructions will surround the entire content of the heading.

heading id and level attributes are indicated according to the reissue application (that is, consecutively without regard to whether the text is inserted or deleted).

p (Reissue Description or Abstract)

The delete/insert processing instructions will surround any text within the paragraph which was deleted or inserted in the reissue application (or a prior reissue application). If the

entire paragraph is deleted, the processing instructions will surround the entire content of the paragraph.

paragraph id and num attributes are indicated according to the reissue application (that is, consecutively without regard to whether the text is inserted or deleted).

“REEXAMINATION RESULTS” Heading and paragraph

When a reissue application is merged with one or more reexamination proceedings, standard text must be appended to the abstract.

A paragraph with all-uppercase words “REEXAMINATION RESULTS” must be followed by another paragraph with the standard text:

The questions raised in reexamination proceeding No. 9 / _____, filed _____, have been considered, and the results thereof are reflected in this reissue patent which constitutes the reexamination certificate required by 35 U.S.C. 307 as provided in 37 CFR 1.570(e) for ex parte reexaminations, or the reexamination certificate required by 35 U.S.C. 316 as provided in 37 CFR 1.997(e) for inter partes reexaminations.

Note: when the reissue application is merged with multiple reexamination proceedings, the standard text varies slightly.

Brackets/Italics Statement

The statement explaining the significance of italics and heavy brackets is not present in Red Book.

References to external complex work unit files

lengthy tables

Tables in excess of 50 pages long or when the total number of table pages in the application exceeds 100 pages.

When one or more lengthy tables is present, a paragraph with an embedded table appears at the end of the description (prior to any statements regarding >1 GB sequence listings).

A corresponding lengthy table XML document is provided, see *1.25 Lengthy table in external file*

1.84. page-wide LENGTHY TABLES statement

A statement regarding the lengthy table will appear at the end of the description in a page-wide table.

The table will contain a single column, with the following standard text:

Grant

The patent contains a lengthy table section . A copy of the table is available in electronic form from the USPTO web site

(<https://seqdata.uspto.gov/?pageRequest=docDetail&DocID=USCCCCCCCCCAN>).

An electronic copy of the table will also be available from the USPTO upon request and payment of the fee set forth in 37 CFR 1.19 (b)(3).

Application

The patent contains a lengthy table section . A copy of the table is available in electronic form from the USPTO web site (<https://seqdata.uspto.gov/?pageRequest=docDetail&DocID=USCCCCCCCCCCCCCAN>). An electronic copy of the table will also be available from the USPTO upon request and payment of the fee set forth in 37 CFR 1.19 (b)(3).

The PSIPSURL processing instructions will wrap around the hyperlink, which will be
The hyperlink will be embedded in a CDATA section

1.84.1. column-wide Lengthy table referenced here placeholder statements
Throughout the specification, a placeholder statement will be inserted in place of each lengthy table.

The placeholder statement will comprise of a single-column table with center-aligned text (Grant) which references the file name (excluding extension) of the external lengthy table file:

Lengthy table referenced here

USCCCCCCCC-NNNNNNNN-TNNNNN

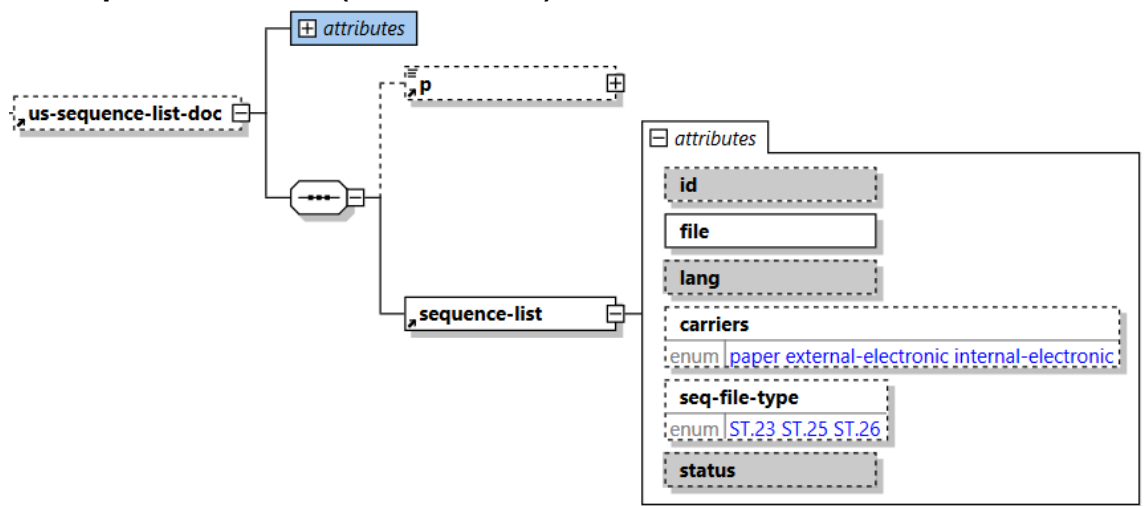
Please refer to the end of the specification for access instructions.

The placeholder statement will comprise of a single-column table with center-aligned text (Application) which references the file name (excluding extension) of the external lengthy table file:

Lengthy table referenced here

USCCCCCCCCCAN-NNNNNNNN-TNNNNN

Please refer to the end of the specification for access instructions.

us-sequence-list-doc (when < 1 GB)

Follows description

attribute id “SEQLIST-1”

attributes lang and status are not used

When a “lengthy” sequence listing is present, a paragraph with an embedded table precedes the sequence listing.

Refer to *Sequence listings: sequence-cwu* for the contents of the referenced file.

Note: When a sequence listing is >1 GB, us-sequence-list-doc is not used. Instead, a paragraph with an embedded table will be appended to the end of the description.

1.85. us-sequence-list-doc/p/tables

attribute id should be “MEGA-SEQ-0”

attribute num

1.86. ST.25 (<600 KB)

contains only sequence-list

1.86.1. sequence-list (ST.25 when <600 KB)

attribute file follows convention *-S00001.XML

attribute carriers is always “internal-electronic”

attribute seq-file-type is always “ST.25”

Reference to external ST.25 sequence listing file.

1.87. ST.25 (≥600 KB and <1 GB; “lengthy” sequence listing)

contains element *p* comprising the SEQUENCE LISTING statement in the specification of which provides the URL for the Publication Site for Issued and Published Sequences (PSIPS) OVERFLOW for the year of publication.

1.87.1.1. sequence-list (ST.25 when ≥600 KB and <1 GB; “lengthy” sequence listing)

attribute file is prefixed by “//YYYYMMDD-SUPP/<document-id>-YYYYMMDD-SUPP.ZIP | “ followed by the referenced sequence listing filename.

attribute carriers is always “internal-electronic”

attribute seq-file-type is always “ST.25”

Reference to external ST.25 sequence listing file which is lengthy and included as a supplemental Red Book deliverable.

1.88. ST.26 (<600 KB)

contains only sequence-list

attribute seq-file-type is always “ST.26”

Reference to external ST.26 sequence listing file.

1.89. ST.26 (when ≥600 KB and <1 GB; “lengthy” sequence listing)

contains element *p* comprising the SEQUENCE LISTING statement in the specification of which provides the URL for the Publication Site for Issued and Published Sequences (PSIPS) OVERFLOW for the year of publication.

Reference to external ST.26 sequence listing file which is lengthy and included as a supplemental Red Book deliverable.

1.89.1. *p*/table for lengthy sequence listing statement in the specification

In addition to the supplemental Red Book deliverable, the us-sequence-list-doc will include a statement that the sequence listing is available in seqdata.uspto.gov.

sequence listings (when > 1GB)

Instead of us-sequence-list-doc, a paragraph with an embedded table will be appended to the end of the description. The >1 GB sequence listing will not be included with the Red Book deliverable.

The table will contain a single column, with the standard text:

“The patent application contains a lengthy sequence listing. A copy of the sequence listing is available in electronic form from the USPTO web site <https://seqdata.uspto.gov/bulk>. An electronic copy of the sequence listing will also be available from the USPTO upon request and payment of the fee set forth in 37 CFR 1.19(b)(3).”

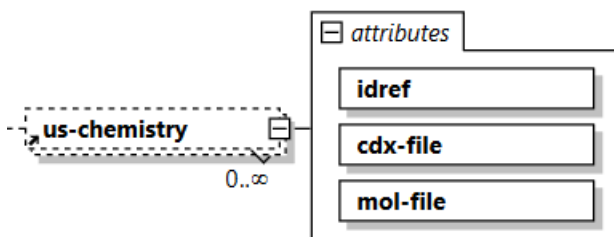
The BULKDATAURL processing instructions will wrap around the hyperlink. See *1.7 BULKDATAURL processing instruction*

us-megatable-doc

Not used

table-external-doc

Not used

us-chemistry

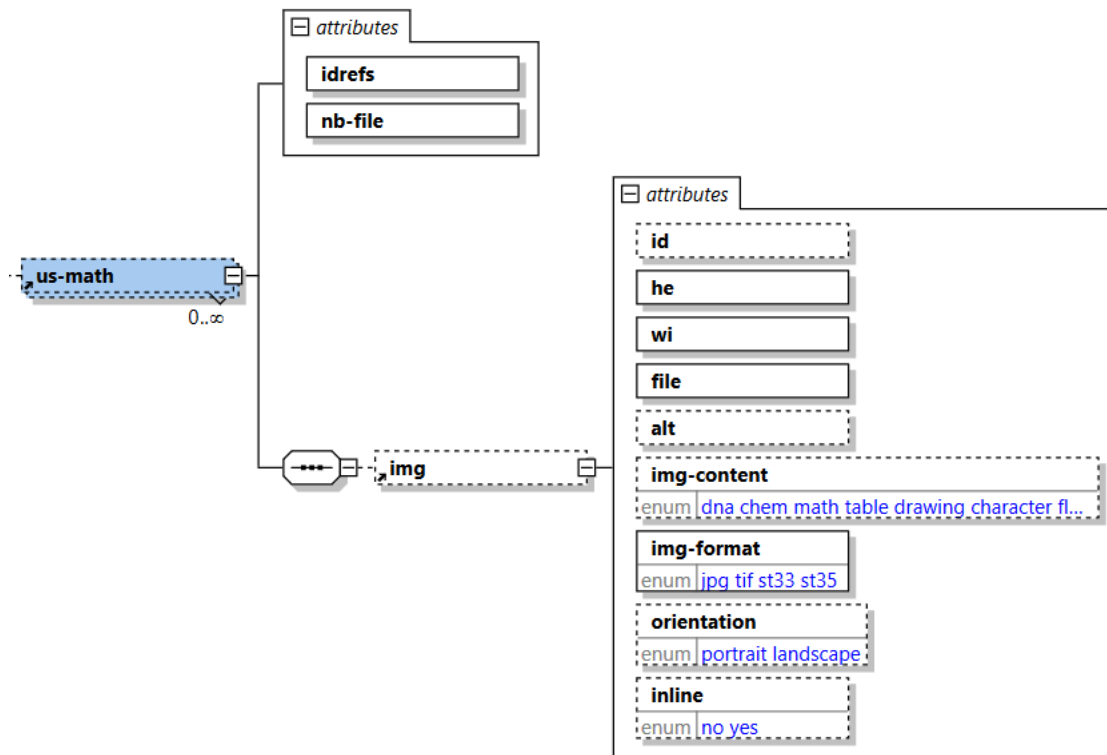
Contains the references to the ChemDraw and MOL files corresponding to the chemical formulae.

attribute `idref` the id of the `chemistry` element embedded within the description, claims, or abstract

attribute `cdx-file` filename including extension of the ChemDraw file

attribute `mol-file` filename including extension of the MOL file

Note: the CDX and MOL files have the same filename (without extension) as the corresponding image of the `chemistry` element. See *1.66.8 chemistry*

us-math

Contains the embedded image of the corresponding MathML fragment and reference to the Mathematica Notebook file.

attribute idrefs id of the `maths` element embedded within the description, claims, or abstract. See *1.66.9 maths*

attribute nb-file filename including extension of the Mathematica Notebook file

1.1. us-math/img

attribute id

attribute he height measured in millimeters (two decimal places)

attribute wi width measured in millimeters (two decimal places)

attribute file filename of image file including extension.

attribute alt “embedded image”

attribute img-content “math”

attribute img-format “tif”

attribute orientation Default value is “portrait”. Otherwise “landscape”.

Image version of math CWU which is displayed in Yellow Book

claim-statement

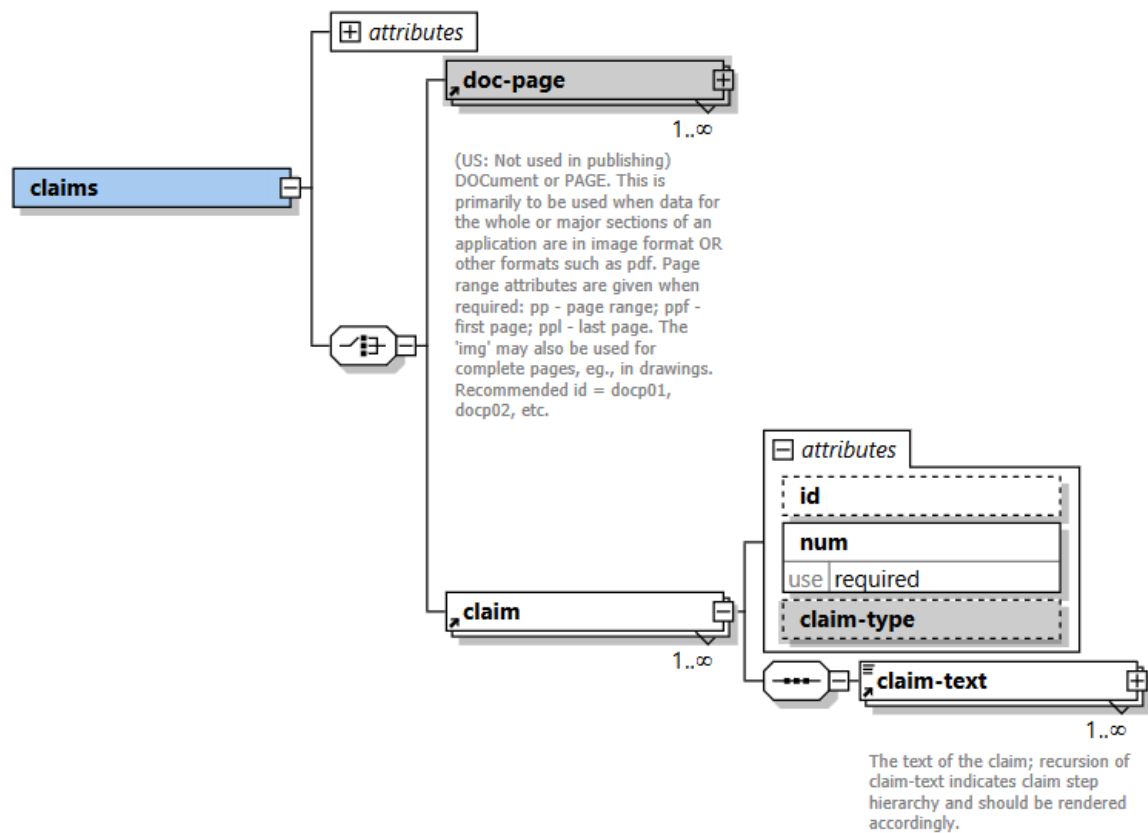
A statement which introduces the claims (often a variation of “I/We claim:” or “The invention claimed is:”).

Required for Patent Grant and optional for PGPub.

For Design Patents, claim statement is “CLAIM”.

Not published in Official Gazette

claims



INID Code (57) only for Design Patents. Not identified by INID code for Utility or Plant patents.

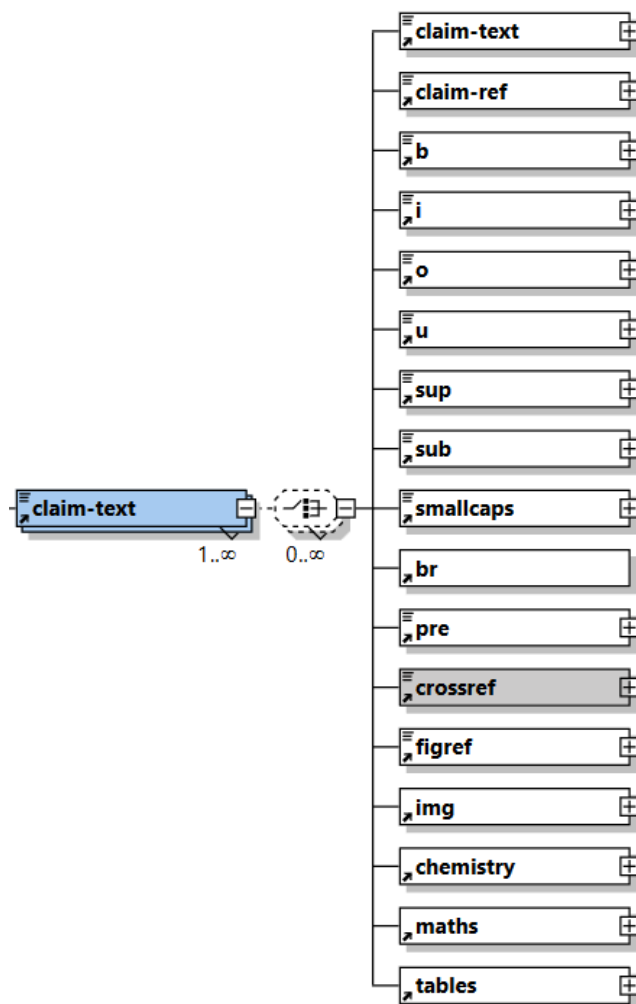
claim

attribute id corresponds to the value of the num attribute, prefixed by “CLM-”

attribute num corresponds to a 5-digit zero-padded number

Note: only those claims identified by *us-exemplary-claim* are published in Official Gazette.

1.2. claim-text



The text of the claim. Recursion of `claim-text` indicates claim step hierarchy.

claim-ref

attribute `idref` is a white-space delimited list of `id`'s corresponding to the referenced claims. See *claim*.

In most cases, a single claim is referenced in a dependent claim. May refer to a range of claims for multiple dependent claims.

Processing instructions

When the U.S. Patent and Trademark Office went from WIPO Standard ST. 32: Recommendation for the Markup of Patent Documents using SGML (Standard Generalized Markup Language) to WIPO Standard ST. 36: Recommendation for the Processing of Patent Documents using XML (Extensible Markup Language) it introduced processing instructions to retain markup that existed as SGML tags in ST. 32 but were no longer present in ST. 36.

The description will always be segmented into contiguous sections marked by processing instructions. Refer to *Utility Description data elements*, *Plant Description data elements*, *Design Description data elements*, and *Reissue data elements*.

PGPub section processing instructions	Grant section processing instructions
cross-reference-to-related-applications	RELAPP
summary-of-invention	BRFSUM
federal-research-statement	GOVINT
brief-description-of-drawings	brief-description-of-drawings
detailed-description*	DETDESC*

The processing instruction for detailed description is required for all Utility and Plant applications.

Processing instructions common to Application and Grant

1.3. brief-description-of-drawings processing instruction

Marks start and end of the “Brief Description of the Drawings” section of the description.

Attribute description

Attribute end (“lead” or “tail”)

Note: Required for Design grant.

1.4. PSIPSURL processing instruction

Marks the start and end of the URL for the PSIPS Lengthy Sequence Listings (and Lengthy Tables).

the URL is embedded in a CDATA section

attribute description “PSIPS url”

attribute end (“lead” or “tail”)

Utility only

1.5. in-line-formulae processing instruction

Marks the start and end of an in-line formula within the abstract, specification, or claims.

Attribute description

Attribute end (“lead” or “tail”)

Utility only. In-line formula processing instructions are used as an alternative to MathML fragments for any formula that is a single level (either with or without superscripts and subscripts) can be completely represented using Unicode characters.

1.6. `img` processing instruction

Used when an image or custom character is encountered in a content model that does not support images.

Also used in the description when unconventional material is present for images corresponding to “camera-ready copy” (PGPub only).

Note: The `img` processing instruction is not to be used within the `us-parties` and `assignee` elements.

Attribute `id`

Attribute `he` height of the image including the unit mm

Attribute `wi` width of the image including the unit mm

Attribute `file` image filename, including extension..

Attribute `alt` (refer to the table below)

Attribute `img-content` (refer to the table below)

Attribute `img-format` “tif”

<code>img-content</code>	<code>alt</code>	Scenario
drawing	embedded image	Camera-ready copy in description Present in Grant only if USPTO indicates that the unconventional material should be published as part of the specification.
character	custom character	Custom character when content model does not support images (e.g. non-patent literature citations or heading)
character	text missing or illegible when filed	PGPub only when content model does not support images (e.g. heading) and when there is a gap or illegibility in the text

1.7. `BULKDATAURL` processing instruction

Used when referencing a sequence listing >1 GB that was filed with the application

Marks the start and end of the bulkdata URL

attribute description “BULKDATA url”

attribute end (“lead” or “tail”)

Utility only

Processing instructions in Application (Utility and Plant)

1.8. cross-reference-to-related-applications

Marks start and end of the “Cross Reference to Related Applications” section of the description.

Do not apply to sections with headings, but no relevant content.

Note: this section is intended for related U.S. applications and/or international applications, **not** related foreign applications.

1.9. federal-research-statement

Marks start and end of the “Statement regarding federally sponsored research or development” section of the description.

Do not apply to sections with headings, but no relevant content.

1.10. summary-of-invention

Marks start and end of the “Summary of Invention” section of the description.

Do not apply to sections with headings, but no relevant content.

1.11. detailed-description

Marks start and end of the “Detailed Description” section of the description.

Required for all applications.

Processing instructions in Grant

1.12. RELAPP

Marks start and end of the “Cross Reference to Related Applications” section of the description.

Do not apply to sections with headings, but no relevant content.

Note: this section is intended for related U.S. applications and/or international applications, **not** related foreign applications.

1.13. GOVINT

Marks start and end of the “Federal Research Statement” section of the description.

Do not apply to sections with headings, but no relevant content.

1.14. BRFSUM

Marks start and end of the “Summary of Invention” section of the description.

Do not apply to sections with headings, but no relevant content.

1.15. DETDESC

Marks start and end of the “Detailed Description” section of the description.

Required for all Utility applications.

Processing instructions in Reissues

1.16. delete-start and delete-end

Marks the start and end of text deleted from the original patent as a result of the reissue (or a prior reissue).

Used within the description and claims.

Note: rendered as strikethrough text in Yellow Book (first Reissue).

attribute id start and end processing instructions are paired by the same id

attribute date (delete-start only; date corresponds to the date of the reissue which deleted the text).

It is possible to have multiple pairs of deletions when there is a reissue of a reissue.

1.17. delete-start-pppcancellation and delete-end-pppcancellation

Marks the start and end of claims that were canceled, disclaimed, or held invalid by a prior post-grant action or proceeding (e.g. Ex Parte Reexamination Certificates, Post-Grant Review Certificates, Inter Partes Review Certificates).

attribute id start and end processing instructions are paired by the same id

attribute date (delete-start only; date corresponds to the date of the prior post-grant action or proceeding)

1.18. insert-start and insert-end

Marks the start and end of text inserted to the original patent as a result of the reissue (or a prior reissue).

Used within the description and claims.

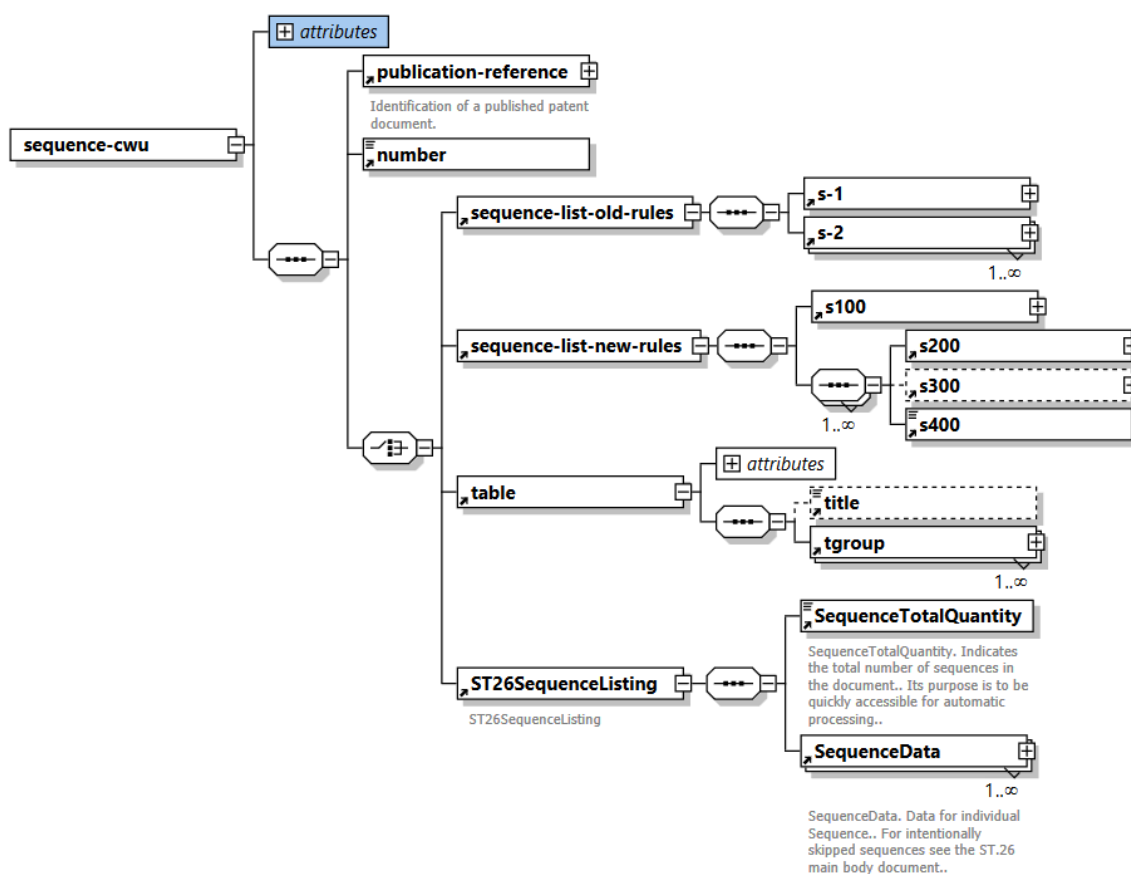
attribute id start and end processing instructions are paired by the same id

attribute date (delete-start only; date corresponds to the date of the reissue which added the text)

It is possible to have multiple pairs of insertions when there is a reissue of a reissue.

Supplemental Red Book

Sequence listings: sequence-cwu



(publication-reference, number, (sequence-list-old-rules | sequence-list-new-rules | table | ST26SequenceListing))

attribute id should be “SEQLIST-1”

External sequence listing

1.19. publication-reference

document-id should be identical to the main Red Book file.

1.20. number

Always 1.

1.21. sequence listing (ST.23): sequence-list-old-rules

Obsolete as of July 2018.

1.22. sequence listing (ST.25): sequence-list-new-rules

Sequence listings for applications filed prior to July 1, 2022.

(s100, (s200, s300?, s400)+)

s-tags correspond to numeric identifiers listed in Annex C, Appendix 1 “Numeric Identifiers” of WIPO Standard ST.25 “Standard for the Presentation of Nucleotide and Amino Acid Sequence Listings in Patent Applications”

The s-tags for the numeric identifiers are grouped under s100, s200, s300, and s400.

Element s100 corresponds to the numeric identifiers relating to bibliographic information.

Element s200 contains information for individual sequences (feature keys, etc.).

Element s300 contains publication information. Not used.

Element s400 is the sequence listing.

1.22.1. s220

Feature information

Note: if the “<221>”, “<222>”, or “<223>” numeric identifiers within the ST.25 text file do not include a corresponding “<220>”, the element must be created.

1.22.2. s400

The sequence listing

Note: White space (including carriage returns) from the original source is retained in this element to support the enumeration of amino acids beneath every fifth amino acid.

1.23. table (sequence listing)

Attribute tabstyle is “monospace”

An ST.25 sequence listing in table form.

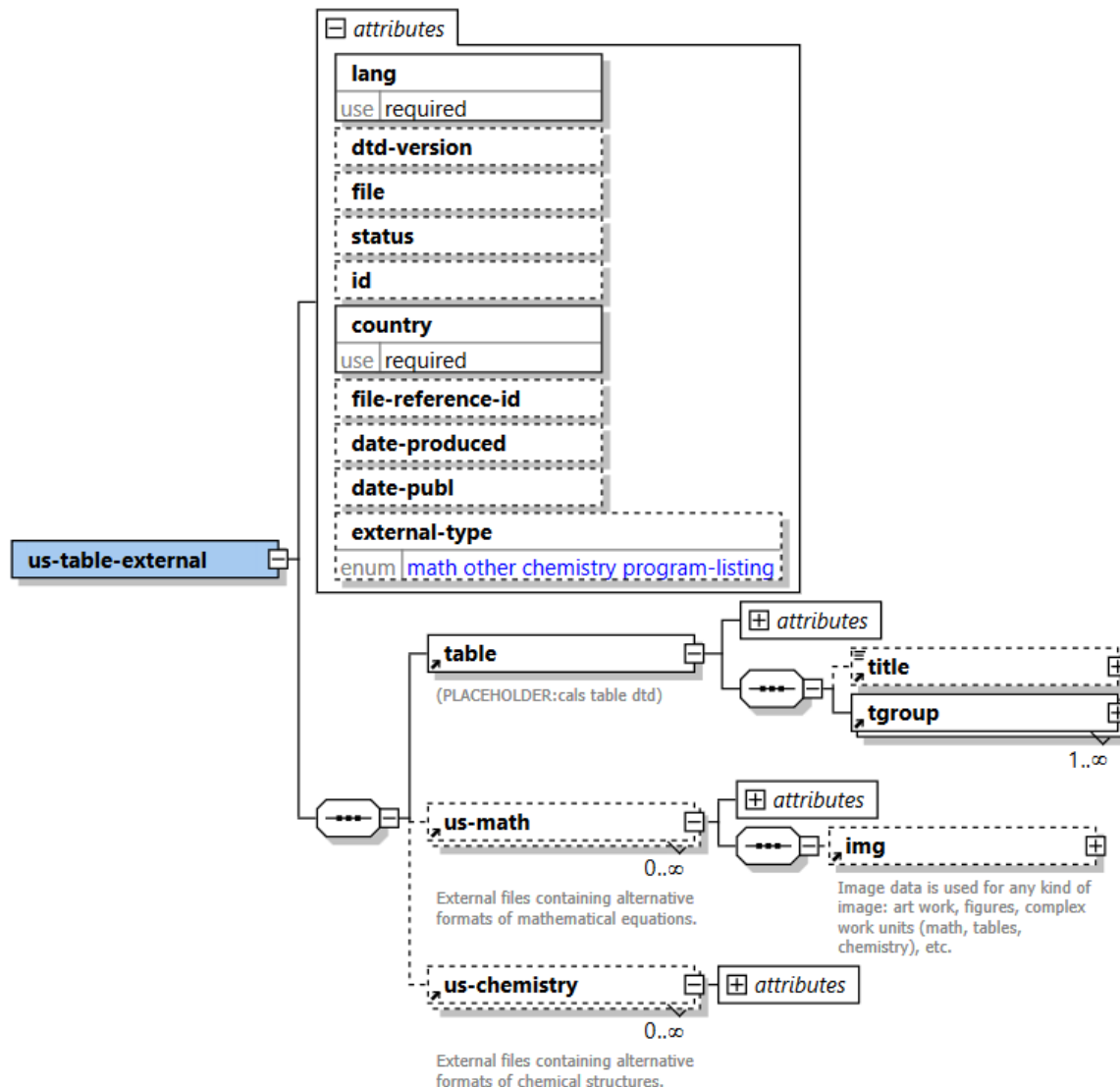
1.24. sequence listing (ST.26): ST26SequenceListing

Sequence listings for applications filed on or after July 1, 2022.

(SequenceTotalQuantity, SequenceData+)

Contains the portion of the originally filed ST.26 XML relating to the sequence listing.

Lengthy tables: table



1.25. Lengthy table in external file

USCCCCCCCCCCCCAN-NNNNNNNN-TNNNNN.XML
NNNNNNNN- TNNNNN.XML

or

USCCCCCCCC-

External standards

OASIS tables

All table elements

MathML

MathML2 Edition 2 is used.

WIPO ST.26

Sequence listings which are over 1GB are retained in the originally filed ST.26 format.

References

WIPO ST.3	Two-letter codes for the representation of states, other entities and organizations
MathML	https://www.w3.org/TR/MathML2/
WIPO ST.26	Presentation of nucleotide and amino acid sequence listings using XML
WIPO ST.36	Processing of patent information using XML
WIPO ST.9	Bibliographic data on and relating to patents and SPCs
WIPO ST.10/C	Presentation of bibliographic data components

Contact

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