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Patent Knowledge – Directorate 5.4.1.3 – Patent Data Services

EXCHANGE FORMAT

EPO - Patent Information Resource

Exchange of Patent Information as produced by the EPO
from their master documentation database DOCDB

AUTHOR: European Patent Office
DISTRIBUTION: Exchange Partners
VERSION: 2.5.8.2
SCHEMA: exchange-documents-v2.5.8.xsd
PRODUCT-ID: T09.01
PROJECT: DOCDB XML [N]

Released and reviewed with the introduction of CPC-International

Document Control

Amendment History

Version	Date	Reviser	Description
0.1	02-02-2006	F. Versloot	First draft
1.0	01-03-2006	F. Versloot	<ul style="list-style-type: none"> Field level change indicator introduced [not implemented yet] Structure priority-claim improved Structure applicants / inventors improved Cited References included <p><u>Additional Notes on Contents :</u></p> <ul style="list-style-type: none"> Structure : Exchange Status : modifications, eg. A8 Element <publication-reference> :: modifications, eg. A8 multiple data-formats Packaging : information on file-split and sorted order
1.1	10-05-2006	F. Versloot	<ul style="list-style-type: none"> Comment number length DOADB formats IDT included in <exch:classification-ecla> National classification [IFD tag 071] included "Star-indication" now "is-family-representative" Abstract accession number no longer supplied
1.2	20-06-2006	F. Versloot	<p>Improvements in sections 1 through 5</p> <p>Additional information attribute "data-format"</p> <p>Additional information abstracts</p> <p>Packaging [zipping and splitting]</p> <p>Annex VI on ECLA, ICO, IDT</p> <p>Annex VII What triggers exchange of a publication</p>
1.3	26-06-2006	F. Versloot	<p>Field Level Change Indicator – new attribute "status"</p> <p>Additional schema changes related to new attribute :</p> <ul style="list-style-type: none"> <classification-ecla> : country and classification-scheme now attributes <is-family-representative> : now attribute on <application-reference>
1.3.1	25-09-2006	F. Versloot	<p>Usage example <priority-claim></p> <p>Added usage example "reference to PCT"</p>

Version	Date	Reviser	Description
			Added annex components and attributes used
1.3.2	14-11-2006	F. Versloot	Updated concordance language-codes [SK added] Additional information on exchange of "withdrawn"
1.4	31-01-2007	F. Versloot	IPC Linked Indexing Codes, samples Designated states for countries other than EP or PCT
1.4.1	02-02-2007	F. Versloot	References Cited – corrected representation "sequence" and <nplcit><text> in usage example
1.4.2	22-03-2007	F. Versloot	Annex IX – Extended Kind-code DE and WO
1.5	28-06-2007	F. Versloot	USEFUL LINKS <ul style="list-style-type: none"> • Link to EPO Patent Information Manuals META DATA <ul style="list-style-type: none"> • New .csv file "data_coverage_ccyyww.csv" EXCHANGE STATUS <ul style="list-style-type: none"> • new values "status" on <exch:exchange-document> to identify "void" or "withdrawn" <ul style="list-style-type: none"> ○ 'CV' ○ 'DV' ELEMENT <exch:dates-of-public-availability> <ul style="list-style-type: none"> • new tag <modified-complete-spec-pub> ANNEX X – Applications and Priorities <ul style="list-style-type: none"> • "exotic" kind-codes • number suffixes
2.0	25.09.2007	F. Versloot	Release 2.0 : <ul style="list-style-type: none"> • data-format="epodoc" • simple patent family • family identifier • English language abstract
2.1	28.11.2007	F. Versloot	Extended : <ul style="list-style-type: none"> • Annex I, mapping DOCDB/XML <ul style="list-style-type: none"> ○ application kind-codes to IFD kind-codes ○ priority kind-codes to IFD kind-codes New : <ul style="list-style-type: none"> • Annex XI Structure of EPODOC format • Annex XII Domestic Classification Revised : <ul style="list-style-type: none"> • Packaging Strategy
2.1.1	19.05.2008	F. Versloot	EPC 2000 : <ul style="list-style-type: none"> • New tag <previously-filed-app> • New publication kind-code B3 for EP's, cater for multiple

Version	Date	Reviser	Description
			occurrences
2.1.2	17.11.2008	F. Versloot	§ 3 Useful Links § 19.2 Extended Kind of Document – WO
2.1.3	19.12.2008	F. Versloot	§ 9.4 Points of Attention : additional explanation
2.1.4	05-03-2009	F. Versloot	§ 9 Simple Patent Family : additional explanation § 7.1 Publication reference : data-format="original"
2.2	17-12-2009	F. Versloot	§ 7.20 ST.50 republication : § modified to comply with new ICE definition not populated yet § 7.10 Cited references : § <exch:citation> - new attributes to cater for additional origins : international search report, supplementary search report § <exch:patcit> - attributes "dnum" and "dnum-type" populated to cater for cited applications in addition to cited publications § publication-date / application-date provided for cited publications / applications
2.2.1	18-08-2010	F. Versloot	New section : § 6 – Practical Hints and Tips : Identification of Publications in DOCDB Unique key – Extend with publication-date Unique key – Publication-identifier only Voids/Withdrawn – Exchange Status CV or DV Attribute "status" on Data Element Level Attribute "is-representative" on Exchange Document
2.2.2	08-09-2010	F. Versloot	Corrigenda <dates-of-availability> => <dates-of-public-availability> voids/withdrawn in the back-file ANNEX XII – Classifications
2.3	14-12-2010	F. Versloot	New Attribute Application Reference New attribute "doc-id" on <application-reference> Unique and stable identifier (surrogate key) To be populated from January 2011 onwards Annex IX - Extended Kind of Document Improved
2.3.1	16-03-2011	F. Versloot	§ 6 PRACTICAL HINTS and TIPS Extended with hints and tips on how to manage cited references aggregated on the 1 st publication level [replaces ANNEX XI]
2.4	20-04-2011	F. Versloot	Classification iteration <exch:classification-ecla> replaced by group <exch:patent- classifications> covering additional classification-schemes

Version	Date	Reviser	Description
			(DOCUS, FI, FTERM) Abstract additional source : "PAJ" – Patent Abstract of Japan
2.4.1	20-09-2011	F. Versloot	Cited References New category 'I'
2.4.2	03-04-2012	F. Versloot	Cited References New cited-phase "PRS" – pre-search/pre-grant
2.4.3	03-04-2012	F. Versloot	Patent Classification New: schemes CPC and CPCNO Discontinued: schemes EC, ECNO, ICO, IDT
2.4.4	13-06-2013	F. Versloot	References Cited NPL citations in original language character set New origins APL – appealed – and FOP – filed opposition
	30-09-2013	F. Versloot	Unique and stable identifier for publication-reference Attribute "doc-id" identifying publication-reference on exchange document level. Refer to § 5.3.1, § 6 and § 7 Unique and stable identifier for application-reference Additional info, refer to § 8.10.1 Combination sets for CPC and CPCNO Patent classifications "grouped in sequence" Refer to § 8.9 and § 8.9.2 References cited – applicant name in patent citations Refer to § 8.19 Search report data In schema definition, not supported yet
2.4.4.1	20-06-2014	F. Versloot	Element <exch:citation><category> For countries that support rich citation data, this element will support ALL categories cited – separated by commas.
2.5	05-08-2014	F. Versloot	Element <exch:citation> <ul style="list-style-type: none"> • attribute "srep-phase" re-named into "cited-phase" • element <exch:corresponding-docs>: full-blown <patcit> instead of <document-id> full-blown <nplcit> instead of <refno> • elements <rel-passage>, <category> and <rel-claims> grouped in sequence instead of individual elements Element <nplcit> attribute "extracted-xp" – information previously exchanged in element <refno> <ul style="list-style-type: none"> • Rich data structure supported for authorities that provide data in rich structure
2.5.1	06-02-	F. Versloot	Additional Information and Usage Examples

Version	Date	Reviser	Description
	2015		
2.5.2	04-08-2015	F. Versloot	<p>Doc-Id on Publication-Identifier</p> <p>Instability of "doc-id" resolved by a change in strategy: Process records in *-DeleteRekey-* packages BEFORE processing the records in *-CreateDelete-* packages. Records in *-Amend-* packages can be processed as soon as they have been released.</p> <p><i>§ 5.4 – Sequence of Processing</i> <i>§ 12.2 – Naming Convention</i> <i>§ 12.9 – Sequence of Processing</i></p>
2.5.2.1			Extended with FAQ's on change of strategy, re. 2.5.2
2.5.3	13-10-2015	F. Versloot	<p>Element <citation></p> <ul style="list-style-type: none"> • Attribute "cited-phase" new value "TPO" – Third Party Observation • Attribute "name" new attribute – name of third party/name of opponent
2.5.4	01-05-2016	F. Versloot	<p>Element <priority-claims> - § 8.13</p> <p>Attribute "doc-id" populated on priority-applications that are present in DOCDB as published applications</p>
2.5.5	06-07-2016	F. Versloot	<p>Element <nplcit> - § 8.19.2</p> <p>Contextual information on attribute "npl-type" extended</p> <p>Annex X – Kind-codes and Number Suffixes - § 22</p> <p>New application kind-code 'V' for "plant patents"</p>
2.5.6	09-08-2016	F. Versloot	<p>§ 8.19 Element <references-cited>/<citation</p> <p>New paragraphs inserted – numbering has changed</p> <p>§ 8.19.1 Release 2.5 - Introduction Rich Citation Data</p> <p>Content has not changed</p> <p>§ 8.19.2 Aug 2016 – Back-file Load EP rich citation data</p> <p>Additional information on EP rich citation data</p> <p>§ 8.19.6 Element <rel-passage></p> <p>May contain empty elements – usage example</p> <p>§ 6.6 Reference Cited – How to manage correction</p> <p>Removed – obsolete - references now on actual citing document - not consolidated on first publication anymore</p> <p>§ 8.20 Element <exch:st50-republication></p> <p>Removed – until such time that this <i>may</i> become actual</p> <p>§ 11 Element <search-report-data></p> <p>Removed – until such time that this <i>may</i> become actual</p> <p>ANNEX XIV - Categories of Cited Documents</p> <p>New categorie 'R' in CN publications</p> <p>ANNEXES VI and XII – Mapping classification symbols</p> <p>Removed – obsolete – not supported anymore – superseded by CPC</p>

Version	Date	Reviser	Description
			and CPCNO
2.5.7	May 2017	F. Versloot	<p>§ 8.19.3 Element <citations> Clarification on the difference between OPP and FOP</p> <p>ANNEX – Mapping Rich Citation Data to ST.36 Additional detail on the strategy followed when mapping rich citation data to <nplcit></p>
2.5.7.1	Nov 2017	F. Versloot	<p>ANNEX – Linkage Type</p> <p>§ 14.1 List of values and descriptions new authority CN</p> <p>§ 14.2 Linkage-type on PCT priorities algorithm for identifying value 'A' or 'W'</p> <p>ANNEX – Mapping Rich Citation Data to ST.36 Updates for npl-type=i and npl-type=c</p>
2.5.7.2	Jan 2018	F. Versloot	<p>ANNEX - Categories of Cited Documents New category & - Document member of the same family</p> <p>§ 14.2 Linkage-type on PCT priorities Modification – see paragraph in question</p>
2.5.8	Jan 2018	F. Versloot	<p>§ 8.16 Element <exch:designation-of-states> Modificaton <exch:designation-epc> - new elements</p> <ul style="list-style-type: none"> validation states member states participating in the unitary patent
2.5.8.1	Aug 2019	F. Versloot	<p>§ 8.9 Element <exch:patent-classifications> New classification-scheme 'CPCI' Incorporating classification-schemes 'CPC' and 'CPCNO' Making the existing classification-schemes obsolete Modification does NOT have an impact on the schema-definition.</p> <p>The following paragraph has been re-instated</p> <ul style="list-style-type: none"> § 8.8 Element <classification-national> This paragraph had inadvertently been taken out with release 2.4.3 when amended with the introduction of CPC and CPCNO <p>Usage examples have been reviewed and revised across the complete document – taken from more recent “real-life” deliveries</p>
2.5.8.2	May2022	V. Vajsbaheer	<p>ANNEX III - Linkage Type</p> <p>§ 14.1. List of values and descriptions Added 5 new LMI's (BG/0, DK/0,4,5,EP-reg, TR/3,6 UA/3) -see table for detail descriptions</p>

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1. PREFACE

DOCDB XML is the standard format for exchange of DOCDB data to trilateral partners, WIPO and commercial providers. This new format will be distinctly ST.36 based. "ST.36 based" meaning that the new exchange format will adhere to ST.36 where possible, but may extend the standard where necessary due the specific nature of the data exchanged.

Previously DOCDB is exchanged in two separate formats, INPADOC or IFD format [product-id 14.07] and ST.30 [product-id 14.10]. DOCDB XML exchange will supersede these and bring transparency as well as uniformity.

Phase 1 concentrates on outgoing exchange of bibliographic data [including cited references] and abstracts. Later phases may extend the coverage of the exchange to full text and images. Options to use the format for both outgoing and incoming bibliographic data are currently being explored.

This preface has been added to the user document with the intention to give information on the background of the strategy opted for and the design decisions taken.

1.1. Strategy

The project started out by trying to use ST-36 model dtd `xx-patent-document` as adapted for EP publication requirements. Shortly after project initiation it became clear that the DOCDB exchange would not fit into `xx-patent-document` model dtd quite as easily as was hoped for :

- ST-36 is intended to accommodate "resources used for filing, processing, publication and exchange of all types of patent information"
- ST-36 currently includes only one model dtd which is publication specific
- DOCDB is about exchanging database contents

In other words, ST-36

- does not contain a model dtd or schema for patent database exchange
- is oriented towards patent processing within a single office
- currently implements one representation only of each entity

Whereas DOCDB :

- contains data supplied by over 70 countries
- contains data that has been standardised and enriched
- contains different "flavours" of one entity, more than one representation

Considering all of this the following strategy has been opted for :

- take ST-36 publication model dtd as adapted for the publication cycle of EP as a starting point
- realise a design that caters for database exchange specifically
- provide a schema-design instead of a DTD

A schema design instead of a DTD, because it is the European Patent Office's intention to make web services the native data exchange vehicle for this product in the near future.

1.2. Design Considerations

There is consensus on fact that ST-36

- will require additional model dtDs and schemas
- is oriented towards the publication cycle of one single country
- currently implements one representation of each entity

DOCDB is a publication based database but

- it contains data supplied by over 100 countries
- it contains data that has been standardised, enriched
- it contains different "flavours" of one entity
more than one representation of one and the same data-item

That means that the design of the DOCDB/XML exchange format has had to extend `<xx-patent-document>` BUT remained distinctly ST-36 based at the same time.

Where does the design embrace ST-36 ?

- ST-36 ICE that have already defined will be embedded
- mandatory fields that cannot be satisfied will be defined "optional"
- ST-36 ICE elements are being re-used where possible
- modified and name-space prefixed where required
- general ST-36 design principals are followed where appropriate

Where does the design extend ST-36 and the existing model dtd ?

- root is `<exchange-document>` instead of `<patent-document>`
- elements will be prefixed with `exch:` rather than an office `xx-`
- only key elements in the root element will be defined "mandatory"
- additional attributes will be added where required
- non-ICE elements will be introduced where necessary
- XML version 1.0 is followed

1.3. Extension to ST-36

Why <exchange-document> instead of <xx-patent-document> ?

Publication exchanged from DOCDB has added value in that :

- data has been enriched from other sources
- data has been reformatted and standardised
- DOCDB puts the publication in a wider context

The term <patent-document> does not quite cover the content

Why prefix with *exch:* and not with *ep:* ?

DOCDB exchange transcends *ep-* in that

- it exchanges more than EP data only
- it exchanges data supplied by over 70 countries

A neutral prefix such as *exch:* is much more appropriate

Why define only the key-elements <mandatory> ?

Within the context of DOCDB elements containing key information are :

- publication-reference
- application-reference

Defining only the key elements "mandatory":

- allows for exchange of "light" backfiles, eg. IPC/R only or abstracts only
- offers the flexibility that exchange of bibliographic data needs
- corresponds to the practical constraint that data that is not available in DOCDB cannot be exchanged

Why additional attributes ?

The most strategic attribute added is "data-format"

- this attribute has been defined as a free format text string
- valid terms allowed to be used in this text string are defined in a glossary refer to ANNEX II - Data Format
- not embedded in the schema itself to allow for maximum flexibility

This new attribute "data-format" resolves the issue of multiple "flavours", of more than one representation of one and the same entity.

Refer to section GENERAL CONSIDERATIONS - Attribute "data-format"

Why non-ICE elements ?

A number of DOCDB specific data-items are not covered by ST.36 ICE definitions

2. INTRODUCTION

2.1. Format

This document describes the format used for exchange of DOCDB contents, patent bibliographic data marked up using XML tags. The format provides for a system independent data format, using XML.

The mark-up of the data conforms to WIPO standard ST.36

See <http://www.wipo.int/scit/en/standards/standards.html>.

Note that not all data elements in the ST.36 International Common Element (ICE) set are used in this exchange, only the ones used are described in this document.

Note that <exchange-documents.xsd> has been reviewed since release 1.1 and has been compressed into a lighter and more manageable document dedicated to the actual contents of this DOCDB exchange.

For ease of transition from current exchange formats IFD and ST.30 to the new exchange format in XML, reference to the corresponding IFD and ST.30 tags has been included in Annex I.

2.2. Contents

The specifications contained in this document refer exclusively to the exchange of bibliographic data and data used for the management and storage of the patent documents by the EPO. Other possible exchanges, e.g. NPL, from the same source are not considered. This exchange product will contain :

- patent bibliographic data
- cited references
- abstracts
- IPC/1 to 7
- IPC/8
- CPC-International
- classifications allocated by the national offices
- information on the EPO simple patent family

3. USEFUL LINKS

<https://www.epo.org/searching-for-patents/data/coverage/regular.html>

- Publication Kind Code Concordance in *Kind Code Concordance List*
- Publication Number Formats in *Number format concordance - publication numbers*
- Application and Priority Number Formats in *Number format concordance - application numbers*

<https://www.epo.org/searching-for-patents/data/bulk-data-sets/manuals.html>

- Latest versions of user manual : DOCDB User Documentation

<http://www.wipo.int/standards/en/>

- WIPO Standards - including ST-36 and ST.8

<http://www.w3.org/TR/REC-xml>

- Extensible Markup Language (XML) 1.0

4. GENERAL CONSIDERATIONS

4.1. Date, country and language

Dates are stored in 8 bytes. The format is always CCYYMMDD. The date is preceded by the <date> tag.

Values used for country and state are according to ST.3; values used of language-codes are according to the standard ISO/R 639-1967 (F). Language-codes are represented in lower case.

4.2. Entity references

XML 1.0 requires that "The ampersand character (&) and the left angle bracket (<) MUST NOT appear in their literal form, except when used as mark-up delimiters. The right angle bracket (>) MAY be represented using the string '>' and MUST, for compatibility, be escaped using either '>' ... ". The following character entity references for "&", "<" and ">" are used in this exchange standard :

- & = & ampersand
- > = > greater than
- < = < less than

E.g. J.A. Kemp & Co = J.A. Kemp & Co

Entity references are identified in `docdb-entities.dtd`.

When entities, detected as such at formatting time, have not been identified in `docdb-entities.dtd`, they will be encapsulated in a **[CDATA]** section.

In these incidences it will concern references included in the text that appear to be entity references but are not, see the example below where "etcetera" has been represented as `&c`.

```
<abstract><exch:p>The characters may be mathematical symbols such as +, x,<![CDATA[&c.]]>, the algebraic operations which they represent not being effectible until further characters, e.g. numbers or other symbols, have been received.</p></abstract>
```

4.3. Element <document-id>

In DOCDB publication-, application- and priority-numbers can contain up to a maximum of 15 digits. DOCDB does not currently support the extended republication-codes of WIPO standard ST-50.

4.4. Attributes

Note that not all attributes as defined in the exchange-document.xsd are used in this exchange, only the ones used are described in this document.

A number of strategic attributes not defined in the ST.36 ICE definitions have been introduced to cater for DOCDB specific needs :

- data-format, allowing for the exchange of multiple representations of the same data-element
- status, the "field level change indicator" identifying which update has triggered the exchange of the publication (refer to ANNEX VII - What Triggers a Publication for Exchange).

4.5. Data Format

DOCDB supports multiple representations of one and the same data-item

Data-format	Description
"docdb"	normalised against the DOCDB standardisation rules
"epodoc"	the doc-number represented in the format as in esp@cenet the doc-number will contain country, number in one concatenated string, where required a kind-code is included; <i>refer to ANNEX XII - Structure of EPODOC Format</i>
"docdba"	supported on inventor, applicant, title and abstract data in the format as supplied by the provider – in Latin character set
"original"	when supported on document-identifiers: in the format as supplied by the provider when supported on inventor, applicant, title and abstract data: in the format as supplied by the provider, in original language character set

Publication- and application-numbers included in <exch:patent-family> will be represented in both data-format="docdb" and data-format="epodoc"

NOTE THAT data-format="epodoc"

- is exchanged in a concatenated string in <doc-number>
- is exchanged following its data-format="docdb" origin, alternating occurrences of data-format="docdb" and data-format="epodoc"

Data-format="docdb" is converted into data-format="epodoc" at exchange-time "on the fly". In case of issues with the format, data-format="epodoc" will not be supplied. Publications affected will be re-exchanged as soon as the issue has been resolved.

Data-items for which DOCDB supports more than one representation are:

- publications
- applications and priorities
- applicants and inventors
- title and abstracts

Refer to ANNEX II - Data Format

Sequence numbering within the individual elements has been set up as follows :

- alternating occurrences of data-format="docdb" / data-format="epodoc"
- all data-format="docdba"
- all data-format="original"
- "sequence" starts from 1 with every change of data-format

Refer to the usage examples within the sections on the individual elements.

Names or numbers with identical sequence numbers but different data-formats cannot be guaranteed to be representations of one and the same name or number. As a rule of thumb it is very likely that the sequence numbering will be consistent between corresponding sets of data-format="docdb" and data-format="docdba" / data-format="original", but it cannot be guaranteed. The sequence numbering across data-formats "docdb" and "epodoc" will be guaranteed to be consistent.

The EPO cannot be responsible for the quality of data in the format as supplied by the providers and is therefore not in a position to correct or manipulate data in data-format="docdba" or data-format="original". The EPO is responsible for its own DOCDB standardised formats and will correct and manipulate data in data-format="docdb" to maintain a high standard of quality. Although generally limited to quality improvement of names and formats, these corrections may have an impact on the consistency of the sequence numbering between corresponding sets.

DOCDB does not support country and kind-code on applications and priorities in data-format="original", they are exchanged as numbers only. Deriving country and kind-code for data-format="original" from data-format="docdb" is not an option, for reasons described above. The consistency of sequence numbering across corresponding sets cannot be guaranteed. This makes derivation of country and kind-code for data-format="original" not reliably accurate.

4.6. Field Level Change Indicator - Attribute "status"

The field level change indicator - attribute "status" at data-element level - will identify which data-units in <exchange-document> have been updated.

The field level change indicator is represented by attribute "status" on data-unit level. This attribute is only populated for publications that have status value = "A" (amend) on <exchange-document > level.

Refer to § 6 PRACTICAL HINTS AND TIPS for more details

5. OVERALL STRUCTURE OF EXCHANGE DELIVERIES

5.1. Meta Data

Each exchange file is accompanied by "meta-data" such as :

- an index
- statistical information
 - statistics_ccyyww.csv
 - data_coverage_ccyyww.csv
- information for administrative purposes

The "statistics_ccyyww.csv" file will contain IFD statistics for legacy purposed

This additional .csv file will provide information on :

- first publication within publication-date
- last publication within publication-date
- number of publications per publication-date
- data-coverage on each bibliographic entity

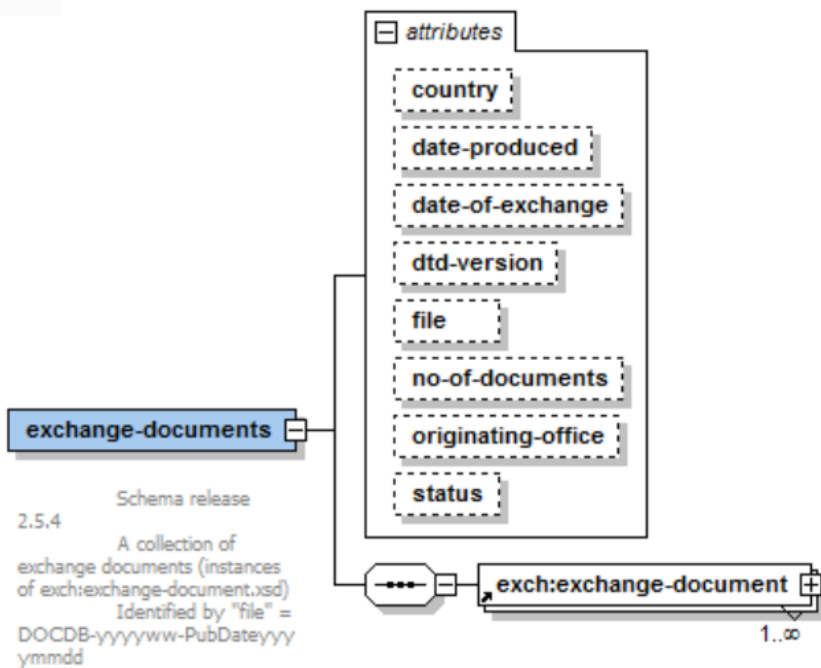
grouped by status, country, kind-code. publication-date

Refer to section on PACKAGING

5.2. XML Instance

Each exchange file contains multiple occurrences of <exchange-document>; the common root-element for these being <exchange-documents>.

Each physical exchange XML file delivery must contain one, and only one, <exchange-documents> element.



Attributes	Description
date-of-exchange	date this batch of exchange-documents was posted on the internet by agreement on Thursday following the date of production
dtd-version	version of dtd or schema
file	unique identifier, e.g DOCDB-200536-PubDate10050909AndBefore.xml
originating-office	EP

5.3. Exchange-document

Each occurrence of the element <exchange-document> corresponds to an "exchange document" and is accompanied by meta-data relevant to the exchange of that document in the form of element attributes:

- date of exchange
- date document was previously exchanged
- date document was added to DOCDB
- reason for exchange (status)

In the context of DOCDB an "exchange document" is a patent publication with all patent information related to it, such as bibliographic data, IPC/8, abstracts, cited references, any classification allocations that the EPO is allowed to disseminate.

5.3.1. Attribute "doc-id"

Attribute "doc-id" will contain the unique and stable identifier to the publication-reference. The attribute will be populated with a variable length 10 digit numerical value. There will be a "doc-id" for every patent publication – except for "void" documents. "Void" documents will not have a "doc-id" allocated.

This attribute is not to be confused with attribute "doc-id" on element <application-reference>. There are two attributes named "doc-id" on two different levels uniquely identifying two different entities – each covering a series ranging from 1 to n :

- "doc-id" @ <exchange-document> unique identifier to the *publication-reference*
- "doc-id" @ <application-reference> unique identifier to the *application-reference*

The value of the "doc-id" attributed to the publication-reference is guaranteed to be stable in any event where the publication-identifier is corrected – also when the kind code has been corrected.

The introduction of the unique and stable identifier will bring more transparency:

- in the event of duplicate publication-identifiers where there have been subsequent modifications of a full specification or a first page: each individual duplicate will be uniquely identified by "doc-id" and have its own unique and stable identifier
NOTE THAT the introduction of "doc-id" has impacted the contents of § 6.
- in the event of a modification of the publication-identifier itself where there will be a pair of status='D' and status='C' : both status='D' and status='C' will have identical values in "doc-id" – uniquely identifying the two records as a pair
NOTE THAT the introduction of "doc-id" has impacted the contents of § 5.3.2.

5.3.2. Attribute "status"

A patent publication is triggered for exchange :

- a) when it has been added to the database
- b) when it has been removed from the database or withdrawn
- c) when any information related to it has been modified
- d) when it has been re-keyed, i.e. the publication-identifier itself has changed

Refer to ANNEX VII - What Triggers a Publication for Exchange

The action performed on the EPO master database is identified by attribute status :

- C - "Create" : publication has been added
- D - "Delete" : publication has been deleted
- A- "Amend" : publication has been updated
- CV - "Create Void" : record of publication having been withdrawn inserted
- DV - "Delete Void" : record of publication having been withdrawn deleted

When status = 'C' or 'A', the patent publication will be exchanged as a complete "image" at all times, i.e. <exchange-document> will contain all related patent information that DOCDB is able to provide.

NOTES on exchange-status – status= 'A'

On occasion "amend" messages may inadvertently go out for publications that are new and have never been exchanged before. The introduction of "doc-id" on publication-reference will not take away the risk of this occurring. The advice is to continue applying the following mode of operation:

- access on the key
 - find a match : document is an "amend"
 - find no match : document is a "create"
- apply this algorithm regardless of status
 - status="A" and no match : process the document as a "create"
 - status="C" and a match : process the document as an "amend"

With the introduction of "doc-id" on publication-reference, access on the unique and stable identifier provided by attribute "doc-id" is strongly recommended.

NOTES on the re-key of the publication-identifier – status='D' and status='C'

When the publication-identifier itself has been changed, the <exchange-document> element will have the following attributes populated:

- status 'D' with the old publication-identifier and no data
- status 'C' with the new publication-identifier and a re-delivery of the full set of bibliographic data that was previously attached to the publication under its old key

With the introduction of the "doc-id" on publication-reference, one pair of status = 'D' and status = 'C' representing a modification of the publication-identifier of one publication will be identified by identical values in attribute "doc-id".

NOTES on exchange of "withdrawn" or "void" publications – status='CV' and 'DV'

Documents that have been exchanged with status='CV' or status='DV' will be exchanged as follows:

```
<ex:exchange-document country="US" doc-number="10057043" kind="B2" family-id="" is-representative="NO"
date-of-last-exchange="20181115" date-of-previous-exchange="20181018" originating-office="EP" status="CV">
  <ex:bibliographic-data>
    <ex:publication-reference data-format="docdb">
      <document-id>
        <country>US</country>
        <doc-number>10057043</doc-number>
        <kind>B2</kind>
      </document-id>
    </ex:publication-reference>
    <ex:publication-reference data-format="epodoc">
      <document-id>
        <doc-number>US10057043</doc-number>
      </document-id>
    </ex:publication-reference>
  </ex:bibliographic-data>
</ex:exchange-document>
```

There will only be a publication-identifier – NO publication-date, application-reference or any other bibliographic data. Status @ <exchange-document> will have value 'CV' or 'DV'

Refer to § 6 PRACTICAL HINTS AND TIPS for more details

5.4. Sequence of Processing

In August 2015 the strategy in the way that the records in one exchange delivery are to be processed has been changed – in order to resolve issues with the stability of the “doc-id” – the unique and stable identifier to the publication-identifier that is supported at <exchange-document> level. This identifier is expected to remain stable throughout the entire life of a publication. There will however be circumstances under which the value of the “doc-id” may fluctuate for a given publication-identifier. These circumstances will only present themselves in a relatively limited number of scenarios, in the case of complicated issues resolved manually – by intellectual intervention.

The new strategy is to cater for scenarios where:

- the same publication-identifier is in the exchange TWICE – with different values in “doc-id”
- the same doc-id is in the exchange TWICE – with different publication-identifiers

once with status='D' – once with status='C' or status='A'

To allow for managing these scenarios in a transparent way, the following solution has been opted for in cases where one publication-identifier is in the exchange twice:

- concentrate records with status="D" in a dedicated package
*-DeleteRekey-PubDate*AndBefore-*
- include this dedicated package in the CreateDelete package
*-CreateDelete-PubDate*AndBefore-*
- sequence of processing must be:
process records in *-DeleteRekey-PubDate*AndBefore-
before records in *-CreateDelete-PubDate*AndBefore-
before records in *-Amend-PubDate*AndBefore-*

5.5. Frequently Asked Questions

5.5.1. What is a publication “re-key”

The modification of any of the key values that identify “the publication” is a “publication re-key”. Publication “re-keys” are exchanged in the package that is identified as `docdb_xml_*_CreateDelete-*`. Publication “re-keys” will result in two exchange records, one with `status="D"`, one with `status="C"`.

Pairs of `status="D"` and `status="C"` representing “publication re-key” will ALWAYS be exchanged in ONE weekly delivery

A publication “re-key” can be one of two things:

- the publication-identifier has been modified, value of the “doc-id” has remained the same
- the publication-identifier has stayed the same, value of the doc-id has changed

When the publication-identifier has been modified, the exchange will contain

- one `status="D"` record with the content of the publication under the old identifier
- one `status="C"` record with the content of the publication under the new identifier

Both records will be inside package `DOCDB-*_CreateDelete-PubDate*AndBefore-*`

When the publication-identifier is the same, but the doc-id has changed, the exchange will contain

- one `status="D"` record with the content of the publication under the old doc-id;
you will find the `status="D"` records inside `DOCDB-*_DeleteRekey-PubDate*AndBefore-*`
- one `status="C"` record with the content of the publication under the new doc-id
you will find the `status="C"` record inside the `DOCDB-*_CreateDelete-PubDate*AndBefore-*`

When a publication has been re-keyed AND updated inside one week, you will find the updates included in the `status="C"` record. The `status="C"` record will always contain the complete image, including cited references, CPC data, patent family.

5.5.2. How to process the files inside the “CreateDelete” package

In the new strategy it is important to process the files inside the CreateDelete package in a particular order.

The CreateDelete package is the package named `docdb_xml_*_CreateDelete-*`. Inside this package you will find package-files per country under different identifiers.

You are certain to find package-files named:

- `DOCDB-*_CreateDelete-PubDate*AndBefore-*`
e.g. `DOCDB-201535-CreateDelete-PubDate20150828AndBefore-EP-0001`
- `DOCDB-*_CreateDelete-PubDate*-*`
e.g. `DOCDB-201535-CreateDelete-PubDate20150902-EP-0001`

You may find package-files identified as:

- `DOCDB-*_DeleteRekey-PubDate*AndBefore-*`
e.g. `DOCDB-201535-DeleteRekey-PubDate20150828AndBefore-EP-0001`

In order to process the data correctly, it is of vital importance to process the files in the following order:

1. records in the `DOCDB-*_DeleteRekey-PubDate*AndBefore` packages
2. records in the `DOCDB-*_CreateDelete-PubDate*AndBefore` packages

5.5.3. What is in the “DeleteRe-key” files

When the publication-identifier has stayed the same but the value of the “doc-id” has changed, there will be TWO records in the exchange for the publication-identifier – one status=“D” with the OLD value of the doc-id and one status=“C” with the NEW value of the doc-id.

In cases like these it is vital important that you process the records with status=“D” FIRST, before you process any of the other records. To this purpose records like these – with status=“D” – have been separated from the rest and put in dedicated packages named `DeleteRekey-PubDate*AndBefore` – so they can be easily identified.

Should you NOT process the records in *DeleteRekey* records first, you would insert the publication when processing status=“C” and then later on delete the same publication when processing status=“D”.

5.5.4. How to process the records inside “ CreateDelete-PubDate*” files

When you have processed the records in the DeleteRekey-PubDate*AndBefore files first, the records in the CreateDelete-PubDate*AndBefore can be processed in any order – irrespective of the sequence that the status=“D” and the status=“C” records are in:

- when the status=“D”, you remove the publication from your reference database
- when the status=“C”, you insert the publication into your reference database

You will only ever find ONE instance of any given publication-identifier in the CreateDelete-PubDate*AndBefore package-files. The publication-identifier will be unique inside these packages.

5.5.5. Does the status=“D” in a publication re-key always come before the status=“C”

The order of sequence of the records inside the package-files is in ascending order and based on publication-identifier. The order of sequence does NOT include the value of attribute “status”.

This means that you may find status=“D” and status=“C” records that make up ONE publication re-key in any order, e.g.

- when old identifier is DE-2407273-B1 and new identifier is DE-2407273-C1, you will find status=“D” before status=“C”
- when old identifier is DE-2407273-B1 and new identifier is DE-2407273-A1, you will find status=“C” before status=“D”

5.5.6. Do status=“D” and status=“C” of ONE publication re-key always come in pairs

The order of sequence of the records inside the package-files is in ascending order and based on publication-identifier. The order of sequence does NOT include the value of attribute “status”.

This means that status=“D” and status=“C” records that are part of ONE publication re-key do not necessarily have to come in pairs, e.g.

- when old identifier is DE-2407273-B1 and new identifier is DE-2407273-C1, you may find the two records in a pair, one following the other
- when old identifier is DE-2407273-B1 and new identifier is DE-2407999-B1, you will very likely NOT find the two records in a pair

5.5.7. Will status="D" and status="C" of ONE publication re-key be in ONE file

In cases where the amount of data for one country exceeds the maximum size of a package-file, the data will be split over more than one package-file. The splitting of the data is on size exclusively. It may happen that the split cuts right across the two records that make up one publication-rekey.

This means that you may find Status="D" and status="C" records that are part of ONE publication re-key in different package-files, e.g.

- when old identifier is DE-2407273-B1 and new identifier is DE-2407273-C1, you may find the two records in one package-file
- when old identifier is DE-2407273-B1 and new identifier is DE-9907273-B1 you will very likely NOT find the two records in one package-file

6. PRACTICAL HINTS and TIPS

6.1. Identifying Publications in DOCDB

The EPO master databases that feed the exchange are all keyed on publication-identifier: publication-country, publication-number, publication kind-code. These three components - country, number and kind-code - provide a unique key to the database for the majority of documents. Exceptions to this rule are those kinds of publications where there can be more than one occurrence with the same publication-identifier, e.g. modifications of full specifications or first pages. In those cases the database may contain duplicates on publication-identifiers.

6.1.1. Duplicates on publication-identifiers

Duplicates on publication-identifier may occur for the following kinds of publications:

- modification of the full specification [eg. A8, B8, U8]
- modification of the first page [eg. B8, B9, U9]
- publication after limitation procedure [EP-B3]
- later publication of ISR with revised front page [WO-A3]

For these kind-codes the publication-date is the defining component. With the introduction of the "doc-id" on publication-reference, it is no longer necessary to include the publication-date in the key to obtain a unique key. The unique and stable identifier provided in the "doc-id" will uniquely identify each duplicate.

6.1.2. Correction of the publication-date

When the publication-date is included in the key, you may end up with undesirable duplicates in your reference database, particularly in cases where the publication-date has been corrected, see usage example on the next page.

In cases where the publication-date has been corrected, but the publication-identifier has remained stable, the exchange will contain a status="A" for that document. Please take note that you will NOT receive a status="D" followed by a status="C" when the publication-date has changed. In DOCDB the publication-date is NOT part of the key. A correction of the publication-date is not uncommon.

Usage examples on the next page

Usage Example - Correction of Publication Date

DE 202016101614 U1 – last exchanged with publication-date 20160502

```
<exch:exchange-document country="DE" doc-number="202016101614" kind="U1" doc-id="456256473" date-
publ="20160502" family-id="55974454" is-representative="YES" date-of-last-exchange="20180222" date-of-previous-
exchange="20170608" date-added-docdb="20160526" originating-office="EP" status="A">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id lang="de">
        <country>DE</country>
        <doc-number>202016101614</doc-number>
        <kind>U1</kind>
        <date>20160502</date>
      </document-id>
    </exch:publication-reference>
  </exch:bibliographic-data>
</exch:exchange-document>
```

DE 202016101614 U1 – publication-date has been changed into 20160609

```
<exch:exchange-document country="DE" doc-number="202016101614" kind="U1" doc-id="456256473" date-
publ="20160609" family-id="55974454" is-representative="YES" date-of-last-exchange="20181115" date-of-previous-
exchange="20180222" date-added-docdb="20160526" originating-office="EP" status="A">
  <exch:bibliographic-data>
    <exch:publication-reference status="A" data-format="docdb">
      <document-id lang="de">
        <country>DE</country>
        <doc-number>202016101614</doc-number>
        <kind>U1</kind>
        <date>20160609</date>
      </document-id>
    </exch:publication-reference>
  </exch:bibliographic-data>
</exch:exchange-document>
```

INCLUDE the publication-date in the key and apply mode of operation proposed in § 5.3.2 Attribute "status":

- NO match on the key then process record with status="A" as a "create"

and you will introduce an undesirable duplicate

Country	Doc Number	Kind	Date publ
DE	202016101614	U1	20160502
DE	202016101614	U1	20160609

EXCLUDE the publication-date from the key and apply the proposed mode of operation:

- match on the key – process record with status="A" as an "amend"

and you will amend the publication and replace the publication-date

Country	Doc Number	Kind	Date publ
DE	202016101614	U1	20160502 20160609

6.2. Withdrawn / "Void" Documents

NOTE THAT if you have no interest in withdrawn or "void" documents, exchange-documents with status="CV" or status="DV" can simply be ignored without having to take any additional action :

If a document has been withdrawn "after publication"

- it was in the database as a properly published document before
- the exchange will contain a status="D" for that document in addition to the status="CV"

If a document has inadvertently been withdrawn "after publication"

- it has been re-instated as a properly published document
- the exchange will contain a status="C" for that document in addition to the status="DV"

If a document has been withdrawn "before publication"

- the document was never present in the database as a "publication"
- there is no need for a status="D" as there was no publication to delete.

NOTE THAT in the back-file attribute "status" on <exchange-document> level is not supported. In the back-file withdrawn or "void" documents can be identified by the fact that <exch:bibliographic-data> will only contain a publication-identifier, no publication-date, no bibliography.

```
<exch:exchange-document country="US" doc-number="10057043" kind="B2" family-id="" is-representative="NO"
date-of-last-exchange="20181115" date-of-previous-exchange="20181018" originating-office="EP" status="CV">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id>
        <country>US</country>
        <doc-number>10057043</doc-number>
        <kind>B2</kind>
      </document-id>
    </exch:publication-reference>
    <exch:publication-reference data-format="epodoc">
      <document-id>
        <doc-number>US10057043</doc-number>
      </document-id>
    </exch:publication-reference>
  </exch:bibliographic-data>
</exch:exchange-document>
```

6.3. Attribute "status" @ data element Level

NOTE THAT the value of attribute "status" on the individual data-field does not necessarily indicate that this particular data-field has been updated. Attribute "status" will be populated for ALL data-fields within the data-unit. If one data-field within the data-unit has been modified, added or deleted, all data-fields within that data-unit will have been identified as having status "A", regardless of whether they have been subject to a modification or not.

Data units within the context of DOCDB are :

- application-reference- further identified by data-format
- priority-claims - further identified by data-format
- applicants - further identified by data-format
- inventors - further identified by data-format
- titles - further identified by data-format
- abstract - further identified by data-format and source
- classifications - further identified by classification-scheme
- data-units that have not been further identified by data-format or scheme, e.g.
 - <classification-ipc>
 - <classification-ipcr>
 - <references-cited>

Attribute "status" on data-unit level will have value "A" (amend) when **at least** one component in the data-unit has been updated, added or deleted. Attribute "status" on data-unit level will have value "C" (create) when a complete data-unit has been added.

The attribute "status" has been defined on the individual data-fields within a data-unit. The value of attribute "status" on any one of the data-fields within a data-unit reflects the status of the data-unit as a whole, it reflects that something in the data-unit has been modified. *See usage examples on the next pages.*

NOTE THAT attribute "status" will not be populated on data-elements that have been generated "on the fly" at exchange time. Data elements generated "on the fly" are :

- data elements identified by data-format="epodoc"
- publication-/application-date on cited publications/applications
- applicant-name on cited publications/applications
- dates of public availability
- data element <patent-family> in its entirety

When these data-elements change, that does not constitute a physical update in the database. As a consequence these data entities cannot be identified as "updates".

NOTE THAT the exchange may contain documents with exchange-status="A" where attribute "status" has not been populated on any of the data-elements. Publications may be re-triggered for exchange without any database updates, for internal business purposes for instance.

NOTE THAT attribute status at element-level may not be consistently supported on data-elements that are populated from satellite databases like CPCI and REFI.

Usage Example

One data-field within the data-unit has been added, updated or deleted – attribute "status" has been populated on ALL data-fields within the data-unit.

```

<exch:priority-claims>
  <exch:priority-claim sequence="1" data-format="docdb" status="A">
    <document-id doc-id="333602099">
      <country>DE</country>
      <doc-number>2006001296</doc-number>
      <kind>W</kind>
      <date>20060725</date>
    </document-id>
    <exch:priority-linkage-type>A</exch:priority-linkage-type>
    <exch:priority-active-indicator>Y</exch:priority-active-indicator>
  </exch:priority-claim>
  <exch:priority-claim sequence="1" data-format="epodoc">
    <document-id>
      <doc-number>WO2006DE01296</doc-number>
    </document-id>
  </exch:priority-claim>
  <exch:priority-claim sequence="2" data-format="docdb" status="A">
    <document-id doc-id="14919385">
      <country>DE</country>
      <doc-number>2006001648</doc-number>
      <kind>W</kind>
      <date>20060919</date>
    </document-id>
    <exch:priority-linkage-type>A</exch:priority-linkage-type>
    <exch:priority-active-indicator>Y</exch:priority-active-indicator>
  </exch:priority-claim>
  <exch:priority-claim sequence="2" data-format="epodoc">
    <document-id>
      <doc-number>WO2006DE01648</doc-number>
    </document-id>
  </exch:priority-claim>
  <exch:priority-claim sequence="1" data-format="original">
    <document-id>
      <doc-number> 25.07.20061PCT/DE2</doc-number>
    </document-id>
  </exch:priority-claim>
  <exch:priority-claim sequence="2" data-format="original">
    <document-id>
      <doc-number>PCT/DE2006/001648</doc-number>
    </document-id>
  </exch:priority-claim>
</exch:priority-claims>

```

6.4. Attribute "is-representative" @ <exchange-document>

Attribute "is-representative" indicates whether the publication is the "representative" document within the application. In EPO terms "is representative=YES" identifies the first genuine publication of the application, that can be either the publication of the filed application or the publication of the granted application.

NOTE that there may be applications that do not contain any representative publication. Publications "laid open to public inspection" or announcements in gazettes are not considered "representative". Applications for which only a "laid open" or an "announcement" has been published will not have a representative publication.

See usage examples on the next pages:

- US pre-grant followed by a grant
- US grant not preceded by a pre-grant
- NO "laid open to the public" followed by a grant
- GB "announcement in a gazette" followed by publication of a filed application

- Usage Example - US grant preceded by a US pre-grant

US A1 is representative, US-B2 is not representative

```
<exch:exchange-document country="US" doc-number="2018178193" kind="A1" doc-id="487729932" date-
publ="20180628" family-id="56193007" is-representative="YES" date-of-last-exchange="20181203" date-added-
docdb="20180628" originating-office="EP" status="A">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id lang="en">
        <country>US</country>
        <doc-number>2018178193</doc-number>
        <kind>A1</kind>
        <date>20180628</date>
      </document-id>
    </exch:publication-reference>
    [ ... ]
  <exch:application-reference is-representative="NO" doc-id="487729931" data-format="docdb">
    <document-id>
      <country>US</country>
      <doc-number>201815903179</doc-number>
      <kind>A</kind>
      <date>20180223</date>
    </document-id>
  </exch:application-reference>

<exch:exchange-document country="US" doc-number="10065175" kind="B2" doc-id="487729933" date-
publ="20180904" family-id="56193007" is-representative="NO" date-of-last-exchange="20181203" date-added-
docdb="20180904" originating-office="EP" status="A">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id lang="en">
        <country>US</country>
        <doc-number>10065175</doc-number>
        <kind>B2</kind>
        <date>20180904</date>
      </document-id>
    </exch:publication-reference>
    [ ... ]
  <exch:application-reference is-representative="NO" doc-id="487729931" data-format="docdb">
    <document-id>
      <country>US</country>
      <doc-number>201815903179</doc-number>
      <kind>A</kind>
      <date>20180223</date>
    </document-id>
  </exch:application-reference>
```


- Usage Example - US grant NOT preceded by a US pre-grant

US-B1 is representative

```
<exch:exchange-document country="US" doc-number="10133263" kind="B1" doc-id="503100827"
date-publ="20181120" family-id="64176387" is-representative="YES" date-of-last-exchange="20181129" date-
added-docdb="20181120" originating-office="EP" status="C">
<exch:bibliographic-data>
  <exch:publication-reference data-format="docdb">
    <document-id lang="en">
      <country>US</country>
      <doc-number>10133263</doc-number>
      <kind>B1</kind>
      <date>20181120</date>
    </document-id>
  </exch:publication-reference>
  [ ... ]
  <exch:application-reference is-representative="YES" doc-id="503100826" data-format="docdb">
    <document-id>
      <country>US</country>
      <doc-number>201514829503</doc-number>
      <kind>A</kind>
      <date>20150818</date>
    </document-id>
  </exch:application-reference>
```

- Usage Example - NO "laid open to public inspection" followed by grant

NO-A is not representative, NO-B1 is representative

```
<exch:exchange-document country="NO" doc-number="20111065" kind="A1" doc-id="337712581" date-
publ="20110818" family-id="42356384" is-representative="NO" date-of-last-exchange="20170223" date-added-
docdb="20111010" originating-office="EP" status="C">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id>
        <country>NO</country>
        <doc-number>20111065</doc-number>
        <kind>A1</kind>
        <date>20110818</date>
      </document-id>
    </exch:publication-reference>
    [ ... ]
  <exch:application-reference is-representative="NO" doc-id="337513496" data-format="docdb">
    <document-id>
      <country>NO</country>
      <doc-number>20111065</doc-number>
      <kind>A</kind>
      <date>20110727</date>
    </document-id>
  </exch:application-reference>

<exch:exchange-document country="NO" doc-number="343155" kind="B1" doc-id="503374434" date-
publ="20181119" family-id="42356384" is-representative="YES" date-of-last-exchange="20181129" date-added-
docdb="20181123" originating-office="EP" status="C">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id lang="no">
        <country>NO</country>
        <doc-number>343155</doc-number>
        <kind>B1</kind>
        <date>20181119</date>
      </document-id>
    </exch:publication-reference>
    [ ... ]
  <exch:application-reference is-representative="NO" doc-id="337513496" data-format="docdb">
    <document-id>
      <country>NO</country>
      <doc-number>20111065</doc-number>
      <kind>A</kind>
      <date>20110727</date>
    </document-id>
  </exch:application-reference>
```

NOTE that for as long as the NO-A is the only publication in the application, the application will NOT contain any representative publication.

- Usage Example - GB "announcement in gazette" followed by filed patent

GB-D0 is not representative, GB-A is representative

```
<exch:exchange-document country="GB" doc-number="201707889" kind="D0" doc-id="480865817"
date-publ="20170628" family-id="59201710" is-representative="NO" date-of-last-exchange="20170713" date-
added-docdb="20170705" originating-office="EP" status="C">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id lang="en">
        <country>GB</country>
        <doc-number>201707889</doc-number>
        <kind>D0</kind>
        <date>20170628</date>
      </document-id>
    </exch:publication-reference>
    [ ... ]
    <exch:application-reference is-representative="NO" doc-id="480865816" data-format="docdb">
      <document-id>
        <country>GB</country>
        <doc-number>201707889</doc-number>
        <kind>A</kind>
        <date>20170517</date>
      </document-id>
    </exch:application-reference>

<exch:exchange-document country="GB" doc-number="2562504" kind="A" doc-id="502229383" date-
publ="20181121" family-id="59201710" is-representative="YES" date-of-last-exchange="20181122" date-added-
docdb="20181102" originating-office="EP" status="C">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id lang="en">
        <country>GB</country>
        <doc-number>2562504</doc-number>
        <kind>A</kind>
        <date>20181121</date>
      </document-id>
    </exch:publication-reference>
    [ ... ]
    <exch:application-reference is-representative="NO" doc-id="480865816" data-format="docdb">
      <document-id>
        <country>GB</country>
        <doc-number>201707889</doc-number>
        <kind>A</kind>
        <date>20170517</date>
      </document-id>
    </exch:application-reference>
```

NOTE that for as long as the GB-D0 is the only publication in the application, the application will NOT contain any representative publication.

7. ELEMENT <exch:exchange-document>

7.1. Root Element

7.1.1. Attributes Used

Attributes	Description
country	identical to <country> in <publication-reference>
doc-number	identical to <number> in <publication-reference>
kind	identical to <kind> in <publication-reference>
date-publ	identical to <date> in <publication-reference>
family-id	family-identifier of the DOCDB simple patent family representing the family that the publication is in at the time of exchange
doc-id	unique and stable identifier to the <publication-reference> refer to § 5.3.1 Attribute "doc-id"
is-representative	value 'YES' or 'NO' refer to § 6.4 Attribute "is-representative" @ <exchange-document>
date-of-last-exchange	date this publication is exchanged
date-added-docdb	date this publication has been added to DOCDB
date-of-previous-exchange	date this publication was previously exchanged
status	reason for exchange, values 'C', 'D' or 'A' refer to § 5.3.2 Attribute "status"

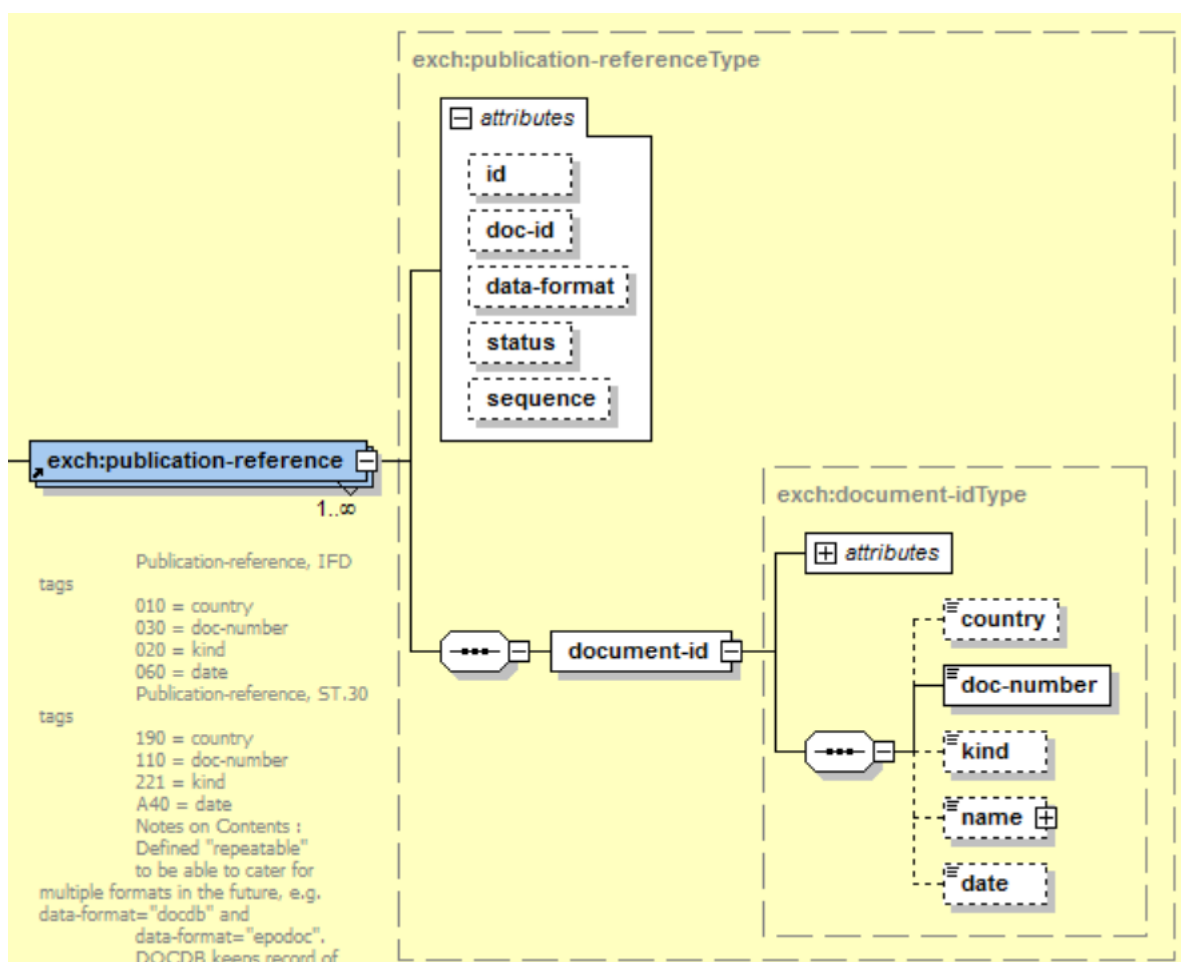
7.1.2. Elements populated

Elements	Description
exch:bibliographic-data	refer to § 8 Element <exch:bibliographic-data>
exch:abstract	refer to § 9 Element <exch:abstract>
patent-family	refer to § 10 Element <patent-family>

8. ELEMENT <exch:bibliographic-data>

8.1. Element <exch:publication-reference>

This tag contains the publication-identifier. The basic structure of the tag is



Attributes used	Description
data-format	refer to § 4.5 Data Format for description and details refer to ANNEX II Data Format for values and definitions
status	only populated in the case of a modification to the publication-date NOTE THAT when the publication-identifier itself has been modified, attribute "status" @ <exchange-document> will be populated

Notes on Contents

The publication-date may not be included.

In cases where the publication-date is not available, the publication-date will not be included. DOCDB keeps a record of very early publications that are available in paper only. In the past - for EPO internal business needs - these publications were recorded on the basis of publication-identification only. In these instances the publication-date is not available and will be zeroes. At present the EPO is engaged in a major exercise to complete these publications - recorded as reference only - with their corresponding bibliographic data.

```

<exch:bibliographic-data>
  <exch:publication-reference data-format="docdb">
    <document-id>
      <country>SE</country>
      <doc-number>7216526</doc-number>
      <kind>L</kind>
    </document-id>
  </exch:publication-reference>
  [ ... ]
  <exch:application-reference is-representative="NO" doc-id="445828900" data-format="docdb">
    <document-id>
      <country>SE</country>
      <doc-number>7216526D</doc-number>
      <kind>A</kind>
    </document-id>
  </exch:application-reference>

```

Withdrawn publications

In the case of withdrawn publications, the publication-date will not be supported. Withdrawn publications are exchanged "publication-identifier only", no date of publication, no application-identification, no bibliographic data.

```

<exch:exchange-document country="US" doc-number="10057043" kind="B2" family-id="" is-representative="NO"
date-of-last-exchange="20181115" date-of-previous-exchange="20181018" originating-office="EP" status="CV">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id>
        <country>US</country>
        <doc-number>10057043</doc-number>
        <kind>B2</kind>
      </document-id>
    </exch:publication-reference>
  </exch:bibliographic-data>
</exch:exchange-document>

```

DE Utility models

In the case of DE utility models the publication-date is populated with the "Eintragungstag. The "Bekanntmachungstag" is included in <date-of-coming-into-force>

```
<exch:bibliographic-data>
  <exch:publication-reference data-format="docdb">
    <document-id lang="de">
      <country>DE</country>
      <doc-number>202012013628</doc-number>
      <kind>U1</kind>
      <date>20181018</date>
    </document-id>
  </exch:publication-reference>
  [ ... ]
  <exch:date-of-coming-into-force>
    <date>20181129</date>
  </exch:date-of-coming-into-force>
```

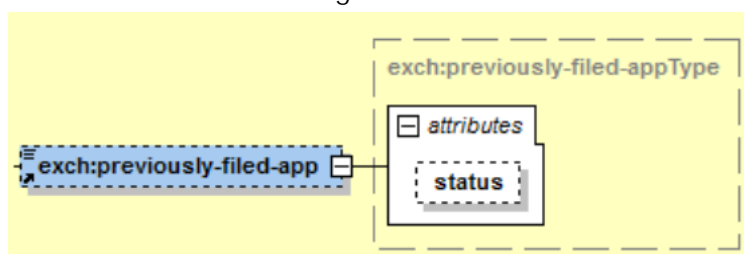
8.2. Element <exch:previously-filed-app>

This tag contains the “previously filed application [EPC 2000 - INID code 27].

The previously filed application is stored as provided by the supplier, without any additional reformatting applied to it : country - number - date concatenated into one string and separated by <space>.

The previously filed application does not represent an additional priority-claim. Should the previously filed application be claimed as a priority as well, the data will be exchanged both in this tag <exch:previously-filed-app> and in <exch:priority-claims>.

Basic structure of the tag

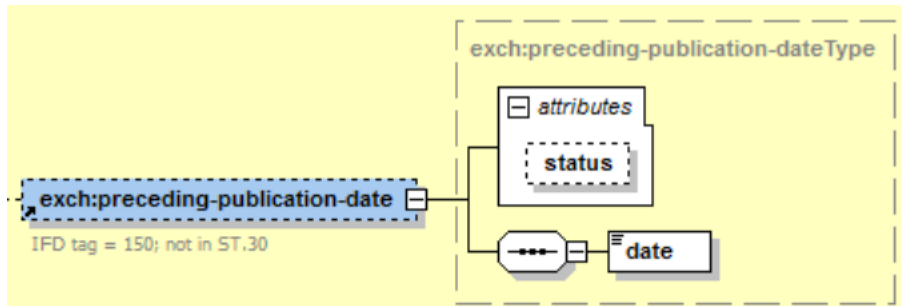


```
<exch:exchange-document country="EP" doc-number="2037097" kind="B1" doc-id="501454367" date-
publ="20181114" family-id="40244004" is-representative="NO" date-of-last-exchange="20181122" date-of-
previous-exchange="20181115" date-added-docdb="20181015" originating-office="EP" status="A">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id lang="en">
        <country>EP</country>
        <doc-number>2037097</doc-number>
        <kind>B1</kind>
        <date>20181114</date>
      </document-id>
    </exch:publication-reference>
    [ ... ]
    <exch:previously-filed-app>0702016      20070911 SE</exch:previously-filed-app>
    [ ... ]
  </exch:bibliographic-data>
```


8.3. Element <exch:preceding-publication-date>

This tag contains date of preceding publication in same application.

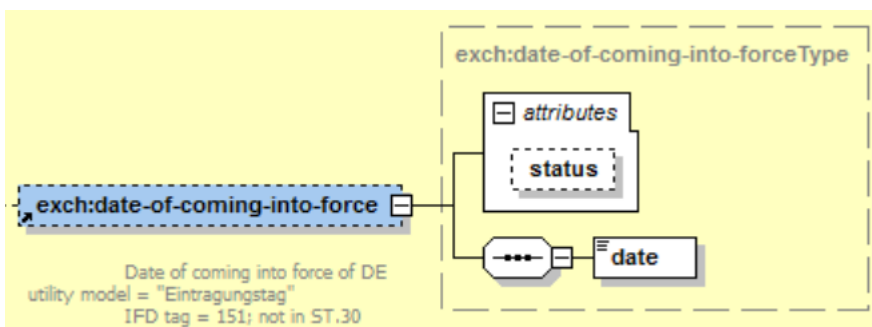
Basic structure of the tag (? is optional)



8.4. Element <exch:date-of-coming-into-force>

This tag contains the date of coming into force - the "Bekanntmachungstag" - of a DE utility-model.

Basic structure of the tag



```

<exch:bibliographic-data>
  <exch:publication-reference data-format="docdb">
    <document-id lang="de">
      <country>DE</country>
      <doc-number>202012013628</doc-number>
      <kind>U1</kind>
      <date>20181018</date>
    </document-id>
  </exch:publication-reference>
  [ ... ]
  <exch:date-of-coming-into-force>
    <date>20181129</date>
  </exch:date-of-coming-into-force>

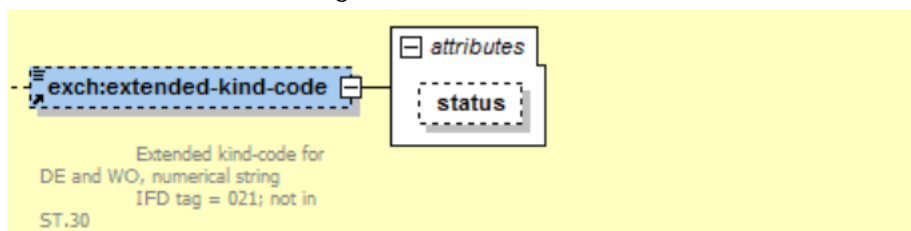
```

8.5. Element <exch:extended-kind-code>

This tag contains the extended kind-code for DE and WO in a numerical string.

Refer to Annex IX : Extended Kind of Document.

Basic structure of the tag

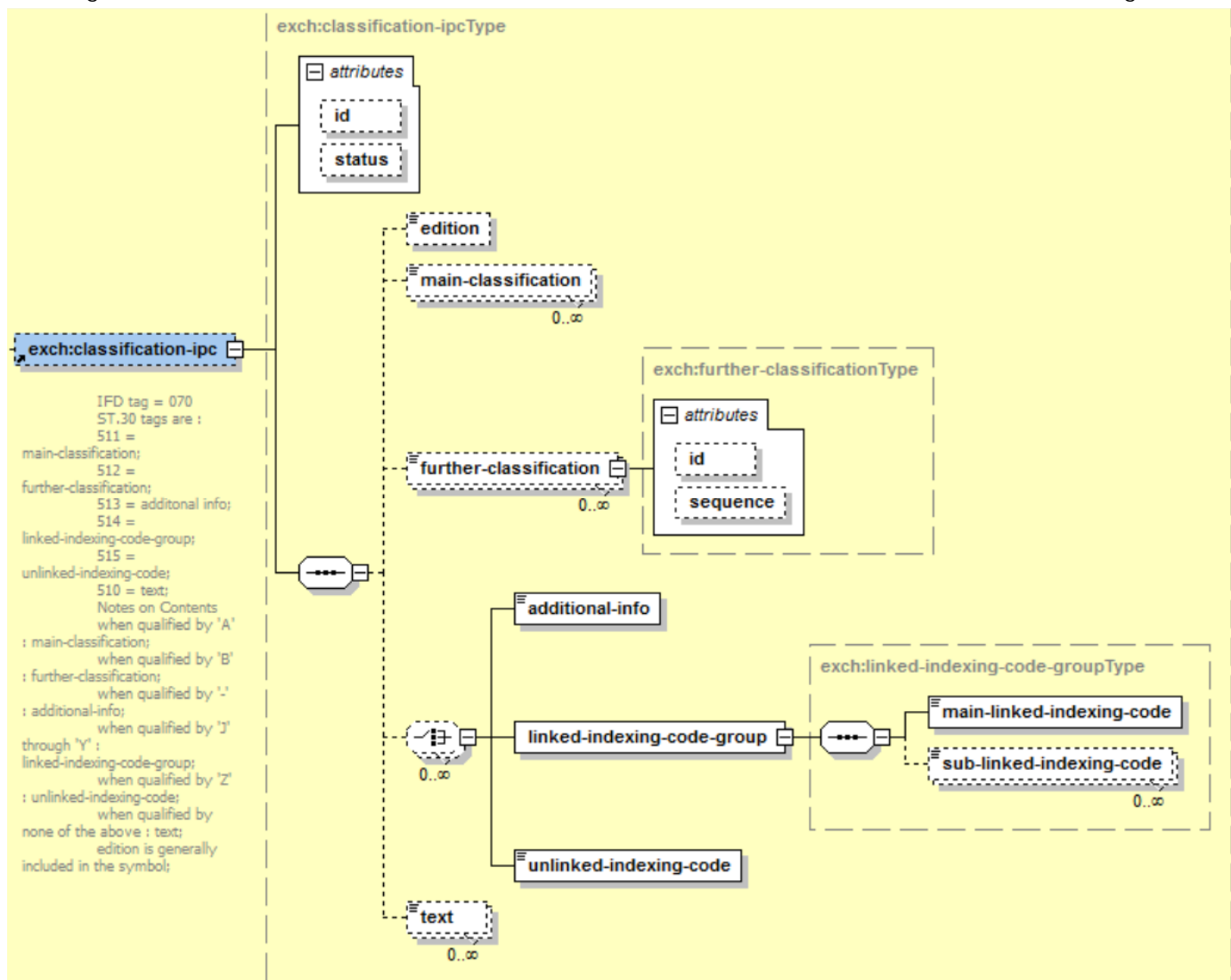


Usage examples

- ```
<exch:exchange-document country="WO" doc-number="2018213856" kind="A2" doc-id="503388976"
date-publ="20181122" family-id="64274799" is-representative="YES" date-of-last-
exchange="20181129" date-added-docdb="20181123" originating-office="EP" status="C">
 <exch:bibliographic-data>
 <exch:publication-reference data-format="docdb">
 <document-id lang="en">
 <country>WO</country>
 <doc-number>2018213856</doc-number>
 <kind>A2</kind>
 <date>20181122</date>
 </document-id>
 </exch:publication-reference>
 [...]
 <exch:extended-kind-code>z</exch:extended-kind-code>
</exch:exchange-document>
```
- ```
<exch:exchange-document country="WO" doc-number="2005125298" kind="A2" doc-id="280694850"
date-publ="20051229" family-id="32524502" is-representative="YES" date-of-last-
exchange="20160414" date-of-previous-exchange="20160218" date-added-docdb="20060111"
originating-office="EP" status="A">
  <exch:bibliographic-data>
    <exch:publication-reference data-format="docdb">
      <document-id lang="en">
        <country>WO</country>
        <doc-number>2005125298</doc-number>
        <kind>A2</kind>
        <date>20051229</date>
      </document-id>
    </exch:publication-reference>
    [ ... ]
  <exch:extended-kind-code>300000</exch:extended-kind-code>
</exch:exchange-document>
```

8.6. Element <exch:classification-ipc>

This tag contains International Patent Classification, versions 1 to 7. Basic structure of the tag



Notes on Contents

- Regarding deviations from the ST.36 ICE definition*

Maximum of flexibility has been built in to cope with IPC on pre-1990 documents
- There may be incorrectly formatted IPC in the exchange*

IPC are exchanged as recorded in the database; no quality control or data correction at the EPO for IPC supplied by other offices; quality is the responsibility of the supplying offices

- *Qualifiers*
 - when qualified by 'A' main-classification
 - when qualified by 'B' further-classification
 - when qualified by '-' additional-info
 - when qualified by 'J' through 'Y' linked-indexing-code-group
 - when qualified by 'Z' unlinked-indexing-code
 - when qualified by none of the above text

Usage examples

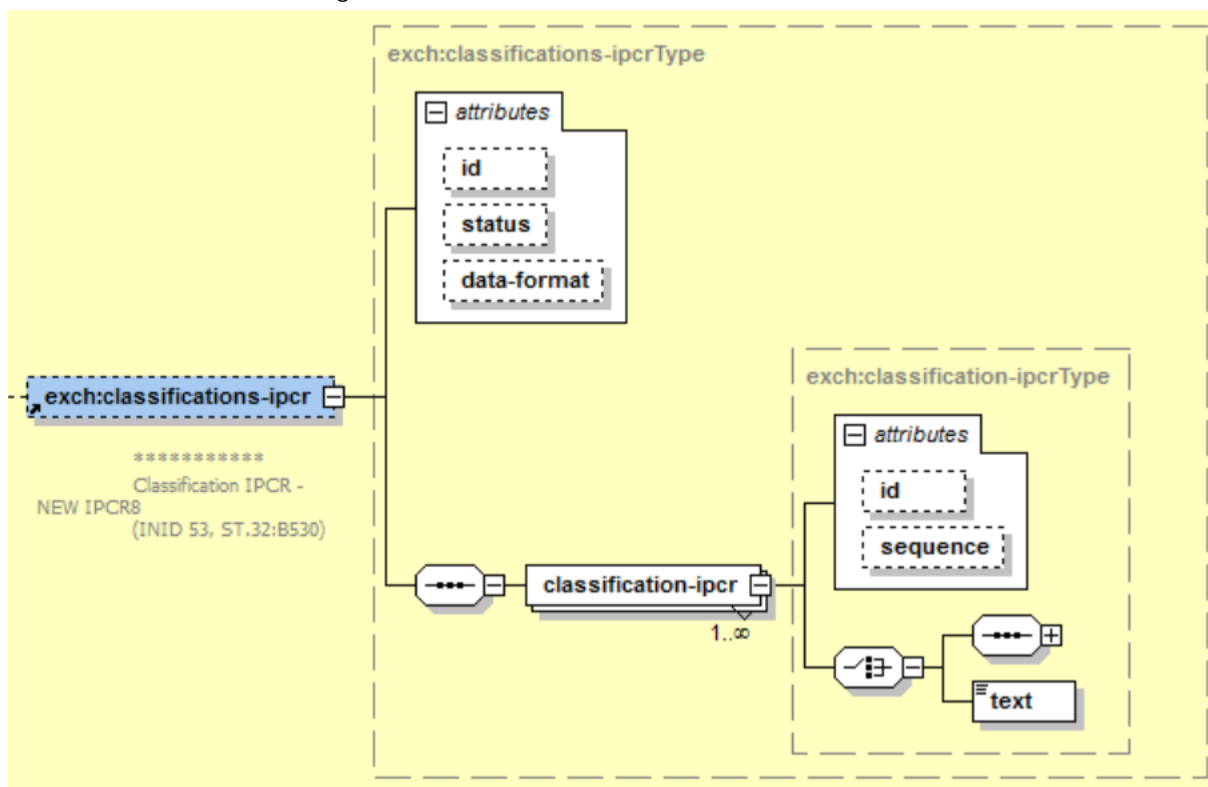
- `<exch:exchange-document country="WO" doc-number="2006001461" kind="A1" doc-id="280724205" date-publ="20060105" family-id="35781887" is-representative="YES" date-of-last-exchange="20160414" date-of-previous-exchange="20130411" date-added-docdb="20060216" originating-office="EP" status="A">`
`<exch:classification-ipc>`
`<edition>7</edition>`
`<main-classification> 7H 05K 9/00 A</main-classification>`
`<further-classification> 7B 32B 3/24 B</further-classification>`
`<further-classification> 7B 32B 15/01 B</further-classification>`
`<further-classification> 7G 09F 9/00 B</further-classification>`
`<further-classification> 7H 01J 11/02 B</further-classification>`
`</exch:classification-ipc>`
- `<exch:exchange-document country="WO" doc-number="03045147" kind="A1" doc-id="287977106" date-publ="20030605" family-id="9926532" is-representative="YES" date-of-last-exchange="20160414" date-of-previous-exchange="20120315" date-added-docdb="20030614" originating-office="EP" status="A">`
`<exch:classification-ipc>`
`<edition>7</edition>`
`<main-classification> 7A 01N 43/36 A</main-classification>`
`<linked-indexing-code-group>`
`<main-linked-indexing-code> 7A 01N 43/36 J</main-linked-indexing-code>`
`<sub-linked-indexing-code> 7A 01N 43:54 J</sub-linked-indexing-code>`
`<sub-linked-indexing-code> 7A 01N 43:40 J</sub-linked-indexing-code>`
`<sub-linked-indexing-code> 7A 01N 37:50 J</sub-linked-indexing-code>`
`</linked-indexing-code-group>`
`</exch:classification-ipc>`
- `<exch:exchange-document country="WO" doc-number="0121373" kind="A1" doc-id="292288515" date-publ="20010329" family-id="3817111" is-representative="YES" date-of-last-exchange="20160414" date-of-previous-exchange="20150521" date-added-docdb="20010331" originating-office="EP" status="A">`
`<exch:classification-ipc>`
`<edition>7</edition>`
`<main-classification> 7B 29B 17/00 A</main-classification>`
`<unlinked-indexing-code> 7B 29K 67:00 Z</unlinked-indexing-code>`
`</exch:classification-ipc>`
- `<exch:exchange-document country="WO" doc-number="0042766" kind="A1" doc-id="293262459" date-publ="20000720" family-id="8239799" is-representative="YES" date-of-last-exchange="20160414" date-of-previous-exchange="20160407" date-added-docdb="20000728" originating-office="EP" status="A">`
`<exch:classification-ipc>`
`<edition>7</edition>`
`<main-classification> 7H 04N 5/44 A</main-classification>`
`<additional-info> 7H 04N 7/088 -</additional-info>`
`</exch:classification-ipc>`

8.7. Element <exch:classification-ipcr>

This tag contains International Patent Classification, version 8. IPC version 8 will be exchanged in the component <text>. The format of <text> will map to WIPO/ST.8.

Refer to Notes on Contents in § 8.9 Element <exch:patent-classification>

Basic structure of the tag



Attributes	Description
status	'A' when the content of <classifications-ipcr> have changed 'C' when element <classifications-ipcr> is new
sequence	sequence as published on the first page

Notes on Contents

- Value of "first" / "later" field may be spaces
If "first" / "later" field is spaces it means that the data is not available

Usage example

- ```

<exch:exchange-document country="EP" doc-number="2566826" kind="B1" doc-id="487731186" date-
publ="20161130" family-id="44583755" is-representative="NO" date-of-last-exchange="20181203"
date-added-docdb="20161031" originating-office="EP" status="A">
 [...]
 <exch:classifications-ipcr>
 <classification-ipcr sequence="1">
 <text>C03C 8/10 20060101AFI20111123BHEP </text>
 </classification-ipcr>
 <classification-ipcr sequence="2">
 <text>A61K 47/26 20060101ALI20170330BHUS </text>
 </classification-ipcr>
 <classification-ipcr sequence="3">
 <text>C04B 35/01 20060101ALI20111123BHEP </text>
 </classification-ipcr>
 <classification-ipcr sequence="4">
 <text>H01B 1/16 20060101ALI20111123BHEP </text>
 </classification-ipcr>
 <classification-ipcr sequence="5">
 <text>H01B 1/22 20060101ALI20111123BHEP </text>
 </classification-ipcr>
 <classification-ipcr sequence="6">
 <text>H01L 31/0224 20060101ALI20111123BHEP </text>
 </classification-ipcr>
 </exch:classifications-ipcr>

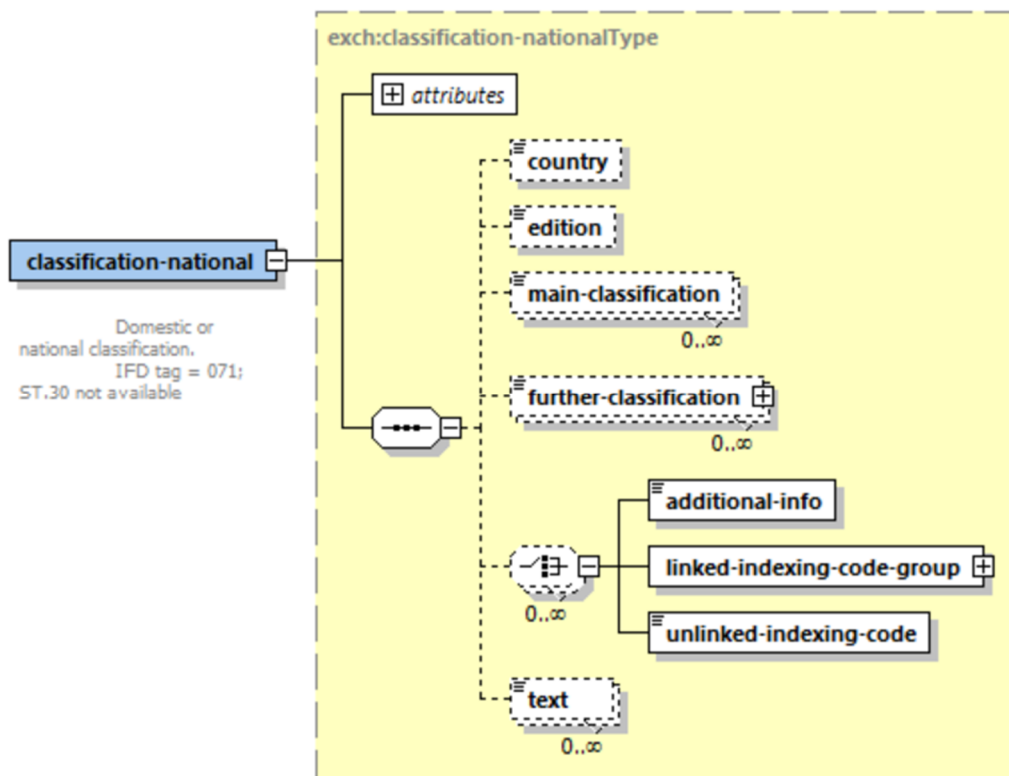
```
- ```

<exch:exchange-document country="EP" doc-number="0000046" kind="A1" doc-id="312062111" date-
publ="19781220" family-id="9192009" is-representative="YES" date-of-last-exchange="20181203" date-
of-previous-exchange="20111103" date-added-docdb="20000418" originating-office="EP" status="A">
  [...]
  <exch:classifications-ipcr>
    <classification-ipcr sequence="1">
      <text>B60H 1/00 20060101A I20051008RMEP </text>
    </classification-ipcr>
    <classification-ipcr sequence="2">
      <text>F24F 11/02 20060101ALI20060310RMJP </text>
    </classification-ipcr>
    <classification-ipcr sequence="3">
      <text>G05G 1/00 20060101ALI20060310RMJP </text>
    </classification-ipcr>
    <classification-ipcr sequence="4">
      <text>G05G 7/04 20060101A I20051008RMEP </text>
    </classification-ipcr>
    <classification-ipcr sequence="5">
      <text>G05G 9/00 20060101ALI20060310RMJP </text>
    </classification-ipcr>
  </exch:classifications-ipcr>

```

8.8. Element <exch:classification-national>

This tag contains the domestic classification. Domestic classification will be exchanged in the component <text>. Basic structure of the tag is :



NOTE that the domestic classification will be exchanged in the format as it has been supplied to the EPO by the national offices.

Selection of usages examples on the next page [not exhaustive]

- `<exch:exchange-document country="DE" doc-number="1798085" kind="U" doc-id="386043265" date-publ="19591015" family-id="32888467" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20110421" date-added-docdb="20010826" originating-office="EP" status="A">`
`<exch:bibliographic-data>`
...
`<exch:classification-national>`
`<text>66b,10/05</text>`
`</exch:classification-national>`
- `<exch:exchange-document country="GB" doc-number="109202" kind="A" doc-id="321036154" date-publ="19170906" family-id="32481239" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20040703" date-added-docdb="20000414" originating-office="EP" status="A">`
`<exch:bibliographic-data>`
...
`<exch:classification-national>`
`<text>A4B B2A 1U </text>`
`<text>A4B B5AX 1U</text>`
`</exch:classification-national>`
- `<exch:exchange-document country="SE" doc-number="4638" kind="C1" doc-id="403136828" date-publ="18930417" family-id="38378270" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20150514" date-added-docdb="20070827" originating-office="EP" status="A">`
`<exch:bibliographic-data>`
...
`<exch:classification-national>`
`<text>80B 1 01</text>`
`</exch:classification-national>`
- `<exch:exchange-document country="US" doc-number="H2206" kind="H" doc-id="278076686" date-publ="20071204" family-id="38775577" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20161020" date-added-docdb="20071207" originating-office="EP" status="A">`
`<exch:bibliographic-data>`
...
`<exch:classification-national>`
`<text>244 751</text>`
`<text>X244 76 R</text>`
`<text>X244194</text>`
`<text>X244195</text>`
`<text>X244196</text>`
`</exch:classification-national>`
- `<exch:exchange-document country="US" doc-number="2019159377" kind="P1" doc-id="513260650" date-publ="20190523" family-id="66439328" is-representative="NO" date-of-last-exchange="20190620" date-of-previous-exchange="20190530" date-added-docdb="20190523" originating-office="EP" status="A">`
`<exch:bibliographic-data>`
...
`<exch:classification-national>`
`<text>PLT161</text>`
`</exch:classification-national>`

8.9. Element <exch:patent-classifications>

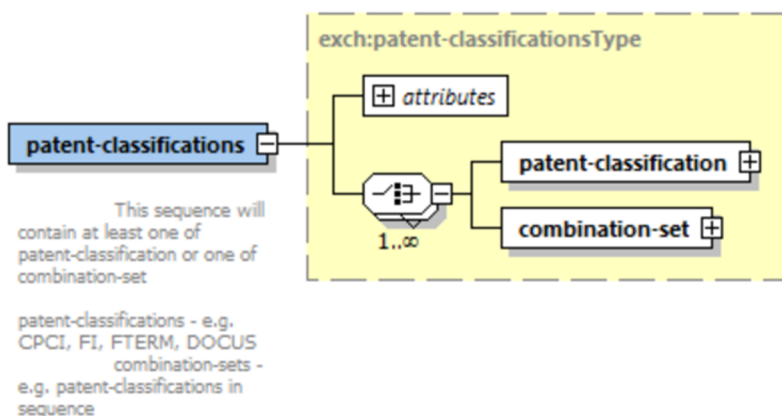
This element may have a mixed content of:

- § classification allocations
- § combination sets of classification allocations "grouped in sequence"

Within this element the sub-elements will be numbered in sequence from 1 to n.

The mixed content of this element will cover – not necessarily in that order:

- § CPCI
- § CPCI combination sets
- § FI
- § Fterm
- § US Patent Classification



8.9.1. Classification-scheme = CPCI

Classification-scheme = CPCI ("CPC International") is incorporating classification-schemes CPC and CPCNO - making these classification-schemes obsolete.

Classification scheme = CPCI is maintained at family-level. When there has been a change to the CPCI picture for a given family, every member in the DOCDB simple patent family will be triggered for exchange. The CPCI picture included in the exchange for publications that are members of the same simple patent family will be exactly the same.

In classification scheme = CPCI classification-symbols will be allocated by more than one authority. When different authorities have allocated the same classification-symbol, the CPCI picture for one publication will contain duplicate classification-symbols.

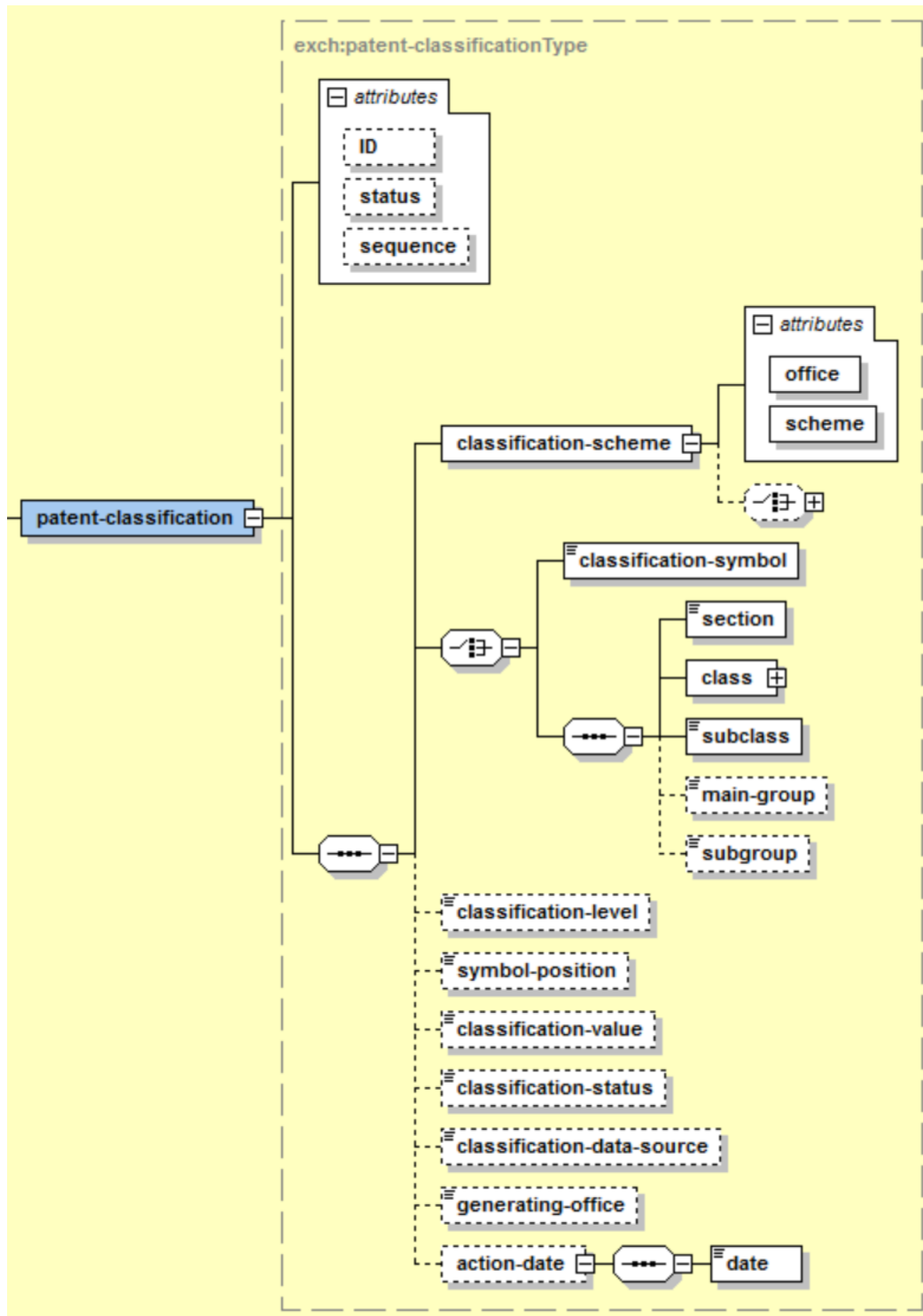
Duplicate classification-symbols for one publication will be made unique by authority-code. To this purpose element <generating-office> is populated for every authority allocating CPCI classifications – also for EPO and USPTO.

The CPCI picture exchanged for each publication will be sorted in ascending order:

- within one CPCI picture: by generating office
- within one generating office: patent classifications first – combination sets last
- within patent classifications for one generating office: by classification-symbol
- within combination-sets for one generating office: by group-number

8.9.2. Element <patent-classification>

This tag contains classifications allocated by EPO, USPTO, JPO and national offices



Notes on Contents

- Referring to the CPC Standard (based on WIPO/ST.8) the following tags will be supported

WIPO/ST8 tags supported	Pos. in ST.8	Description	Values
<classification-symbol>	1	section	A ,,,,,,H and Y
	2,3	class	01,,,,,99
	4	subclass	A,,,,,Z
	5 to 8	main group	1,,,,,9999 right aligned
	9	separator	/ ("slash")
	10 to 15	subgroup	00,,,,,999999
	16 to 19	n.a.	trailing spaces
<classification-scheme><date>	20 to 27	version-indicator	CCYYMMDD
<classification-level>	28	core/advanced	not applicable
<symbol-position>	29	first / later	F/L - only for CPCI
<classification-value>	30	invention	I
		additional	A
<action-date>	31 to 38	date format	CCYYMMDD
<classification-status>	39	original	B
		reclassified	R
<classification-data-source>	40	human	H
		concordance	C
		generated	G
<generating-office>	41, 42	country-code	

- *Classification-schemes*

Classification-scheme	Generating Office	Comments
CPCI	range of authorities incl. EP and US	Cooperative Patent Classification - International
DOCUS	US	US Classification
FI	JP	File Index
FTERM	JP	File Foming Term

NOTE THAT

Classification schemes DOCUS, FI, and FTERM are stored in DOCDB as supplied by the National Offices without inspection of the contents. The EPO does not hold any responsibility for content, format or validity

- *Element <classification-value>*
 - classification-value = "I" (invention) identifies CPCI as invention information
 - classification-value = "A" (additional) identifies CPCI as additional information
 - classification-value = "N" will not be used

- *Element <symbol-position>*
 - only one CPCI allocated to a patent family by a given patent office is identified by symbol-position = "F" (first). It is the responsibility of the generating office to identify one allocation as "F" (first).
 - the EPO identifies the first CPCI allocation (chronologically) confirmed by an EPO authorised classifier by symbol position = "F" (first)
 - CPCI symbol identified by symbol-position = "F" will always have classification-value = "I" (invention)
 - all other CPCI symbols allocated to a given patent family have symbol-position = "L" (later)

§ *Element <action-date>*

Represents the date that the CPC symbol was allocated to the patent family.

Note that <action-date> will be populated with "20130101" by default for all ECLA and ICO that have been converted to CPC in preparation for the introduction of this classification-scheme

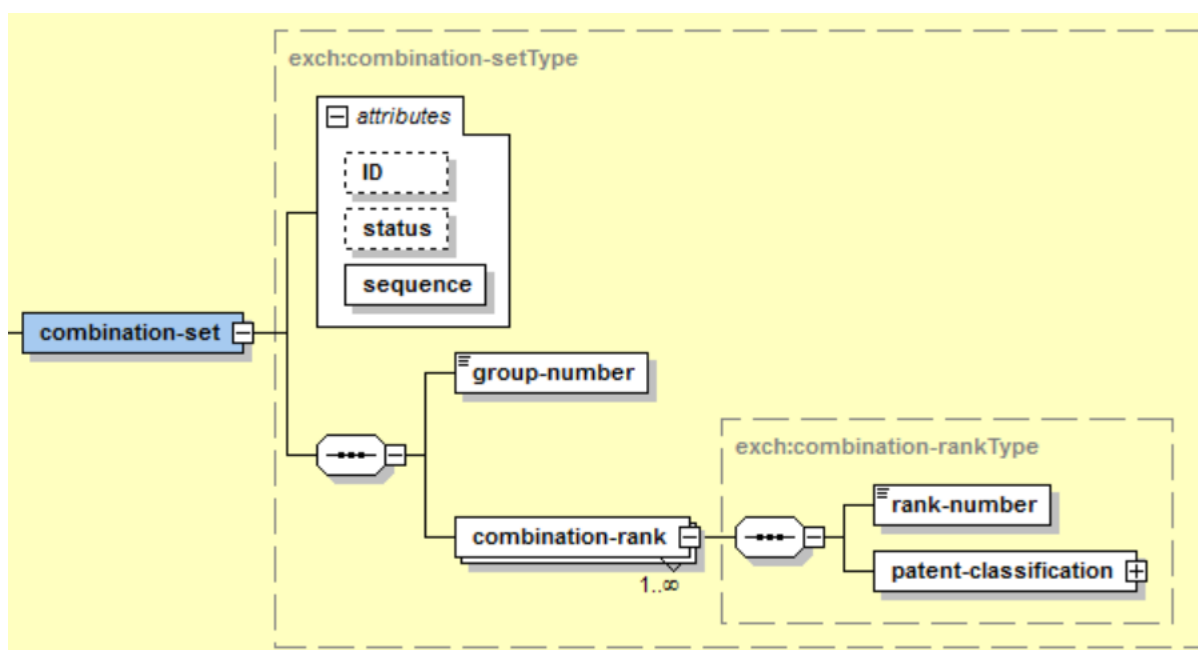
8.9.3. Element <combination-set>

This tag contains classifications "grouped in sequence" allocated by EPO, USPTO and national offices. The basic structure of the tag is (* is none, one or more; ? is optional).

Example illustrating "grouped in sequence" on the next page. Should you require more in-depth details, please contact the CPC information team at cpc@epo.org or browse the web pages of www.cpcinfo.org.

Notes on contents and structure

- Each *combination-set* is a "group" identified by <group-number>
- Each *group* will consist of one or more ranks identified by <rank-number>
- Each *rank* is a patent classification
- Combination sets are limited to classification-schemes CPCI



Example illustrating combination-set – a set of classifications “grouped in sequence”

A combination set can be compared to a kitchen recipe – adding ingredients in sequence. It corresponds to the classification of technical features taken in combination in the same embodiment.

Abstract	A fiber reinforced cement composition comprising: a hydraulic inorganic material (Portland cement), a silicious material (pearl stone and/or fly ash), a woody reinforcement (used paper) and a finely dividing fiber reinforced cement product which is produced by said raw materials and cured in an autoclave . It additionally comprises expanded perlite or mica and a water soluble resin						
CPC	C04B28/04						
Combination set	C04B28/04	C04B14/185	C04B14/20	C04B14/22	C04B18/08	C04B18/241	C04B40/024
	C04B2103/0053						

```

<exch:patent-classifications>
  <patent-classification sequence="1">
    ...
    <classification-symbol>C04B 28/04 </classification-symbol>
    ...
  </patent-classification>
  <combination-set sequence="2">
    <group-number>1</group-number>
    <combination-rank>
      <rank-number>1</rank-number>
      <patent-classification>
        ...
        <classification-symbol>C04B 28/04 </classification-symbol>
        ...
      </patent-classification>
    </combination-rank>
    <combination-rank>
      <rank-number>2</rank-number>
      <patent-classification>
        ...
        <classification-symbol>C04B 14/185 </classification-symbol>
        ...
      </patent-classification>
    </combination-rank>
    <combination-rank>
      <rank-number>3</rank-number>
      <patent-classification>
        ...
        <classification-symbol>C04B 14/20 </classification-symbol>
        ...
      </patent-classification>
    </combination-rank>
    <combination-rank>
      <rank-number>4</rank-number>
      <patent-classification>
        ...
        <classification-symbol>C04B 14/22 </classification-symbol>
        ...
      </patent-classification>
    </combination-rank>
    <combination-rank>
      <rank-number>5</rank-number>
      <patent-classification>
        ...
        <classification-symbol>C04B 18/08 </classification-symbol>
        ...
      </patent-classification>
    ...
  </combination-set>

```

```
    ....
    </patent-classification>
  </combination-rank>
  <combination-rank>
    <rank-number>6</rank-number>
    <patent-classification>
      ....
      <classification-symbol>C04B 18/241 </classification-symbol>
      ....
    </patent-classification>
  </combination-rank>
  <combination-rank>
    <rank-number>7</rank-number>
    <patent-classification>
      ....
      <classification-symbol>C04B 40/024 </classification-symbol>
      ....
    </patent-classification>
  </combination-rank>
  <combination-rank>
    <rank-number>8</rank-number>
    <patent-classification>
      ....
      <classification-symbol>C04B2103/0053 </classification-symbol>
      ....
    </patent-classification>
  </combination-rank>
</combination-set>
</exch:patent-classifications>
```


8.9.4. Usage example CPC1

- ```

<exch:exchange-document country="CN" doc-number="105980464" kind="A" doc-id="470017987" date-publ="20160928"
family-id="56193007" is-representative="YES" date-of-last-exchange="20181203" date-added-docdb="20161004"
originating-office="EP" status="A">
 ...
 <exch:patent-classifications>
 <patent-classification sequence="1">
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08F 220/06 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>CN</generating-office>
 <action-date>
 <date>20160901</date>
 </action-date>
 </patent-classification>
 <patent-classification sequence="2">
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08J 3/075 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>CN</generating-office>
 <action-date>
 <date>20160901</date>
 </action-date>
 </patent-classification>
 ...
 <combination-set sequence="13">
 <group-number>1</group-number>
 <combination-rank>
 <rank-number>1</rank-number>
 <patent-classification>
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08F 220/06 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>CN</generating-office>
 <action-date>
 <date>20160901</date>
 </action-date>
 </patent-classification>
 </combination-rank>
 <combination-rank>
 <rank-number>2</rank-number>
 <patent-classification>
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 </patent-classification>
 </combination-rank>
 </combination-set>
 </exch:patent-classifications>

```

```

 </classification-scheme>
 <classification-symbol>C08F2222/1013 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>CN</generating-office>
 <action-date>
 <date>20160901</date>
 </action-date>
 </patent-classification>
</combination-rank>
<combination-rank>
 <rank-number>3</rank-number>
 <patent-classification>
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08F2222/1026 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>CN</generating-office>
 <action-date>
 <date>20160901</date>
 </action-date>
 </patent-classification>
</combination-rank>
</combination-set>
<patent-classification sequence="14">
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>A61L 15/60 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>EP</generating-office>
 <action-date>
 <date>20161130</date>
 </action-date>
</patent-classification>
...
<combination-set sequence="31">
 <group-number>1</group-number>
 <combination-rank>
 <rank-number>1</rank-number>
 <patent-classification>
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08F 220/06 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>A</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>EP</generating-office>
 <action-date>
 <date>20161130</date>
 </action-date>
 </patent-classification>
 </combination-rank>
</combination-set>

```

```
 </patent-classification>
 </combination-rank>
<combination-rank>
 <rank-number>2</rank-number>
 <patent-classification>
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08F2222/1013 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>A</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>EP</generating-office>
 <action-date>
 <date>20161130</date>
 </action-date>
 </patent-classification>
</combination-rank>
<combination-rank>
 <rank-number>3</rank-number>
 <patent-classification>
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08F2222/108 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>A</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>EP</generating-office>
 <action-date>
 <date>20161130</date>
 </action-date>
 </patent-classification>
</combination-rank>
<combination-rank>
 <rank-number>4</rank-number>
 <patent-classification>
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08F2222/1026 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>A</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>EP</generating-office>
 <action-date>
 <date>20161130</date>
 </action-date>
 </patent-classification>
</combination-rank>
</combination-set>
...
<patent-classification sequence="35">
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08J 3/075 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
```

```
<classification-status>B</classification-status>
<classification-data-source>H</classification-data-source>
<generating-office>KR</generating-office>
<action-date>
 <date>20150302</date>
</action-date>
</patent-classification>
...
<patent-classification sequence="40">
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>A61L 15/60 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>US</generating-office>
 <action-date>
 <date>20161130</date>
 </action-date>
</patent-classification>
...
<combination-set sequence="59">
 <group-number>2</group-number>
 <combination-rank>
 <rank-number>1</rank-number>
 <patent-classification>
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>A61L 15/60 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>US</generating-office>
 <action-date>
 <date>20170313</date>
 </action-date>
 </patent-classification>
 </combination-rank>
 <combination-rank>
 <rank-number>2</rank-number>
 <patent-classification>
 <classification-scheme office="EP" scheme="CPCI">
 <date>20130101</date>
 </classification-scheme>
 <classification-symbol>C08L 33/02 </classification-symbol>
 <symbol-position>L</symbol-position>
 <classification-value>I</classification-value>
 <classification-status>B</classification-status>
 <classification-data-source>H</classification-data-source>
 <generating-office>US</generating-office>
 <action-date>
 <date>20170313</date>
 </action-date>
 </patent-classification>
 </combination-rank>
</combination-set>
</exch:patent-classifications>
```

### 8.9.5. Usage examples DOCUS

- ```

<exch:exchange-document country="US" doc-number="H703" kind="H" doc-id="303986106" date-
publ="19891107" family-id="22149819" is-representative="YES" date-of-last-exchange="20190620" date-of-
previous-exchange="20011110" date-added-docdb="20011110" originating-office="EP" status="A">
  <exch:bibliographic-data>
    ...
    <exch:patent-classifications>
      ...
      <patent-classification sequence="5">
        <classification-scheme office="US" scheme="DOCUS"/>
        <classification-symbol>244221000O</classification-symbol>
      </patent-classification>
      <patent-classification sequence="6">
        <classification-scheme office="US" scheme="DOCUS"/>
        <classification-symbol>244228000X</classification-symbol>
      </patent-classification>
    </exch:patent-classifications>

```

8.9.6. Usage examples FI/FTERM

- ```

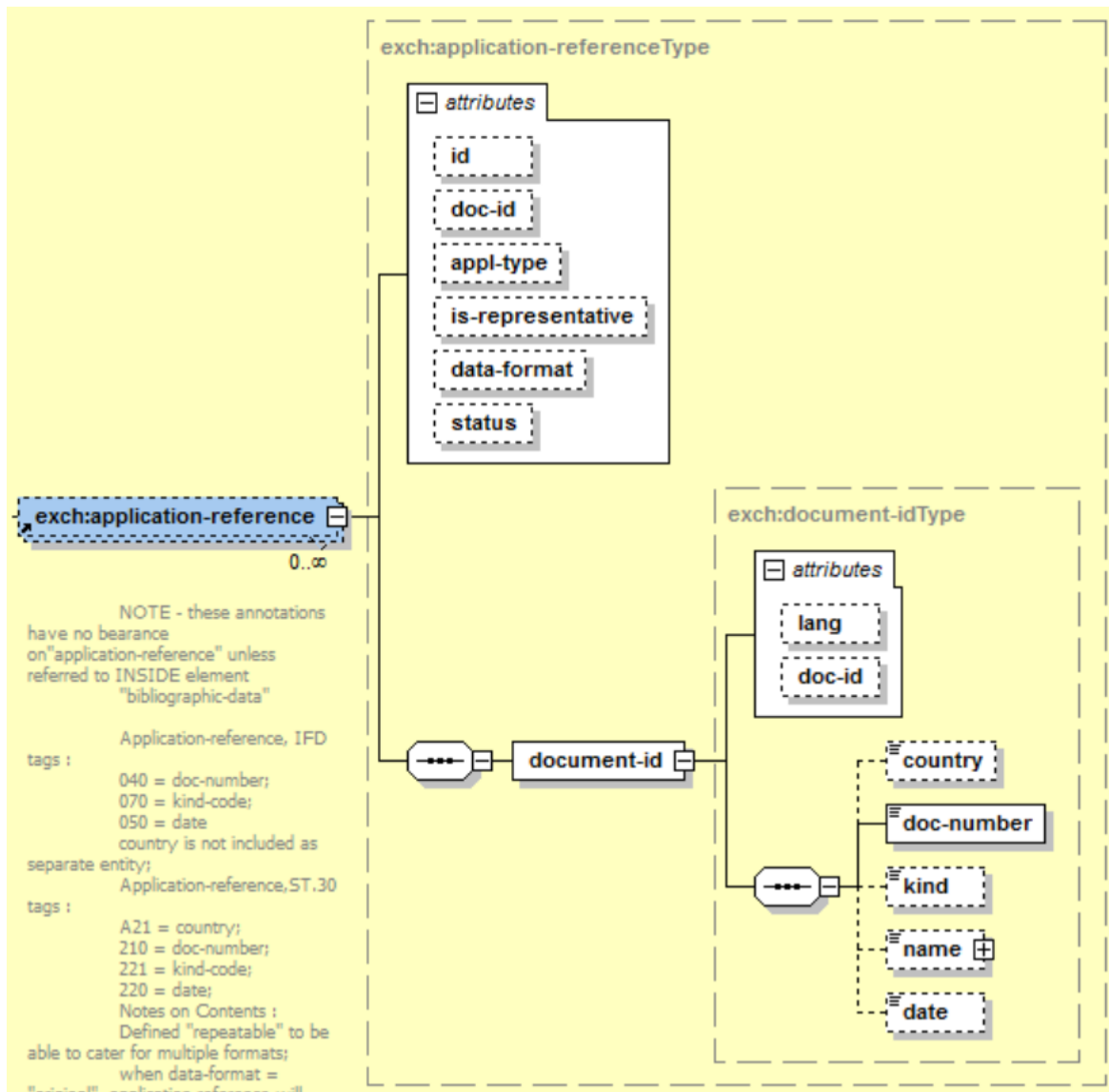
<exch:exchange-document country="JP" doc-number="2019000108" kind="A" doc-id="506206818" date-
publ="20190110" family-id="64562977" is-representative="YES" date-of-last-exchange="20190620" date-of-
previous-exchange="20190530" date-added-docdb="20190118" originating-office="EP" status="A">
 <exch:bibliographic-data>
 ...
 <exch:patent-classifications>
 ...
 <patent-classification sequence="21">
 <classification-scheme office="JP" scheme="FI"/>
 <classification-symbol>4C12M1 /00 A</classification-symbol>
 </patent-classification>
 ...
 <patent-classification sequence="24">
 <classification-scheme office="JP" scheme="FI"/>
 <classification-symbol>4C12Q1 /6869 Z</classification-symbol>
 </patent-classification>
 <patent-classification sequence="25">
 <classification-scheme office="JP" scheme="FTERM"/>
 <classification-symbol>4B029/AA07</classification-symbol>
 </patent-classification>
 ...
 <patent-classification sequence="42">
 <classification-scheme office="JP" scheme="FTERM"/>
 <classification-symbol>4B063/QX02</classification-symbol>
 </patent-classification>
 </exch:patent-classifications>

```

### 8.10. Element <exch:application-reference>

This tag contains the application-identifier

Basic structure of the tag



Attributes used	Description
doc-id	refer to § 8.10.1 Attribute "doc-id"
data-format	refer to § 4.5 Data Format for description and details refer to ANNEX II Data Format for values and definitions
status	status = 'A' when any of the sub-elements have been modified
is-representative	refer to § 8.10.2 Attribute "is-representative"

## Notes on Contents

*Element <application-reference> is iterative*

Element <application-reference> has been defined "repeatable" to be able to cater for multiple formats

```

<exch:application-reference is-representative="NO" doc-id="512769014" data-format="docdb">
 <document-id>
 <country>US</country>
 <doc-number>201816148969</doc-number>
 <kind>A</kind>
 <date>20181001</date>
 </document-id>
</exch:application-reference>
<exch:application-reference data-format="epodoc">
 <document-id>
 <doc-number>US201816148969</doc-number>
 </document-id>
</exch:application-reference>
<exch:application-reference data-format="original">
 <document-id>
 <doc-number>16148969</doc-number>
 </document-id>
</exch:application-reference>

```

*PCT applications are identified by kind-code 'W'*

For reasons of standardisation DOCDB has recorded PCT applications as follows

- o <country> [*country of filing*] </country>
  - o <doc-number> [*numerics only*] </doc-number>
  - o <kind>W</kind>
- <exch:exchange-document country="WO" doc-number="2019080603" kind="A1" doc-id="511988467" date-publ="20190502" family-id="61031868" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20190606" date-added-docdb="20190502" originating-office="EP" status="A">
 <exch:bibliographic-data>
 ...
 <exch:application-reference is-representative="YES" doc-id="511988466" data-format="docdb">
 <document-id>
 <country>CN</country>
 <doc-number>2018100189</doc-number>
 <kind>W</kind>
 <date>20180813</date>
 </document-id>
 </exch:application-reference>
 <exch:application-reference data-format="epodoc">
 <document-id>
 <doc-number>WO2018CN100189</doc-number>
 </document-id>
 </exch:application-reference>
 <exch:application-reference data-format="original">
 <document-id>
 <doc-number>CN2018/100189</doc-number>
 </document-id>
 </exch:application-reference>
 </exch:bibliographic-data>
 </exch:exchange-document>

*The application-number may be suffixed by 'D'.*

DOCDB keeps a record of very early publications available in paper only. In the past - for EPO internal business needs - these publications were recorded on the basis of publication-identification only. In these instances a dummy application-identification was derived from the publication-identification by suffixing the number with the letter 'D'. At present the EPO is engaged in a major exercise to complete these publications – recorded as reference only – with their corresponding bibliographic data.

- ```

<exch:exchange-document country="US" doc-number="11652" kind="A" doc-id="324231501" date-
publ="18540905" family-id="2071988" is-representative="YES" date-of-last-exchange="20190620" date-of-
previous-exchange="20170316" date-added-docdb="20001118" originating-office="EP" status="A">
...
<exch:application-reference is-representative="YES" doc-id="45400978" data-format="docdb">
  <document-id>
    <country>US</country>
    <doc-number>11652D</doc-number>
    <kind>A</kind>
  </document-id>
</exch:application-reference>
<exch:application-reference data-format="epodoc">
  <document-id>
    <doc-number>USD11652</doc-number>
  </document-id>
</exch:application-reference>

```

The application-date may be not be included

In instances like the above, the application-date may be not be included.

The kind-code may contain non-standard values like 'D', 'K', 'L', 'M', 'N' and 'Q'.

These are used to resolve database conflicts that would otherwise have blocked the update. This technique serves the purpose of getting the bibliographic data stored in the database as quickly as possible without the update being delayed by issues that can be resolved after the fact

```

<exch:application-reference is-representative="NO" doc-id="51716042" data-format="docdb">
  <document-id>
    <country>US</country>
    <doc-number>54527695</doc-number>
    <kind>D</kind>
    <date>19951019</date>
  </document-id>
</exch:application-reference>
<exch:application-reference data-format="epodoc">
  <document-id>
    <doc-number>US19950545276D</doc-number>
  </document-id>
</exch:application-reference>
<exch:application-reference data-format="original">
  <document-id>
    <doc-number>545276</doc-number>
  </document-id>

```

 </exch:application-reference>

8.10.1. Attribute “doc-id”

This is the unique and stable identifier to the application-reference.

The stable and unique identifier contained in "doc-id" will allow for linking up a number of EPO raw data products through the application in a reliable way.

The attribute will be populated for every application in DOCDB. It will contain a numeric value of max. 10 digits.

How stable is the value of the “doc-id” ?

In instances where an application-reference has been re-keyed - technically speaking - the value of the “doc-id” will remain stable and unchanged. There may be situations however – particularly as a result of on-line intellectual intervention – where this cannot be guaranteed. This means that value of the “doc-id” may vary from one exchange delivery to another for publications of one application that have had their application-identifier modified.

Inside one exchange delivery – however - the value of the “doc-id” for a given application will be consistent. In instances where there are multiple publications for one and the same application-reference in one exchange delivery, the value of the “doc-id” will always be exactly the same for that application-reference – across all package-files

NOTE THAT:

There are instances in DOCDB where one and the same application is recorded under two different application-references – once with kind-code ‘D’, once with kind-code ‘A’.

In these cases each identifier will have its own individual and unique “doc-id” - despite the fact that the two identifiers represent one and the same application – because from a database point of view they are *technically* two different identifiers. See example on the next page.

| doc-id | application | | | filing date | publication | | | publication-date | |
|---------|-------------|-------|---|-------------|-------------|--------|----|------------------|------------------------|
| 1390785 | AU | 11766 | D | 1966-01-06 | AU | 11766 | A | 1966-07-06 | "laid open" |
| 1390784 | AU | 11766 | A | 1966-01-06 | AU | 422772 | B1 | 1972-03-27 | 1st formal publication |

There is a unique “doc-id” for every unique application-reference in DOCDB.

8.10.2. Attribute “is-representative”

This attribute identifies whether this application is the family representative in the EPO simple patent family, value = Y/N.

An application is candidate to become the EPO family representative when

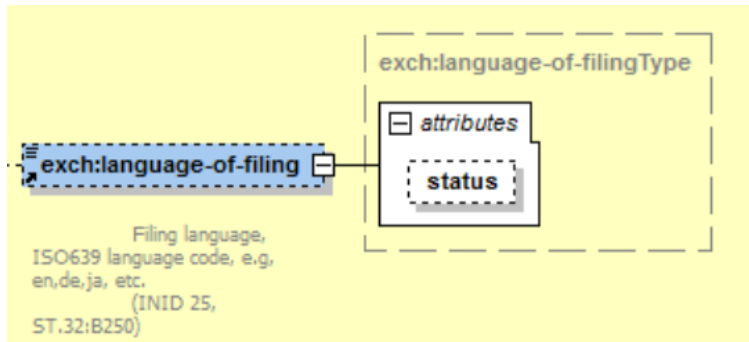
- it is the first application in a family that is part of the EPO search collection
- it is the first application in a family that is in one of the EPO official languages
- it has formally been published - “announcement in the gazette” or “laid open to the public” are NOT formal publications.

“Part of the search collection” are all the major publishing countries and the countries that publish in one of the EPO official languages. The EPO official languages are English, French and German.

NOTE that there are families in DOCDB that do NOT have a family representative.

8.11. Element <exch:language-of-filing>

Element <language-of-filing> contains language of filing of PCT publications



Languages are represented in 2 character language-codes

For concordance against 3 letter codes as exchanged in IFD, refer to ANNEX V

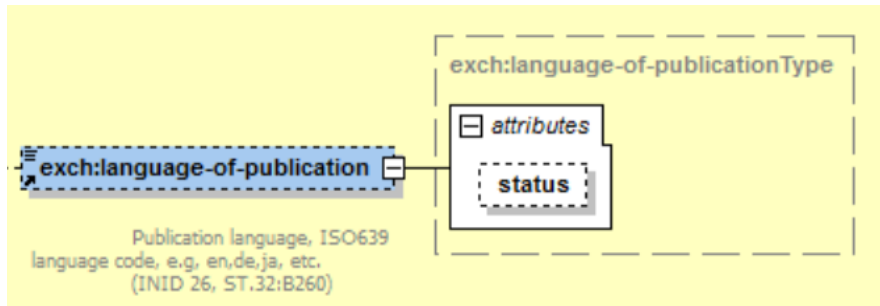
- ```

<exch:exchange-document country="WO" doc-number="2019080603" kind="A1" doc-id="511988467" date-
publ="20190502" family-id="61031868" is-representative="YES" date-of-last-exchange="20190620" date-of-
previous-exchange="20190606" date-added-docdb="20190502" originating-office="EP" status="A">
 <exch:bibliographic-data>
 ...
 <exch:application-reference is-representative="YES" doc-id="511988466" data-format="docdb">
 <document-id>
 <country>CN</country>
 <doc-number>2018100189</doc-number>
 <kind>W</kind>
 <date>20180813</date>
 </document-id>
 </exch:application-reference>
 <exch:application-reference data-format="epodoc">
 <document-id>
 <doc-number>WO2018CN100189</doc-number>
 </document-id>
 </exch:application-reference>
 <exch:application-reference data-format="original">
 <document-id>
 <doc-number>CN2018/100189</doc-number>
 </document-id>
 </exch:application-reference>
 <exch:language-of-filing>zh</exch:language-of-filing>

```

## 8.12. Element <exch:language-of-publication>

Element <language-of-publication> contains language of publication for non-PCT.



Languages are represented in 2 character language-codes

For concordance against 3 letter codes as exchanged in IFD, refer to ANNEX V

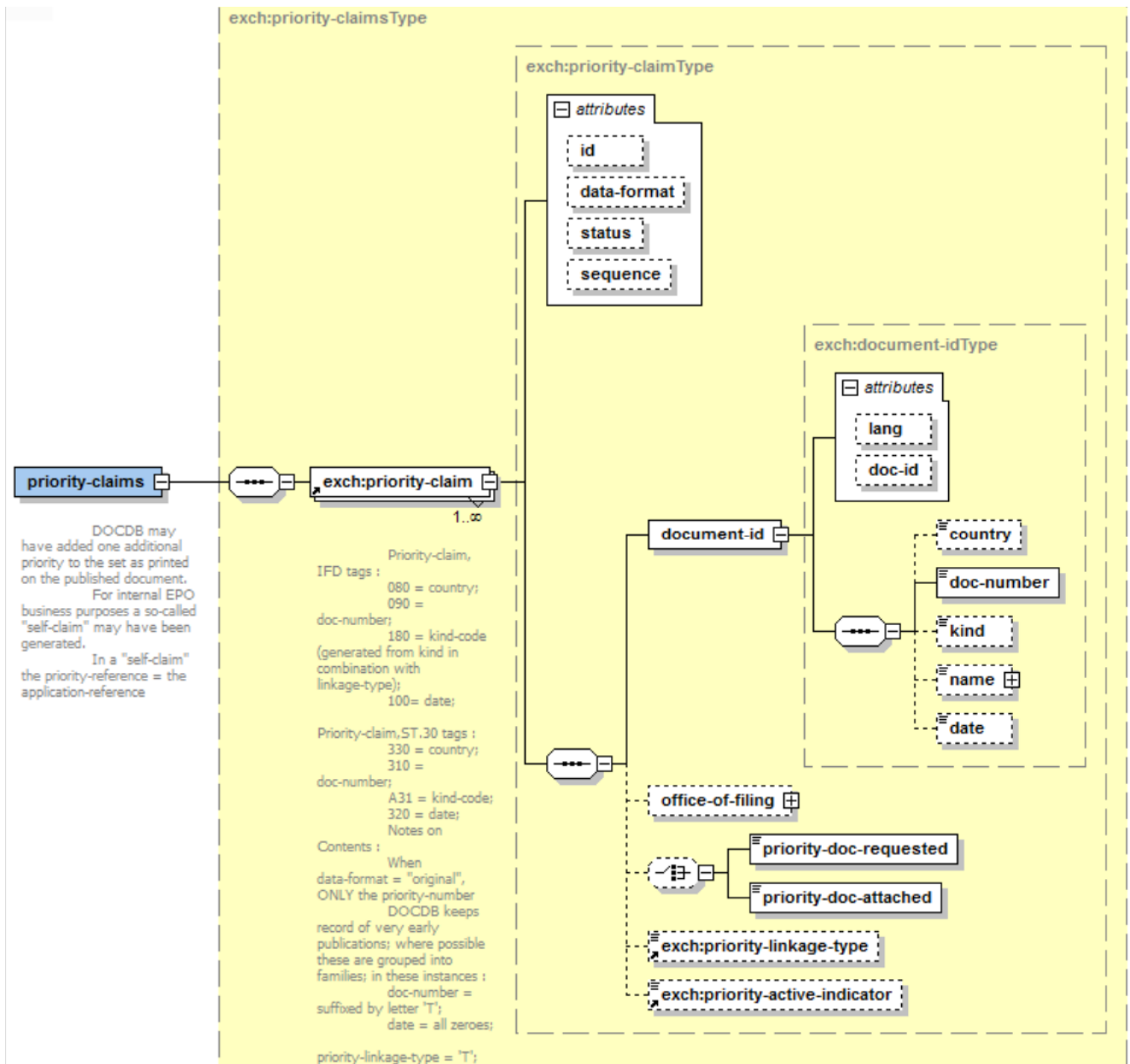
- ```

<exch:exchange-document country="EP" doc-number="3494410" kind="A1" doc-id="512538120" date-
publ="20190612" family-id="58606298" is-representative="YES" date-of-last-exchange="20190620" date-of-
previous-exchange="20190613" date-added-docdb="20190513" originating-office="EP" status="A">
  <exch:bibliographic-data>
    ...
    <exch:application-reference is-representative="NO" doc-id="482989725" data-format="docdb">
      <document-id>
        <country>EP</country>
        <doc-number>17754203</doc-number>
        <kind>A</kind>
        <date>20170804</date>
      </document-id>
    </exch:application-reference>
    <exch:application-reference data-format="epodoc">
      <document-id>
        <doc-number>EP20170754203</doc-number>
      </document-id>
    </exch:application-reference>
    <exch:application-reference data-format="original">
      <document-id>
        <doc-number>17754203.2</doc-number>
      </document-id>
    </exch:application-reference>
    <exch:language-of-publication>en</exch:language-of-publication>

```

8.13. Element <exch:priority-claims>

This tag contains information on priority applications claimed



| Attributes used | Description |
|-----------------|--|
| doc-id | only supported when present in DOCDB as a published application |
| data-format | refer to § 4.5 Data Format for description and details
refer to ANNEX II Data Format for values and definitions |
| status | refer to § 4.6 Field Level Change Indicator |
| sequence | sequence as printed on the first page |

Notes on Contents*Attribute "sequence"*

Attribute "sequence" restarts with every change of "data-format" - priority claims in different formats with identical sequence numbers cannot be guaranteed to be representations of one and the same entity.

In given instances DOCDB may have generated a "self-claim" in addition to priorities printed on the published document to suit EPO internal business needs. Where used, this technique will put the number of priorities with data-format "docdb" out of synch with those originally provided by the supplier.

```

<exch:application-reference is-representative="NO" doc-id="512769014" data-format="docdb">
  <document-id>
    <country>US</country>
    <doc-number>201816148969</doc-number>
    <kind>A</kind>
    <date>20181001</date>
  </document-id>
</exch:application-reference>
..
<exch:priority-claims>
  <exch:priority-claim sequence="1" data-format="docdb">
    <document-id doc-id="512769014">
      <country>US</country>
      <doc-number>201816148969</doc-number>
      <kind>A</kind>
      <date>20181001</date>
    </document-id>
    <exch:priority-active-indicator>N</exch:priority-active-indicator>
  </exch:priority-claim>
  <exch:priority-claim sequence="2" data-format="docdb">
    <document-id>
      <country>IN</country>
      <doc-number>201641005019</doc-number>
      <kind>A</kind>
      <date>20160212</date>
    </document-id>
    <exch:priority-active-indicator>Y</exch:priority-active-indicator>
  </exch:priority-claim>
  <exch:priority-claim sequence="3" data-format="docdb">
    <document-id doc-id="482610848">
      <country>US</country>
      <doc-number>201615206008</doc-number>
      <kind>A</kind>
      <date>20160708</date>
    </document-id>
    <exch:priority-linkage-type>1</exch:priority-linkage-type>
    <exch:priority-active-indicator>N</exch:priority-active-indicator>
  </exch:priority-claim>

  <exch:priority-claim sequence="1" data-format="original">
    <document-id>
      <doc-number>201641005019</doc-number>
    </document-id>
  </exch:priority-claim>
  <exch:priority-claim sequence="2" data-format="original">
    <document-id>
      <doc-number>15206008</doc-number>
    </document-id>
  </exch:priority-claim>

```

```
</exch:priority-claims>
```

Number of Occurrences

Publications added to DOCDB before September 2005 have been loaded with a maximum of 99 priority-claims due to the technical constraints at the time. With the completion of the DOCDB rebuild these constraints have been eliminated. Publications added to DOCDB from September 2005 onwards are exchanged without any limitations on the number of occurrences.

Attribute "doc-id" @ element <document-id>

Attribute "doc-id" contains the unique identifier to the application-identifier. This attribute is only populated for applications that are present in DOCDB as applications proper. Attribute "doc-id" will only be supported with data-format="docdb". The attribute will allow for detecting priorities that are claiming published applications – only published applications will have the attribute "doc-id". The attribute will provide a way of linking the application claimed to the published document – attribute "doc-id" in <priority-claim> corresponds to attribute "doc-id" supported on <application-reference>.

PCT applications claimed as priorities are identified by kind-code 'W'

For reasons of standardisation DOCDB has recorded PCT applications as follows

- o <country> [country of filing] </country>
- o <doc-number> [numerics only] </doc-number>
- o <kind>W</kind>

```
<exch:application-reference is-representative="NO" doc-id="494953134" data-format="docdb">
  <document-id>
    <country>JP</country>
    <doc-number>2017551295</doc-number>
    <kind>A</kind>
    <date>20160329</date>
  </document-id>
</exch:application-reference>
<exch:priority-claims>
...
<exch:priority-claim sequence="3" data-format="docdb">
  <document-id doc-id="451557985">
    <country>US</country>
    <doc-number>2016024731</doc-number>
    <kind>W</kind>
    <date>20160329</date>
  </document-id>
  <exch:priority-linkage-type>W</exch:priority-linkage-type>
  <exch:priority-active-indicator>N</exch:priority-active-indicator>
</exch:priority-claim>
<exch:priority-claim sequence="3" data-format="epodoc">
  <document-id>
    <doc-number>WO2016US24731</doc-number>
  </document-id>
</exch:priority-claim>
...
<exch:priority-claim sequence="3" data-format="original">
  <document-id>
    <doc-number>US2016024731</doc-number>
  </document-id>
```

</exch:priority-claim>

The priority-number may be suffixed by 'T'.

DOCDB keeps a record of very early publications available in paper only. In the past - for EPO internal business needs - these publications were recorded on the basis of publication-identification only. Where possible EPO has grouped these very early publications into patent families by examining technical content. In these instances a dummy priority was derived from one of the publication-identifications in the family by suffixing the number with the letter 'T'. Priority links generated in such a process are identified by linkage type 'T'. In instances like these, the priority-date may not be provided.

Linkage Type

For reasons of standardization DOCDB has translated the priority relation, e.g. for continuation, for continuation in part, for division, <...> into a 1 byte indicator. In the DOCDB exchange in IFD format this 1 byte indicator was used to build the so-called "extended" priority kind-code.

Refer to ANNEX III for a list of linkage-types and definitions.

Active Indicator

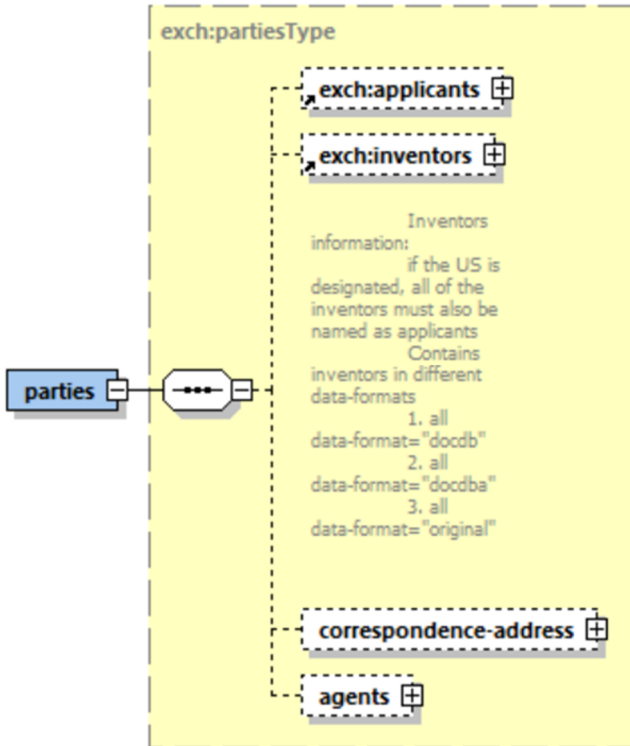
For reasons of family building - for internal business purposes only - the active indicator has been introduced in DOCDB. DOCDB follows the concept of building simple patent families, a concept that groups publications of the similar technical content together on the basis of identical priority pictures.

- o **Y** indicates that this priority is "active" and has been included in the priority picture that defines the DOCDB simple patent family
- o **N** indicates that this priority is "not active" and has not been included

Documents that have the same priority picture, that claim exactly the same active priorities, are members of the EPO simple patent family

8.14. Element <exch:parties>

This tag contains the details of applicants and inventors. The basic structure of the element is:



Elements `<correspondence-address>` and `<agents>` are not supported.

Elements `<exch:applicants>` and `<exch:inventors>` follow the same concept:

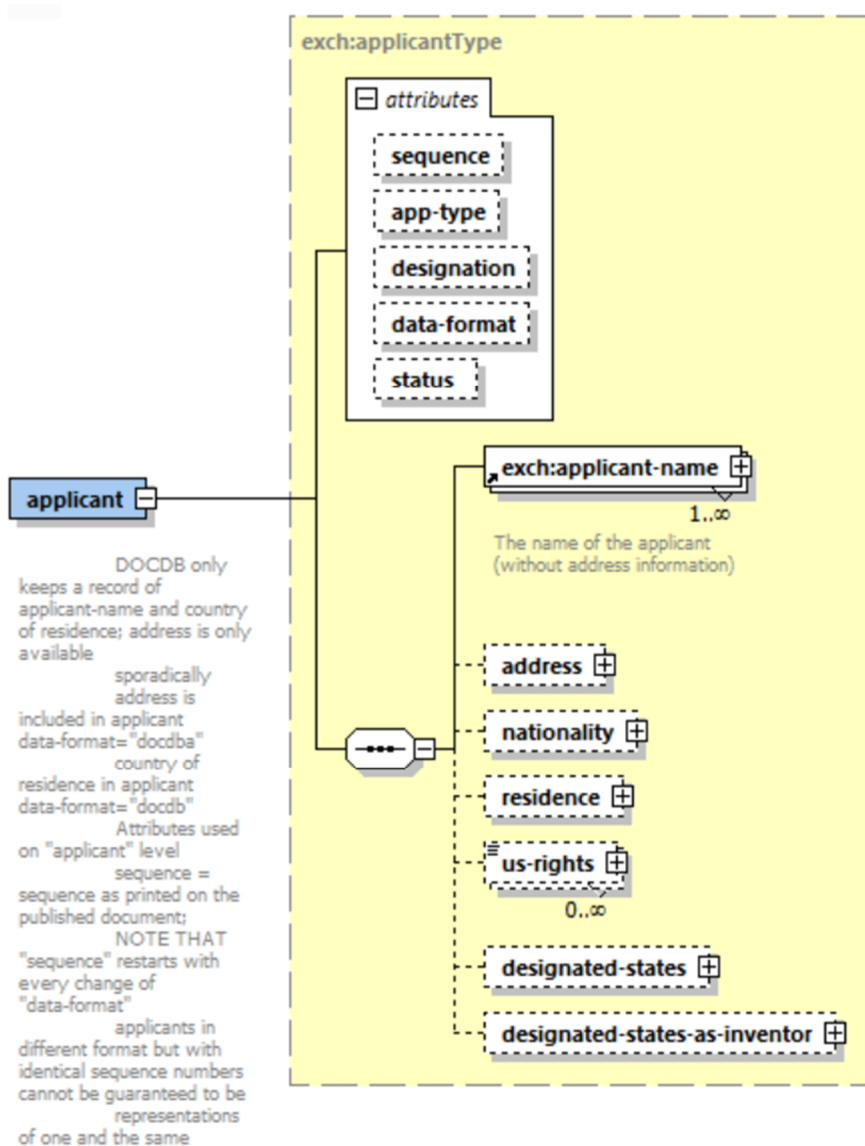
- multiple instances of `<exch:applicant>` and `<exch:inventor>` respectively
- name is exchanged in sub-element `<name>`
- address is exchanged in sub-element `<text>`

| Attributes used | Description |
|-----------------|--|
| data-format | refer to § 4.5 Data Format for description and details
refer to ANNEX II Data Format for values and definitions |
| status | refer to § 4.6 Field Level Change Indicator |
| sequence | sequence as printed on the first page |

Attribute "sequence" restarts with every change of "data-format"; names in different format but with identical sequence numbers cannot be guaranteed to be representations of one and the same name. Data format may be "docdb" only, "docdba" only, "original" only – or a combination of two or three formats.

Original language characters in name or address may be represented by character entity references.

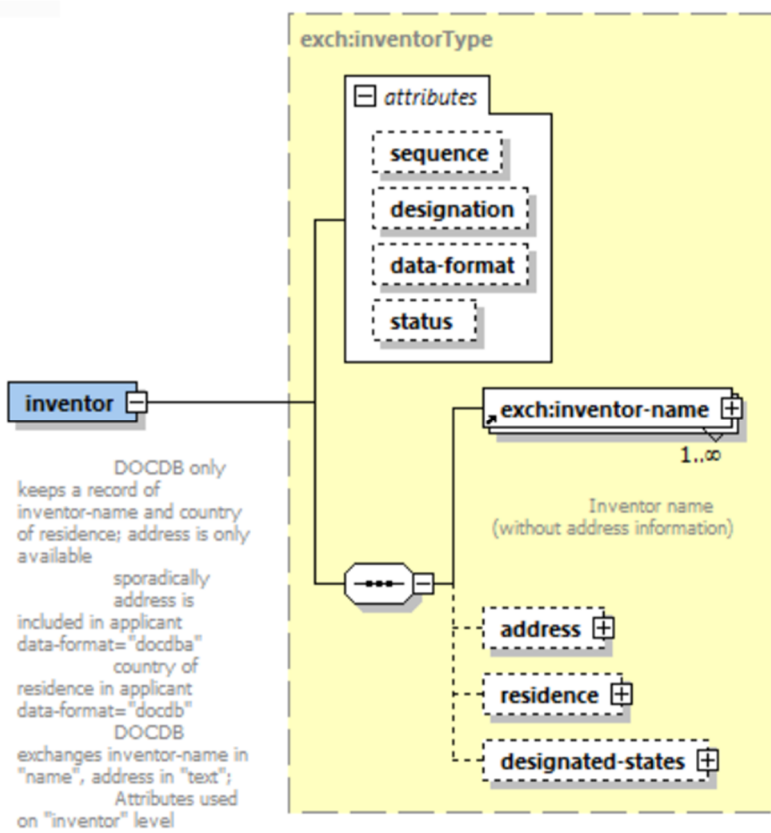
8.14.1. Element <exch:applicant>



Elements that may be populated are:

- <exch:applicant-name>
- <address>
- <residence>

8.14.2. Element <exch:inventor>

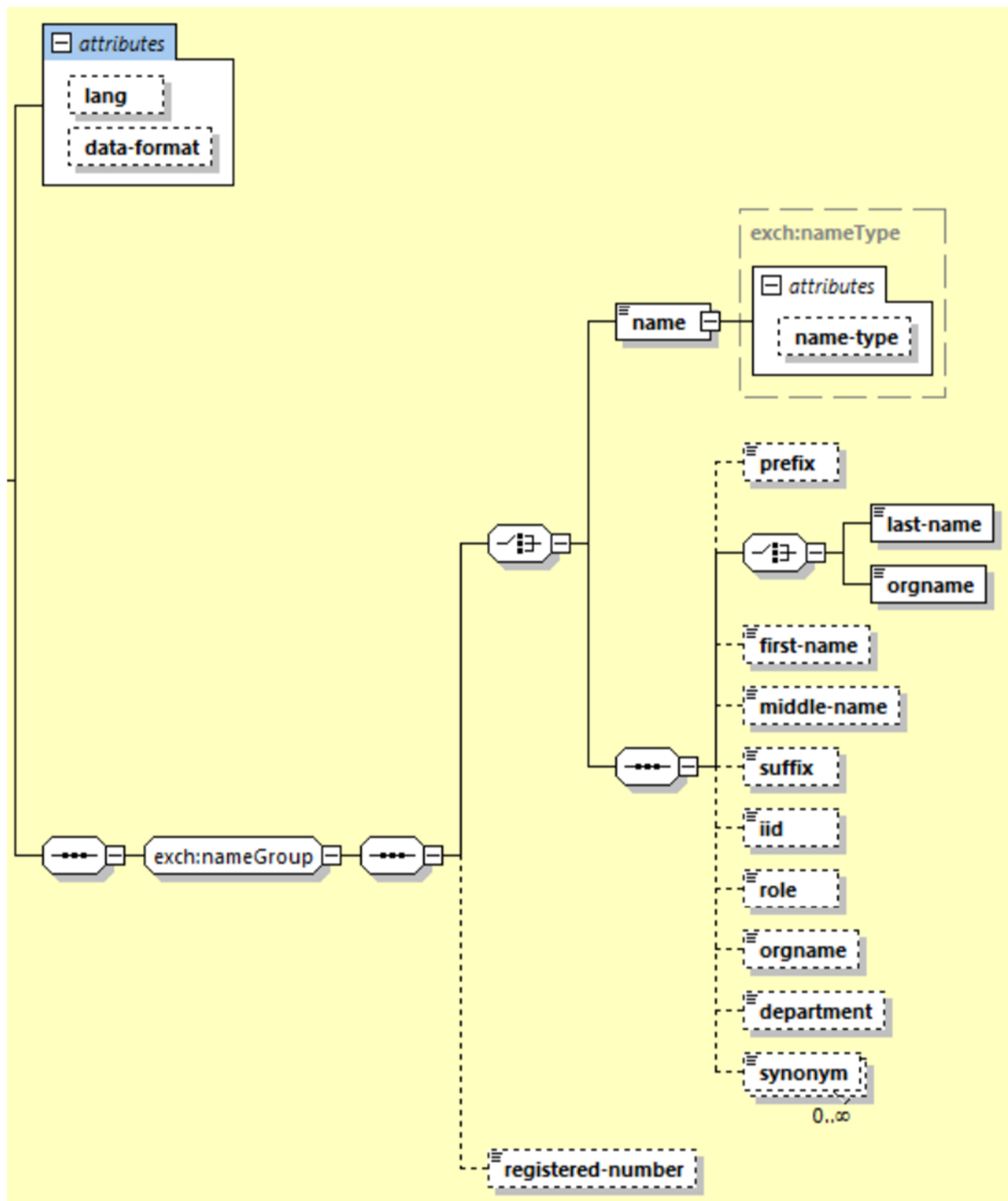


Elements that may be populated are:

- <exch:inventor-name>
- <address>
- <residence>

8.14.3. Element <name>

In elements <exch:applicant-name> and <exch:inventor-name> respectively



Attributes "lang" and "data-format" are not supported at this level.

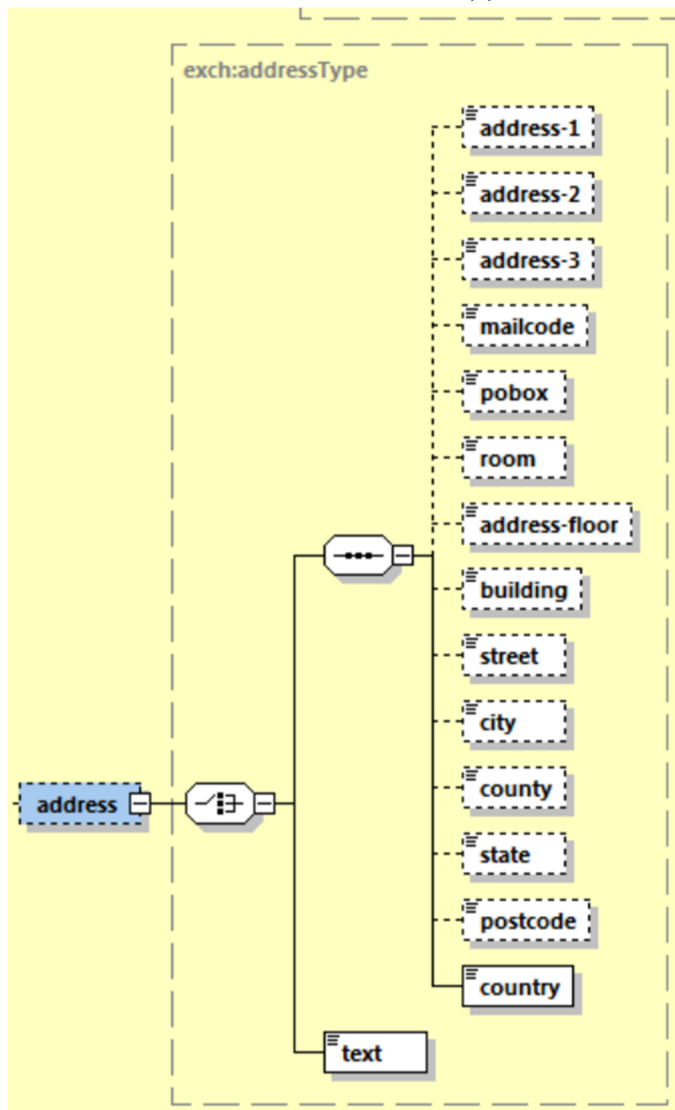
Name is supported in element <name>.

Attributes "name-type" is not used.

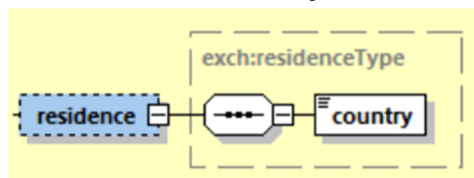
8.14.4. Elements <address> and <residence>

In elements <exch:applicant> and <exch:inventor> respectively.

When available address data is supported in concatenated format in element <text>.



When available country of residency is supported in element <country>:



8.14.5. Usage Examples [Not exhaustive]

- ```

<exch:exchange-document country="JP" doc-number="2018512946" kind="A" doc-id="494953135" date-publ="20180524"
family-id="55755712" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20190207"
date-added-docdb="20180601" originating-office="EP" status="A">
 <exch:parties>
 <exch:applicants>
 <exch:applicant sequence="1" data-format="original">
 <exch:applicant-name>
 <name>• • Ž • • •
 </exch:applicant-name>
 • • Ž • </name>
 </exch:applicant>
 </exch:applicants>
 <exch:inventors>
 <exch:inventor sequence="1" data-format="original">
 <exch:inventor-name>
 <name>• • Ž • • • • • Ž • • • • Ž </name>
 </exch:inventor-name>
 </exch:inventor>
 <exch:inventor sequence="2" data-format="original">
 <exch:inventor-name>
 <name>• • • • • • • • Ž • • • • • </name>
 </exch:inventor-name>
 </exch:inventor>
 </exch:inventors>
 </exch:parties>

```
- ```

<exch:exchange-document country="JP" doc-number="H06158" kind="A" doc-id="393647821" date-publ="19940111" family-
id="23856022" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20190613" date-
added-docdb="20000421" originating-office="EP" status="A"> ...
  <exch:parties>
    <exch:applicants>
      <exch:applicant sequence="1" data-format="docdb">
        <exch:applicant-name>
          <name>FUJI OPT SYST INC</name>
        </exch:applicant-name>
      </exch:applicant>
      <exch:applicant sequence="1" data-format="docdba">
        <exch:applicant-name>
          <name>FUJI OPT SYST INC</name>
        </exch:applicant-name>
      </exch:applicant>
    </exch:applicants>
    <exch:inventors>
      <exch:inventor sequence="1" data-format="docdb">
        <exch:inventor-name>
          <name>DEIBITSUDO EICHI KUUPAA</name>
        </exch:inventor-name>
      </exch:inventor>
      <exch:inventor sequence="2" data-format="docdb">
        <exch:inventor-name>
          <name>CHIYAARUZU ESU BUTSUSHIYU</name>
        </exch:inventor-name>
      </exch:inventor>
      <exch:inventor sequence="1" data-format="docdba">
        <exch:inventor-name>
          <name>DEIBITSUDO EICHI KUUPAA</name>
        </exch:inventor-name>
      </exch:inventor>
      <exch:inventor sequence="2" data-format="docdba">
        <exch:inventor-name>
          <name>CHIYAARUZU ESU BUTSUSHIYU</name>
        </exch:inventor-name>
      </exch:inventor>
    </exch:inventors>
  </exch:parties>

```

- ```

<exch:exchange-document country="MD" doc-number="4539" kind="B1" doc-id="488188922" date-publ="20171231" family-id="48094815" is-representative="NO" date-of-last-exchange="20190620" date-of-previous-exchange="20181108" date-added-docdb="20180105" originating-office="EP" status="A">
 <exch:parties>
 <exch:applicants>
 <exch:applicant sequence="1" data-format="docdb">
 <exch:applicant-name>
 <name>HELSINN HEALTHCARE SA</name>
 </exch:applicant-name>
 <residence>
 <country>CH</country>
 </residence>
 </exch:applicant>
 <exch:applicant sequence="1" data-format="docdba">
 <exch:applicant-name>
 <name>HELSINN HEALTHCARE SA</name>
 </exch:applicant-name>
 </exch:applicant>
 <exch:applicant sequence="1" data-format="original">
 <exch:applicant-name>
 <name>HELSINN HEALTHCARE SA</name>
 </exch:applicant-name>
 </exch:applicant>
 </exch:applicants>
 <exch:inventors>
 <exch:inventor sequence="1" data-format="docdb">
 <exch:inventor-name>
 <name>FADINI LUCA</name>
 </exch:inventor-name>
 <residence>
 <country>CH</country>
 </residence>
 </exch:inventor>
 ...
 <exch:inventor sequence="8" data-format="docdb">
 <exch:inventor-name>
 <name>STELLA VALENTINO J</name>
 </exch:inventor-name>
 <residence>
 <country>US</country>
 </residence>
 </exch:inventor>
 <exch:inventor sequence="1" data-format="docdba">
 <exch:inventor-name>
 <name>FADINI Luca</name>
 </exch:inventor-name>
 </exch:inventor>
 ...
 <exch:inventor sequence="8" data-format="docdba">
 <exch:inventor-name>
 <name>STELLA Valentino J.</name>
 </exch:inventor-name>
 </exch:inventor>
 <exch:inventor sequence="1" data-format="original">
 <exch:inventor-name>
 <name> </name>
 </exch:inventor-name>
 </exch:inventor>
 ...
 <exch:inventor sequence="8" data-format="original">
 <exch:inventor-name>
 <name> </name>
 </exch:inventor-name>
 </exch:inventor>
 </exch:inventors>
 </exch:parties>

```

- ```

<exch:exchange-document country="CZ" doc-number="31723" kind="U1" doc-id="493795501" date-publ="20180502" family-
id="62022891" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20180510" date-
added-docdb="20180503" originating-office="EP" status="A">
  <exch:parties>
    <exch:applicants>
      <exch:applicant sequence="1" data-format="docdb">
        <exch:applicant-name>
          <name>TECHNICKA UNIVERZITA V LIBERCI</name>
        </exch:applicant-name>
        <residence>
          <country>CZ</country>
        </residence>
      </exch:applicant>
      <exch:applicant sequence="1" data-format="docdba">
        <exch:applicant-name>
          <name>Technická univerzita v Liberci</name>
        </exch:applicant-name>
      </exch:applicant>
      <exch:applicant sequence="1" data-format="original">
        <exch:applicant-name>
          <name>Technická univerzita v Liberci</name>
        </exch:applicant-name>
      </exch:applicant>
    </exch:applicants>
    <exch:inventors>
      <exch:inventor sequence="1" data-format="docdb">
        <exch:inventor-name>
          <name>CHVOJKA Jiří</name>
        </exch:inventor-name>
        <residence>
          <country>CZ</country>
        </residence>
      </exch:inventor>
      ...
      <exch:inventor sequence="11" data-format="docdb">
        <exch:inventor-name>
          <name>KLÁPŠOVÁ ANDREA</name>
        </exch:inventor-name>
        <residence>
          <country>CZ</country>
        </residence>
      </exch:inventor>
      <exch:inventor sequence="1" data-format="docdba">
        <exch:inventor-name>
          <name>Chvojka Jiří</name>
        </exch:inventor-name>
      </exch:inventor>
      ...
      <exch:inventor sequence="11" data-format="docdba">
        <exch:inventor-name>
          <name>Klápšová Andrea</name>
        </exch:inventor-name>
      </exch:inventor>
      <exch:inventor sequence="1" data-format="original">
        <exch:inventor-name>
          <name>Chvojka Jiří</name>
        </exch:inventor-name>
      </exch:inventor>
      ...
      <exch:inventor sequence="11" data-format="original">
        <exch:inventor-name>
          <name>Klápšová Andrea</name>
        </exch:inventor-name>
      </exch:inventor>
    </exch:inventors>
  </exch:parties>

```

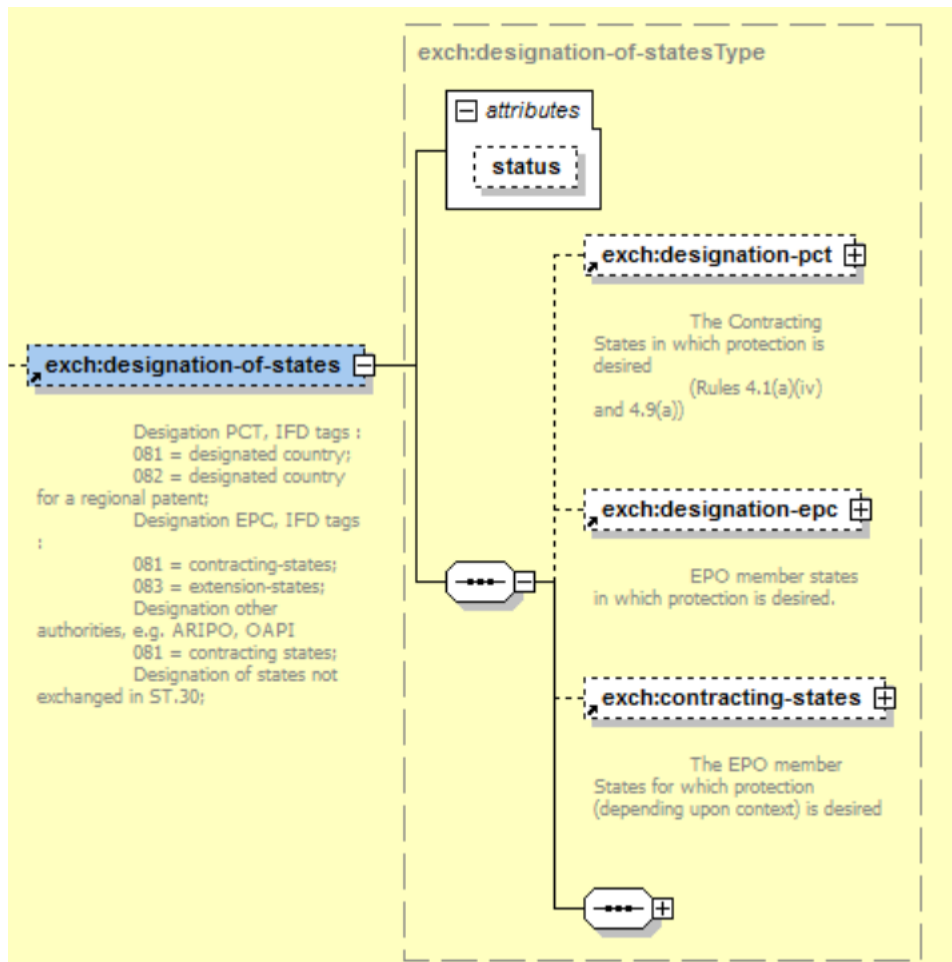

- ```

<exch:exchange-document country="WO" doc-number="2019080603" kind="A1" doc-id="511988467" date-
publ="20190502" family-id="61031868" is-representative="YES" date-of-last-exchange="20190620" date-of-
previous-exchange="20190606" date-added-docdb="20190502" originating-office="EP" status="A">
...
<exch:application-reference is-representative="YES" doc-id="511988466" data-format="docdb">
 <document-id>
 <country>CN</country>
 <doc-number>2018100189</doc-number>
 <kind>W</kind>
 <date>20180813</date>
 </document-id>
</exch:application-reference>
<exch:language-of-filing>zh</exch:language-of-filing>
...
<exch:parties>
 <exch:applicants>
 <exch:applicant sequence="1" data-format="docdb">
 <exch:applicant-name>
 <name>NANTONG RISING SPORTS & LEISURE GOODS CO LTD</name>
 </exch:applicant-name>
 <residence>
 <country>CN</country>
 </residence>
 </exch:applicant>
 <exch:applicant sequence="1" data-format="docdba">
 <exch:applicant-name>
 <name>NANTONG RISING SPORTS & LEISURE GOODS CO., LTD</name>
 </exch:applicant-name>
 </exch:applicant>
 <exch:applicant sequence="1" data-format="original">
 <exch:applicant-name>
 <name> </name>
 </exch:applicant-name>
 </exch:applicant>
 </exch:applicants>
 <exch:inventors>
 <exch:inventor sequence="1" data-format="docdb">
 <exch:inventor-name>
 <name>QIAN LIN</name>
 </exch:inventor-name>
 <residence>
 <country>CN</country>
 </residence>
 </exch:inventor>
 ...
 <exch:inventor sequence="1" data-format="docdba">
 <exch:inventor-name>
 <name>QIAN, Lin</name>
 </exch:inventor-name>
 </exch:inventor>
 ...
 <exch:inventor sequence="1" data-format="original">
 <exch:inventor-name>
 <name>• • </name>
 </exch:inventor-name>
 </exch:inventor>
 ...
 </exch:inventors>
</exch:parties>

```

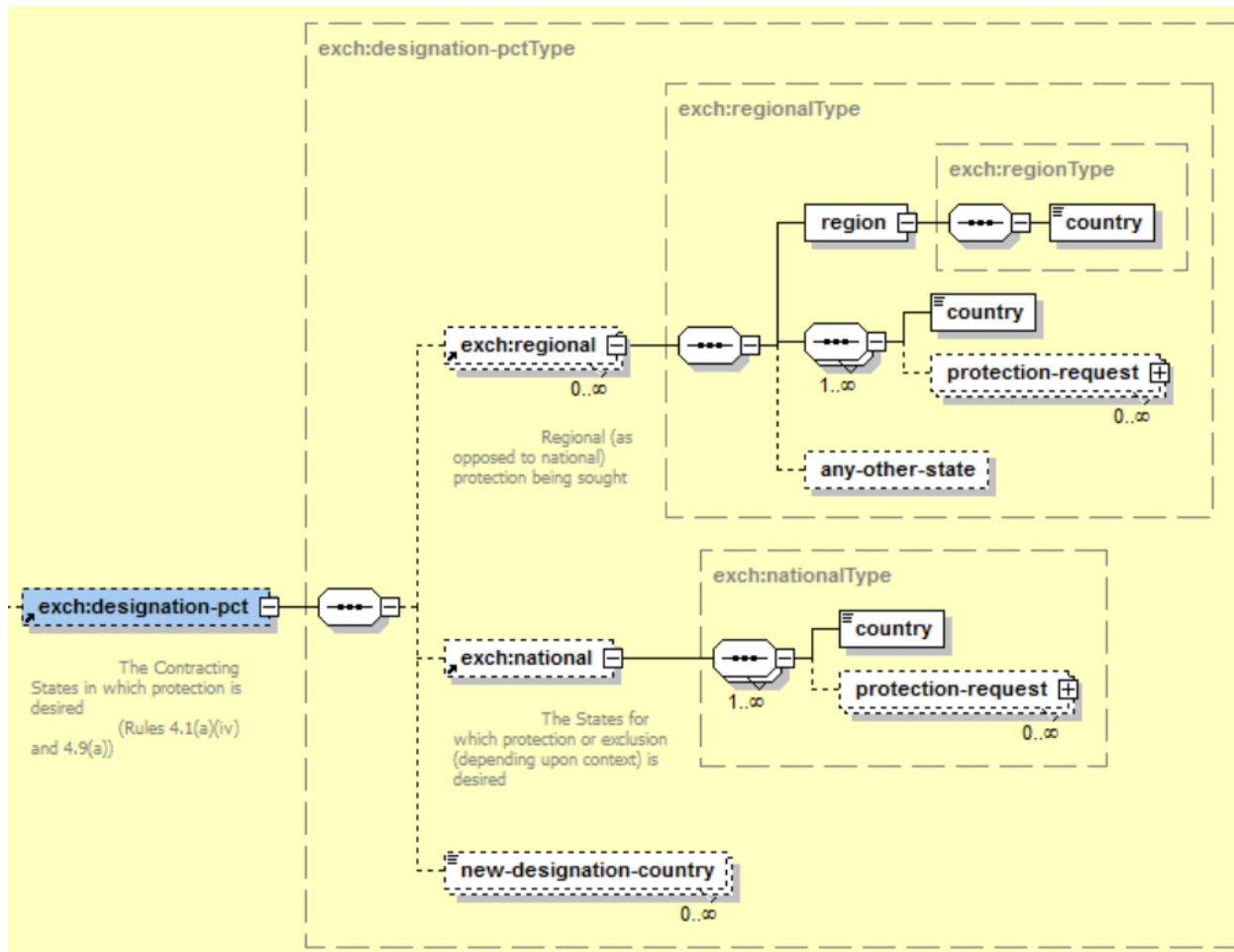
### 8.15. Element <exch:designation-of-states>

This tag contains designated states. The basic structure of the tag is :



### 8.15.1. Element <exch:designation-pct>

Basic structure of the tag is



For WO publications :

- when regional then <country> and <region> populated in <exch:regional>
- when national then <country> populated in <exch:national>

Usage example on the next page.

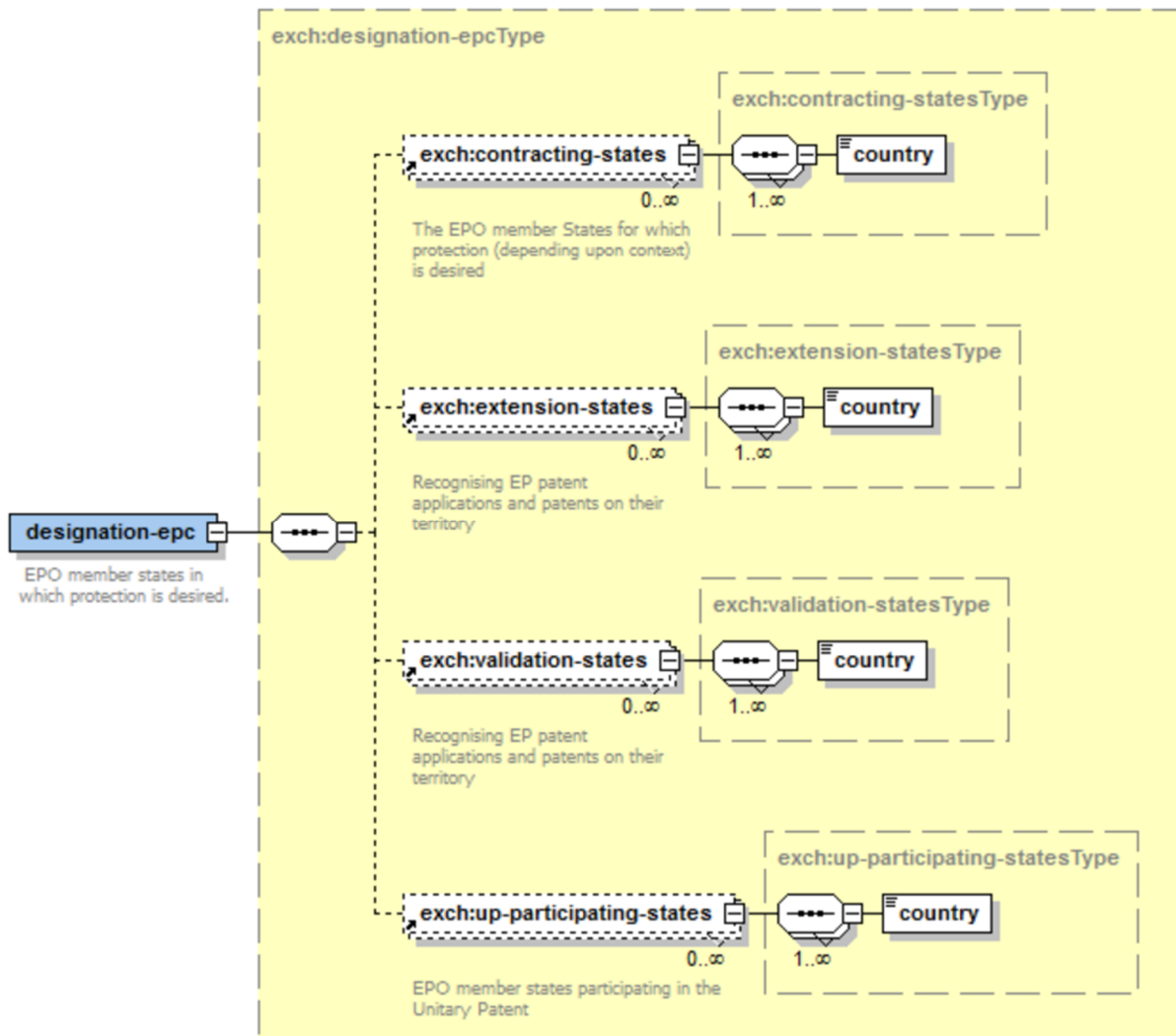
- ```

<exch:exchange-document country="WO" doc-number="2019080603" kind="A1" doc-id="511988467" date-
publ="20190502" family-id="61031868" is-representative="YES" date-of-last-exchange="20190620" date-of-
previous-exchange="20190606" date-added-docdb="20190502" originating-office="EP" status="A">
...
<exch:application-reference is-representative="YES" doc-id="511988466" data-format="docdb">
  <document-id>
    <country>CN</country>
    <doc-number>2018100189</doc-number>
    <kind>W</kind>
    <date>20180813</date>
  </document-id>
</exch:application-reference>
<exch:language-of-filing>zh</exch:language-of-filing>
...
<exch:designation-of-states>
  <exch:designation-pct>
    <exch:regional>
      <region>
        <country>AP</country>
      </region>
      <country>BW</country>
      ...
      <country>ZW</country>
    </exch:regional>
    <exch:regional>
      <region>
        <country>EA</country>
      </region>
      <country>AM</country>
      ...
      <country>TM</country>
    </exch:regional>
    <exch:regional>
      <region>
        <country>EP</country>
      </region>
      <country>AL</country>
      ...
      <country>TR</country>
    </exch:regional>
    <exch:regional>
      <region>
        <country>OA</country>
      </region>
      <country>BF</country>
      ...
      <country>ST</country>
    </exch:regional>
    <exch:national>
      <country>AE</country>
      ...
      <country>ZW</country>
    </exch:national>
  </exch:designation-pct>
</exch:designation-of-states>

```

8.15.2. Element <exch:designation-epc>

Basic structure of the tag is



For EP publications :

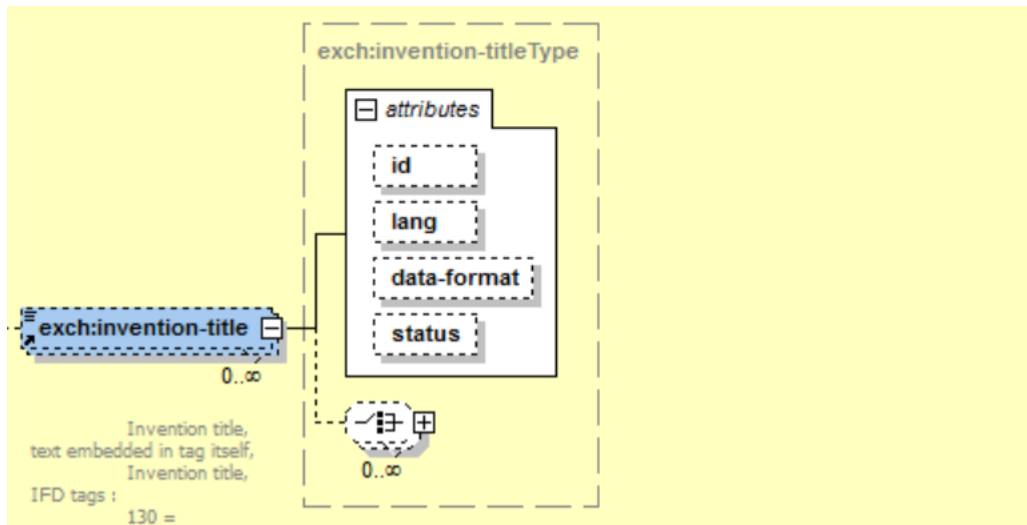
- when contracting states then <exch:contracting-states> populated
- when extension states then <exch:extension-states> populated
- when validation states then <exch:validation-states> populated
- when member states participating in the unitary patent then <exch:up-participating-states>

Usage example on the next page.

- `<exch:exchange-document country="EP" doc-number="3494410" kind="A1" doc-id="512538120" date-publ="20190612" family-id="58606298" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20190613" date-added-docdb="20190513" originating-office="EP" status="A">`
 - ...
 - `<exch:application-reference is-representative="NO" doc-id="482989725" data-format="docdb">`
 - `<document-id>`
 - `<country>EP</country>`
 - `<doc-number>17754203</doc-number>`
 - `<kind>A</kind>`
 - `<date>20170804</date>`
 - `</document-id>`
 - `</exch:application-reference>`
 - ...
 - `<exch:language-of-publication>en</exch:language-of-publication>`
 - ...
 - `<exch:designation-of-states>`
 - `<exch:designation-epc>`
 - `<exch:contracting-states>`
 - `<country>AL</country>`
 - `<country>AT</country>`
 - `<country>BE</country>`
 - `[...]`
 - `<country>SK</country>`
 - `<country>SM</country>`
 - `<country>TR</country>`
 - `</exch:contracting-states>`
 - `<exch:extension-states>`
 - `<country>BA</country>`
 - `<country>ME</country>`
 - `</exch:extension-states>`
 - `</exch:designation-epc>`

8.16. Element <exch:invention-title>

This tag contains the title of the invention. Basic structure of the tag



| Attributes used | Description |
|-----------------|--|
| data-format | refer to § 4.5 Data Format for description and details
refer to ANNEX II Data Format for values and definitions |
| status | refer to § 4.6 Field Level Change Indicator |
| lang | title language |

Usage examples

- ```

<exch:exchange-document country="EP" doc-number="3494410" kind="A1" doc-id="512538120" date-publ="20190612"
family-id="58606298" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20190613"
date-added-docdb="20190513" originating-office="EP" status="A">
...
<exch:invention-title lang="de" data-format="docdba">MOTORRAD MIT HINDERNISSENSOR
</exch:invention-title>
<exch:invention-title lang="en" data-format="docdba">MOTORCYCLE WITH OBSTACLE SENSOR
</exch:invention-title>
<exch:invention-title lang="fr" data-format="docdba">MOTOCYCLETTE COMPRENANT UN CAPTEUR
D&apost;OBSTACLES</exch:invention-title>

```
- ```

<exch:exchange-document country="MD" doc-number="4539" kind="B1" doc-id="488188922" date-publ="20171231" family-
id="48094815" is-representative="NO" date-of-last-exchange="20190620" date-of-previous-exchange="20181108" date-
added-docdb="20180105" originating-office="EP" status="A">
....
<exch:invention-title lang="en" data-format="docdba">Substituted 4-phenyl-pyridines for the treatment of
NK-1 receptor related diseases</exch:invention-title>
<exch:invention-title lang="ro" data-format="docdba">4-Fenilpiridine substituie pentru tratamentul bolilor
asociate cu receptorul NK-1</exch:invention-title>
<exch:invention-title lang="ru" data-format="docdba">
&#x417;&#x430;&#x43C;&#x435;&#x449;&#x435;&#x43D;&#x43D;&#x44B;&#x435; 4-&#x444;&#x435;
&#x43D;&#x438;&#x43B;&#x43F;&#x438;&#x440;&#x438;&#x434;&#x438;&#x44B; &#x434;
&#x43B;&#x44F; &#x43B;&#x435;&#x447;&#x435;&#x43D;&#x438;&#x44F; &#x437;&#x430;&#x431;
&#x43E;&#x43B;&#x435;&#x432;&#x430;&#x43D;&#x438;&#x439;&#x441;&#x432;&#x44F;&#x437;
&#x430;&#x43D;&#x43D;&#x44B;&#x445; &#x441;&#x440;&#x435;&#x446;&#x435;&#x43F;&#x442;
&#x43E;&#x440;&#x43E;&#x43C; NK-1</exch:invention-title>

```

8.17. Element <exch:dates-of-public-availability>

This tag contains the date of publication. It further qualifies the date of publication as a "date of availability". The tag offers a choice of one out of many categories, from "gazette-reference" to "not-printed-with-grant". When it not possible to categorize the publication in any of these the element <dates-of-public-availability> is not included. The publication-date represented in <dates-of-public-availability> is a duplication of the date featuring in <publication-reference>

The XML structure of the tag is:

```
<element name="dates-of-public-availability">
  <complexType>
    <sequence>
      <element ref="exch:gazette-reference" minOccurs="0"/>
      <element ref="exch:abstract-reference" minOccurs="0"/>
      <element ref="exch:supplemental-srep-pub" minOccurs="0"/>
      <element ref="exch:gazette-pub-announcement" minOccurs="0"/>
      <element ref="exch:modified-first-page-pub" minOccurs="0"/>
      <element ref="exch:modified-complete-spec-pub" minOccurs="0"/>
      <element ref="exch:unexamined-not-printed-without-grant" minOccurs="0"/>
      <element ref="exch:examined-not-printed-without-grant" minOccurs="0"/>
      <element ref="exch:unexamined-printed-without-grant" minOccurs="0"/>
      <element ref="exch:examined-printed-without-grant" minOccurs="0"/>
      <element ref="exch:printed-with-grant" minOccurs="0"/>
      <element ref="exch:claims-only-available" minOccurs="0"/>
      <element ref="exch:not-printed-with-grant" minOccurs="0"/>
      <element name="term-of-grant" type="exch:term-of-grantType" minOccurs="0"/>
      <element ref="exch:invalidation-of-patent" minOccurs="0"/>
      <element ref="exch:printed-as-amended" minOccurs="0"/>
    </sequence>
    <attribute name="status" type="string"/>
  </complexType>
</element>
```

NOTE that <dates-of-public-availability> is one of the data-elements referred to in § 6.3 that are generated "on the fly". Change in value does not constitute a physical database update, attribute "status" is not supported on this element.

NOTE that not all elements are supported. Refer to *ANNEX VI Concordance Dates of Public Availability* for concordance with WIPO ST-30.

Usage examples on the next page [not exhaustive]

- `<exch:exchange-document country="EP" doc-number="3390150" kind="A1" doc-id="500237478" date-publ="20181024" family-id="59055844" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20181227" date-added-docdb="20180924" originating-office="EP" status="A">`
 - `<exch:dates-of-public-availability>`
 - `<exch:examined-printed-without-grant>`
 - `<document-id>`
 - `<date>20181024</date>`
- `<exch:exchange-document country="EP" doc-number="3390791" kind="A2" doc-id="500236915" date-publ="20181024" family-id="54937038" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20181213" date-added-docdb="20180924" originating-office="EP" status="A">`
 - `<exch:dates-of-public-availability>`
 - `<exch:unexamined-printed-without-grant>`
 - `<document-id>`
 - `<date>20181024</date>`
- `<exch:exchange-document country="EP" doc-number="3390143" kind="A4" doc-id="503803932" date-publ="20190102" family-id="59055745" is-representative="NO" date-of-last-exchange="20190620" date-of-previous-exchange="20190214" date-added-docdb="20181203" originating-office="EP" status="A">`
 - `<exch:dates-of-public-availability>`
 - `<exch:supplemental-srep-pub>`
 - `<exch:date>20190102</exch:date>`
- `<exch:exchange-document country="EP" doc-number="3390230" kind="B1" doc-id="512543594" date-publ="20190612" family-id="56611301" is-representative="NO" date-of-last-exchange="20190620" date-of-previous-exchange="20190613" date-added-docdb="20190513" originating-office="EP" status="A">`
 - `<exch:dates-of-public-availability>`
 - `<exch:printed-with-grant>`
 - `<document-id>`
 - `<date>20190612</date>`
- `<exch:exchange-document country="GB" doc-number="0001091" kind="D0" doc-id="389725550" date-publ="20000308" family-id="22923815" is-representative="NO" date-of-last-exchange="20190620" date-of-previous-exchange="20030823" date-added-docdb="20000408" originating-office="EP" status="A">`
 - `<exch:dates-of-public-availability>`
 - `<exch:gazette-reference>`
 - `<date>20000308</date>`
- `<exch:exchange-document country="GB" doc-number="2327175" kind="A8" doc-id="389999200" date-publ="20000221" family-id="10815578" is-representative="NO" date-of-last-exchange="20190620" date-of-previous-exchange="20120517" date-added-docdb="20070710" originating-office="EP" status="A">`
 - `<exch:dates-of-public-availability>`
 - `<exch:modified-first-page-pub>`
 - `<document-id>`
 - `<date>20000221</date>`
- `<exch:exchange-document country="GB" doc-number="2525011" kind="A9" doc-id="445448527" date-publ="20151021" family-id="50777099" is-representative="NO" date-of-last-exchange="20190620" date-of-previous-exchange="20170216" date-added-docdb="20151022" originating-office="EP" status="A">`
 - `<exch:dates-of-public-availability>`
 - `<exch:modified-complete-spec-pub>`
 - `<document-id>`
 - `<date>20151021</date>`

8.18. Element <exch:references-cited>

8.18.1. Release 2.5 – Introduction Rich Citation Data

The format in which the rich structure data items have been populated is dependent on the data supplier.

This document will only contain a limited number of usage examples to illustrate the new features. New features in release 2.5 are supported by a sample package containing data representative for Production.

Refer to *ANNEX XV Reference Cited – Usage Examples* for all usage examples related to <references-cited> - those already included in 2.4 and additional examples to illustrate the enhancements of release 2.5

Schema modifications @ element <exch:citation>

Schema modifications in release 2.5 compared to release 2.4:

- attribute “srep-phase” re-named into “cited-phase” to be compliant with CCD
- elements that relate to search report data have been suppressed; these data-fields have never been supported at this level in this product

8.18.2. Aug 2016 – Back-file Load EP Rich Citation Data

In the first semester of 2016 the complete collection of EP search report citations has been re-loaded into DOCDB – providing cited references that are richer both in data content and in data structure. An earlier exercise had already put rich citations in place from early 2015 for newly loaded documents. Now, after having re-loading the cited references for roughly 4.7 million documents into the database, DOCDB also supports full-blown richness for citations covering the time span from 1994 to 2015 and enhanced content for references cited in the period before 1994. These are mostly references cited in EPO and PCT publications, but include national publications from EPO member states for which the EPO drew up the search report as well.

Key features in EP generated rich citation data are:

- attribute "cited-date" @ element <exch:citation> will be populated with the date that the search report has been completed
- cited references will be provided with the actual citing document instead of being consolidated on the first publication in the application
- number of cited references provided the document will be the actual number instead of being limited to 99 instances per document
- cited references will be provided in a rich data structure

NOTE THAT:

These key-features will only be supported when the corresponding information is available in the EPO's master database for search report data – in publications before 1994:

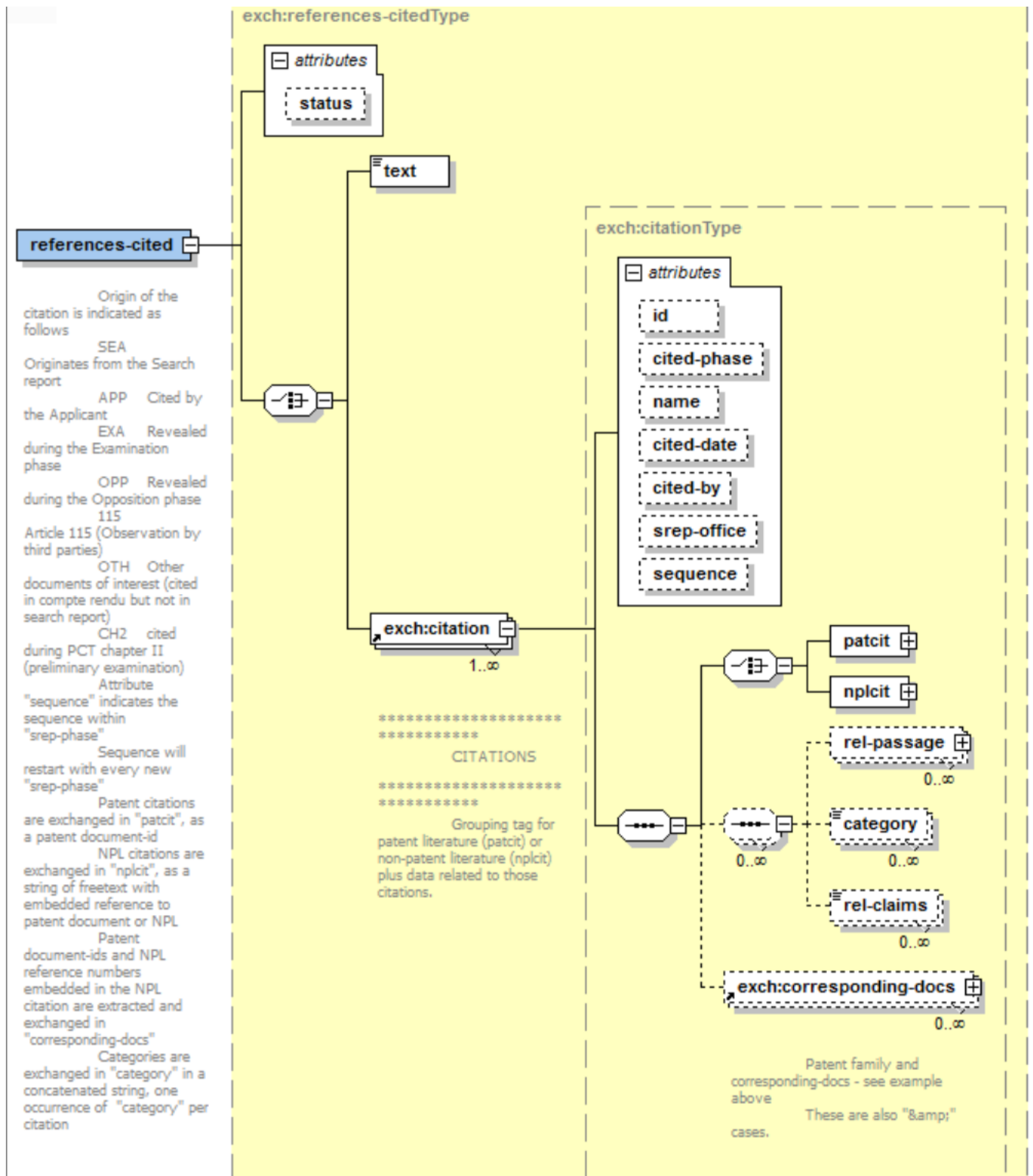
- element <rel-passage> - related passages/related claims – may not be supported
- attribute "cited-date" may not be populated
- rich data structure may not be available

POINT of ATTENTION:

When there is NO rich data structure available, but any one of the other key- features are represented, the rich structure is simulated to the limit of what is supported in the master database for search report data.

Under those conditions element <rel-passage> will be represented in element <citation> with empty elements for <passage> and <rel-claims> and data in <category> only. Refer to the paragraph on element <rel-passage> and the usage example.

8.18.3. Element <exch:citation>



NOTES on CONTENTS

- *Attribute "cited-phase" is used to indicate the origin of the citation*

The cited references will be presented by order of phase, as shown in the table below

A question frequently asked is: *What is the difference between OPP and FOP?*

Cited phase is OPP

These are the real opposition documents (citations) selected by the Opposition Division. They are printed on the B2 publication – in DOCDB/XML they are provided with the document that they have been printed on.

Cited phase is FOP ("Filed by OPponent")

These are the documents submitted by the opponent/proprietor of the application after B1 publication. These documents will be considered during the Opposition (Division) Procedure. They are not printed on any document – in DOCDB/XML they are provided with the first publication step in the application

OPP citations will have been filed by third parties – never by the examiner.

They are the documents that have been selected out of the documents submitted in the FOP phase.

- *Attribute "cited-date" is used to indicate the date that the citation has become available as shown in the table below*

cited-phase	Description	cited-date
SEA	Originates from the Search report	search report completed
ISR	Originates from International Search Report	international search report completed
SUP	Originates from Supplementary Search Report	supplementary search report completed
PRS	Origin Pre-Grant / Pre-Search	national search report completed
APP	Cited by the Applicant	information available in EPO systems
EXA	Revealed during the Examination phase (citing document is kind-code 'A')	information available in EPO systems
OPP	Revealed during the Opposition phase	opposition letters filed
APL	Filed for appeal by applicant / proprietor / patentee	appeal filed
FOP	Filed for opposition by any third party	observation letters filed
TPO	Third party observation	observation letters filed
CH2	Chapter 2	international search report completed

- *Attribute "name" will be populated for*

- cited-phase="FOP" – name of opponent
- cited-phase="TPO" – name of third party [has replaced cited-phase="115"]

NOTE that with the introduction of this attribute there may be duplicate citations inside element <exch:references-cited> in cases where there are more than one opponent or more than one third party.

- *Other attributes used :*

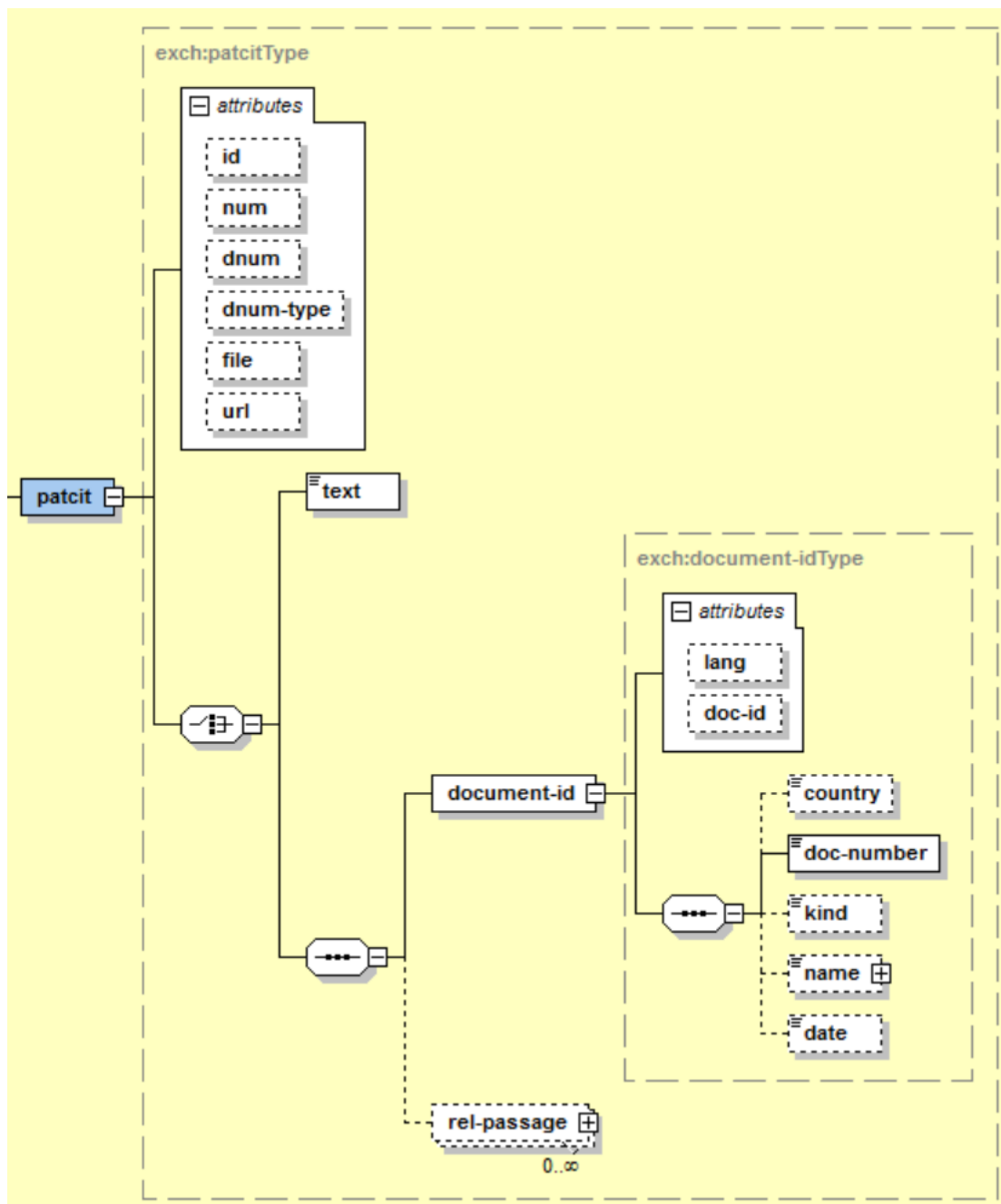
- "srep-office" : search authority
- "sequence" : sequence within "cited-phase"

- *Element <category>*

Categories are exchanged concatenated in one string, not separated by commas. Refer to *Annex XIV - Categories of Cited Documents*

Notes on content of elements <patcit>, <nplcit>, <corresponding-docs> and <rel-passage> will be covered in detail in dedicated paragraphs.

8.18.4. Element <patcit>



Enhancements Introduction Rich Citation Data

- attribute "doc-id" – supporting the unique DOCDB identifier in `<document-id>`
- element `<rel-passage>` is NOT supported at this level; `<rel-passage>` is supported one level up, in element `<citation>`

NOTES on CONTENTS

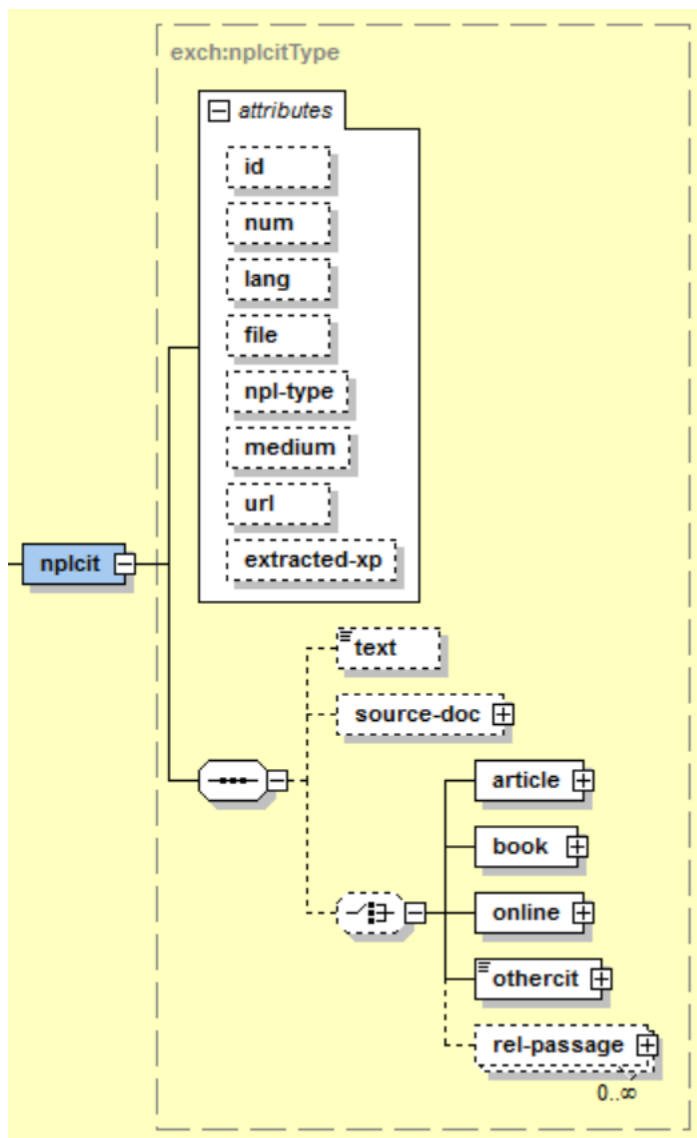
- *Element <patcit> may contain cited publications or cited applications*
Cited applications only when cited-phase="APP"
- *Attributes used to identify between cited publication and cited application are :*
 - "dnum" on <patcit> : copy of <document-id>
 - "dnum-type" on <patcit> : "publication number" or "application number"
- *Attribute used to identify sequence*
 - "num" sequence within <patcit> across "cited-phase"
- *Publication-date or application filing-date may be provided in <document-id><date>*
Applicant-name may be provided in <document-id>, represented in compliance with the CCD format
 - one applicant : <name>RICHTER DAVID L</name>
 - more than one applicant : <name>MACDOUGALL JAMES R, et al</name>
 - country available : <name>TRUONG TUONG K [US]</name>

NOTE that a date or a name can only be provided when the publication/application is present in DOCDB as a publication/application proper

- *Reference to PCT is exchanged in <exch:nplcit> in <text>*

```
<exch:citation cited-phase="SEA" cited-date="20071012" srep-office="EP" sequence="2">
  <nplcit num="1" npl-type="a">
    <text>See also references of WO 8000061A1</text>
  </nplcit>
</exch:citation>
```


8.18.5. Element <nplcit>



Enhancements release 2.5 – Introduction Rich Citation Data

- attribute “extracted-xp” – XP number extracted from the NPL citation, previously exchanged in `<corresponding-docs><ref-no>`
- element `<source-doc>` - patent number extracted from the NPL citation, previously exchanged in `<corresponding-docs><document-id>`
- element `<rel-passage>` is NOT supported at this level; `<rel-passage>` is supported one level up, in element `<citation>`

For a detailed structure of the element `<nplcit>`, please refer to the schema definition

NOTES on the CONTENTS

- "Poor" next to "Rich"

From release 2.5 onwards the product will support NPL citations in rich data structure for those patent issuing authorities that provide the EPO with NPL citations in rich structure. In order to ease the transition to the richer structured format rich citation data will be exchanged both in the richer structured format and in the unstructured format. At data loading time the rich citation data will be compiled into the current unstructured format for your convenience. This concept of structured and unstructured side by side will be maintained in the master database itself and can be supported for the foreseeable future.

NOTE that this emulation will only work one way – from rich structure to unstructured. Citation data that has been provided in the unstructured format by the supplier will NOT be emulated into rich format. Examples of "poor" next to "rich" in ANNEX XV References Cited – Usage Examples

- NPL citations in <text>

NPL citations might be exchanged in a string of free text. This string is exchanged in `<exch:nplcit><text>`, with the cited patent number or the NPL reference number embedded in the text. Patent-numbers and NPL-numbers embedded in the text will be extracted from the text and exchanged as follows:

- patent numbers in element `<source-doc>`
- NPL numbers in attribute "extracted-xp"

The functionality of element `<exch:nplcit>` is supporting original language characters sets in sub-element `<text>`. This means that the string of free text as exchanged in `<exch:nplcit><text>` may contain text in original language characters. These original language characters will be exchanged in the exact format as they have been captured in the master database - in numeric entities. The representation in numeric entities has been opted for reasons of maintainability and transferability. These numeric entities can be managed by any tool or software that supports Unicode and Asian character fonts.

- Attribute "npl-type"

Value in "npl-type"	Description
a	Abstract citation of no specific kind
b	Book citation
i	Biological abstract citation
c	Chemical abstract citation
e	Database citation
d	Derwent citation
p	Patent citation within NPL group
j	Patent Abstracts of Japan citation
s	Serial / Journal / Periodical citation
w	World Wide Web / Internet search citation

The mapping logic is:

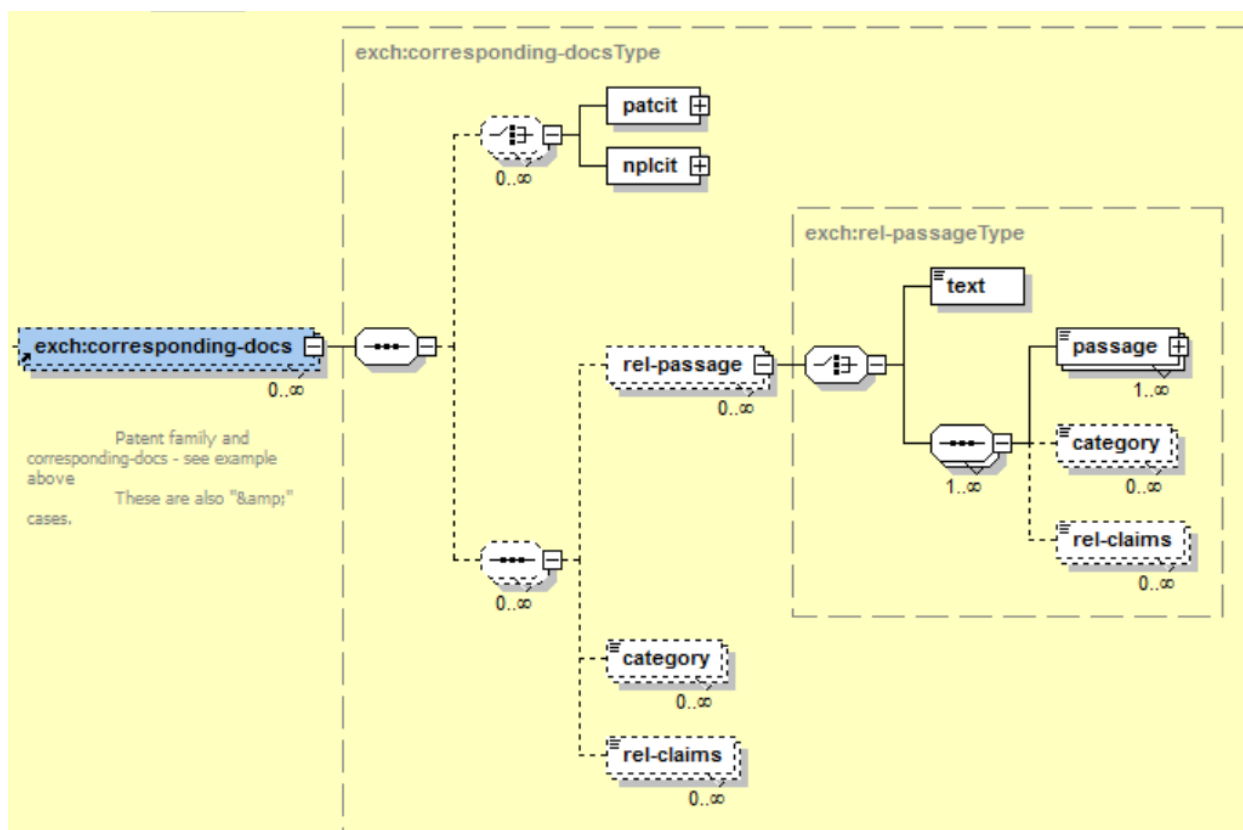
Value in "npl-type"	Start with
i	<nplcit npl-type> <article>
b	
c	
j	
s	
e	<nplcit npl-type> <online>
w	
d	
a	<nplcit npl-type> <text>
p	n.a.

There will not be any NPL <book> or <othercit> citations inside <exch:nplcit>

Refer to ANNEX – Mapping Rich Citation Data to ST.36

This annex is providing additional detail on the strategy that has been followed when mapping rich citation data properties to attributes and elements within <nplcit>.

8.18.6. Element <exch:corresponding-docs>



Enhancements release 2.5 – Introduction Rich Citation Data

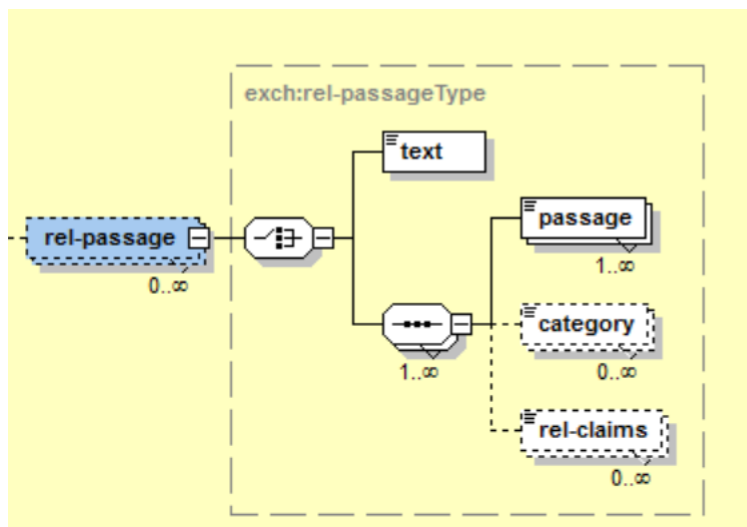
- full-blown `<patcit>` instead of `<document-id>`
- full-blown `<nplcit>` instead of `<ref-no>`
- `<rel-passage>` allowing for the exchange of passages, categories and related claims, refer to paragraph dedicated to `<rel-passage>`

NOTES on the CONTENTS

Element `<corresponding-docs>` now contains the so-called &-documents where before it would contain the patent-number or NPL number extracted from the NPL citation. These extracted numbers are now exchanged in `<nplcit>` in element `<source-doc>` and attribute "extracted-xp" respectively. When there is more than one &-document, then there will be multiple instances of `<corresponding-docs>` – one &-document in one instance of `<corresponding-docs>`

A so-called & document is a "document being a member of the same patent family or document whose contents have not been verified by the search examiner but are believed to be substantially identical to those of another document which the search examiner has inspected".

8.18.7. Element <rel-passage>



NOTES on the CONTENTS

- Element <rel-passage> may contain more than one related passage; individual related passages will not be wrapped separately inside <rel-passage>
- Child-element <category> will always come in a pair with its corresponding <rel-claims>; in case of more than one category, these will not be separated by commas
- Child-element <passage> may occur anywhere in <rel-passage>, the position of <passage> inside <rel-passage> is NO guarantee for its relationship vis-a-vis pairs of <category> and <rel-claims>
- In the case of EPO generated citation data, element <passage> may be populated in rich data format. NOTE that there may be occasions where you will find instances of <passage> in rich data format next to instances of <passage> in text format inside one <exchange-document>. See table on the next page
- In the case of EPO generated citation data in publications before 1994, element <rel-passage> may contain empty elements. See usage example on the next page. Refer to POINT of ATTENTION in § 8.19.2 for more detail

>

"Poor" data format versus "Rich" data format

Poor	Rich
<code><passage>* page 1, line 20 *</passage></code>	<code><passage> <line>20</line> <pp>1</pp> </passage></code>
<code><passage>* example 4 *</passage></code>	<code><passage> <example>4</example> </passage></code>
<code><passage>* compounds III,IV,V *</passage></code>	<code><passage> <compound>III, IV, V</compound> </passage></code>
<code>* page 1, column 7, line 5, paragraph 3 - page 2, column 8, line 6, paragraph 4; figure 4 *</code>	<code><passage> <ppf>1</ppf> <pp1>2</pp1> <paraf>3</paraf> <paral>4</paral> <linef>5</linef> <linel>6</linel> <colf>7</colf> <coll>8</coll> <figure>4</figure> </passage></code>

Usage Example

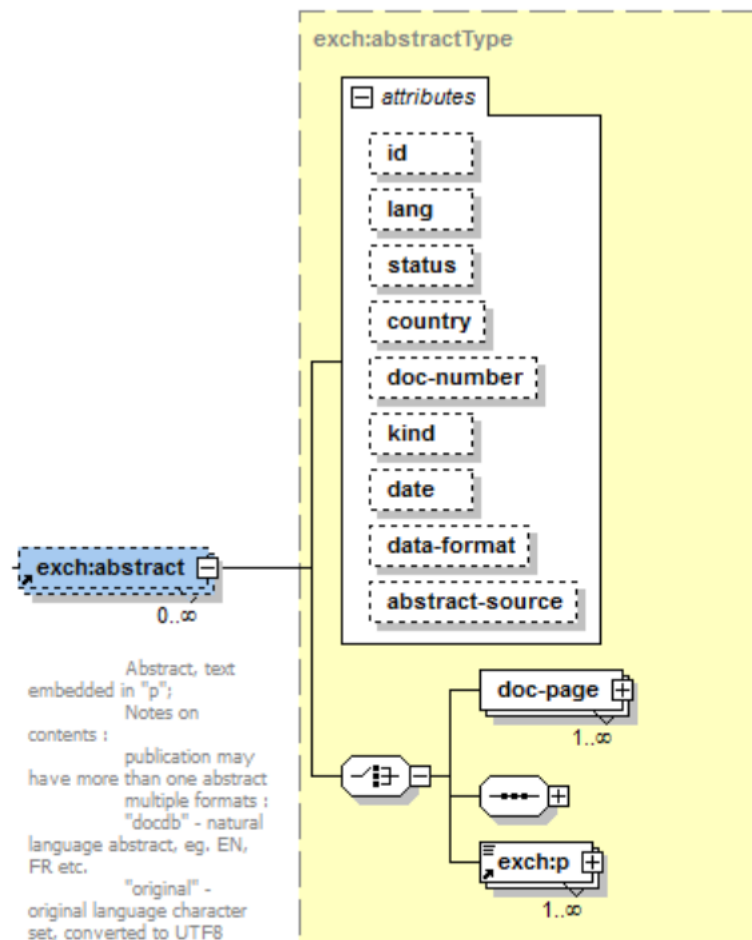
```

<exch:citation cited-phase="SEA" cited-date="20071005" srep-office="EP" sequence="7">
  <patcit num="7" dnum="DE2161506A1" dnum-type="publication number">
    <document-id doc-id="314107347">
      <country>DE</country>
      <doc-number>2161506</doc-number>
      <kind>A1</kind>
      <name>KERNFORSCHUNG GMBH GES FUER</name>
      <date>19730614</date>
    </document-id>
  </patcit>
  <rel-passage>
    <passage/>
    <category>A</category>
    <rel-claims/>
  </rel-passage>
  <category>A</category>
</exch:citation>

```

9. ELEMENT <exch:abstract>

This tag contains the abstract text. The text of the abstract is exchanged in <exch:p>.



Attributes used	Description
(*) country	authority-code of publication providing the abstract
(*) doc-number	document-number of publication providing the abstract
(*) kind	kind-code of publication providing the abstract
(*) date-publ	date of publication
lang	publication language
abstract-source	refer to "Notes on Contents"
lang	publication
data-format	refer to § 4.5 Data Format for description and details refer to ANNEX II Data Format for values and definitions
status	refer to § 4.6 Field Level Change Indicator

(*) only populated when <exch:abstract> is a child element of <patent-family>

Notes on Contents :

A publication may have more than one abstract :

- more than one source
- more than one language
- more than one data-format

Abstracts are keyed on language and source. When an abstract for same language and source arrives again, it is assumed to be an improvement and it will be replaced. Replacement of an abstract will trigger the publication for exchange.

Abstract Source	Description
National Office	Abstract as originally provided by the national office
Transcript	English transcript
Translation	English translation
EPO	Abstract in DE, FR or EN as provided with the EP publication
PAJ	Patent Abstract of Japan in the English Language

The EPO will make an effort to provide an abstract in the English language for the simple patent family. English language abstracts acquired by the EPO will be exchanged as "transcript" or "translation". The efforts of the EPO to acquire transcripts or translations do not cover the complete back-file.

The translation or transcript acquired by the EPO is added to the publication it was acquired for, not to the family. The addition of a translation or a transcript will ONLY trigger the publication it was added to, "abstract" being a component that is connected to the publication rather than to a family.

"Patent Abstracts of Japan" are the latest addition to the collection of abstracts that the EPO is entitled to disseminate.

Usage examples on the next page [not exhaustive]

- `<exch:exchange-document country="WO" doc-number="2018119471" kind="A1" doc-id="496326733" date-publ="20180628" family-id="61018009" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20181213" date-added-docdb="20180628" originating-office="EP" status="A">`
...
`<exch:abstract lang="en" data-format="docdba" abstract-source="national office">`
`<exch:p>The present disclosure is directed to the synthesis and application of an ethyl linalool derivative having unique and desired flavor and/or fragrant characteristics. Specifically, the compound is represented by Formula (I). The compound of Formula (I) can be employed alone or incorporated as fragrance or flavor ingredients in fragrance or flavor compositions. The present disclosure is also directed to consumer products comprising such derivatives and/or fragrance or flavor compositions.</exch:p>`
`</exch:abstract>`
`<exch:abstract lang="fr" data-format="docdba" abstract-source="national office">`
`<exch:p>La présente invention concerne la synthèse et l'application d'un dérivé d'éthyl-linalol ayant des caractéristiques uniques et souhaitées d'arôme et/ou de parfum. Plus particulièrement, le composé est représenté par la formule (I). Le composé de formule (I) peut être utilisé seul ou incorporé en tant qu'ingrédients de parfum ou d'arôme dans des compositions de parfum ou d'arôme. La présente invention concerne également des produits de consommation comprenant de tels dérivés et/ou de telles compositions de parfum ou d'arôme.</exch:p>`
`</exch:abstract>`
- `<exch:exchange-document country="KR" doc-number="20170070548" kind="A" doc-id="481300024" date-publ="20170622" family-id="59283201" is-representative="YES" date-of-last-exchange="20190620" date-of-previous-exchange="20170921" date-added-docdb="20170714" originating-office="EP" status="A">`
...
`<exch:abstract lang="ko" data-format="docdba" abstract-source="national office">`
`<exch:p>본 발명은 반도운 또는 액정 디스플레이 등에 사용되는 기판을 처리하기 위한 기판 처리 장치에 관한 것이다. 공용 챔버를 구비한 기판 처리 장치는; 로드락 챔버; 상기 로드락 챔버와 ꯀ합되고 내부에 진공로봇이 설치된 트랜스퍼 챔버 및 상기 트랜스퍼 챔버와 ꯀ합되는 2 이상의 프로세스 챔버를 각각 포함하는 복수의 클러스터 장치; 및 인접한 클러스터 장치 사이에 프로세스 챔버 기능을 수행하는 1 이상의 공용 챔버; 를 포함한다. 이에 의해; 클러스터 장치 내 장치 내 문제가 발생한 챔버 대신 비상으로 사용할 수 있어 전운 공정 과정을 유지할 수 있고; 문제가 발생한 클러스터 장치 내의 기판을 인접한 다른 클러스터 장치로 직접 이송시킬 수 있어 기판의 불량을 최소화 할 수 있다</exch:p>`
`</exch:abstract>`

10. ELEMENT <patent-family>

The objective of incorporating patent family information into DOCDB/XML ST.36 is to support the recipients of the exchange in their family building processes.

Patent family information is exchanged in : <exch:exchange-document><exch:patent-family>

The root-element <exch:exchange-document> is extended with an additional attribute "family-id".

The information supplied will reflect the EPO simple patent family. The EPO simple patent family is identical to the list "also published as" as displayed in esp@cenet. It is not to be confused with the INPADOC family that will give the extended family

The EPO simple patent family will contain :

- all family members in the simple patent family of the publication exchanged :
 - each application within the simple patent family
 - all publication-levels within the application
- indication which family member is the EPO allocated family representative
- an English language abstract, when available within the family

The business rules governing the family building process are internal to the EPO and not public.

For an introduction to the patent family concepts supported at the EPO, refer to:

<https://www.epo.org/searching-for-patents/helpful-resources/first-time-here/patent-families/docdb.html>

10.1. Family Identifier

Attribute "family-id" will be populated with the family-identifier, a 9 digit unique key.

Physically the simple patent family is identified by this 9 digit unique key.

Logically the simple patent family is identified by a priority picture of :

- all <exch:priority-claim>
- identified by <exch:priority-active-indicator> = Y
- in ascending order

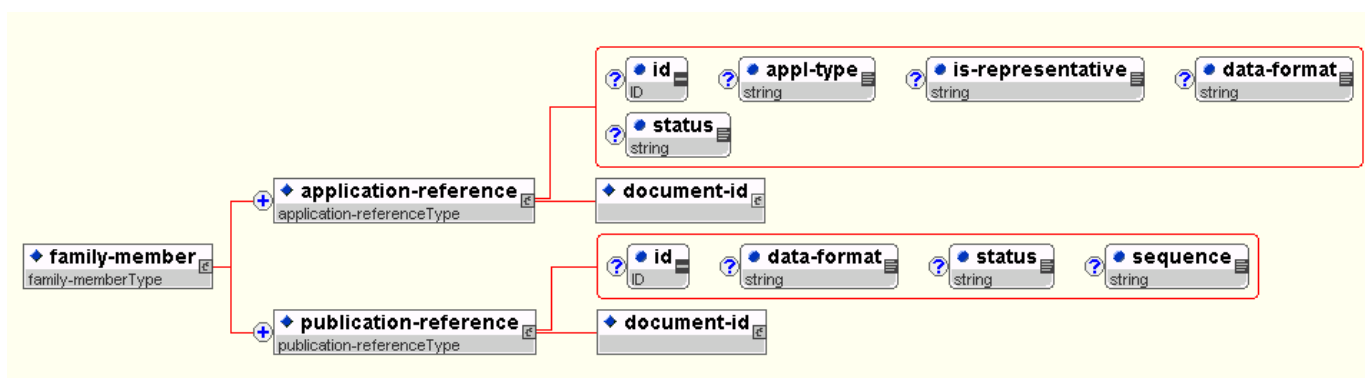
Attribute "family-id" will not be populated on instances of <exchange-document> identified by status value = 'D', 'CV' or 'DV'

10.2. Simple Patent Family

The EPO Simple Patent Family will be exchanged in one or more occurrences of <exch:family-member>. The application- and publication-numbers will be represented both in data-format="docdb" and data-format="epodoc".

Element <exch:publication-reference> has been extended with attribute "sequence" to be able to group corresponding representations of a given publication reference together.

Attribute "is-representative" on <exch:application-reference> will be populated with values "YES" or "NO" depending on whether the application in question is the EPO family-representative.



Element <exch:patent-family> will not be populated in instances of <exchange-document> identified by status value = 'D', 'CV' or 'DV'

10.3. English Language Abstract

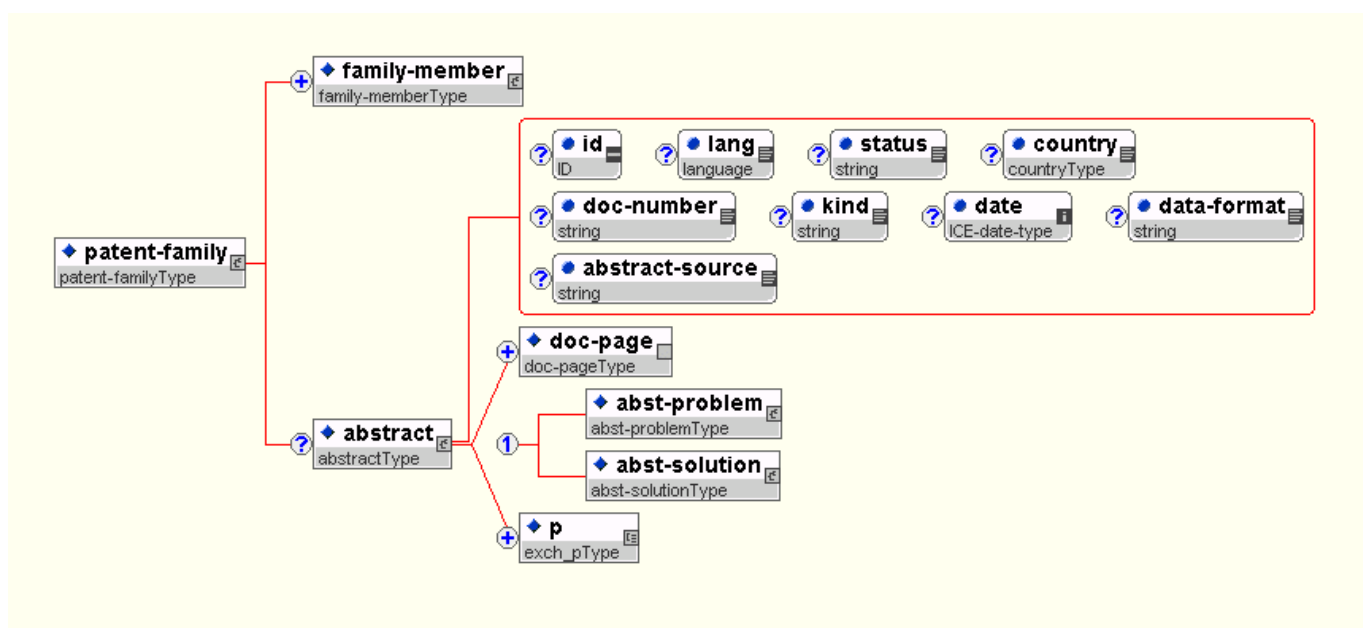
English language abstract is exchanged in <exch:patent-family><exch:abstract>.

There will be no English language abstract included in <exch:patent-family> when :

- the publication exchanged itself comes with an English language abstract in <exch:bibliographic-data><exch:abstract>
- there is no English language abstract available within the family

When there is more than one English language abstract available in the family, one abstract is selected based on *presumed* quality of the abstract-source :

1. abstract-source="transcript"
2. abstract-source="EPO"
3. abstract-source="national office" [major English speaking offices]
4. abstract-source="translation"



Attribute "abstract-source" will reflect the source of the abstract selected. Attributes "country", "doc-number" and "kind" will indicate which publication has supplied the abstract

Usage example on the next page

- ```

<exch:exchange-document country="DE" doc-number="112009001644" kind="B4" doc-id="494072417" date-
publ="20180524" family-id="41465023" is-representative="NO" date-of-last-exchange="20190620" date-of-
previous-exchange="20190418" date-added-docdb="20180514" originating-office="EP" status="A">
...
<exch:abstract lang="de" data-format="docdba" abstract-source="national office">
 <exch:p>Verfahren zum Bereitstellen eines anwenderdefinierten Namens, der einen aktuellen Standort
eines Benutzers eines mobilen Rechengerätes (10) repräsentiert, wobei das Verfahren Folgendes
beinhaltet:Speichern (430) eines anwenderdefinierten Namens, der mit einem Standort assoziiert werden soll,
zusammen mit die Assoziation anzeigenden Daten in einem Speicher, umfassend das Speichern einer Mehrzahl von
mit dem Standort zu assoziierenden anwenderdefinierter Namen;Empfangen (418) von Daten, die einen aktuellen
Standort des mobilen Rechengerätes anzeigen;Ermitteln (446), ob der aktuelle Standort des mobilen Rechengerätes
mit nur einem oder mit mehreren anwenderdefinierten Namen assoziiert ist;Ermitteln (458) eines anwenderdefinierten
Namens aus der Mehrzahl anwenderdefinierten Namen, wenn der aktuelle Standort mit mehreren Namen assoziiert
ist; undBereitstellen (470) des anwenderdefinierten Namens, der mit dem aktuellen Standort des mobilen
Rechengerätes assoziiert ist, einem Empfänger, der nicht das mobile Rechengerät ist, als den Standort des Benutzers
des mobilen Rechengerätes auf der Basis der Ermittlung, dass der aktuelle Standort des mobilen Rechengerätes mit
nur einem anwenderdefinierten Namen assoziiert ist; oderBereitstellen (470) des ermittelten anwenderdefinierten
Namens, einem Empfänger, der nicht das mobile Rechengerät ist, als den Standort des Benutzers des mobilen
Rechengerätes.</exch:p>
</exch:abstract>
<exch:patent-family>
 <exch:family-member>
 <exch:application-reference data-format="docdb" is-representative="NO">
 <document-id>
 <country>CN</country>
 <doc-number>200980133464</doc-number>
 <kind>A</kind>
 </document-id>
 </exch:application-reference>
 <exch:application-reference data-format="epodoc">
 <document-id>
 <doc-number>CN20098133464</doc-number>
 </document-id>
 </exch:application-reference>
 <exch:publication-reference data-format="docdb" sequence="1">
 <document-id>
 <country>CN</country>
 <doc-number>102132589</doc-number>
 <kind>A</kind>
 </document-id>
 </exch:publication-reference>
 <exch:publication-reference data-format="epodoc" sequence="1">
 <document-id>
 <doc-number>CN102132589</doc-number>
 </document-id>
 </exch:publication-reference>
 </exch:family-member>
 ...
 <exch:abstract lang="en" country="EP" doc-number="2434722" kind="A2" data-format="docdba" abstract-
source="EPO">
 <exch:p>A user's location may be tracked by tracking a device associated with the user. The
user's location may be published (e.g. on a website) using a user defined name or some other name that is not
related to the coordinates of the location based on the tracked location of the device. If published to a website, the
name may be uploaded to the website in a user-editable area of the website, which area may or may not be directed
to tracking the location of the user. The device may also be configured to trigger reminders based on whether the
device is leaving an area and/or based on whether the device is approaching a location based on the location's
membership in a class of locations (e.g. approaching a grocery store).</exch:p>
 </exch:abstract>
 </exch:patent-family>

```

## 10.4. Points of Attention

DOCDB/XML ST-36 exchange is a publication-based exchange :

- it will only exchange publications that have been affected by a change
- it will only provide family information for the publication exchanged
- it will only provide information on the family the publication featured in at the time of exchange

The DOCDB simple patent family is identified by priority picture. Any change to the priority picture will induce family movement.

If the priority picture has been changed for a given application, that application will move from one "source" family to another "target" family :

- ONLY the publications of THAT application have been affected by the change these publications will be exchanged
- publications in the "source" family have NOT been affected by the change publications in the "target" family have NOT been affected by the change those publications will NOT be exchanged
- for each publication affected by the change, the exchange will include family information in <exch:patent-family>
- publications affected by the change will feature in the "target" family at the time of exchange, only information related to the "target" family will be exchanged in <exch:patent-family>

However, the exchange does offer the tools to retrace the family that the publication featured in previously and detect family movement :

- the publication-reference of the publication exchanged
- attribute "status" on application-reference and priority-claim

The publication-reference is a UNIQUE entity

- a publication can only feature in ONE family and one family only
- family included in the weekly exchange is the publication's current family

To retrace the family that the publication featured in previously :

- access with publication given in weekly exchange
- family retrieved is "source" family
- family in weekly exchange is "target" family
- compare both images to detect any changes

The attribute "status" can also help identifying family movement.

Within the constraints of the <exch:exchange-document> itself the values of

attribute "status" provided on <exch:application-reference> and <exch:priority-claim> might indicate family movement :

- when attribute "status" has **not** been populated, not on <exch:application-reference> and not on <exch:priority-claims>, the publication has **not** moved family
- when attribute "status" **has** been populated on <exch:application-reference> or on <exch:priority-claim>, the publication *may* have moved family

NOTE THAT :

The family identifier should not be used to detect family movement. The family identifier is not a functional key. It is a derived key, introduced for technical purposes.

The family-identifier is unique within the database, once used it will never be re-used, but its value cannot be guaranteed to be stable.

The family identifier in itself does not have any significance other than providing a convenient handle to the simple patent family. All publications identified by the same family identifier are members of the same simple patent family.

## 10.5. Front File versus Back File

Patent family information will be exchanged in element <exch:patent-family>, directly branching off the root-element <exch:exchange-document>.

Due to technical constraints and for reasons of sheer volume, this element will not be populated in the back-file. The back-file will allow for the retro-active building of families through the use of attribute "family-id". The attribute "family-id" on root-element <exch:exchange-document> will be supported both in front-file and back-file exchanges.

## 11. PACKAGING

With the deployment of DOCDB/XML release 2.0, the packaging strategy has been revised with the objective to give the recipient of the product the option to give priority to new publications that are being exchanged for the first time over updates of publications that have been exchanged before.

### 11.1. General

The exchange has been split up by exchange status into a number of dedicated archives or "packages" :

- dedicated package for `Amend`
  - status="A" - publications that have been updated
- dedicated package for `CreateDelete`
  - status="C" - publications that have been added
  - status="D" - publications that have been deleted
  - status="D" / status="C" - publications that have been "re-keyed"
  - status="CV" / status="DV" - withdrawn publications

Each of these dedicated packages has been split into a number of "package-files" :

- on publication-date
- within publication-date on country
- within country on size
- sorted on publication-number

Each of these dedicated packages will come with

- its own packaging-index, a table of contents :
  - enabling to navigate through the exchange and trace information
  - specifying which ranges of documents can be found in what package-file
- its own reports on data coverage and statistics

Within each of these dedicated packages, the packaging strategy of previous releases has been retained, with only an impact on the naming convention.



## 11.2. Naming convention

The naming convention adhered to is :

- individual packages
  - docdb\_xml\_CCYYww\_Amend
  - docdb\_xml\_CCYYww\_CreateDelete
- package-files within each package
  - DOCDB-CCYYww-Amend-PubDateCCYYmddAndBefore
  - DOCDB-CCYYww-CreateDelete-PubDateCCYYMMDD
  - DOCDB-CCYYww-CreateDelete-PubDateCCYYmddAndBefore
  - DOCDB-CCYYww-DeleteRekey-PubDateCCYYmddAndBefore

Significance of individual identifiers :

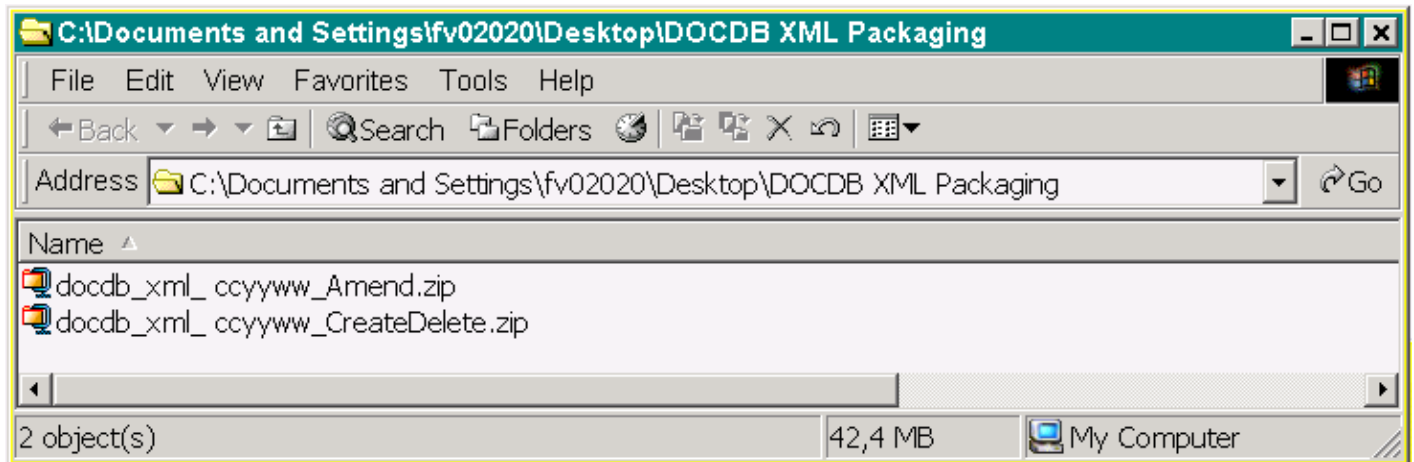
- CCYYww - week of exchange
- Amend - publications that have been subject to an update
- CreateDelete - publications that have been subject to a create or a delete
  - new publications that are being exchanged for the first time
  - publications that have been deleted
  - publications that have been "re-keyed" [ delete OLD, add NEW ]
  - withdrawn publications
- DeleteRekey - publications that have been part of a complex re-key  
See also *§ 5.4 – Sequence of Processing Records*
- PubDateCCYYmddAndBefore
  - publications in this file have been added to the master database on or before the date of production
  - CCYYMMDD is the date of production of the actual exchange
- PubDateCCYYmdd
  - publications in this file have been added to the master database on or before the date of production
  - CCYYMMDD is the actual date of publication of the documents in the file

Each package-file will be suffixed with an additional identifier to indicate further subdivisions :

- DOCDB-CCYYww-Amend-PubDateCCYYmddAnBefore-cc-nnnn.xml
- DOCDB-CCYYww-CreateDelete-PubDateCCYYmddAnBefore-cc-nnnn.xml
- DOCDB-CCYYww-CreateDelete-PubDateCCYYMMDD-cc-nnnn.xml
- DOCDB-CCYYww-DeleteRekey-PubDateCCYYmddAnBefore-cc-nnnn.xml

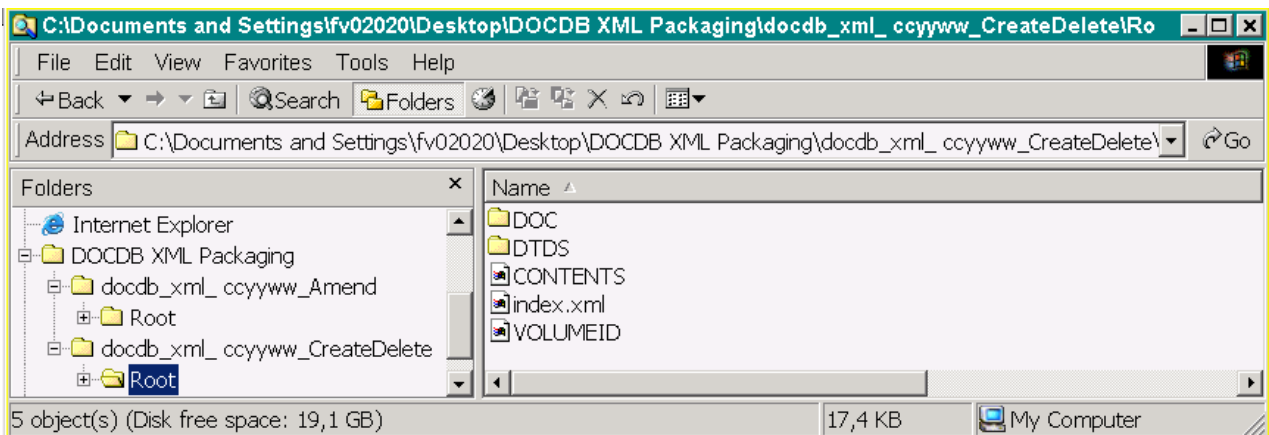
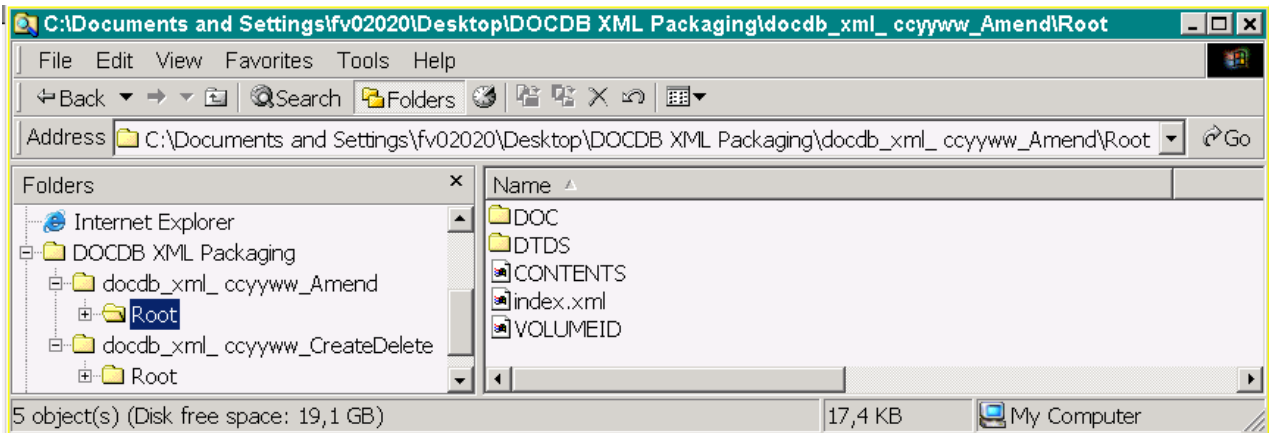
### 11.3. Zipping Strategy

The exchange will be supplied in a number of zipped archives:



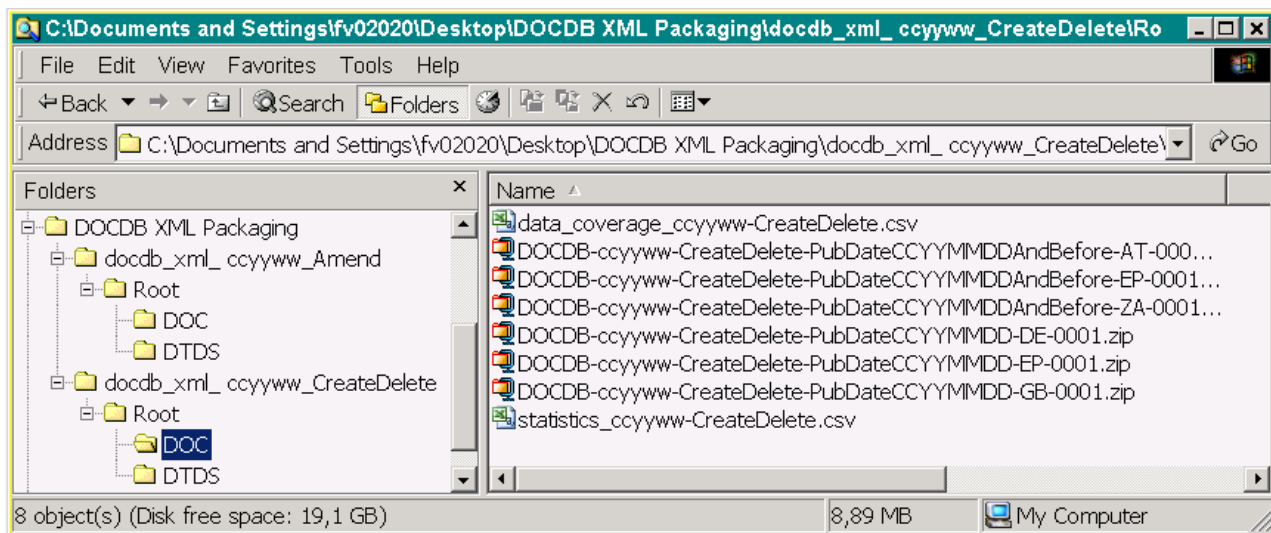
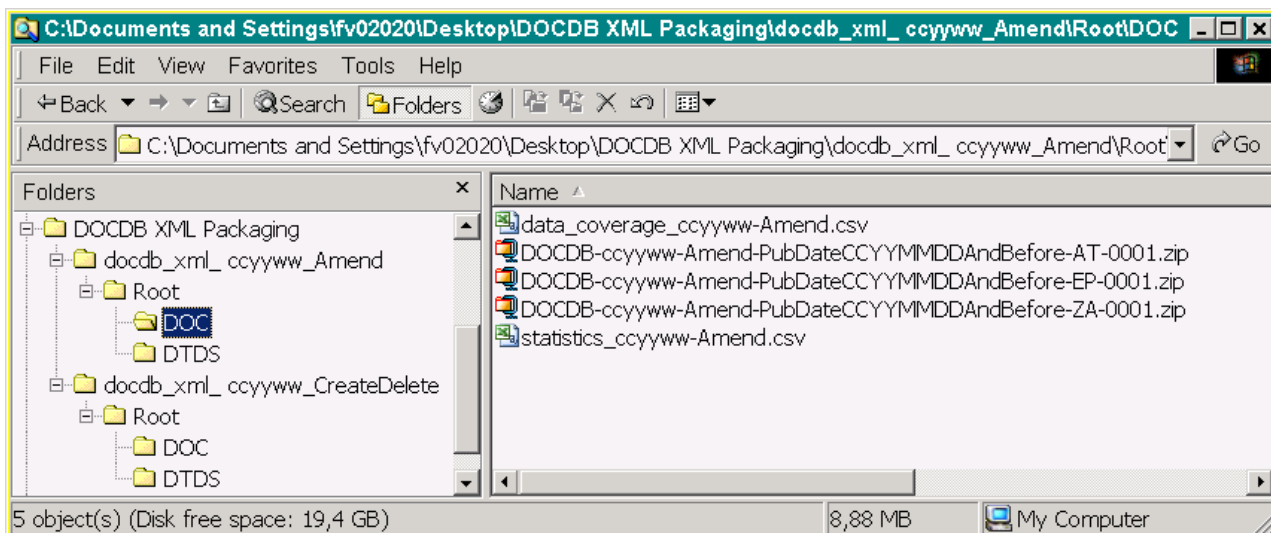
Unzipping each archive will reveal the root

## 11.4. Root

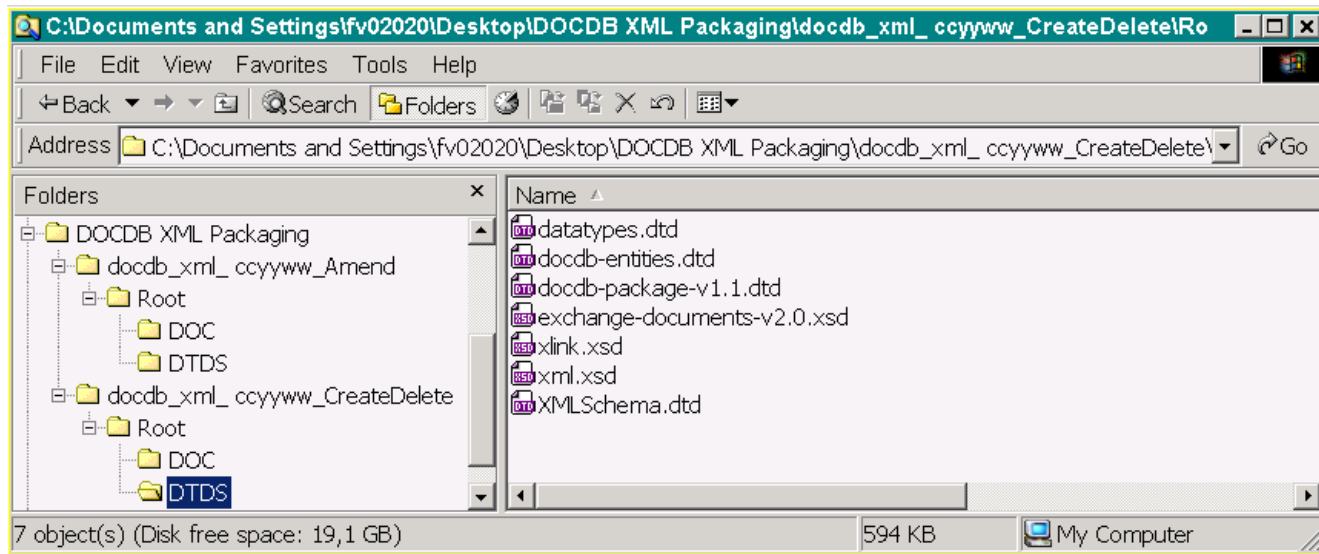
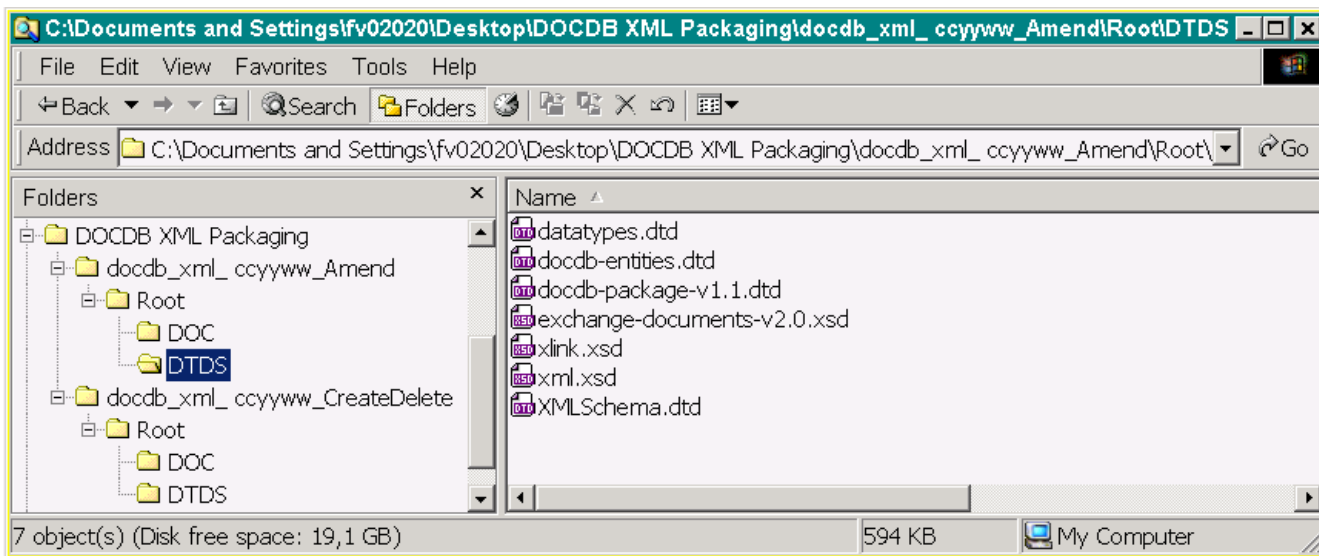


- DOC contains payload data in .xml files, each .xml file zipped
- DTDS contains DTDs and XML Schemas necessary to validate the .xml files
- CONTENTS contains a description of the contents of the product
- index.xml gives a list of the files included in the volume
- VOLUMEID will contain identifying tag of a minimum of 23 characters

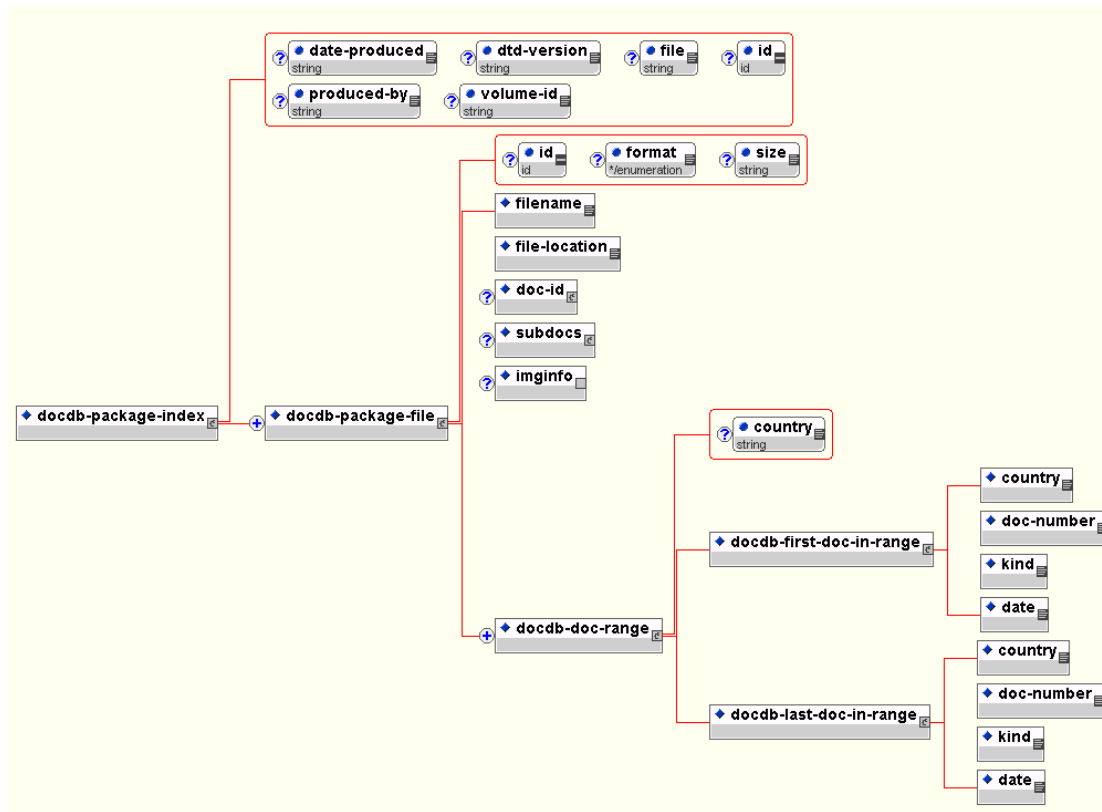
### 11.5. Directory DOC



### 11.6. Directory DTDS



### 11.7. INDEX File



Package-index covers one exchange period, in general one week's worth of updates

- date-produced      date this exchange was produced at the EPO
- dtd-version        version of the dtd or schema
- file                year/week-number
- produced-by        "EP"
- volume-id         see section VOLUME-id

Package-file covers one instance of super-root <exchange-documents>

- attributes         attributes used are "format" and "size"
- file-name         refer to section Naming Convention
- doc-range         for each country : first and last document in range

**11.8. VOLUME-id**

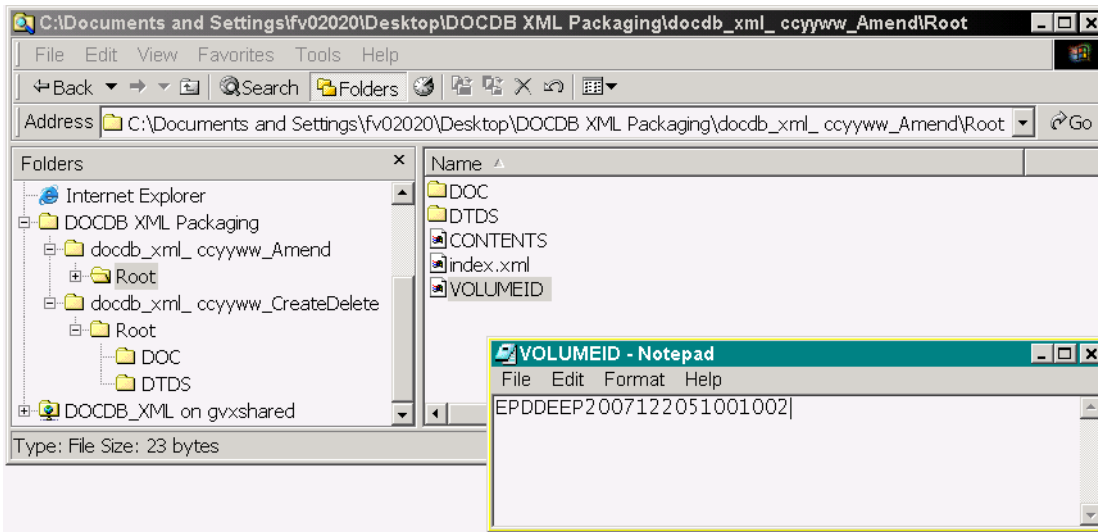
Identifying tag with a minimum length of 23 characters

| Position | Name               | Description                                                                                                                               |
|----------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1-2      | Responsible Office | EP                                                                                                                                        |
| 3-5      | Batch type         | DDE - DocDb Exchange<br>DDB - DocDb Backfile                                                                                              |
| 6-7      | Author             | EP                                                                                                                                        |
| 8-11     | Year               | Four-digit calendar year of issue                                                                                                         |
| 12-15    | Month and Day      | Format is MMDD. If this information is not available/relevant, it will contain the value 0000.                                            |
| 16-17    | Week               | The week number of production of the package (in format WW). If this information is not available/relevant, it will contain the value 00. |
| 18-20    | Volume Number      | A three digit sequential number starting from 001                                                                                         |
| 21-23    | Volume Total       | A three digit number indicating how many volumes (CD's, DVD's, etc...) are in the same batch.                                             |

Usage Examples - assuming exchange week 51/2007 - on next page

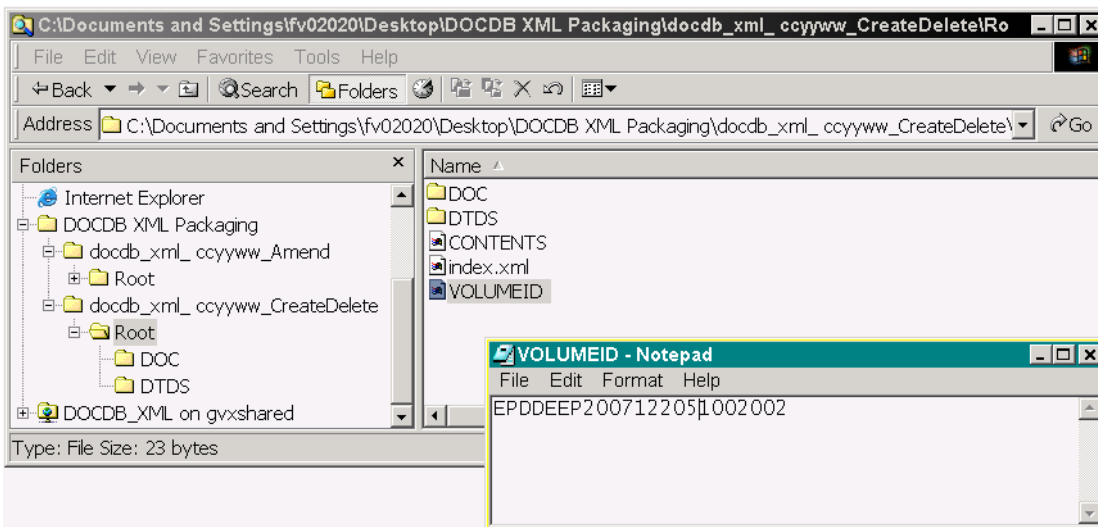
docdb\_xml\_200751\_Amend

- o EP - responsible office
- o DDE - DocDb Exchange, weekly front file
- o EP - author
- o 20071220 - date of exchange
- o 51 - week of exchange
- o 001002 - volume 1 of 2 packages



docdb\_xml\_200751\_CreateDelete

- o 002002 - volume 2 of 2 packages





## 11.9. Sequence of Processing

Sequence of processing the packages is as follows:

1. AMEND package `docdb_xml_CCYYww_Amend`  
As soon as it has been published – beginning of the week
2. CREATE package `docdb_xml_CCYYww_CreateDelete`  
As soon as it has been published – on the Thursday

Inside the CREATE package:

- 1) files `DOCDB-CCYYww-DeleteRekey-PubDateCCYYmddAndBefore`
- 2) files `DOCDB-CCYYww-CreateDelete-PubDateCCYYmddAndBefore`

Files `DOCDB-CCYYww-CreateDelete-PubDateCCYYMMDD` are not bound by sequence

## 12. ANNEX I - Mapping DOCDB XML to IFD and ST.30

### 12.1. Mapping DOCDB/XML Data-Tags to IFD and ST.30 Data-Tags

| Element / Attribute                                   | Sub-element                   | Short description                              | IFD tag | ST30 tag         |
|-------------------------------------------------------|-------------------------------|------------------------------------------------|---------|------------------|
| exchange-document                                     | ATT date-of-last-exchange     | date of exchange                               |         |                  |
|                                                       | ATT date-of-previous-exchange | date publication was previously exchanged      |         |                  |
|                                                       | ATT date-creation             | date publication was first added               |         |                  |
|                                                       | ATT country                   | publishing country or organisation             | 010     | 190              |
|                                                       | ATT doc-number                | number of document                             | 030     | 110              |
|                                                       | ATT kind                      | kind of publication                            | 020     | 221              |
|                                                       | ATT date-publ                 | date of publication                            | 060     | A40              |
|                                                       | ATT is-representative         | Y/N publication of granted / filed application | -       | A10 [ 1st byte ] |
| exch:publication-reference<br>ATT data-format="docdb" | country                       | publishing country or organisation             | 010     | 190              |
|                                                       | doc-number                    | number of document                             | 030     | 110              |
|                                                       | kind                          | kind of publication                            | 020     | 221              |
|                                                       | date                          | date of publication                            | 060     | A40              |
| ATT data-format="original"                            | doc-number                    | number of document                             | -       | -                |
| ATT data-format="epodoc"                              | doc-number                    | number of document                             | -       | -                |
| exch:preceding-publication-date                       | date                          | date of preceding publication                  | 150     | -                |
| exch:date-of-coming-into-force                        | date                          | date of coming into force DE utility           | 151     | -                |
| exch:extended-kind-code                               | text                          | extended kind-code DE or WO                    | 021     | -                |
| exch:classification-ipc                               | main-classification           | when qualified by 'A'                          | 070     | 511              |

| Element / Attribute                 | Sub-element                  | Short description                           | IFD tag          | ST30 tag       |
|-------------------------------------|------------------------------|---------------------------------------------|------------------|----------------|
|                                     | further-classification       | when qualified by 'B'                       | 070              | 512            |
|                                     | additional-info              | when qualified by '-'                       | 070              | 513            |
|                                     | linked-indexing-code-group   | when qualified by values 'J' through 'Y'    | 070              | 514            |
|                                     | unlinked-indexing-code-group | when qualified by 'Z'                       | 070              | 515            |
|                                     | text                         | when qualified by none of the above         | 070              | 510            |
| <b>exch:classification-ipcr</b>     | text                         | IPC/8 in 50 byte string                     | 073 / 074        | 516            |
| <b>exch:classification-national</b> | text                         | domestic classification supplied by NO      | 071              | -              |
| <b>exch:application-reference</b>   | country                      | country or organisation                     | -                | A21            |
| ATT data-format="docdb"             | doc-number                   | number of application                       | 040              | 210            |
|                                     | kind                         | kind of application                         | 170              | 221            |
|                                     | date                         | date of filing                              | 050              | 220            |
| ATT data-format="epodoc"            | doc-number                   | number of application                       | -                | -              |
| ATT data-format="original"          | doc-number                   | number of application                       | 900              | -              |
| ATT "is-representative"             |                              |                                             |                  | A20 (1st byte) |
| <b>exch:patent-classification</b>   | classification-scheme        | EC and ICO allocated by EPO                 | 072              | 520            |
|                                     | classification-symbol        | DOCUS allocated by USPTO                    | -                | -              |
|                                     |                              | FI and Fterm allocated by JPO               | -                | -              |
| <b>exch:language-of-filing</b>      | language                     | language of filing                          | 132              | 150            |
| <b>exch:language-of-publication</b> | language                     | language of publication                     | 132              | 151            |
| <b>exch:priority-claim</b>          | country                      | country or organisation                     | 080              | 330            |
| ATT sequence="#" [ 001 - 999 ]      | doc-number                   | number of priority application              | 090              | 310            |
| ATT data-format="docdb"             | kind                         | kind of priority application                | 180 [ 1st byte ] | A31            |
|                                     | date                         | date of filing priority application         | 100              | 320            |
|                                     | priority-linkage-type        | eg. "for addition", "for continuation", ... | 180 [ 2nd byte ] | A32            |

| Element / Attribute                                          | Sub-element                       | Short description                        | IFD tag    | ST30 tag |
|--------------------------------------------------------------|-----------------------------------|------------------------------------------|------------|----------|
|                                                              | priority-active-indicator         | Y/N [ for internal EPO use ]             | -          | -        |
| ATT sequence="#" [ 001 - 999 ]<br>ATT data-format="epodoc"   | doc-number                        | number of priority application           | -          | -        |
| ATT sequence="#" [ 001 - 999 ]<br>ATT data-format="original" | doc-number                        | number of priority application           | 901        | -        |
| <b>exch:applicant</b>                                        |                                   |                                          |            |          |
| ATT sequence="#" [ 001 - 999 ]<br>ATT data-format="docdb"    | applicant-name                    | name after formalisation                 | 121        | 710      |
|                                                              | residence                         | country of residence                     | 122        | 714      |
| ATT sequence="#" [ 001 - 999 ]<br>ATT data-format="docdba"   | applicant-name                    | name before formalisation                | 120        | -        |
|                                                              | address                           | address, unstructured                    | 123        | -        |
| ATT sequence="#" [ 001 - 999 ]<br>ATT data-format="original" | applicant-name                    | name in original language characters     | 973        | -        |
| <b>exch:inventor</b>                                         |                                   |                                          |            |          |
| ATT sequence="#" [ 001 - 999 ]<br>ATT data-format="docdb"    | inventor-name " <b>docdb</b> "    | name after formalisation                 | 111        | 720      |
|                                                              | residence                         | country of residence                     | 112        | 722      |
| ATT sequence="#" [ 001 - 999 ]<br>ATT data-format="docdba"   | inventor-name " <b>docdba</b> "   | name before formalisation                | 110        | -        |
|                                                              | address                           | address, unstructured                    | 113        | -        |
| ATT sequence="#" [ 001 - 999 ]<br>ATT data-format="original" | inventor-name " <b>original</b> " | name in original character set           | 972        | -        |
| <b>exch:designation-of-states</b>                            | PCT - national                    | "designated country"                     | 081        | -        |
|                                                              | PCT - regional                    | "designated country for regional patent" | 082        | -        |
|                                                              | EPC - contracting states          | "designated country"                     | 081        | -        |
|                                                              | EPC - extension states            | "extension states"                       | 083        | -        |
| <b>exch:invention-title</b>                                  |                                   |                                          |            |          |
| ATT lang="language"                                          |                                   | title of the invention                   | 130<br>133 | 541      |

| Element / Attribute                      | Sub-element                                                  | Short description                        | IFD tag | ST30 tag |
|------------------------------------------|--------------------------------------------------------------|------------------------------------------|---------|----------|
| ATT data-format = "docdb"                |                                                              |                                          |         |          |
| ATT data-format = "original"             |                                                              | title in original language character set | 954     | -        |
| <b>exch:dates-of-public-availability</b> | see ANNEX IV- Concordance Dates of Availability - ST-30 tags |                                          |         |          |

## 12.2. Mapping DOCDB Application Kind-Codes to IFD Kind-Codes

|                     | Publication Country | DOCDB Kind-Code | INPADOC Kind-Code |
|---------------------|---------------------|-----------------|-------------------|
| PCT application     | WO                  | 'W'             | 'A'               |
| Translation         | AT                  | 'T'             | 'EP'              |
|                     | BE                  |                 |                   |
|                     | ES                  |                 |                   |
|                     | IT                  | 'T'             | 'T'               |
|                     | any other           | 'T'             | 'A'               |
| Design              | any                 | 'F'             | 'D'               |
| "Exotic" Kind-Codes | any                 | 'D'             | 'A'               |
|                     |                     | 'K'             |                   |
|                     |                     | 'L'             |                   |
|                     |                     | 'M'             |                   |
|                     |                     | 'N'             |                   |

## 12.3. Mapping DOCDB Priority Kind-Codes to IFD Kind-Codes

Refer to ANNEX III - Linkage Type

Access Concordance Table Linkage Type as presented in ANNEX III with information provided in

<exch:priority-claim> :

- <document-id><country>
- <exch:priority-linkage-type>

to retrieve the INPADOC priority kind-code equivalent to the DOCDB kind-code [ IFD tag 180 ]

When priority kind-code = 'W' :

```
<exch:priority-claim>
 <document-id>
 <country>...</country>
 <kind >W</kind >
 <doc-number> ... </doc-number>
 </document-id>
 ...
</exch:priority-claim>
```

retrieve the equivalent INPADOC priority kind-code by accessing this table with country = "PCT" and the value of <exch:priority-linkage-type>.

### 13. ANNEX II - Data Format

| Entity             | "docdb" | "docdba" | "original" | "epodoc" |
|--------------------|---------|----------|------------|----------|
| Publication-number | ü       |          | ü          | ü        |
| Application-number | ü       |          | ü          | ü        |
| Priority-number    | ü       |          | ü          | ü        |
| Applicant-name     | ü       | ü        | ü          |          |
| Inventor-name      | ü       | ü        | ü          |          |
| Title              |         | ü        | ü          |          |
| Abstract           |         | ü        | ü          |          |

Note that data in original language character sets have been converted into UTF8 prior to exchange.

Note that data-format="epodoc" will be exchanged in <doc-number> in one concatenated string :

- country
- number, left adjusted
- kind-code, optional

Sequence-numbering across data-formats "docdb" and "epodoc" are guaranteed to be consistent.

Refer to § 4.5 Data Format.

| Data Format          | Description                                                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data format=docdb    | Standardised according to the prime DOCDB standardisation rules                                                                                            |
| data format=docdba   | Standardised according to the secondary DOCDB standardisation rules . These data items are currently referred to as "non-standardised" or "unstandardised" |
| data format=original | Stored as supplied by the provider                                                                                                                         |
| data format=epodoc   | Standardised according to the prime EPODOC standardisation rules                                                                                           |

## 14. ANNEX III - Linkage Type

### 14.1. List of values and descriptions

| AUTHORITY | LINKAGE TYPE | DESCRIPTION                                            |
|-----------|--------------|--------------------------------------------------------|
| **        | <space>      | Default value                                          |
| **        | T            | Technical priority                                     |
| PCT       | A            | PCT application claimed under the Paris Convention     |
| PCT       | W            | PCT application claimed as a regional filing           |
| PCT       | 0            | Prior application claimed for an addition              |
| PCT       | 1            | Prior application claimed for continuation             |
| PCT       | 2            | Prior application claimed for continuation in part     |
| PCT       | 3            | Prior application claimed for a division               |
| AT        | A            | Cited application changed from patent to utility       |
| AT        | U            | Cited application changed from utility to patent       |
| AU        | 0            | Prior application claimed for an addition              |
| AU        | 3            | Prior application claimed for a division               |
| BA        | 3            | Prior application claimed for a division               |
| BR        | 0            | Prior application claimed for an addition              |
| BR        | 3            | Prior application claimed for a division               |
| BG        | 0            | Prior application claimed for an addition              |
| CA        | 3            | Prior application claimed for a division               |
| CA        | 4            | Prior application claimed for a division of a division |
| CA        | 5            | Claimed application is a supplementary disclosure      |
| CH        | 0            | Prior application claimed for an addition              |
| CH        | 3            | Prior application claimed for a division               |
| CN        | A            | PCT application claimed under the Paris Convention     |
| CN        | W            | PCT application claimed as a regional filing           |
| CN        | 0            | Prior application claimed for an addition              |
| CN        | 3            | Prior application claimed for a division               |
| CS        | 3            | Prior application claimed for a division               |
| CZ        | 3            | Prior application claimed for a division               |
| DE        | I            | Patent application claimed for utility model           |
| DE        | W            | Widerrechtliche Entnahme claimed Application           |
| DE        | 1            | Domestic priority claimed for patent                   |
| DE        | 2            | Domestic priority claimed for utility model            |
| DE        | 3            | Prior application claimed for a division               |



| AUTHORITY   | LINKAGE TYPE | DESCRIPTION                                       |
|-------------|--------------|---------------------------------------------------|
| DK          | 0            | Prior application claimed for an addition         |
| DK          | 3            | Prior application claimed for a division          |
| DK          | 4            | Prior application claimed for 2 division          |
| DK          | 5            | Claimed application is a supplementary disclosure |
| EP-regional | 3            | EP application claimed as a regional filing       |
| EP          | 3            | Prior application claimed for a division          |
| ES          | 3            | Prior application claimed for a division          |
| FI          | 3            | Prior application claimed for a division          |
| FR          | 3            | Prior application claimed for a division          |
| GB          | 3            | Prior application claimed for a division          |
| HK          | 3            | Prior application claimed for a division          |
| HU          | 3            | Prior application claimed for a division          |
| IE          | C            | Cognate application                               |
| IE          | 0            | Prior application claimed for an addition         |
| IE          | 3            | Prior application claimed for a division          |
| IL          | 0            | Prior application claimed for an addition         |
| IL          | 3            | Prior application claimed for a division          |
| IN          | C            | Cognate application                               |
| IN          | 0            | Prior application claimed for an addition         |
| IN          | 3            | Prior application claimed for a division          |
| JP          | A            | Cited application changed from patent to utility  |
| JP          | U            | Cited application changed from utility to patent  |
| JP          | 1            | Domestic priority                                 |
| KR          | A            | Cited application changed from patent to utility  |
| KR          | U            | Cited application changed from utility to patent  |
| KR          | 0            | Prior application claimed for an addition         |
| KR          | 3            | Prior application claimed for a division          |
| LU          | 3            | Prior application claimed for a division          |
| LV          | 3            | Prior application claimed for a division          |
| MX          | A            | Cited application changed from patent to utility  |
| MX          | U            | Cited application changed from utility to patent  |
| NL          | 3            | Prior application claimed for a division          |
| NO          | 3            | Prior application claimed for a division          |
| NZ          | C            | Cognate application                               |
| NZ          | 0            | Prior application claimed for an addition         |
| NZ          | 3            | Prior application claimed for a division          |

| AUTHORITY | LINKAGE TYPE | DESCRIPTION                                              |
|-----------|--------------|----------------------------------------------------------|
| PH        | 1            | Prior application claimed for continuation               |
| PH        | 2            | Prior application claimed for continuation in part       |
| PH        | 3            | Prior application claimed for a division                 |
| PL        | 0            | Prior application claimed for an addition                |
| SU        | 6            | Domestic priority                                        |
| TR        | 3            | Prior application claimed for an addition                |
| TR        | 6            | Domestic priority                                        |
| TW        | 0            | Prior application claimed for an addition                |
| UA        | 3            | Prior application claimed for a division                 |
| US        | B            | Claimed for continuation [abandoned]                     |
| US        | C            | Claimed for continuation in part [abandoned]             |
| US        | D            | Claimed for a division [abandoned]                       |
| US        | R            | Request for re-examination number                        |
| US        | 1            | Prior application claimed for continuation               |
| US        | 2            | Prior application claimed for continuation in part       |
| US        | 3            | Prior application claimed for a division                 |
| US        | 4            | Prior application claimed for a substitute               |
| US        | 5            | Claimed application is an original reissue serial number |
| YU        | 3            | Prior application claimed for a division                 |
| YU        | 6            | Domestic priority                                        |
|           |              |                                                          |

## 14.2. Linkage-type on PCT priorities

PCT priorities can be claimed:

- as a genuine priority – under the “Paris Convention”
- as a regional filing – indicating “national entry”

The fact that a PCT is being claimed as a “regional filing” is communicated in different ways – depending on the authority providing the information:

- by providing the PCT in INID [86]
- by providing the PCT in INID [30]
- by providing the PCT in INID [62] or [63] – as “Related Application Data”
- by not providing the PCT at all

To overcome these constraints and dependencies in determining whether the PCT is

- claimed under the Paris Convention linkage-type = ‘A’
- claimed as a “regional filing” linkage-type = ‘W’

the database update process has been equipped with an authority-independent algorithm that is based on the interval between application-date and priority-date:

| Rule                                            | Interval                  | Value |
|-------------------------------------------------|---------------------------|-------|
| PCT date is the application-date                | -                         | ‘W’   |
| PCT date is within period for Paris Convention  | within 12 months + 3 days | ‘A’   |
| PCT date is outside period for Paris Convention |                           | ‘W’   |

The algorithm has been amended to suppress the option to not support a linkage-type at all. Not supporting the linkage-type on PCT priorities was having a negative impact on the patent family building – particularly in scenarios catering for the proper management of US abandoned applications that are being claimed for a continuation or a division.

**15. ANNEX IV - Concordance Dates-of-public-availability**

|                              |                                                                                                                                                 |                                                                                                                                                              |     |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| dates-of-public-availability | gazette-reference                                                                                                                               | date of announcement of filed application in gazette                                                                                                         | A41 |
|                              | abstract-reference                                                                                                                              | date of separate publication of an abstract                                                                                                                  | A42 |
|                              | supplemental-srep-reference                                                                                                                     | date of separate publication of a supplementary search report                                                                                                | A43 |
|                              | gazette-pub-announcement                                                                                                                        | date of announcement of a granted application in a gazette                                                                                                   | A44 |
|                              | modified-first-page-pub                                                                                                                         | date of separate publication of a modified first page report                                                                                                 | A45 |
|                              | modified-complete-spec-pub                                                                                                                      | date of separate publication of a modified complete specification report                                                                                     | A46 |
|                              | unexamined-not-printed-without-grant                                                                                                            | date of making available to the public by viewing or copying on request, an unexamined document on which no grant has taken place on or before the said date | 410 |
|                              | examined-not-printed-without-grant                                                                                                              | date of making available to the public by viewing or copying on request, an examined document on which no grant has taken place on or before the said date   | 420 |
|                              | unexamined-printed-without-grant                                                                                                                | date of publication by printing or similar process of an unexamined document on which no grant has taken place on or before the said date                    | 430 |
|                              | examined-printed-without-grant                                                                                                                  | date of publication by printing or similar process of an examined document on which no grant has taken place on or before the said date                      | 440 |
|                              | printed-with-grant                                                                                                                              | date of publication by printing or similar process of document on which grant has taken place on or before the said date                                     | 450 |
|                              | claims-only-available                                                                                                                           | date of publication by printing or similar process of the claims only of a document                                                                          | 460 |
| not-printed-with-grant       | date of making available to the public by viewing or copying on request of a document on which grant has taken place on or before the said date | 470                                                                                                                                                          |     |

**16. ANNEX V - Concordance Language Codes**

| Language Code DOCDB | Language Code ISO | Description   |
|---------------------|-------------------|---------------|
| BS                  | BOS               | Bosnian       |
| CZ                  | CZE               | Czech         |
| DA                  | DAN               | Danish        |
| DE                  | GER               | German        |
| EL                  | ELL               | Greek (Helen) |
| EN                  | ENG               | English       |
| ES                  | SPA               | Spanish       |
| ET                  | EST               | Estonian      |
| FI                  | FIN               | Finnish       |
| FR                  | FRE               | French        |
| HR                  | SCR               | Croatian      |
| GR                  | GRE               | Greek         |
| ID                  | IND               | Indonesian    |
| IT                  | ITA               | Italian       |
| JA                  | JAP               | Japanese      |
| KO                  | KOR               | KOREAN        |
| LT                  | LIT               | Lithuanian    |
| LV                  | LAV               | Latvian       |
| MO                  | MOL               | Moldavian     |
| NL                  | DUT               | Dutch         |
| NO                  | NOR               | Norwegian     |
| PL                  | POL               | Polish        |
| PT                  | POR               | Portuguese    |
| RO                  | RUM               | Romanian      |
| RU                  | RUS               | Russian       |
| SK                  | SLO               | Slovak        |
| SL                  | SLV               | Slovenian     |
| SR                  | SRB               | Serbian       |
| SV                  | SWE               | Swedish       |
| TR                  | TUR               | Turkish       |
| ZH                  | CHI               | Chinese       |

**17. ANNEX VII - What Triggers a Publication for Exchange**

| Level       | Modification                                                  | Exchanged                                                                                                               | Status           | Action        |
|-------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------|---------------|
| Family      | EP classifications [ ECLA, ICO ]                              | All publications in this family                                                                                         | Amend            | Replace       |
|             | IPC/8 [ back-file migration / reclassification ]              |                                                                                                                         |                  |               |
| Priority    | Priority date                                                 | All publications claiming this priority                                                                                 | Amend            | Replace       |
| Application | Priority Picture [ add, delete, re-key priority-id ]          | All publications in this application                                                                                    | Amend            | Replace       |
|             | Priority Link [ make active / not active ]                    |                                                                                                                         |                  |               |
|             | Is Family Representative Y/N                                  |                                                                                                                         |                  |               |
|             | Application Date                                              |                                                                                                                         |                  |               |
| Publication | Application re-key                                            | This publication                                                                                                        | Amend            | Replace       |
|             | Is Representative Y/N                                         |                                                                                                                         |                  |               |
|             | Publication-Date                                              |                                                                                                                         |                  |               |
|             | Bibliographic Data [ e.g. IPC/8, applicant, inventor, title ] |                                                                                                                         |                  |               |
|             | Cited References                                              |                                                                                                                         |                  |               |
|             | Abstracts                                                     |                                                                                                                         |                  |               |
| Publication | Add                                                           | This publication                                                                                                        | Create           | Add           |
|             | Delete                                                        | This publication [ publication-identification only ]                                                                    | Delete           | Remove        |
|             | Re-key                                                        | This publication - old reference [ publication-identification only ]<br>This publication - new reference [ full image ] | Delete<br>Create | Remove<br>Add |

|  |                             |                                                                                                                                                           |                  |               |
|--|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------|
|  | From published to withdrawn | This publication - old reference [ publication-identification<br>only ]<br>This publication - new reference "void" [ publication-identification<br>only ] | Delete<br>Create | Remove<br>Add |
|  | Withdrawn                   | This publication - "void" [ publication-identification<br>only ]                                                                                          | Create           | Add           |

## 18. ANNEX VIII - Components and Attributes Used in the Tag Structures

### 18.1. Element Exchange Document

| Tag-Name                        | Component             | Component        |
|---------------------------------|-----------------------|------------------|
| exchange-document               | bibliographic data    | see section 18.1 |
| ATT "country"                   | abstract              | p                |
| ATT "doc-number"                | ATT "data-format"     |                  |
| ATT "kind"                      | ATT "lang"            |                  |
| ATT "date-publ"                 | ATT "abstract-source" |                  |
| ATT "date-added-docdb"          | patent family         | see section 18.2 |
| ATT "date-of-previous-exchange" |                       |                  |
| ATT "date-of-last-exchange"     |                       |                  |
| ATT "is-representative"         |                       |                  |
| ATT "doc-id"                    |                       |                  |
| ATT "family-id"                 |                       |                  |
| ATT "originating-office"        |                       |                  |
| ATT "status"                    |                       |                  |



### 18.2. Element Bibliographic Data

| Tag-Name                                   | Component                                               | Component                                             | Component                  | Component |
|--------------------------------------------|---------------------------------------------------------|-------------------------------------------------------|----------------------------|-----------|
| publication-reference                      | document-id<br>ATT "lang"<br>ATT "doc-id"               | country                                               |                            |           |
|                                            |                                                         | doc-number                                            |                            |           |
|                                            |                                                         | kind                                                  |                            |           |
|                                            |                                                         | date                                                  |                            |           |
| preceding-publication-date<br>ATT "status" | date                                                    |                                                       |                            |           |
| date-of-coming-into-force<br>ATT "status"  | date                                                    |                                                       |                            |           |
| extended-kind-code<br>ATT "status"         |                                                         |                                                       |                            |           |
| classification-ipc<br>ATT "status"         | main-classification                                     |                                                       |                            |           |
|                                            | further-classification                                  |                                                       |                            |           |
|                                            | additional-info                                         |                                                       |                            |           |
|                                            | linked-indexing-code-group                              |                                                       |                            |           |
|                                            | unlinked-indexing-code                                  |                                                       |                            |           |
|                                            | text                                                    |                                                       |                            |           |
| classifications-ipcr<br>ATT "status"       | classification-ipcr                                     | text                                                  |                            |           |
| classification-national<br>ATT "status"    | <b>OBSOLETE</b><br>replaced by CPC and CPCNO            |                                                       |                            |           |
| patent-classifications                     | patent-classification<br>ATT "status"<br>ATT "sequence" | classification-scheme<br>ATT "office"<br>ATT "scheme" |                            |           |
|                                            |                                                         | classification-scheme                                 | date ("version indicator") |           |
|                                            |                                                         | classification-symbol                                 |                            |           |

|                                                                                                              |                                                            |             |                                                                         |                       |                                                     |
|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------|-------------------------------------------------------------------------|-----------------------|-----------------------------------------------------|
|                                                                                                              |                                                            |             | classification-value                                                    |                       |                                                     |
|                                                                                                              |                                                            |             | classification-status                                                   |                       |                                                     |
|                                                                                                              |                                                            |             | classification-data-source                                              |                       |                                                     |
|                                                                                                              |                                                            |             | generating office                                                       |                       |                                                     |
|                                                                                                              |                                                            |             | action-date                                                             |                       |                                                     |
|                                                                                                              | <b>combination-set</b><br>ATT "status"<br>ATT "sequence"   |             | group-number                                                            |                       |                                                     |
|                                                                                                              |                                                            |             | combination-rank                                                        | rank-number           |                                                     |
|                                                                                                              |                                                            |             |                                                                         | patent-classification |                                                     |
| <b>application-reference</b><br>ATT "doc-id"<br>ATT "is-representative"<br>ATT "data-format"<br>ATT "status" | "docdb"                                                    | document-id | country                                                                 |                       |                                                     |
|                                                                                                              |                                                            |             | number                                                                  |                       |                                                     |
|                                                                                                              |                                                            |             | kind-code                                                               |                       |                                                     |
|                                                                                                              |                                                            |             | date                                                                    |                       |                                                     |
|                                                                                                              | "original"                                                 | document-id | number                                                                  |                       |                                                     |
| <b>language-of-filing</b><br>ATT "status"                                                                    |                                                            |             |                                                                         |                       |                                                     |
| <b>language-of-publication</b><br>ATT "status"                                                               |                                                            |             |                                                                         |                       |                                                     |
| <b>priority-claims</b>                                                                                       | <b>priority-claim</b><br>ATT "data-format"<br>ATT "status" | "docdb"     | document-id                                                             | country               |                                                     |
|                                                                                                              |                                                            |             |                                                                         | doc-number            |                                                     |
|                                                                                                              |                                                            |             |                                                                         | kind                  |                                                     |
|                                                                                                              |                                                            |             |                                                                         | date                  |                                                     |
|                                                                                                              |                                                            |             | priority-active-indicator                                               |                       |                                                     |
|                                                                                                              |                                                            |             | priority-linkage-type                                                   |                       |                                                     |
|                                                                                                              |                                                            | "original"  | document-id                                                             | number                |                                                     |
| <b>parties</b>                                                                                               | applicants                                                 |             | <b>applicant</b><br>ATT "sequence"<br>ATT "data-format"<br>ATT "status" | "docdb"               | applicant-name<br>residence<br>name<br>text<br>name |
|                                                                                                              |                                                            |             |                                                                         | "docdba"              | applicant-name<br>address<br>name                   |
|                                                                                                              |                                                            |             |                                                                         | "original"            | applicant-name<br>name                              |

|                                                                           |                                                          |                                                                        |             |               |      |
|---------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------------|-------------|---------------|------|
|                                                                           | inventors                                                | <b>inventor</b><br>ATT "sequence"<br>ATT "data-format"<br>ATT "status" | "docdb"     | inventor-name | name |
|                                                                           |                                                          |                                                                        | "docdba"    | residence     |      |
|                                                                           |                                                          |                                                                        |             | inventor-name | name |
|                                                                           |                                                          |                                                                        | "original"  | inventor-name | name |
| <b>designation-of-states</b><br>ATT "status"                              | designation-pct                                          | regional                                                               | region      |               |      |
|                                                                           |                                                          |                                                                        | country     |               |      |
|                                                                           | national                                                 | country                                                                |             |               |      |
|                                                                           | designation-epc                                          | contracting-states                                                     | country     |               |      |
|                                                                           |                                                          | extension-states                                                       | country     |               |      |
| <b>invention-title</b><br>ATT "lang"<br>ATT "status"<br>ATT "data-format" | string                                                   |                                                                        |             |               |      |
| <b>dates-of-public-availability</b><br>ATT "status"                       | gazette-reference                                        | document-id                                                            | date        |               |      |
|                                                                           | abstract-reference                                       | document-id                                                            | date        |               |      |
|                                                                           | supplemental-srep-reference                              | document-id                                                            | date        |               |      |
|                                                                           | gazette-pub-announcement                                 | document-id                                                            | date        |               |      |
|                                                                           | modified-first-page-pub                                  | document-id                                                            | date        |               |      |
|                                                                           | modified-complete-spec-pub                               | document-id                                                            | date        |               |      |
|                                                                           | unexamined-not-printed-without-grant                     | document-id                                                            | date        |               |      |
|                                                                           | examined-not-printed-without-grant                       | document-id                                                            | date        |               |      |
|                                                                           | unexamined-printed-without-grant                         | document-id                                                            | date        |               |      |
|                                                                           | examined-printed-without-grant                           | document-id                                                            | date        |               |      |
|                                                                           | printed-with-grant                                       | document-id                                                            | date        |               |      |
|                                                                           | claims-only-available                                    | document-id                                                            | date        |               |      |
| not-printed-with-grant                                                    | document-id                                              | date                                                                   |             |               |      |
| <b>references-cited</b><br>ATT "status"                                   | <b>citation</b><br>ATT "cited-phase"<br>ATT "cited-date" | <b>patcit</b><br>ATT "num"<br>ATT "dnum"                               | document-id | country       |      |
|                                                                           |                                                          |                                                                        |             | doc-number    |      |
|                                                                           |                                                          |                                                                        |             | kind          |      |

|  |                                     |                                                                    |                                                                    |                                         |
|--|-------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------|
|  | ATT "srep-office"<br>ATT "sequence" | ATT "dnum-type"                                                    |                                                                    | name                                    |
|  |                                     |                                                                    |                                                                    | date                                    |
|  |                                     | <b>nplcit</b><br>ATT "num"<br>ATT "npl-type"<br>ATT "extracted-xp" | text<br>source-doc<br>article<br>online                            | see schema for<br>element structure     |
|  |                                     | <b>rel-passage</b>                                                 | passage<br>category<br>rel-claims                                  |                                         |
|  |                                     | <b>category</b>                                                    |                                                                    |                                         |
|  |                                     | <b>corresponding-docs</b>                                          | <b>patcit</b><br>ATT "num"<br>ATT "dnum"<br>ATT "dnum-type"        | document-id                             |
|  |                                     |                                                                    | <b>nplcit</b><br>ATT "num"<br>ATT "npl-type"<br>ATT "extracted-xp" | text<br>source-doc<br>article<br>online |
|  |                                     |                                                                    | <b>rel-passage</b>                                                 | passage<br>category<br>rel-claims       |
|  |                                     |                                                                    | <b>category</b>                                                    |                                         |

**18.3. Element Patent Family**

| Tag-Name              | Component             | Component               | Component | Component |            |
|-----------------------|-----------------------|-------------------------|-----------|-----------|------------|
| family-member         | application-reference | country                 |           |           |            |
|                       |                       | ATT "doc-id"            |           |           | doc-number |
|                       |                       | ATT "is-representative" |           |           | kind       |
|                       |                       | ATT "data-format"       |           |           | date       |
|                       | publication-reference | country                 |           |           |            |
|                       |                       | ATT "data-format"       |           |           | doc-number |
|                       |                       | ATT "sequence"          |           |           | kind       |
|                       |                       |                         |           |           | date       |
| abstract              | p                     |                         |           |           |            |
| ATT "country"         |                       |                         |           |           |            |
| ATT "doc-number"      |                       |                         |           |           |            |
| ATT "kind"            |                       |                         |           |           |            |
| ATT "lang"            |                       |                         |           |           |            |
| ATT "abstract-source" |                       |                         |           |           |            |

## 19. ANNEX IX - Extended Kind of Document

The publication kind-code often does not show detailed information about the possible differences in legal status of the publication of a patent document.

Further information on DE and WO publications is exchanged in `<exch:extended-kind-code>`.

### 19.1. Extended Kind of Document for DE

| County | Kind | Extended | Definition                                                              |
|--------|------|----------|-------------------------------------------------------------------------|
| DE     | C1   | D1       | Grant of a patent without OS                                            |
| DE     | C2   | D2       | Grant of a patent after the examination procedure                       |
| DE     | C2   | D3       | Limited patent maintenance (without OS)                                 |
| DE     | C3   | D4       | Limited patent maintenance (with OS)                                    |
| DE     | C2   | D5       | Patent changed in the restriction procedure No OS, no changed PS        |
| DE     | C3   | D6       | Patent changed in the restriction procedure No OS, changed PS           |
| DE     | C3   | D7       | Patent changed in the restriction procedure With OS, without changed PS |
| DE     | C4   | D8       | Patent changed in the restriction procedure With OS, with changed PS    |

## 19.2. Extended Kind of Document for WO

In the original document you will find the full description of the extended kind-code under the header "published", "publié", "veröffentlicht".

In DOCDB/XML you will find this information in coded form in the data-field <exch:extended-kind-code>. For publications with a publication-date before 2006, the extended kind-code is encoded in a 6 digit numerical field, eg. "130100"

For publications with a publication-date starting 2006, the extended kind-code is encoded in a combination of alphanumerical codes, eg. "xq2mc"

### Extended kind-of-publication code for publications until 2006

The significance of the code is dependent on the position within the numerical field, eg. "130100" identifies published :

- *with international search report* (position 1, value '1')
- *before expiration of time limit for amending the claims and to be republished in the event of the receipt the amendments* (position 2, value '3')
- *before the expiration of the time limit referred to in Article 21(2)(a) on the request of the applicant* (position 4, value '1')

NOTE THAT value '0' identifies 'null' - not relevant - irrespective of its position

| Position | Code | Explanation                                                                                                                                                                                                                   |
|----------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1        | 1    | With international search report                                                                                                                                                                                              |
|          | 2    | With declaration under art. 17(2)(a); without classification and without abstract; title not checked by the International Searching Authority                                                                                 |
|          | 3    | Without international search report and to be republished upon receipt of that report                                                                                                                                         |
|          | 4    | With declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority                                                                                                         |
| 2        | 1    | With amended claims                                                                                                                                                                                                           |
|          | 2    | With amended claims and statement                                                                                                                                                                                             |
|          | 3    | Before expiration of time limit for amending the claims and to be republished in the event of the receipt of the amendments                                                                                                   |
| 3        | 1    | in English translation (filed in XXX)                                                                                                                                                                                         |
| 4        | 1    | Before the expiration of the time limit referred to in Article 21(2)(a) on the request of the applicant                                                                                                                       |
| 5        | 1    | Upon request of the applicant under article 64(3)(c)(i)                                                                                                                                                                       |
|          | 2    | In accordance with Art. 64 (3)(c)(ii) upon the publication of a patent based on the international application referred to herein, issued by the United States Patents and Trademark Office on ..... under serial number ..... |
| 6        | 1    | With a request for rectification under Rule 91.1 (f)                                                                                                                                                                          |

Extended kind-of-publication code for publications from 2006

This encoding is a concatenation of alphanumerical codes of maximum 2 characters long, eg. "xq2mc" identifies published :

- *with international search report*
- *sequence listing part of description published separately in electronic form and available upon request from the International Bureau*
- *with (an) indication(s) in relation to deposited biological material furnished under rule 13bis separately from the description*
- *before the expiration of the term limit for amending the claims and to be republished in the event of receipt of amendments*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*



## 20. ANNEX X - Application Kind-codes and Number Suffixes

The value of application- and priority kind-codes is generally limited to:

- A = patent
- U = utility model
- P = provisional application ( US )
- W = PCT
- F = design
- V = plant patent
- T = translation

Incidentally you may come across "exotic" values for application- and priority kind-codes, refer to [21.1 "Exotic" Kind-codes](#).

Incidentally you may come across application- or priority-numbers suffixed by 'D' or 'T' or 'X', refer to [21.2 Number Suffixes](#).

For reasons of standardisation the EPO records PCT applications as follows

- <country> [*country of filing*] </country>
- <doc-number> [*numerics only*] </doc-number>
- <kind>W</kind>

## 20.1. "Exotic" Kind-codes

The EPO makes use of non-standard "office-specific" kind-code to temporarily overcome minor problems that would otherwise have blocked the loading of the bibliographic data.

- **Application kind-codes D and Q**

Application kind-codes 'D' and 'Q' identify "dummy" applications.

Distinction between 'D' and 'Q' is made to help identify the corrective action required :

Issues involving application kind-code 'D' can be resolved by an automated back-file correction exercise.

Issues involving application kind-code 'Q' need intellectual effort and are being tackled manually, one by one.

- **Application kind-codes K, L, M, N, O**

A limited number of countries, e.g. MC PH RU SU, supply identical application-identifications for separate publications.

In order to resolve that issue, kind-code 'K' is allocated to the first duplicate encountered for a given application-identification, 'L' to the second etc.

- **French applications with kind-codes E, F, M**

The kind-code of these French applications should be 'A'.

Applications with kind-code E, F or M have been loaded with an incorrect kind-code at the time.

## 20.2. Number Suffixes

The EPO makes use of number suffixes to temporarily fill in gaps in the bibliographic data that would otherwise have rendered the loading of the already available bibliographic data impossible.

- **Numbers suffixed with D or T**

Application-numbers suffixed by 'D' and priority-numbers suffixed by 'T' are "dummy" entries. They will eventually be replaced by genuine identifiers, as and when the bibliographic data is made available to the EPO.

- **Numbers suffixed with X**

These are priorities claimed by pre-1920 publications. On the printed document of these publications priority-claims are identified by country and date only.

DOCDB requires a priority-number.

In order to make the bibliographic data available as soon as possible, the EPO opted for generating a priority-number from the publication-number + X.

Incidentally you may come across numbers generated from the priority-date + X.

The EPO is working on tracing back the original priority-identifiers, pending time and resources.

- **Date Fields**

All applications and priorities will come with a <date> field, with the exception of data-format="original".

Dummy applications and priorities, suffixed with D and T respectively, will have no <date> field.

Derived priorities suffixed with X do come with a <date> field and a valid date.

## 21. ANNEX XI - Structure of EPODOC Format

NOTE THAT this ANNEX has been compiled with the intention to give insight in the *structure* of data-format="epodoc". The contents of this ANNEX are not to be taken as an exhaustive set of formatting rules.

### 21.1. Publication Numbers

Basic structure of publication numbers in data-format="epodoc" is :

- country
- number

For a number of publication-countries and kind-codes, an extended structure applies:

- country
- number
- kind-code

| Country                                          | Kind-code <sup>1</sup> | Structure <sup>2</sup> |
|--------------------------------------------------|------------------------|------------------------|
| JP                                               | B1                     | JPstringB1             |
|                                                  | B2                     | JPstringB2             |
|                                                  | Bn                     | JPstringB              |
|                                                  | Cn                     | JPstringC              |
| AT, BA, CN, DK<br>FI, NL, NO, SK,<br>TW, YU, ... | A(n)                   | CCstring               |
|                                                  | B(n)                   | CCstringB              |
|                                                  | C(n)                   | CCstringC              |
| other                                            | A(n)                   | CCstring               |
|                                                  | B(n)                   | CCstring               |
|                                                  | C(n)                   | CCstring               |
| any                                              | other                  | CCstringK              |

<sup>1</sup> where (n) stands for any of the following values :

- space
- 1 through 9
- 2 through 9 when JP

<sup>2</sup> where "K" identifies 1st character of publication kind-code

## 21.2. Application- and Priority Numbers

Basic structure of application and priority-numbers in data-format="epodoc" is :

- country
- number
  - ccyy - century/year derived from application- or priority-date
  - nnnnnnn - serial number, leading zeroes when required
- kind-code, when kind-code not = 'A'

Extended structure for a number of countries :

- country [ "WO" when kind-code in data-format="docdb" is "W" ]
- number
  - ccyy : century/year derived from application- or priority-date
  - xx : "other data"
  - nnnnn : serial number, leading zeroes when required
- kind-code, when kind-code not = 'A'

"Other data" may be :

- regional office, eg. 'MI' when country = 'IT' and regional office = Milan
- filing country, eg. 'US' when country = 'WO' and filing country = US
- ...

Length of the concatenated string is generally fixed at 13 characters or 14 when the kind-code is appended. Strings exceeding a total of 13 or 14 may occur, when the number of significant digits exceeds the number of digits reserved for the serial number, eg. DE.

A special format applies to numbers that in data-format="docdb" have been suffixed with letters 'D' or 'T' or 'X' :

- country
- 'D' or 'T' or 'X'
- number
- kind-code, when kind-code not = 'A'

## 22. ANNEX XIII - The DOCDB Simple Patent Family

This ANNEX has been compiled with the intention to give insight in the family building process at the EPO without going into detailed technical specifications.

The objective of the DOCDB simple patent family concept is to group applications together that share identical technical content. In DOCDB simple patent families are identified by priority picture. The priority picture will only include priorities claiming applications that add new technical detail

NOTE THAT there will be families in DOCDB that do not reflect what is being described in this annex.

- § the business rules described here have only come into force in August 2008.
- § the business rules described here are applied by automated process based on priority-data only
- § any correction activity triggered by quality control or examiner feedback is not bound to these business rules.

This annex will give insight in:

- § design features specific to DOCDB and vital to the family building process
- § family building business rules applied in the initial family building process

## 22.1. Design Features

Design features specific to DOCDB that are vital to the family building process are:

- § concept of ACTIVE and NOT ACTIVE
- § generation of the self-claim

### Concept of ACTIVE and NOT ACTIVE

In this concept only priorities that add new technical detail will be ACTIVE and included in the priority picture that defines the simple patent family. Priorities that do not add technical detail will be NOT ACTIVE and excluded. This concept allows the process to exclude priorities from the priority picture of a given family, while leaving the set of priorities claimed by each application in that family intact.

A priority will be ACTIVE and included when it is claiming :

- § an application that is a "first filing"
- § an application that is standing in for a "first filing" ( provisional application )
- § an application that is qualifying as a "first filing" ( continuation in part )

### Generation of the Self-Claim

A self-claim is a copy of the application that has been added to the set of priorities claimed. EPO processes will add a self-claim to the set of priorities in two instances:

- § when the application is a "first filing"
- § when the application is claiming a domestic priority

This feature enables the family building process to identify

- § applications that are "first filings"
- § applications that qualify as "first filings" ( continuations in part )

An application is a "first filing" or is qualifying as a "first filing" when it is claiming itself as an ACTIVE priority.

## 22.2. Business Rules

Each priority claimed by the new application is put through a cascade of four business rules. Which one of these rules is going to be applied depends on the properties of the application claimed.

### 1. Is the application claimed a "self-claim"?

- § if the self-claim is not being claimed next to a domestic priority, the new application is a "first filing" : the self-claim will be ACTIVE
- § if the self-claim is being claimed next to a domestic priority and the new application is claimed for "continuation in part", the application is qualifying as a "first filing" : the self-claim will be ACTIVE

### 2. Is the application claimed a US Provisional ?

- § if the provisional application is not being claimed next to a foreign priority  
the provisional application is standing in for the "first filing" : the priority will be ACTIVE

### 3. Is the application claimed present in the database as an application proper?

- § if the application claimed is a "first filing" : the priority will be ACTIVE
- § if the application claimed is qualifying as a "first filing" :  
the priority will be ACTIVE

### 4. Is there any ambiguity on the quality of the application claimed ?

- § if the application is not present in the database, either as an application proper or as an application claimed by others : the priority will be ACTIVE

Where the application claimed does not meet any of the criteria above, the priority will be NOT ACTIVE



## 23. ANNEX XIV - Categories of Cited Documents

|   |                                                                                                                                         |
|---|-----------------------------------------------------------------------------------------------------------------------------------------|
| X | Particularly relevant if taken alone.                                                                                                   |
| Y | Particularly relevant if combined with another document of the same category.                                                           |
| A | Defining the state of the art and not prejudicing novelty or inventive step.                                                            |
| O | Non-written disclosure.                                                                                                                 |
| P | Intermediate document.                                                                                                                  |
| T | Theory or principle underlying the invention.                                                                                           |
| E | Earlier patent application, but published after the filing date of the application searched (potentially conflicting patent documents). |
| D | Document cited in the application.                                                                                                      |
| L | Document cited for other reasons.                                                                                                       |
| & | Document member of the same patent family – citing a so-called " &-document"                                                            |

References cited by publications with a publication date from April 2011 might have category 'I'.

Category 'I' is category 'X' further defined. With the introduction of new category 'I', the category 'X' will have a slightly different meaning:

|   |                                                                   |
|---|-------------------------------------------------------------------|
| X | Particularly relevant if taken alone - prejudicing novelty        |
| I | Particularly relevant if taken alone - prejudicing inventive step |

Currently the number of categories supported by REFI - the master database for cited references - for each cited document is three. Due to the limitation to three categories in REFI, <exch:category> will only support one category of each group - see table below :

|   |         |
|---|---------|
| 1 | X I Y A |
| 2 | P E     |
| 3 | D       |
| 4 | O T L   |

End of Aug 2016 the EPO will have loaded rich citation data into REFI. For those countries for which rich citation data has been loaded into REFI the number of categories supported by REFI will be unlimited. Element <exch:citation><category> will support ALL categories cited

In Chinese patent publications you may find citations with category 'R':

|   |                                                                                                                                                                              |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| R | Referring to a patent application or a utility model filed on the same day that relates to the same invention<br>[ Source: Examination Guidelines SIPO, Part II, Chapter 7 ] |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 24. ANNEX XV – References Cited – Usage Examples

### 24.1. Usage Examples Release 2.4

#### 24.1.1. EP-WO Cross Reference

- ```

<exch:exchange-document country="EP" doc-number="3390143" kind="A4" doc-id="503803932" date-
publ="20190102" family-id="59055745" is-representative="NO" date-of-last-exchange="20190620"
date-of-previous-exchange="20190214" date-added-docdb="20181203" originating-office="EP"
status="A">
  <exch:bibliographic-data>
    ...
    <exch:references-cited>
      ....
      <exch:citation cited-phase="SEA" cited-date="20181121" srep-office="EP" sequence="4">
        <nplcit num="1" npl-type="a">
          <text>See also references of WO 2017101838A1</text>
        </nplcit>
      </exch:citation>
    </exch:references-cited>
  </exch:bibliographic-data>

```

24.1.2. Cited-phase="APP" – Applicant

- ```

<exch:exchange-document country="EP" doc-number="3391726" kind="A1" doc-id="500238023" date-
publ="20181024" family-id="61913012" is-representative="YES" date-of-last-exchange="20190620"
date-of-previous-exchange="20190523" date-added-docdb="20180924" originating-office="EP"
status="A">
 <exch:bibliographic-data>
 ...
 <exch:references-cited>

 <exch:citation cited-phase="APP" sequence="1">
 <nplcit num="1" npl-type="a">
 <text>None</text>
 </nplcit>
 </exch:citation>
 </exch:references-cited>
 </exch:bibliographic-data>

```

### 24.1.3. Cited-phase="PRS" – Pre-grant / Pre-search

- ```

<exch:exchange-document country="US" doc-number="9753684" kind="B1" doc-id="483317993" date-
publ="20170905" family-id="59701266" is-representative="YES" date-of-last-exchange="20190620"
date-of-previous-exchange="20180524" date-added-docdb="20170905" originating-office="EP"
status="A">
  <exch:bibliographic-data>
    ...
    <exch:references-cited>
      ....
      <exch:citation cited-phase="PRS" srep-office="US" sequence="2">
        <patcit num="2" dnum="US2013208312A1" dnum-type="publication number">
          <document-id doc-id="409571230">
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### 24.1.7. Applicant name in patent citations - Cited in EP publication

Covered in Usage Examples Release 2.5

### 24.1.8. Applicant name in patent citations - Cited in US publication

Covered in Usage Examples Release 2.5

**24.1.9. Applicant name in patent citations - Cited in WO publication**

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**25. ANNEX XVI – Mapping Rich Citation Data to ST.36**

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BOOK	nplcit/nplType (B) nplcit/article/book/imprint/name nplcit/article/book/imprint/address/text nplcit/article/book/imprint/pubdate nplcit/article/book/isbn nplcit/article/book/bookno nplcit/article/book/author/name nplcit/article/book-title nplcit/article/book/vid nplcit/article/book/location/serpart nplcit/article/book/location/pp/ppf nplcit/article/book/location/pp/ppl nplcit/article/author/name nplcit/article/atl nplcit/@extracted-xp nplcit/article/book/doi nplcit/article/book/issn	Book publisher publicationPlace examPubDate isbn issueNumber author title volume part startPage endPage sectionAuthor sectionTitle xpNumber digitalObjectIdentifier issn
SERIAL	nplcit/nplType (S) nplcit/article/serial/vid nplcit/article/serial/ino nplcit/article/artid nplcit/article/serial/pubdate/sdate nplcit/article/serial/pubdate/edate nplcit/article/location/pp/ppf nplcit/article/location/pp/ppl nplcit/article/serial/sertitle nplcit/article/author/name nplcit/article/atl nplcit/article/serial/imprint/address/text nplcit/vnum nplcit/article/serial/isbn nplcit/article/serial/issn nplcit/@extracted-xp nplcit/article/serial/doi	Serial issueVolume issueNumber articleNumber examPubDate endDate startPage endPage name author title publicationPlace vCode isbn issn xpNumber digitalObjectIdentifier
INTERNET	nplcit/nplType (W) nplcit/online/avail nplcit/online/author/name nplcit/online/notes nplcit/online/online-title nplcit/online/srchdate/date nplcit/online/pubdate/sdate nplcit/@extracted-xp nplcit/online/serial/vid nplcit/online/serial/ino	Internet citationURL author usenet title iNetDate examPubDate xpNumber volume number

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CHEMICAL ABSTRACT	nplcit/nplType (C) nplcit/article/absno nplcit/article/serial/pubdate nplcit/article/serial/vid nplcit/article/serial/ino nplcit/article/serial/sertitle nplcit/article/location/pp nplcit/article/location/column/colf nplcit/article/author/name nplcit/article/atl nplcit/@extracted-xp nplcit/article/serial/issn	ChemicalAbstract abstractNumber examPublDate issueVolume issueNumber name page fromColumn author title xpNumber issn
DERWENT	nplcit/nplType (D) nplcit/online/absno nplcit/online/pubdate nplcit/online/vid nplcit/online/ino nplcit/online/class nplcit/online/location/pp nplcit/online/location/sersect nplcit/@extracted-xp nplcit/online/edition nplcit/online/author/name nplcit/online/online-title nplcit/online/issn	WPI-Derwent hostAccession examPublDate issueVolume issueNumber wpiClass page section xpNumber titleCode author title issn
DATABASE ABSTRACT	nplcit/nplType (E) nplcit/online/hosttitle nplcit/online/imprint/name nplcit/online/absno nplcit/online/imprint/pubdate nplcit/online/author/name nplcit/online/online-title nplcit/online/avail nplcit/online/hostno nplcit/online/notes nplcit/@medium nplcit/@extracted-xp	DatabaseAbstract databaseName databaseOwner dbAccession examPublDate author title hostName hostAccession usenet storageMedia xpNumber
BIOLOGICAL	nplcit/nplType (I) nplcit/article/absno	BiologicalAbstract abstractNumber

ABSTRACT	nplcit/article/serial/pubdate nplcit/article/serial/vid nplcit/article/serial/ino nplcit/article/serial/sertitle nplcit/article/location/pp nplcit/article/author/name nplcit/article/at1 nplcit/@extracted-xp nplcit/article/serial/issn	examPublDate issueVolume issueNumber name page author title xpNumber issn
PAJ	nplcit/nplType (J) nplcit/article/serial/vid nplcit/article/serial/ino nplcit/article/absno nplcit/article/serial/pubdate nplcit/article/serial/issn nplcit/article/serial/isbn	PAJ issueVolume issueNumber B.A.D number examPublDate issn isbn
OTHER ABSTRACT	nplcit/nplType (A) nplcit/text nplcit/@extracted-xp nplcit/date	OtherAbstract textReference xpNumber examPublDate