STANDARD ST.37

RECOMMENDATION FOR AN AUTHORITY FILE OF PUBLISHED PATENT DOCUMENTS

Version 3.0

Revision approved by the Committee on WIPO Standards (CWS)
at its thirteenth session on November 14, 2025

TABLE OF CONTENTS

INTRODUCTION 2
DEFINITIONS 2
NOTATIONS 3
MANDATORY DATA ELEMENTS 3
Publication authority 3
Publication number 3
Kind code 3
Publication date 3
DEFINITION FILE 4
OPTIONAL DATA ELEMENTS 4
Priority application identification 4
Application Identification 4
Publication exception code 5
Text-searchable indicators 5
FILE FORMATS 5
FILE NAME 6
IMPLEMENTATION OF THE AUTHORITY FILE 7
REFERENCES 8

ANNEXES

Annex I – Example of a definition file
Annex II – Text file for authority file
Annex III – XML Schema definition (XSD) for authority file
Appendix to Annex III
Annex IV – Document Type Definition (DTD) for authority file
Appendix to Annex IV

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INTRODUCTION

1. This Standard defines data elements to constitute an authority file of patent documents, as well as its structure and format.

2. The primary purpose of the authority file generated by an industrial property office (IPO) is to allow other IPOs and other interested parties to assess the completeness of the available patent documentation. An authority file may also be used to capture bibliographic information for patents which form part of the PCT Minimum Documentation set[1].

3. In order to allow consistency checks, the authority file should contain the list of all publication numbers assigned by the IPO. This should include publication numbers for which no published document is available – this can be the case for applications withdrawn shortly before the publication or for destroyed documents – as well as publication numbers for which the publication contains only bibliographic data.

DEFINITIONS

4. For the purposes of this Standard:

(a) the term “patent documents” includes patents for inventions, plant patents, design patents, inventors’ certificates, utility certificates, utility models, patents of addition, inventors’ certificates of addition, utility certificates of addition, and published applications therefor. “Documents” means patent documents, unless otherwise stated.

(b) the terms “publication” and “published” are used in the sense of making available:

(i) a patent document to the public for inspection or supplying a copy on request; and

(ii) multiple copies of a patent document produced on, or by, any medium (e.g., paper, film, magnetic tape or disc, optical disc, online database, computer network, etc).

(c) according to certain national industrial property laws or regulations or regional or international industrial property conventions or treaties, the same patent application may be published at various procedural stages. For the purpose of this standard, a “publication level” is defined as the level corresponding to a procedural stage at which normally a document is published under a given national industrial property law or under a regional or international industrial property convention or treaty.

(d) the term “machine-readable” indicates that the contents of the document can be extracted by a machine. It is considered interchangeable with the term “electronically available”. Included within the scope of this term are images and PDF documents.

(e) the term “text-searchable” indicates that a particular component of the document can be identified. For example, the value of the abstract can be identified and extracted automatically by a machine. Included within the scope of this term are XML and JSON documents.

(f) the term “publication exception code” refers to a one-letter code which classifies why the particular complete patent publication is not available in machine-readable form at that time.

[1] See Part 4.1 of the WIPO Handbook on Intellectual Property Information and Documentation

NOTATIONS

5. The following notations are used throughout this document:

- <>: indicates a placeholder descriptive term that, in implementation, will be replaced by a specific instance value;
- " ": indicates that the text included in quotes must be used verbatim in implementation;
- { }: indicates that the items are optional in implementation; and
- `Courier New font`: indicates keywords or source code.

MANDATORY DATA ELEMENTS

6. An authority file is generated by the IPO and contains a list of all patent documents published by that IPO from the first publication onwards. It should include the numbers of documents which were published but for which no document is currently available and may include numbers within otherwise used ranges for which no document was ever published, indicating the appropriate exception codes below.

7. For each publication, the authority file must contain the following minimum data elements to uniquely identify all types of patent documents as originally published by the IPO:

(a) two-letter alphabetic code of the IPO publishing the document (publication authority);

(b) publication number;

(c) kind code of the patent document; and

(d) publication date.

8. All elements and sub-elements listed in paragraph 7 above must be recorded in separate fields.

Publication authority

9. The two-letter alphabetic code for the publication authority, country or region of the IPO generating the authority file, must follow the recommendations of WIPO Standard ST.3.

Publication number

10. Any non-alphanumeric characters, for example, those used as separators, such as dots, commas, dashes, slashes, spaces, should preferably be removed from the publication number, while generally the publication number should follow the recommendations of WIPO Standard ST.6.

Document kind code

11. Different kinds of patent documents should be identified following the recommendations of WIPO Standard ST.16. If the IPO uses document kind codes which do not follow the recommendations of WIPO Standard ST.16, the definitions of such codes should be provided in the definition file.

12. If no document kind code was allocated or it is unknown, the corresponding data element "kind code" should not be populated.

Publication date

13. The publication date should be presented in accordance with paragraph 7(a) of WIPO Standard ST.2. For example, '2017-06-02' for 'June 2, 2017', except for authority files created in accordance with Annex IV, where WIPO Standard ST.36 expects the format '20170602'.

14. If the publication date of a patent document is unknown to the IPO generating the authority file or a publication number is not used, the corresponding data element "publication date" component may not be populated.

15. The list of documents in the authority file should be sorted by publication number, type of document (kind code), and by publication date.

DEFINITION FILE

16. It is required that IPOs provide a definition file, as part of or in addition to, the authority file. Information which is not evident or easily understandable should be provided within the definition file. For example, in the definition file the IPO may:

(a) describe specific criteria for building the authority file(s);

(b) describe the use of publication exception codes;

(c) describe the use of document kind codes or provide a reference to Part 7.3 of the WIPO Handbook if up-to-date information on document kind codes is already described in Part 7.3 of the WIPO Handbook;

(d) indicate the date of the most recent document listed; and

(e) define the numbering systems or provide a reference to Parts 7.2.6 and 7.2.7 of the WIPO Handbook if up-to-date information on the numbering systems used is already described in Parts 7.2.6 and 7.2.7 of the WIPO Handbook.

17. To assist other IPOs and interested parties in a first assessment of the completeness of the available patent documentation, the definition file should also include an overview of the data coverage, for example indicate the number of publications per year by kind code or by publication level.

18. Annex I contains an example of a definition file to assist IPOs in drafting their definition files.

OPTIONAL DATA ELEMENTS

19. In addition to the mandatory data elements listed above, the authority file may contain the following data elements:

(a) publication exception code;

(b) application identification of the corresponding publication, which typically contains the following sub-elements:

i. two-letter alphabetic code of the IPO publishing the application;

ii. application number; and

iii. filing date.

(c) priority application identification of the corresponding publication, which typically contain the following sub-elements:

i. two-letter alphabetic code of the IPO publishing the priority application;

ii. priority application number; and

iii. filing date of the priority application.

(d) indication of whether the abstract, description, claims of a publication are text-searchable, through selection of one of the following:

– “N”: Not available; and

– two-letter language code(s) in which the searchable text is available, either in the original language or as an official translation.

20. The provision of the optional data elements indicated above remains within the discretion of the IPO generating the authority file and if data is not available then IPOs may provide incomplete or any necessary modifications to sub-elements for these optional data elements.

Priority application identification

21. Priority application numbers should be indicated in accordance with paragraph 12 of WIPO Standard ST.10/C.

Application Identification

22. An application number should be provided in the same format as it appeared on the original patent publication issued by the IPO. If the IPO uses application number formats in the authority file that are different from those used on the original publication, an explanation of the format should be provided in the definition file.

Publication exception code

23. When the complete publication in machine-readable format is not available, a publication exception code should be always be included. Otherwise, the data element “publication exception code” should not be populated.

24. The following single–alphabetic letter codes should be used to indicate the reason why the complete published document, for which the corresponding number is assigned, is not available:

Publication exception code letter	**Code description**
C	Publication document which is corrupted so that not all of the text is searchable
D	Publication document which was deleted after the publication
E	Publication number allocated by the IPO representing a PCT national/regional phase entry (for example Euro-PCT). No corresponding document published. A Euro-PCT application is an international (PCT) patent application that entered the European regional phase
M	Published document which is considered missing
N	Publication number range for which a publication document was never produced
P	Publication document which is available only on paper
W	Publication number which was assigned but withdrawn before publication of the document.
X	The use of code 'X' must be described in the IP Office's Authority Definition File

25. It is recommended to list only the numbers assigned by the IPO, but in case of small gaps in the numbering sequence (less than 1,000 consecutive publication numbers), the IPO may use the publication exception code “N” to identify the numbers, which were not used.

Text-searchable indicators

26. The availability of the abstract, description and/or claims of a publication in a text-searchable format may be indicated in the authority file using the appropriate text-searchable indicators.

27. The availability in text-searchable format of each section of a publication must be identified in the authority file with a code “N” for “Not available”, or the two-letter language code(s) for each corresponding language made available by the IPO, either as the original language or an official translation.

28. The two-letter code, which identifies the language the text is provided in, should follow the recommendations of WIPO Standard ST.96, `ExtendedISOLanguageCodeType`, based on International Standard ISO 639-1 “Codes for the representation of names of languages – Part 1: Alpha2-code”.

FILE HANDLING

29. If an IPO finds it necessary to generate the authority file as comprising several files, it is recommended that the list of publication numbers is split based on one or more of the following criteria:

(a) Publication date (file per year or several years);

(b) Publication level (applications, granted IP rights); and

(c) Types of patent documents (file per document kind code).

30. To improve file handling, an IPO may generate an update file which includes only data for the current year and a static file including all older data. The Office would then indicate using the update category, that the new file is the delta only.

FILE FORMAT

31. The file must be encoded using Unicode UTF-8.

32. With the aim to harmonize, as much as possible, the current practices to exchange and parse authority files, two file formats are recommended:

(a) XML (eXtensible Markup Language) format: to identify the content of minimum data elements of an authority file (see paragraph 7) using XML tags within an instance, either in an XML schema (as defined in Annex III) or a Document Type Definition (DTD) (see Annex IV) format; and

(b) Text format (file extension TXT or CSV): to identify the content of minimum data elements and the optional publication exception code element using a single text coded list, where the elements are separated by commas (preferred), tabs or semicolons and a “Carriage Return and Line Feed” (CRLF character) to represent the end of each record. However, IPOs may also include application identification information optionally as long as the content of each data field is clear and obvious. Examples showing minimum data fields and optional elements are shown in Annex II.

33. Examples of text format and XML file structures are provided in Annexes II to IV.

FILE NAME

34. The file name of the authority file generated by an IPO should be structured as follows:

(a) A single filename should consist of a generating Office ST.3 code, the string “AF” and the generation date in format YYYMMDD followed by the file extension i.e., `<generating Office ST.3 code>_AF_YYYYMMDD.<file extension (xml or txt or csv)>`

For example,

`EP_AF_20160327.txt` – single authority file generated by the EPO on March 27, 2016 in text format.

(b) The filename for each one of multiple files of which an authority file is comprised of should consist of generating Office ST.3 code, the string "AF", criterion information, the index number of the file in relation to the total number of files following by the string “of” with the total number of files generated and the file generated date followed by the file extension i.e., `<generating Office ST.3 code>_AF_{criterion information}_<index of number of the file in relation to the total number of files>of<total number of files generated>_YYYYMMDD.<file extension (xml or txt or csv)>`.

For example,

- `EP_AF_A-documents_1of2_20160327.txt` – first of two parts of the authority file generated by the EPO on March 27, 2016 in text format, this part covers applications only;
- `EP_AF_B-documents_2of2_20160327.txt` – second of two parts of the authority file generated by the EPO on March 27, 2016 in text format, this part covers granted patents only.

(c) for the instance where multiple files are provided, and each covers a different time period, please refer to the table below for an example of recommended file naming:

Example file name	Related comment

`<generating Office ST.3 code>“_”<authority file acronym “AF”>“_”gazette”<NNXXX>”_”<file generation date>”.”<file extension (xml or txt or csv).`
 	
`For example,`
`CC_AF_gazetteNNXXXX_YYYYMMDD.txt`
	Example contains the authority file for authority CC produced in time period NNXXXX where NN is the week number, XXXX is the year, in text file format

`<generating Office ST.3 code>“_”<authority file acronym “AF”>“_”year”<XXXX>”_”<file`	Example contains the authority file for authority CC in the year XXXX, in text file format

generation date>”.”<file extension (xml or txt or csv). For example, CC_AF_yearXXXX_YYYYMMDD.txt	
<generating Office ST.3 code>“_”<authority file acronym “AF”>“_”<file generation date>”.”<file extension (xml or txt or csv). For example, CC_AF_YYYYMMDD.txt	Example contains the authority file with for authority CC in text file format
<generating Office ST.3 code>“_”<authority file acronym “AF”>“_”<authority file year>”_”<kind code>”DOCUMENTS”_”<file generation date>”.”<file extension (xml or txt or csv). For example, CC_AF_YYYY_K_DOCUMENTS.txt	Example contains the authority file for authority CC in the year YYYY with text file format and containing documents of kind code K
<generating Office ST.3 code>“_”<authority file acronym “AF”>”.”<file extension (xml or txt or csv). For example, CC_AF.zip	Example is a zipped file which contains any of the files above

IMPLEMENTATION OF THE AUTHORITY FILE

35. In order to ensure efficiency of the data exchange, authority files in XML format must be structured according to the XML schema (XSD) or the data type definition (DTD) file as specified in Annex III and Annex IV, respectively. Text files must be structured according to the data structures provided in Annex II.

36. The update frequency for the authority file should be at least annual. An authority file that is complete for all publications to the end of the previous calendar year should be provided by the IPO by March 1 of the following year.

37. If an error is discovered in an authority file, a replacement file should be provided by the IPO as soon as possible.

38. A set of guidelines for authoring the authority file by an IPO is available here: https://www.wipo.int/standards/en/authority-file-guidelines.html

REFERENCES

39. References to the following documents are of relevance to this Recommendation:

WIPO Standard ST.1	Recommendation Concerning the Minimum Data Elements Required to Uniquely Identify a Patent Document
WIPO Standard ST.2	Standard Manner for Designating Calendar Dates by Using the Gregorian Calendar
WIPO Standard ST.3	Recommended Standard on Two–Letter Codes for the Representation of States, Other Entities and Intergovernmental Organizations
WIPO Standard ST.6	Recommendation for the Numbering of Published Patent Documents
WIPO Standard ST.10/C	Presentation of Bibliographic Data Components
WIPO Standard ST.16	Recommended Standard Code for the Identification of Different Kinds of Patent Documents
WIPO Standard ST.36	Recommendation for the Processing of Patent Information Using XML (eXtensible Markup Language)
WIPO Standard ST.96	Recommendation for the Processing of Intellectual Property Information Using XML (eXtensible Markup Language)

[Annex I follows]

ANNEX I

EXAMPLE OF A DEFINITION FILE

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Definition File for XX Authority File :

This definition file relates to the following authority file: XX_AF_20170322

Date of production :

2017-03-22

Data coverage :

Public XX documents from 1974-01-01 to 2016-12-31.

The XX authority file lists all XX patent and, if applicable, XX utility model publications.

Coverage according to document type and kind-of-document code (see Part 7.3.2 of the WIPO Handbook for details on kind codes):

Type	Kind Code	Total
Patent Application	A1	125.568
Patent Application	A2	96.430
Patent Granted	B1	144.879
Utility Model Application	U	24.332
Utility Model Examined	Y1	18.445

A detailed (annual) data-coverage can be found online at: http://www.XX-office.org/coverage.

Used options :

- Application information is provided where available
- Priority data not included
- Availability of abstract, description and claims of the publication in text-searchable format is provided
- Additional publication exception codes used are the following:

Publication Exception Code	Definition
D	Documents deleted after the publication
E	PCT applications which have not been republished
M	Missing published documents
N	Publication numbers not used
X	Publication or application numbers have been modified
W	Applications (or patents), which were withdrawn before the publication

Remark :

X: Publication/application number modified

Between 1939 until 1950 certain patent publications or patent applications were published with the same publication or application number. To address this problem, the publication or application number was corrected after the initial publication to ensure uniqueness in the authority file.

Numbering Formats :

For details on the numbering systems used by XX office see the corresponding entries in Parts 7.2.6 and 7.2.7 of the WIPO Handbook.

[Annex II follows]

ANNEX II

TEXT FILE (TXT)

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1. The authority file text structure lists the minimum data elements, the optional publication exception code element, and the optional text-searchable indicators for abstract, description and claims elements (see paragraph 7 of Main Body) for each publication record in one line, separated by a comma (preferred), or semicolon and a “Carriage Return and Line Feed” or equivalent end of line character to signal the end of each record.

2. Data structure for mandatory components with optional text searchable indicators: `<publication authority>,<publication number>,<kind-of-document code>,<publication date>,<publication exception code>, <searchable abstract code (language codes or N)>, <searchable description code (language codes or N )>, <searchable claims code (language codes or N )> <CRLF>.`

3. Data structure including all allowable optional components: `<publication authority>,<publication number>,<kind-of-document code>,<publication date>,<publication exception code>, <application authority>,<application number>,<filing date>, <searchable abstract code (language codes or N)>, <searchable description code (language codes or N)>, <searchable claims code (language codes or N)> <CRLF>.`

4. The code “N” in the elements <searchable description code>, <searchable claims code> <searchable abstract code> mean “Not available”, respectively. The codes “language code” e.g., “en” and “N” are represented as a suffix of the corresponding element of the publication using one of the following options, following by a dash:

i. ABST – Abstract
ii. DESC – Description
iii. CLMS – Claims

5. If there are multiple languages available for these elements, the language indications must be separated by spaces instead of the separator referred to in paragraph 1 above. For example:

```
ABST-en ABST-de ABST-fr, DESC-N, CLMS-N
```

6. This first example illustrates an authority file, produced with only the mandatory elements, represented using a TXT structure with comma separators:

```
...

UA,1,C2,1993-04-30 <CRLF>
UA,1,U,1995-06-30 <CRLF>
UA,2,C2,1993-04-30 <CRLF>
UA,2,U,1995-06-30 <CRLF>
UA,3,C2,1993-04-30 <CRLF>
```

7. This second example illustrates an authority file, produced with the optional text-searchable abstract, description and claims indicator elements again represented using a TXT structure where the data elements are separated by a comma:

```
...

EP,2363052,A1,20110907,W,,ABST-N,DESC-N,CLMS-N <CRLF>
EP,2363053,A2,20110907,M, ,ABST-en,DESC-N,CLMS-N<CRLF>
EP,2540632,A1,20130102,P,,ABST-N,DESC-N,CLMS-N<CRLF>
EP,2540632,B1,20151202,,ABST-en ABST-fr ABST-de,DESC-en,CLMS-en <CRLF>
```

[Annex III follows]

ANNEX III

XML SCHEMA DEFINITION (XSD) FOR AUTHORITY FILE

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Editorial Note by the International Bureau:

Annex III of WIPO Standard ST.37 is the set of XML schema components to represent the minimum and extended data elements of an Authority File of patent documents issued by a Patent Office. Annex III is based on WIPO Standard ST.96, including the naming convention used to identify the names of the specific data components for Authority File. Annex III includes an Appendix which is a sample XML instance of an Authority File structured according to the XML schema of WIPO Standard ST.96 Version 8.0.

The complete XSD can be downloaded from here but its contents are also included for reference below:
https://www.wipo.int/standards/XMLSchema/AFPatent/V3_0/ST37PatentAuthorityFile_V3_0.xsd.

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:afp="http://www.wipo.int/standards/XMLSchema/AFPatent"
xmlns:com="http://www.wipo.int/standards/XMLSchema/ST96/Common"
xmlns:pat="http://www.wipo.int/standards/XMLSchema/ST96/Patent"
targetNamespace="http://www.wipo.int/standards/XMLSchema/AFPatent"
elementFormDefault="qualified" attributeFormDefault="qualified" version="V3_0">
       <xsd:import namespace="http://www.wipo.int/standards/XMLSchema/ST96/Patent"
schemaLocation="PatentPublication_V8_0.xsd"/>
       <xsd:import namespace="http://www.wipo.int/standards/XMLSchema/ST96/Common"
schemaLocation="PatentPublication_V8_0_Common.xsd"/>
       <xsd:annotation>
              <xsd:appinfo>
                     <com:SchemaLastModifiedDate>2025-11-09</com:SchemaLastModifiedDate>
                     <com:SchemaContactPoint>standards@wipo.int</com:SchemaContactPoint>

                     <xsd:documentation>Changes introduced since version 2.2 comprise:
           (i)   Adding a new bag to capture multiple number ranges in
           AuthorityFileDataCoverageType – PublicationNumberRangeBag
           (ii)  Adding a date range for which the number range is effective - StartDate and
           EndDate added to PublicationNumberRangeType
           (iii) Created new definition for PriorityApplicationIdentificationBag which
           allows the application number to be optionally provided
           (iv)  Updating AuthorityFileEntry to refer to the new priority application
           component
           (v)   Removed codes R and U from the list of allowable exception codes
           (vi)  Included new component DocumentTotalQuantity and DocumentCoverageURI and
           updateAFCategory as no longer present in ST.96
                     </xsd:documentation>

              </xsd:appinfo>
       </xsd:annotation>
       <xsd:element name="PatentAuthorityFile" type="afp:PatentAuthorityFileType">
              <xsd:annotation>
                     <xsd:documentation>Authority file for patent documents provided by
patent offices according to WIPO Standard ST.37</xsd:documentation>
```

```
		</xsd:annotation>
	</xsd:element>
	<xsd:element name="AuthorityFileDataCoverage"
type="afp:AuthorityFileDataCoverageType">
		<xsd:annotation>
			<xsd:documentation>List of patent documents published by industrial
property offices grouped according to their ST.16 kind-of-document codes for a given date
range</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:complexType name="AuthorityFileDataCoverageType">
		<xsd:sequence>
			<xsd:element ref="afp:PublicationDateRange"/>
			<xsd:element ref="afp:PublicationNumberRangeBag" minOccurs="0"/>
			<xsd:element ref="afp:KindCodeCoverageBag" minOccurs="0"/>
			<xsd:element ref="afp:ExceptionCodeCoverageBag" minOccurs="0"/>
			<xsd:element ref="afp:DataCoverageURI" minOccurs="0"/>
		</xsd:sequence>
	</xsd:complexType>
	<xsd:element name="AuthorityFileDefinition" type="afp:AuthorityFileDefinitionType">
		<xsd:annotation>
			<xsd:documentation>Provide definition file information relating to
this associated authority file, including file coverage</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:complexType name="AuthorityFileDefinitionType">
		<xsd:choice maxOccurs="unbounded">
			<xsd:element ref="afp:ExceptionCodeDefinitionBag"/>
			<xsd:element ref="pat:PatentDocumentKindCodeDefinitionBag"/>
			<xsd:element ref="afp:MostRecentDocument"/>
			<xsd:element ref="afp:AuthorityFileDataCoverage"/>
			<xsd:element ref="com:CommentText"/>
			<xsd:element ref="com:DocumentLocationURI"/>
		</xsd:choice>
		<xsd:attribute ref="com:id"/>
		<xsd:attribute ref="afp:groupedAFIndicator" use="required"/>
		<xsd:attribute ref="afp:groupAFCategory"/>
		<xsd:attribute ref="com:updateAFCategory" use="required"/>
	</xsd:complexType>
	<xsd:element name="AuthorityFileEntry" type="afp:AuthorityFileEntryType">
		<xsd:annotation>
			<xsd:documentation>An authority file entry consists of data required
to uniquely identify a patent publication according to WIPO ST.37</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:element name="DataCoverageURI" type="xsd:anyURI">
		<xsd:annotation>
			<xsd:documentation>
				Provides the URI for where details regarding the data coverage
can be found online
			</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:element name="PublicationDateRange" type="afp:PublicationDateRangeType">
		<xsd:annotation>
			<xsd:documentation>Publication date range over which the authority
file is valid</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:complexType name="PublicationDateRangeType">
		<xsd:sequence>
			<xsd:element ref="com:StartDate"/>
			<xsd:element ref="com:EndDate"/>
		</xsd:sequence>
	</xsd:complexType>
```

```
	<xsd:element name="SearchableDescriptionCode" type="afp:SearchableCodeType">
		<xsd:annotation>
			<xsd:documentation>A code which indicates the language if a text-
searchable description is available, or otherwise indicated with 'N' if not
available</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:complexType name="SearchableCodeType">
		<xsd:choice>
			<xsd:element ref="afp:NotSearchableCode"/>
			<xsd:element ref="afp:SearchableLanguageCode" minOccurs="1"
maxOccurs="unbounded"/>
		</xsd:choice>
		<xsd:attribute ref="com:id"/>
	</xsd:complexType>
	<xsd:element name="NotSearchableCode" type="xsd:string" default="N">
		<xsd:annotation>
			<xsd:documentation>Where the text is not searchable, this indicator is
set to N</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:element name="SearchableLanguageCode" type="com:ISOLanguageCodeType">
		<xsd:annotation>
			<xsd:documentation>2-letter code indicating the language the text-
searchable abstract, claims or description is available in</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:element name="SearchableClaimsCode" type="afp:SearchableCodeType">
		<xsd:annotation>
			<xsd:documentation>A code which indicates the language if a text-
searchable claims is available, or otherwise the code value 'N'</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:element name="SearchableAbstractCode" type="afp:SearchableCodeType">
		<xsd:annotation>
			<xsd:documentation>A code which indicates the language if a text-
searchable abstract is available, or otherwise the code value 'N'</xsd:documentation>
		</xsd:annotation>
	</xsd:element>

	>
	<xsd:complexType name="AuthorityFileEntryType">
		<xsd:sequence>
			<xsd:element ref="pat:PatentPublicationIdentification"/>
			<xsd:element ref="afp:ExceptionCode" minOccurs="0"/>
                                    <xsd:element ref="pat:ApplicationIdentification"
		minOccurs="0"/>
			<xsd:element ref="patafp:PriorityApplicationIdentificationBag"
minOccurs="0"/>
			<xsd:element ref="afp:SearchableAbstractCode" minOccurs="0"
maxOccurs="1"/>
			<xsd:element ref="afp:SearchableDescriptionCode" minOccurs="0"
maxOccurs="1"/>
			<xsd:element ref="afp:SearchableClaimsCode" minOccurs="0"
maxOccurs="1"/>
		</xsd:sequence>
		<xsd:attribute ref="com:id"/>
	</xsd:complexType>
	<xsd:complexType name="PatentAuthorityFileType">
		<xsd:sequence>
			<xsd:element ref="afp:AuthorityFileDefinition" minOccurs="0"/>
			<xsd:element ref="afp:AuthorityFileEntry" maxOccurs="unbounded"/>
		</xsd:sequence>
		<xsd:attribute ref="com:id"/>
		<xsd:attribute ref="com:officeCode" use="required"/>
```

```
		<xsd:attribute ref="com:creationDate"/>
		<xsd:attribute ref="afp:st37Version" use="required"/>
		<xsd:attribute ref="com:ipoVersion"/>
	</xsd:complexType>
	<xsd:attribute name="groupedAFIndicator" type="xsd:boolean">
		<xsd:annotation>
			<xsd:documentation>Indicates that the authority file has been grouped,
or not, according to one of the defined categories</xsd:documentation>
		</xsd:annotation>
	</xsd:attribute>
	<xsd:element name="DocumentTotalQuantity" type="xsd:nonNegativeInteger">
		<xsd:annotation>
			<xsd:documentation>Total number of documents available or
provided</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:element name="ExceptionCode" type="afp:ExceptionCodeType">
		<xsd:annotation>
			<xsd:documentation>A one-letter code which classifies why the
particular complete patent publication is not available in machine-readable form at that
time </xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:element name="ExceptionCodeCoverage" type="afp:ExceptionCodeCoverageType">
		<xsd:annotation>
			<xsd:documentation>Data coverage summary by exception code including
total quantity of documents</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:complexType name="ExceptionCodeCoverageType">
		<xsd:sequence>
			<xsd:element ref="afp:ExceptionCode"/>
			<xsd:element ref="afp:DocumentTotalQuantity"/>
		</xsd:sequence>
	</xsd:complexType>
	<xsd:element name="ExceptionCodeCoverageBag"
type="afp:ExceptionCodeCoverageBagType">
		<xsd:annotation>
			<xsd:documentation>Collection of data coverage summary by exception
code</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:complexType name="ExceptionCodeCoverageBagType">
		<xsd:sequence maxOccurs="unbounded">
			<xsd:element ref="afp:ExceptionCodeCoverage"/>
		</xsd:sequence>
	</xsd:complexType>
	<xsd:element name="ExceptionCodeDefinition" type="afp:ExceptionCodeDefinitionType">
		<xsd:annotation>
			<xsd:documentation>A set of Exception codes, particularly the codes N
and X, and their descriptions as defined by the IP Office, which are different from
definitions in WIPO ST.37</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:complexType name="ExceptionCodeDefinitionType">
		<xsd:sequence>
			<xsd:element ref="afp:ExceptionCode"/>
			<xsd:element ref="afp:ExceptionCodeDescriptionText"/>
		</xsd:sequence>
	</xsd:complexType>
	<xsd:element name="ExceptionCodeDescriptionText" type="xsd:string">
		<xsd:annotation>
			<xsd:documentation>A different or specific description of an exception
code, which an IP Office uses in their authority file</xsd:documentation>
		</xsd:annotation>
```

```
	</xsd:element>
	<xsd:element name="ExceptionCodeDefinitionBag"
type="afp:ExceptionCodeDefinitionBagType">
		<xsd:annotation>
			<xsd:documentation>List of exception codes that have a different or
specific definition in use by the IP Office rather than the definitions of exception codes
defined in WIPO ST.37</xsd:documentation>
		</xsd:annotation>
	</xsd:element>
	<xsd:complexType name="ExceptionCodeDefinitionBagType">
		<xsd:sequence maxOccurs="unbounded">
			<xsd:element ref="afp:ExceptionCodeDefinition"/>
		</xsd:sequence>
	</xsd:complexType>
	<xsd:simpleType name="ExceptionCodeType">
		<xsd:restriction base="xsd:token">
			<xsd:enumeration value="C">
				<xsd:annotation>
					<xsd:documentation>Publication document which is
corrupted so that not all of the text is searchable</xsd:documentation>
				</xsd:annotation>
			</xsd:enumeration>
			<xsd:enumeration value="D">
				<xsd:annotation>
					<xsd:documentation>Publication document which deleted
after the publication</xsd:documentation>
				</xsd:annotation>
			</xsd:enumeration>
			<xsd:enumeration value="E">
				<xsd:annotation>
					<xsd:documentation>Publication number allocated by the
IPO representing a PCT national/regional phase entry (for example Euro-PCT). No
corresponding document published. A Euro-PCT application is an international (PCT) patent
application that entered the European regional phase</xsd:documentation>
				</xsd:annotation>
			</xsd:enumeration>
			<xsd:enumeration value="M">
				<xsd:annotation>
					<xsd:documentation>Published document which is
considered missing</xsd:documentation>
				</xsd:annotation>
			</xsd:enumeration>
			<xsd:enumeration value="N">
				<xsd:annotation>
					<xsd:documentation>The use of code 'N' must be described
in the IP Office's Authority Definition File</xsd:documentation>
				</xsd:annotation>
			</xsd:enumeration>
			<xsd:enumeration value="P">
				<xsd:annotation>
					<xsd:documentation>Publication document which available
only on paper</xsd:documentation>
				</xsd:annotation>
			</xsd:enumeration>
			<xsd:enumeration value="W">
				<xsd:annotation>
					<xsd:documentation>Publication number which was assigned
but withdrawn before publication of the document</xsd:documentation>
				</xsd:annotation>
			</xsd:enumeration>
			<xsd:enumeration value="X">
				<xsd:annotation>
					<xsd:documentation>The use of code 'X' must be described
in the IP Office's Authority Definition File</xsd:documentation>
				</xsd:annotation>
```

```
                        </xsd:enumeration>
                </xsd:restriction>
        </xsd:simpleType>
        <xsd:attribute name="groupAFCategory" type="afp:GroupCategoryType">
                <xsd:annotation>
                        <xsd:documentation>Identifies how the authority files has been grouped
i.e., by date, publication-level or document-kind code</xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>
        <xsd:simpleType name="GroupCategoryType">
                <xsd:restriction base="xsd:token">
                        <xsd:enumeration value="date">
                                <xsd:annotation>
                                        <xsd:documentation>Date</xsd:documentation>
                                </xsd:annotation>
                        </xsd:enumeration>
                        <xsd:enumeration value="publication-level">
                                <xsd:annotation>
                                        <xsd:documentation>Publication level</xsd:documentation>
                                </xsd:annotation>
                        </xsd:enumeration>
                        <xsd:enumeration value="document-kind">
                                <xsd:annotation>
                                        <xsd:documentation>Document kind</xsd:documentation>
                                </xsd:annotation>
                        </xsd:enumeration>
                </xsd:restriction>
        </xsd:simpleType>
        <xsd:element name="KindCodeCoverage" type="afp:KindCodeCoverageType">
                <xsd:annotation>
                        <xsd:documentation>Data coverage summary by kind code including
document total quantity</xsd:documentation>
                </xsd:annotation>
        </xsd:element>
        <xsd:complexType name="KindCodeCoverageType">
                <xsd:sequence>
                        <xsd:element ref="com:PatentDocumentKindCode"/>
                        <xsd:element ref="afp:DocumentTotalQuantity"/>
                </xsd:sequence>
        </xsd:complexType>
        <xsd:element name="KindCodeCoverageBag" type="afp:KindCodeCoverageBagType">
                <xsd:annotation>
                        <xsd:documentation>Collection of data coverage summary by kind
code</xsd:documentation>
                </xsd:annotation>
        </xsd:element>
        <xsd:complexType name="KindCodeCoverageBagType">
                <xsd:sequence maxOccurs="unbounded">
                        <xsd:element ref="afp:KindCodeCoverage"/>
                </xsd:sequence>
        </xsd:complexType>
        <xsd:element name="MostRecentDocument" type="afp:MostRecentDocumentType">
                <xsd:annotation>
                        <xsd:documentation>The most recent document information available or
provided in the authority file</xsd:documentation>
                </xsd:annotation>
        </xsd:element>
        <xsd:complexType name="MostRecentDocumentType">
                <xsd:sequence>
                        <xsd:element ref="com:DocumentIdentifier"/>
                        <xsd:element ref="com:DocumentDate"/>
                </xsd:sequence>
                <xsd:attribute ref="com:id"/>
                </xsd:complexType>
        <xsd:complexType name="PriorityApplicationIdentificationType">
```

```
                <xsd:sequence>
                        <xsd:element ref="com:IPOfficeCode"/>
                        <xsd:element ref="com:ApplicationNumber" minOccurs="0"/>
                        <xsd:element ref="pat:FilingDate"/>
                </xsd:sequence>
                <xsd:attribute ref="com:id"/>
                <xsd:attribute ref="com:sequenceNumber" use="required"/>
        </xsd:complexType>
        <xsd:element name="PriorityApplicationIdentification"
type="afp:PriorityApplicationIdentificationType">
                <xsd:annotation>
                        <xsd:documentation>Identification of the priority
application</xsd:documentation>
                </xsd:annotation>
        </xsd:element>
        <xsd:complexType name="PriorityApplicationIdentificationBagType">
                <xsd:sequence>
                        <xsd:element ref="afp:PriorityApplicationIdentification"
maxOccurs="unbounded"/>
                        <xsd:element ref="pat:IncorporationByReferenceIndicator"
minOccurs="0"/>
                </xsd:sequence>
                <xsd:attribute ref="com:id"/>
        </xsd:complexType>
        <xsd:element name="PriorityApplicationIdentificationBag"
type="afp:PriorityApplicationIdentificationBagType">
                <xsd:annotation>
                        <xsd:documentation>Collection of priority applications which are used
to claim priority. Refers to ST.9 INID Code 30</xsd:documentation>
                </xsd:annotation>
        </xsd:element>
        <xsd:element name="PublicationNumberRange" type="afp:PublicationNumberRangeType">
                <xsd:annotation>
                        <xsd:documentation>A range of patent publication numbers which are
included within this authority file</xsd:documentation>
                </xsd:annotation>
        </xsd:element>
        <xsd:complexType name="PublicationNumberRangeType">
                <xsd:sequence>
                        <xsd:element ref="pat:BeginRangeNumber"/>
                        <xsd:element ref="pat:EndRangeNumber"/>
                        <xsd:element ref="com:StartDate"/>
                        <xsd:element ref="com:EndDate"/>
                </xsd:sequence>
        </xsd:complexType>
        <xsd:element name="PublicationNumberRangeBag"
type="afp:PublicationNumberRangeBagType">
                <xsd:annotation>
                        <xsd:documentation>A collection of patent publication number ranges
which are included within this authority file</xsd:documentation>
                </xsd:annotation>
        </xsd:element>
        <xsd:complexType name="PublicationNumberRangeBagType">
                <xsd:sequence>
                        <xsd:element ref="afp:PublicationNumberRange" minOccurs="1"
maxOccurs="100"/>
                </xsd:sequence>
        </xsd:complexType>
        <xsd:attribute name="st37Version" type="xsd:token" fixed="V3_0">
                <xsd:annotation>
                        <xsd:documentation>A specific release version of ST.37 XML
Schema</xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>
<xsd:attribute name="updateAFCategory" type="afp:UpdateAFCategoryType">
```

```
              <xsd:annotation>
                     <xsd:documentation>
                            Determines how updates to the authority file will be performed
e.g., incremental versus full.
                     </xsd:documentation>
              </xsd:annotation>
       </xsd:attribute>
       <xsd:simpleType name="UpdateAFCategoryType">
              <xsd:restriction base="xsd:token">
                     <xsd:enumeration value="full">
                            <xsd:annotation>
                                   <xsd:documentation>
                                          A complete new authority file is provided at each
update period.
                                   </xsd:documentation>
                            </xsd:annotation>
                     </xsd:enumeration>
                     <xsd:enumeration value="incremental">
                            <xsd:annotation>
                                   <xsd:documentation>
                                          Only the new authority file entries published
since the last update period are provided.
                                   </xsd:documentation>
                            </xsd:annotation>
                     </xsd:enumeration>
                     <xsd:enumeration value="differential">
                            <xsd:annotation>
                                   <xsd:documentation>
                                          Only the records which have changed or are
required to be updated since the last update period are provided.
                                   </xsd:documentation>
                            </xsd:annotation>
                     </xsd:enumeration>
              </xsd:restriction>
       </xsd:simpleType>
</xsd:schema>
```

[Appendix to Annex III follows]

APPENDIX TO ANNEX III

The Appendix is available at:
https://www.wipo.int/standards/en/st37/annexiii_appendix_V3_0.xml

[Annex IV follows]

ANNEX IV

DOCUMENT TYPE DEFINITION (DTD) FOR AUTHORITY FILE

Version 3.0

Revision approved by the Committee on WIPO Standards (CWS)
at its thirteenth session on November 14, 2025

Editorial Note by the International Bureau:

Annex IV of WIPO Standard ST.37 is the set of XML DTD components to represent the minimum and extended data elements of an Authority File of patent documents issued by a Patent Office. Annex IV is based on WIPO Standard ST.36, including the naming convention used to identify the names of the specific data components for Authority File. Annex IV includes an Appendix which is a sample XML instance of an Authority File structured according to the XML DTD.

The complete DTD can be downloaded from here:
https://www.wipo.int/standards/dtd/ST37PatentAuthorityFile_V3_0.dtd

```
<?xml version='1.0' encoding='UTF-8' ?>
<!--Annex IV of WIPO Authority File Standard ST.37, XML Data Type Definition (DTD) for
Authority Files

This entity may be identified by the PUBLIC identifier:
************************************************************************************
*
PUBLIC "-//WIPO//XSD AUTHORITY FILE 3.0//EN" "PatentAuthorityFile_V3_0.dtd"
************************************************************************************
* 2025-11-14:
(i) Update not-searchable-code to be a fixed value of "N"
(ii) For priority-claims: kind should be removed from here and application number made
optional so that it matches the Schema
(iii) Remove reference to priority-claim-kind
(iv) For publication-number-range, start-date and end-date added
(iv) Corrected document-kind-code-definition to remove cardinality as each kind should only
have one document-kind-code-description
*
* 2021-08-24: Revision of the main body, annexes and appendixes of ST.37 approved by the
Committee on WIPO Standards (CWS) at its ninth session comprising:
* (i) added elements: <searchable-abstract-code?>, <searchable-description-code?>,
<searchable-claims-code?>
* (ii) added attributes @code to be used with <not-searchable-indicator>, referenced by
elements listed in (i)
* (iii) added element <searchable-language-code>, referenced by the elements listed in (i)
* (iii) changed values of grouped-af-indicator to 'true' and 'false' which are true boolean
values
*
* 2019-07-02: Revision of Annex IV was approved by the Committee on WIPO Standards (CWS) at
its seventh session comprising:
* (i) group-category renamed grouped-af-indicator and is now a list of boolean values 'yes'
and 'no'
* (ii) backup-category renamed update-af-category
* (iii) additional-comment renamed comment-text
*
* 2018-10-19: Revision of Annex IV was approved by the Committee on WIPO Standards (CWS) at
its sixth session.
*
```

```
**************************************************************

* PUBLIC DTD URL

* http://www.wipo.int/standards/dtd/ST37PatentAuthorityFile_V3_0.dtd

****************************************************************************
* CONTACTS
****************************************************************************
standards@wipo.int

Date first draft created: 2018-09-19
Date last modified: 2025-11-14

-->
<!ELEMENT authority-file (authority-file-definition? , authority-file-entry+)>

<!ATTLIST authority-file  country       CDATA  #REQUIRED
                          date-produced CDATA  #REQUIRED >
<!ELEMENT authority-file-definition (exception-code-list | document-kind-code-list | most-
recent-document | data-coverage | comment-text | document-location-uri)+>


 <!ATTLIST authority-file-definition  grouped-af-indicator  (yes | no )  #REQUIRED
                                      group-af-category (date |
                                                         publication-level |
                                                         document-kind )  #IMPLIED
                                      update-af-category (full |
                                                         incremental |
                                                         differential )  #REQUIRED >

<!ELEMENT document-location-uri (#PCDATA)>

<!ELEMENT exception-code-list (exception-code-definition)+>

<!ELEMENT exception-code-definition (exception-code, exception-code-description)>

<!ELEMENT exception-code-description (#PCDATA)>
<!--Publication exception code; single-alphabetic letter code to indicate the reason why
the complete published document, for which the corresponding number is assigned, is not
available:
    C=Defective documents;
    D= Documents deleted after the publication;
    E=Publication number allocated by the IPO representing a PCT national/regional phase
entry (for example Euro-PCT). No corresponding document published.  A Euro-PCT application
is an international (PCT) patent application that entered the European regional phase;
    M=Missing published documents;
    N=Not used publication number: e.g. publication numbers have been issued, but finally
have not been allocated to any publication;
    P=Document available on paper only;

    W=Applications (or patents) which were withdrawn before the publication;
         this can include lapsed or ceased patents and might depend on national patent law
regulations;
    X=Code available for individual or provisional use by an IPO;
-->

<!ELEMENT exception-code (#PCDATA)>

<!ELEMENT document-kind-code-list (document-kind-code-definition)+>

<!ELEMENT document-kind-code-definition (kind, document-kind-code-description)>

<!ELEMENT document-kind-code-description (#PCDATA)>
```

```
<!ELEMENT most-recent-document EMPTY>

<!ATTLIST most-recent-document  publication-number CDATA  #REQUIRED
                                publication-date   CDATA  #REQUIRED >
<!ELEMENT data-coverage (publication-date-range? , publication-number-range? , kind-code-
coverage? , exception-code-coverage? , data-coverage-uri?)>

<!ELEMENT publication-date-range EMPTY>

<!ATTLIST publication-date-range  start-date CDATA  #REQUIRED
                                  end-date   CDATA  #REQUIRED >
<!ELEMENT publication-number-range EMPTY>

<!ATTLIST publication-number-range  begin-range-number  CDATA  #REQUIRED
                                    end-range-number CDATA  #REQUIRED
                                   start-date CDATA #REQUIRED
                                   end-date CDATA #REQUIRED>
<!ELEMENT kind-code-coverage (kind, document-total-quantity)*>

<!ELEMENT document-total-quantity (#PCDATA)>

<!ELEMENT exception-code-coverage (exception-code, document-total-quantity)*>

<!ELEMENT data-coverage-uri (#PCDATA)>

<!ELEMENT authority-file-entry (publication-reference , exception-code?, application-
reference? , priority-claims?, searchable-abstract-code?, searchable-description-code?,
searchable-claims-code?)>

<!ELEMENT publication-reference (document-id)>

<!-- document-id tag as defined in ST.36 -->
<!ELEMENT document-id (country , doc-number , kind? , date?)>

<!--Two-letter alphabetic codes which represent the names of states, other entities
and intergovernmental organizations the legislation of which provides for the protection of
IP rights or which organizations are acting in the framework of a treaty in the field of
IP. e.g. "XX".
Always in upper case.-->
<!ELEMENT country (#PCDATA)>

<!--Doc-number: The number of the referenced patent (or application) document-->
<!ELEMENT doc-number (#PCDATA)>

<!--Document kind code; e.g., A1 (WIPO ST.16)-->
<!ELEMENT kind (#PCDATA)>

<!--Date: components of a date. Format: YYYYMMDD (WIPO ST.2)-->
<!ELEMENT date (#PCDATA)>

<!--Application reference information: application number, country.
In case of a filing reference, the kind code is empty and the date refers to the filing
date.
-->
<!ELEMENT application-reference (country , doc-number , filing-date?)>

<!--Filing Date: components of a date. Format: YYYYMMDD (WIPO ST.2)-->
<!ELEMENT filing-date (#PCDATA)>

<!--Priority application identification (priority-claim)-->
<!ELEMENT priority-claims (priority-claim+)>

<!ELEMENT priority-claim (country, doc-number?, , date)>
```

```
<!ATTLIST priority-claim  sequence  CDATA  #REQUIRED>

<!ELEMENT comment-text (#PCDATA)>
<!-- Series of two-letter language codes that indicate, for searchable description,
abstract and claim text, the language made available by the Office either as the original
language or an official translation or alternatively 'N' if this text is not searchable or
'U' if it is unknown whether this text is searchable and the language it is available in
-->

<!ELEMENT searchable-description-code (not-searchable-code | searchable-language-code+)>

<!ELEMENT searchable-claims-code (not-searchable-code | searchable-language-code+)>

<!ELEMENT searchable-abstract-code (not-searchable-code | searchable-language-code+)>

<!ELEMENT not-searchable-code EMPTY >

<!-- N means the information is not available at this time-->
<!ATTLIST not-searchable-code code CDATA #FIXED "N" >

<!-- WIPO ST.96 language code, e.g., en, de, ja, etc.-->
<!ELEMENT searchable-language-code (#PCDATA)>
```

[Appendix to Annex IV follows]

APPENDIX TO ANNEX IV

The Appendix is available at:
http://www.wipo.int/standards/en/st37/annexiv_appendix_V3_0.xml

[End of Annex IV and of Standard]