PATENT COOPERATION TREATY (PCT)

ADMINISTRATIVE INSTRUCTIONS
UNDER THE PATENT COOPERATION TREATY:

ANNEX F, APPENDIX I
XML DTDS FOR THE E-PCT STANDARD

as in force from January 1, 2021

1. This document contains the text of Appendix I of Annex F of the Administrative Instructions under the Patent Cooperation Treaty (PCT) as in force from January 1, 2021. It has been established under Article 58(4) and Rule 89.2(a), and modified under Rule 89.2(b) and in accordance with the change procedure provided for in section 2.5 of Annex F.

2. The text of the Administrative Instructions as in force from July 1, 2020, with the exception of Annexes A and F (available separately), is contained in document PCT/AI/21 dated June 25, 2020. The text of Annex F of the Administrative Instructions as in force from July 1, 2010, with the exception of its Appendix I, is contained in document PCT/AI/ANF/5 dated February 17, 2010. This document is to be read, subject to any subsequent additions or revisions, with these texts.

3. This document is published on WIPO’s website at www.wipo.int/pct/en/texts/index.htm; paper copies are available from the International Bureau of WIPO upon request.
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1. INTRODUCTION

This document presents the XML DTDs used for the electronic exchange of international application documents as defined in Annex F. It also contains details of the methodology adopted in drafting these DTDs.¹

2. DTDS FOR XML DOCUMENTS

2.1 Strategy for further development of DTDs

This specification is expected to expand in scope over time to include subsequent formal exchanges between the parties involved. Included below are some of the DTDs required for the initial phase of electronic submission of an electronic application, and for some communications in the Office-to-Office PCT communication sector. Other DTDs will be required for later phases of the processing of an electronic PCT application (E-PCT).

While the immediate goal of this specification is to support E-PCT applications, national Offices intended to use it as the basis for their own national electronic applications for a variety of industrial property types and recommend that it would be the basis for an eventual WIPO standard for use by other Offices.

With that in mind, the DTDs created for E-PCT will be constructed in components for element definitions and from which Offices can derive elements and DTDs for their needs in a consistent and compatible manner. The other DTDs that will eventually be required will also be based on the component DTD architecture. The XML name-space facility (XMLNS) will be used to support the distinction of sub-component names in this specification and those produced by other Offices.

As an aid to understanding the DTDs and the component-based architecture, an HTML-based documentation has been constructed of the elements and structures in the sources of the proposed DTDs, that will illustrate their relationships. This HTML documentation is available on the PCT Electronic Filing web-site.

2.2 Future DTDs

(a) Post-application, procedural and formal communications of various types

(b) RO to IB

(c) RO to ISA

(d) IB to ISA

(e) IB to IPEA

(f) ISA to IB

(g) IPEA to IB

(h) IB to RO

(i) DTDs required by other types of industrial property

¹ Words and expressions used in this Appendix have the same meanings as in the main body of Annex F; see the Glossary and abbreviations section at the end of that main body.
2.3 **Reusable components**

Given the large number of international application document exchange DTDs, they will be built using a number of reusable standard components combined with transaction specific components.

These components are defined as XML Schemas (a W3C Recommendation); each element definition is a reusable component and a valid schema in itself; parent elements include the child element components needed to complete their definitions, thus making each component a possible ‘root element’ or document type. These components are then assembled into a complete XML Schema file, which is translated into DTD syntax.

These element definition components will be stored in a repository available via the internet in order to allow Offices to rapidly create DTDs for their specific needs; since many common components have already been defined, new document types can be created in minutes by including pre-defined element definitions, and these element definitions will be consistent across all DTDs.

The complete XML Schemas will also be available via the ePCT Schema repository for use in software development, validation of documents, etc. An XML document instance created with an XML Schema will conform to and can be validated against the DTD as well.

Details on the ePCT Schema repository will be published in future revisions of this document, once it has been tested and implemented.

2.4 **XSL Stylesheets**

Standard XSL stylesheets are being created by WIPO for the following purposes:

(a) conversion of XML data to HTML to permit viewing of PCT data using web browser software, and

(b) conversion of XML data to support the fee calculation method based on the number of sheets in the international application were it to be in paper form, and to enable printing of PCT data.

These stylesheets will be hosted in the ePCT Schema repository along with the PCT element definitions, and published in future versions of this document.

2.5 **DTD Versioning**

The file name of a DTD shall indicate its version. The file name with a version number shall be a string resulting from concatenating the document type followed by a hyphen followed by the literal ‘v’ followed by a digit signifying the major version followed by an optional section consisting of a dash followed by a minor revision number digit.

- Example: request-v1-2.dtd
2.6 XML Document Prolog

XML document instances shall begin with a prolog section. The prolog shall contain an XML processing instruction that specifies the version of XML and the encoding scheme. The prolog shall also contain a document type declaration, also known as a DOCTYPE statement. The document type declaration may optionally include a public identifier (prefaced with the keyword ‘PUBLIC’) and must contain a system identifier (prefaced by the keyword ‘SYSTEM’, unless a PUBLIC keyword has been used), which specifies a URI (Uniform Resource Identifier) referencing the DTD that the document instance can be validated against. Public identifiers may be found in the comments at the start of each DTD file.

- Example of a prolog with ‘PUBLIC’ identifier:

    <?xml version="1.0" encoding="UTF-8"?>
    <!DOCTYPE request PUBLIC "//WIPO//DTD REQUEST 1.1//EN" "request-v1-1.dtd">

- Example of a prolog with ‘SYSTEM’ identifier:

    <?xml version="1.0" encoding="UTF-8"?>
    <!DOCTYPE request SYSTEM "request-v1-1.dtd">

3. DTDS FOR NEW PCT APPLICATIONS (E-PCT)

The DTDs listed below are the latest released versions. They are available in a public Web repository at http://www.wipo.int/pct-safe/en/resources/xml_dtd.html.

3.1 Package data

<![xml version='1.0' encoding='UTF-8' ?>>


<!--
********************************************************************************
* package-data v1.7  2017 JULY                                            *
********************************************************************************
* PUBLIC "//WIPO//DTD PACKAGE DATA 1.7//EN" "package-data-v1-7.dtd"
********************************************************************************
********************************************************************************
* contacts: *
*   WIPO: Yukako SHIBA; yukako.shiba@wipo.int *
********************************************************************************
* revision history *
********************************************************************************
Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.6 to v1.7
..added an element "written-opinion" to :"package-data
..changed an attribute "ref-number" of copy-general-power-of-attorney optional
MO: 01/07/09 incorporated changes from PFC
..changed version number from v1.5 to v1.6
..added attribute 'electronic-format-type' to sequence-list (PFC09/001)
..added attribute 'part-of-application' to sequence-list (PFC09/001)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.4 to v1.5
..added element 'xmit-receipt-doc' to package-data (PFC08/004)
..added element 'ro-request-receiving-info-doc' to package-data (PFC08/004)
..added element 'pre-conversion-files-package' to package-data (PFC08/004)

MO: 01/07 incorporated changes from PFCs:
..changed version number from v1.3 to v1.4
..implementation of PFC06/001
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-text,
p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
..added element 'restore-rights-reason' to package-data (PFC06/004)
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
..added attribute 'subset' to protection-request (PFC06/005)

HT: 14/12/04 incorporated changes from PFCs:
..added attribute 'id' to application-reference, publication-reference
..added attribute 'seq-file-type' to sequence-list

HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..added element 'address' to first-named-applicant
..added value 'national-office', 'regional-office' to attribute produced-by of root element

HT: 16/12/03 Incorporated changes from PFCs:
..changed version number from v1.1 to v1.2
..added element 'sup2' and 'sub2' to sup and sub
..added attribute 'external-type' to table-external

JD: 03/02/03 incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..added element 'notice-info', 'request-for-dispatch-info' to office-to-applicant content model
..added element 'table-external' to root content model
..added element 'other-filing' to transmittal-info content model
..added (last-name | orgname) to %name_group;
..made postcode optional within address
..removed br from b, i, smallcaps
2001/12/01
..released version number as v1.0

*****************************************************

Root Element 'package-data'

Attributes:
lang = language of application - use ISO639 language code
dtd-version = dtd version number
file = filename of the whole application
status = status of the application; values: new = new application
produced-by = creator of this document
date-produced = YYYYMMDD e.g, 20011230 if desired, 12 characters maximum
country = st.3 code

%document-attributes group entity:
lang = language code of attached document, ISO639 language code, e.g, en, de, ja,
file = attached document file name, e.g, "request.xml"
status = attached document status, e.g, new, replace,
carriers =
   internal = This WAD contains the referenced electronic document
   external = Outside electronic carrier contains the referenced electronic document
   paper = The referenced document is paper form

-->
<!ELEMENT package-data (transmittal-info , signatories , dtext? , (application-
<!DOCTYPE package-data [
<!ELEMENT package-data (data, dtd, file, produced-by, """>
<!ELEMENT data CDATA #REQUIRED>
<!ELEMENT dtd CDATA #IMPLIED>
<!ELEMENT file CDATA #IMPLIED>
<!ELEMENT produced-by ((applicant | RO | ISA | IPEA | IB | DO | EO | national-office | regional-office)) #REQUIRED>
<!ELEMENT country CDATA #IMPLIED>
<!ELEMENT status CDATA #IMPLIED>
<!ATTLIST package-data lang CDATA #REQUIRED>
<!ATTLIST package-data dtd-version CDATA #IMPLIED>
<!ATTLIST package-data file CDATA #IMPLIED>
<!ATTLIST package-data produced-by applicant CDATA #IMPLIED>
<!ATTLIST package-data produced-by national-office CDATA #IMPLIED>
<!ATTLIST package-data produced-by regional-office CDATA #IMPLIED>
<!ATTLIST package-data date-produced CDATA #IMPLIED>
<!ATTLIST package-data country CDATA #IMPLIED>
<!ATTLIST package-data status CDATA #IMPLIED>]
<!ELEMENT other-doc (document-name, document-code, dtext)+>
<!ATTLIST other-doc id ID #IMPLIED>
<!ATTLIST other-doc file CDATA #REQUIRED>
<!ATTLIST other-doc lang CDATA #IMPLIED>
<!ATTLIST other-doc carriers (internal-electronic | external-electronic | paper) #IMPLIED>
<!ATTLIST other-doc file-type (xml | pdf | txt | tif | zip | jpg) #REQUIRED>
<!ATTLIST other-doc status CDATA #IMPLIED>]
<!ELEMENT pre-conversion-files-package EMPTY>
<!ATTLIST pre-conversion-files-package id ID #IMPLIED>
<!ATTLIST pre-conversion-files-package file CDATA #REQUIRED>
<!ATTLIST pre-conversion-files-package lang CDATA #IMPLIED>
<!ATTLIST pre-conversion-files-package carriers (internal-electronic | external-electronic | paper) #IMPLIED>
<!ATTLIST pre-conversion-files-package status CDATA #IMPLIED>]
<!ELEMENT ro-request-receiving-info-doc EMPTY>
<!ATTLIST ro-request-receiving-info-doc id ID #IMPLIED>
<!ATTLIST ro-request-receiving-info-doc file CDATA #REQUIRED>
<!ATTLIST ro-request-receiving-info-doc lang CDATA #IMPLIED>
<!ATTLIST ro-request-receiving-info-doc status CDATA #IMPLIED>
<!ATTLIST ro-request-receiving-info-doc carriers (internal-electronic | external-electronic | paper) #IMPLIED>]
<!ELEMENT xmit-receipt-doc EMPTY>
Wrapped document referenced; e.g. record copy, certified priority document.

Correspondence from applicant
it is possible to use corr(espondence)-type attribute for correspondence title

SEQUENCE LISTING
According to WIPO ST.25: STANDARD FOR THE PRESENTATION OF NUCLEOTIDE AND AMINO ACID SEQUENCE LISTINGS IN PATENT APPLICATIONS:
see http://www.wipo.int/scit/en/index.html
"The sequence listing as defined in paragraph 2(i) shall, where it is filed together with the application, be placed at the end of the description part of the application. This part shall be entitled Sequence Listing, begin on a new page and preferably have independent page numbering. The sequence listing forms an integral part of the description; it is therefore unnecessary, subject to paragraph 36, to describe the sequences elsewhere in the description." Therefore we create here a separate sub-document for sequence listings, it should follow any drawings or the claims. It should follow the format of Annex C/ST.25 and be an external file
Published application, e.g. PCT Art.20 communication

English translation of International Preliminary Examination Report

International Preliminary Examination Report (IPER) (Article 35)

English translation of search report

Search report
<!ELEMENT search-report-doc EMPTY>  
<!ATTLIST search-report-doc id ID #IMPLIED  
file CDATA #REQUIRED  
lang CDATA #IMPLIED  
carriers (internal-electronic |  
external-electronic |  
paper ) #IMPLIED  
status CDATA #IMPLIED >  

<!--  
Translation of international application  
-->  
<!ELEMENT translation-of-application EMPTY>  
<!ATTLIST translation-of-application id ID #IMPLIED  
file CDATA #REQUIRED  
lang CDATA #IMPLIED  
carriers (internal-electronic |  
external-electronic |  
paper ) #IMPLIED  
status CDATA #IMPLIED >  

<!--  
A copy of the earlier application for which priority is being claimed (Rule 17)  
-->  
<!ELEMENT priority-document EMPTY>  
<!ATTLIST priority-document id ID #IMPLIED  
file CDATA #REQUIRED  
lang CDATA #IMPLIED  
carriers (internal-electronic |  
external-electronic |  
paper ) #IMPLIED  
status CDATA #IMPLIED >  

<!--  
Amendment request document (PCT Art 19, Art 34)  
-->  
<!ELEMENT amendment EMPTY>  
<!ATTLIST amendment id ID #IMPLIED  
file CDATA #REQUIRED  
lang CDATA #IMPLIED  
status CDATA #IMPLIED  
carriers (internal-electronic | external-electronic |  
paper ) #IMPLIED >  

<!--  
Notification form among applicant and offices  
-->  
<!ELEMENT notification EMPTY>  
<!ATTLIST notification id ID #IMPLIED  
file CDATA #REQUIRED  
lang CDATA #IMPLIED  
carriers (internal-electronic |  
external-electronic |  
paper ) #IMPLIED  
notf-type CDATA #REQUIRED  
status CDATA #IMPLIED >  

<!--  
Changes to bibliographic material; e.g. name, address  
-->
<!ELEMENT bib-changes EMPTY>
<!ATTLIST bib-changes id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
status CDATA #IMPLIED
carriers (internal-electronic |
external-electronic |
paper ) #IMPLIED >

<!--
Copy of general power of attorney; PCT/RO/101 Box IX Check-box 4
-->  
<!ELEMENT copy-general-power-of-attorney EMPTY>
<!ATTLIST copy-general-power-of-attorney id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic |
external-electronic |
paper ) #IMPLIED
ref-number CDATA #IMPLIED
status CDATA #IMPLIED >

<!--
Original general power of attorney;
PCT/RO/101 Box IX, Check-box 3
-->  
<!ELEMENT general-power-of-attorney EMPTY>
<!ATTLIST general-power-of-attorney id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic |
external-electronic |
paper ) #IMPLIED
status CDATA #IMPLIED >

<!--
Original separate power of attorney
-->  
<!ELEMENT separate-power-of-attorney EMPTY>
<!ATTLIST separate-power-of-attorney id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic |
external-electronic |
paper ) #IMPLIED
status CDATA #IMPLIED >

<!--
Separate indications concerning deposited microorganism
or other biological material
-->  
<!ELEMENT biological-material EMPTY>
<!ATTLIST biological-material id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic |
external-electronic |
paper ) #IMPLIED
status CDATA #IMPLIED >

<!--
Statement explaining lack of signature

-->
<!ELEMENT lack-of-signature EMPTY>

<!ATTLIST lack-of-signature
  id    ID    #IMPLIED
  file  CDATA    #REQUIRED
  lang  CDATA    #IMPLIED
  carriers (internal-electronic | external-electronic | paper )    #IMPLIED
  status CDATA    #IMPLIED >

<--

Declarations under PCT

Attribute values of "dec-type":
"1" = Declaration as to the identity of the inventor
"2" = Declaration as to the applicant's entitlement, as at the international
filing date, to apply for and be granted a patent
"3" = Declaration as to the applicant's entitlement, as at the international
filing date, to claim the priority of the earlier application
"4" = Declaration of inventorship (only for the purposes of the designation of
the United States of America)
"5" = Declaration as to non-prejudicial disclosures or exceptions to lack of
novelty

-->
<!ELEMENT declaration-doc EMPTY>

<!ATTLIST declaration-doc
  id    ID    #IMPLIED
  file  CDATA    #REQUIRED
  lang  CDATA    #IMPLIED
  carriers (internal-electronic | external-electronic | paper )    #IMPLIED
  dec-type (1 | 2 | 3 | 4 | 5 | combined )    #REQUIRED
  status CDATA    #IMPLIED >

<--

Reference to an attached fee-calculation sheet

-->
<!ELEMENT fee-calculation-sheet EMPTY>

<!ATTLIST fee-calculation-sheet
  id    ID    #IMPLIED
  file  CDATA    #REQUIRED
  lang  CDATA    #IMPLIED
  status CDATA    #IMPLIED
  carriers (internal-electronic | external-electronic | paper )    #IMPLIED >

<--

Chapter2-demand form (IPEA401)

-->
<!ELEMENT chapter2-demand EMPTY>

<!ATTLIST chapter2-demand
  id    ID    #IMPLIED
  file  CDATA    #REQUIRED
  lang  CDATA    #IMPLIED
  status CDATA    #IMPLIED
  carriers (internal-electronic | external-electronic | paper )    #IMPLIED >

<--
Table external document:

```
<!ELEMENT table-external EMPTY>
<!ATTLIST table-external id ID #IMPLIED
  file CDATA #REQUIRED
  lang CDATA #IMPLIED
  carriers ((internal-electronic | external-electronic | paper ) #IMPLIED
  status CDATA #IMPLIED >
```

Application Body document:

```
(ST32: PATDOC)
description, claims, drawings and abstract
```

```
<!ELEMENT application-body-doc EMPTY>
<!ATTLIST application-body-doc id ID #IMPLIED
  file CDATA #REQUIRED
  lang CDATA #IMPLIED
  status CDATA #IMPLIED
  carriers ((internal-electronic | external-electronic | paper ) #IMPLIED >
```

```
PCT request form (PCT/RO/101)
```

```
<!ELEMENT application-request EMPTY>
<!ATTLIST application-request id ID #IMPLIED
  file CDATA #REQUIRED
  lang CDATA #IMPLIED
  status CDATA #IMPLIED
  carriers ((internal-electronic | external-electronic | paper ) #IMPLIED >
```

```
A signature represented by electronic means
```

```
<!ELEMENT electronic-signature (basic-signature | enhanced-signature)>
<!ATTLIST electronic-signature date CDATA #REQUIRED
  place-signed CDATA #IMPLIED >
```

```
A TIFF image of a signature
```

```
<!ELEMENT fax-image EMPTY>
<!ATTLIST fax-image file CDATA #REQUIRED >
```

```
Information regarding notice
```

```
<!ATTLIST notice-info notice-id-ref CDATA #REQUIRED >
```

<!--
Response term of invitation.

Attributes:
  term = period of time
  division = discernment of month or day

-->
<!ELEMENT response-term EMPTY>
<!ATTLIST response-term unit-of-time CDATA #REQUIRED
value CDATA #REQUIRED >

-->
Publication reference information: publication number, date, etc
(INID 11, ST.32:B110)

-->
<!ELEMENT publication-reference (document-id)>
<!ATTLIST publication-reference id ID #IMPLIED >

-->
Application reference information: application number, country
(INID 21, ST.32:B210)

-->
<!ELEMENT application-reference (document-id)>
<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

-->
Document identification refers to patents (and patent applications) only.
See WIPO ST.14

-->
<!ELEMENT document-id (country, doc-number, kind?, name?, date?)>
<!ATTLIST document-id lang CDATA #IMPLIED >

-->
Reference to an appealed application

-->
<!ELEMENT appeal-reference (doc-number, date?)>
<!ATTLIST appeal-reference appeal-type CDATA #REQUIRED >

-->
Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names

-->
<!ELEMENT name (#PCDATA)>
<!ATTLIST name name-type (legal | natural ) #IMPLIED >

-->
Title of the Invention:
(INID 54, ST.32:B540/B542)

Preferably two to seven words when in English or translated into English and precise. (Rule 4.3)
Recommended id = 'invt'

-->
<!ELEMENT invention-title (#PCDATA | b | i | u | o | sup | sub)>
<!ATTLIST invention-title id ID #IMPLIED
    lang CDATA #IMPLIED >

<!--
  Underscore: style - single is default
-->
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)*>
<!ATTLIST u style (single | double | dash | dots ) 'single' >

<!--
  Overscore: style - single is default
-->
<!ELEMENT o (#PCDATA | b | i | smallcaps | sup | sub)*>
<!ATTLIST o style (single |
    double |
    dash |
    dots |
    leftarrow |
    rightarrow |
    leftrightarrow ) 'single' >

<!--
  Holder for other documents that do not conform to one of the DTDs published in
  Appendix I of Annex F.
-->
<!ELEMENT other-documents (other-doc*)>

<!--
  Descriptive text
-->
<!ELEMENT dtext (#PCDATA)>

<!--
  The name of the other-doc(ument) referenced
-->
<!ELEMENT document-name (#PCDATA)>

<!--
  Signatories
-->
<!ELEMENT signatories (signatory*)>

<!--
  PCT/RO/101 Box No. X:
  The signature must be that of the applicant (if there are several applicants, all
  must sign); however, the signature may be that of the agent, or the common
  representative, where a separate power of attorney appointing the agent or the
  common representative, respectively, or a copy of a general power of attorney is
  already in possession of the receiving Office, is furnished...
  (PCT Rules 4.1(d), 4.15, and 90)
  Indicate the capacity of the signer with 'signatory-capacity'
-->
<!ELEMENT signatory (%name_group; , address? , electronic-signature , signatory-capacity?)>
<!ATTLIST signatory
   id ID #IMPLIED>

<!--
The capacity in which the person signs
-->  
<!ELEMENT signatory-capacity (#PCDATA)>

<!--
A PKI / PKCS #7 digital signature data type
-->  
<!ELEMENT enhanced-signature (pkcs?)>

<!--
PKCS7 digital signature
-->  
<!ELEMENT pkcs7 EMPTY>

<!--
A non-PKI electronic signature
-->  
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>

<!--
A simple 'signature';
e.g., clicking a button labeled 'accept' or 'I agree'
-->  
<!ELEMENT click-wrap EMPTY>

<!--
A simple text string is to be used as the basic electronic signature;
e.g., John Doe  <text-string>/jd/</text-string>
-->  
<!ELEMENT text-string (#PCDATA)>

<!--
Transmittal information
-->  
<!ELEMENT transmittal-info (new-application | subsequent-filing | office-to-office | office-to-applicant)>

<!--
Document transfer information from office to applicant
-->  

<!--
The total number of cases ready for notice
-->  

<!ELEMENT total-number-of-notifications (#PCDATA)>

<!--
A list of the receipts produced by the Office in response to query
"what did I send you?"
-->
<!ELEMENT receipt-list-info (applicant-name?, receipt-number*)>

<!--
Notification to the applicant of the document code of the object to draft
-->
<!ELEMENT drafting-document-info (document-code?, (receipt-number | dispatch-id))>

<!--
Dispatch identifier
-->
<!ELEMENT dispatch-id (#PCDATA)>

<!--
Receipt number
-->
<!ELEMENT receipt-number (#PCDATA)>

<!--
The Japanese applicant is demanding the notice of the reason for rejection
-->
<!ELEMENT reason-for-rejection-info (reason-code, text)>

<!--
Code of the reason for rejection
-->
<!ELEMENT reason-code (#PCDATA)>

<!--
Information regarding the agent (without address information)
-->
<!ELEMENT agent-info (agent-name+, customer-number)>

<!--
Customer number for agents by office
-->
<!ELEMENT customer-number (#PCDATA)>

<!--
The name of the agent (without address information)
-->
<!ELEMENT agent-name (%name_group;)

<!--
The name of the applicant (without address information)
(ST.32:B711)
<!ELEMENT applicant-name (%name_group;)> 

<!--
Document transfer information between offices.
--> 


<!--
The office that sends the document
--> 

<!ELEMENT from (country)> 

<!--
Subsequent filing information, before Issue Date
--> 


<!--
Patent reference information: patent number, date, etc
--> 

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

<!--
Document kind code; e.g., A1
(INID 13, ST.32:B130)
--> 

<!ELEMENT kind (#PCDATA)> 

<!--
Date: components of a date. Format: YYYYMMDD
--> 

<!ELEMENT date (#PCDATA)> 

<!--
The number of the referenced patent (or application) document
--> 

<!ELEMENT doc-number (#PCDATA)> 

<!--
Confirmation number from office
--> 

<!ELEMENT confirmation-number (#PCDATA)> 

<!--
New application information from applicant to office
-->

<!--
The office that receives the document
-->
<!ELEMENT to (country)>

<!--
For reference to non-PCT document from national office;
code defined by national office
-->
<!ELEMENT document-code (#PCDATA)>

<!--
Applicant's or agent's file reference, if desired, 12 characters maximum
-->
<!ELEMENT file-reference-id (#PCDATA)>

<!--
First applicant name in applicant group
-->
<!ELEMENT first-named-applicant (%name_group; , address?)>

<!--
Address components:
Address formats differ from country to country
If no structure possible use text
-->
<!ELEMENT address (%address_group;)> 

<!--
If no structure is possible, enter text (without markup)
-->
<!ELEMENT text (#PCDATA)>

<!--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO
-->
<!ELEMENT country (#PCDATA)>

<!--
Postal code or zip code
-->
<!ELEMENT postcode (#PCDATA)>

<!--
Region of country; e.g., state, province, etc.
-->
<!ELEMENT state (#PCDATA)>
<!-- County, parish, department, etc (mainly UK, USA) -->
<!ELEMENT county (#PCDATA)>

<!-- City or town name -->
<!ELEMENT city (#PCDATA)>

<!-- Street may contain house number or name -->
<!ELEMENT street (#PCDATA)>

<!-- Building information in address; e.g., Hoffman building -->
<!ELEMENT building (#PCDATA)>

<!-- Address floor; e.g., 10th -->
<!ELEMENT address-floor (#PCDATA)>

<!-- Address room; e.g., Room 55B -->
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number -->
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code -->
<!ELEMENT mailcode (#PCDATA)>

<!-- Address, fifth line -->
<!ELEMENT address-5 (#PCDATA)>

<!-- Address, fourth line -->
<!ELEMENT address-4 (#PCDATA)>
<!-- Address, third line -->
<!ELEMENT address-3 (#PCDATA)>

<!-- Address, second line -->
<!ELEMENT address-2 (#PCDATA)>

<!-- Address, first line -->
<!ELEMENT address-1 (#PCDATA)>

<!-- Registered number -->
<!ELEMENT registered-number (#PCDATA)>

<!-- Synonym -->
<!ELEMENT synonym (#PCDATA)>

<!-- Department, division, section, etc. name -->
<!ELEMENT department (#PCDATA)>

<!-- Organisation name or company name -->
<!ELEMENT orgname (#PCDATA)>

<!-- Role; e.g., President, Chairman, etc. -->
<!ELEMENT role (#PCDATA)>

<!-- SDOBI: Individual id -->
<!ELEMENT iid (#PCDATA)>

<!-- Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.) -->
<!ELEMENT suffix (#PCDATA)>
<!--
   Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!--
   First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--
   Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
   Title: e.g., Mr., Mrs., Dr. etc
-->
<!ELEMENT prefix (#PCDATA)>

<!--
   Bold formatting for text
-->
<!ELEMENT b (#PCDATA | i | u | o | smallcaps | sup | sub)*>

<!--
   Italic formatting for text
-->
<!ELEMENT i (#PCDATA | b | u | o | smallcaps | sup | sub)*>

<!--
   Small capitals
-->
<!ELEMENT smallcaps (#PCDATA | b | u | i | o)*>

<!--
   Subscripted text
-->
<!ELEMENT sub (#PCDATA | b | u | i | o | sup2 | sub2)*>

<!--
   Superscripted text
-->
<!ELEMENT sup (#PCDATA | b | u | i | o | sup2 | sub2)*>

<!--
   Subscripted text
-->
<!ELEMENT sub2 (#PCDATA | b | u | i | o)*>
3.2 Request form

```xml
<?xml version='1.0' encoding='UTF-8' ?>
<!ELEMENT sup2 (#PCDATA | b | u | i | o)>
<!-- bio = stub; not same as element (yet) -->
<!ELEMENT written-opinion EMPTY>
<!ATTLIST written-opinion
id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic | external-electronic | paper ) #IMPLIED
status CDATA #IMPLIED>
```

Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.8 to v1.9
..added an attribute "id" to signatory and us-rights
..added an element "earlier-search-authorization" to search-authority
..added an element "figures-in-color" to "request"
SY: 01/07/12 incorporated changes from PFC:
..changed version number from v1.7 to v1.8
..added attribute 'priority-doc-access-code' to priority-doc-from-library (PFC12/001)
SY: 01/04/10 incorporated changes from PFC:
..changed version number from v1.6 to v1.7
..added element 'priority-doc-from-library' to priority-claim (PFC09/005)
..added element 'store-in-digital-library' to request (PFC09/005)
MO: 01/07/09 incorporated changes from PFC:
..changed version number from v1.5 to v1.6
..added attribute 'carriers-type' to cl-sequence-listing (PFC09/001)
..added attribute 'carriers-quantity' to cl-sequence-listing (PFC09/001)
..added attribute 'size' to cl-sequence-listing (PFC09/001)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.4 to v1.5
..added element 'sub' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to u (PFC06/003)
..added attribute 'orientation' to doc
..added attribute 'total-page-count' to check-list
..added attribute 'page-count' to cl-sequence-listing
drawings
..added attribute 'lang', 'sequence' attributes to deceased-inventor
..added attribute 'orientation' to doc-page
..added (last-name | orgname) option to %name_group;
..made postcode optional within address
..removed 'br' from b, i, smallcaps
December 2001
..released version number as v1.0
*******************************************************************************

PCT REQUEST FORM : RO101 (root element)
attributes for request

Attributes:
- **lang** = language of application - use ISO639 language code
- **dtd-version** = dtd version number
- **file** = filename of the whole application
- **status** = status of the application; values: new = new application
- **date-produced** = YYYYMMDD e.g., 20011230 if desired, 12 characters maximum
- **produced-by** = Receiving office name, country code ST.3

-->

```xml
```

```xml
<!ATTLIST request
 lang          CDATA  #REQUIRED
 dtd-version   CDATA  #IMPLIED
 file          CDATA  #IMPLIED
 produced-by   (applicant | RO | ISA | IPEA | IB | DO | EO | national-office | regional-office )  #REQUIRED
 date-produced CDATA  #IMPLIED
 ro            CDATA  #REQUIRED
 status        CDATA  #IMPLIED>
```

```xml
<!ELEMENT doc-page EMPTY>
```

```xml
<!ATTLIST doc-page
 id          ID     #IMPLIED
 he          CDATA  #REQUIRED
 wi          CDATA  #REQUIRED
 type        (jpg | pdf | tif )  #REQUIRED
 alt         CDATA  #IMPLIED
 pp          CDATA  #IMPLIED
 pff         CDATA  #IMPLIED
 ppl         CDATA  #IMPLIED
 file        CDATA  #IMPLIED
 ocr         CDATA  #IMPLIED
 color       (color | bw )  #IMPLIED
 orientation (portrait | landscape ) 'portrait' >
```

This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.

Page range attributes are given when required
- **pp** = page range
- **ppf** = first page
- **ppl** = last page (for pdf).

The 'img' may also be used for complete pages, e.g. in drawings.

Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

--> 

```xml
<!ELEMENT doc-page EMPTY>
```

```xml
<!ATTLIST doc-page
 id          ID     #IMPLIED
```

Office is the ST.3 country code, including the regional authorities.
Office-dtd is the file which contains the DTD for the office-specific elements.
Indicator used to flag request to store this application in digital library for later use as a priority document. In the case of PCT this will be the WIPO DAS for Priority documents. The Indicators presence implies the request and absence implies no request.

A signature represented by electronic means.

A TIFF image of a signature.

Request (PCT/RO/101) BOX No.IX Check list, figure number to publish and language of International Application check-list.

Checklist; an additional document is being furnished.

Checklist; an earlier-search report is being furnished.

Checklist; an earlier-search document is being furnished.
<!ELEMENT cl-restore-rights-reason EMPTY>
<!ATTLIST cl-restore-rights-reason quantity CDATA #REQUIRED >

<!--
Includes the PCT/RO/134 or any separate sheet containing
Indications that is not included as part of the description
-->
<!ELEMENT cl-biological-material EMPTY>
<!ATTLIST cl-biological-material quantity CDATA #REQUIRED >

<!--
Check-list; a translation of application is being furnished
-->
<!ELEMENT cl-translation-of-application EMPTY>
<!ATTLIST cl-translation-of-application quantity CDATA #REQUIRED
lang CDATA #IMPLIED >

<!--
Checklist; a priority document is being furnished
-->
<!ELEMENT cl-priority-document (sequence-number+)> 
<!ATTLIST cl-priority-document quantity CDATA #REQUIRED >

<!--
Checklist; a statement explaining lack of signature is being furnished
-->
<!ELEMENT cl-lack-of-signature EMPTY>
<!ATTLIST cl-lack-of-signature quantity CDATA #REQUIRED >

<!--
Checklist; a copy of the general power of attorney is being furnished
-->
<!ELEMENT cl-copy-general-power-of-attorney (ref-number+)> 
<!ATTLIST cl-copy-general-power-of-attorney quantity CDATA #REQUIRED >

<!--
Checklist; a general power of attorney is being furnished
-->
<!ELEMENT cl-general-power-of-attorney EMPTY>
<!ATTLIST cl-general-power-of-attorney quantity CDATA #REQUIRED >

<!--
Checklist; a separate power of attorney is being furnished
-->
<!ELEMENT cl-separate-power-of-attorney EMPTY>
<!ATTLIST cl-separate-power-of-attorney quantity CDATA #REQUIRED >

<!--
Checklist; a sequence listing table is being furnished
-->
<!ELEMENT cl-sequence-listing-table EMPTY>
<!ATTLIST cl-sequence-listing-table quantity CDATA #REQUIRED for-search-only (yes | no ) #IMPLIED additional-copies-including-search-copy (yes | no ) #IMPLIED with-identifying-statement (yes | no ) #IMPLIED page-countCDATA #IMPLIED carriers (internal-electronic |external-electronic |paper ) #IMPLIED >

<!-- Checklist; a sequence listing or sequence listings is/are being furnished
For carrier-type the listed values represent:
  FD  - Floppy Disc
  CD  - Compact Disc
  BD  - Blu-Ray Disc
  DVD - Digital Versatile Disc
  Other - Other media types
-->
<!ELEMENT cl-sequence-listing EMPTY>

<!ATTLIST cl-sequence-listing quantity CDATA #REQUIRED for-search-only (yes | no ) #IMPLIED additional-copies-including-search-copy (yes | no ) #IMPLIED with-identifying-statement (yes | no ) #IMPLIED page-countCDATA #IMPLIED carriers (internal-electronic |external-electronic |paper ) #IMPLIED >

#IMPLIED carriers-type (FD |
CD |
BD |
DVD |
other ) #IMPLIED carriers-quantityCDATA #IMPLIED sizeCDATA #IMPLIED >

<!--
Checklist; drawings are being furnished
(ST32:B598)

--> <!ELEMENT cl-drawings EMPTY>
<!ATTLIST cl-drawings page-count CDATA #IMPLIED
fig-count CDATA #IMPLIED>

<!-- Checklist; the abstract is being furnished

--> <!ELEMENT cl-abstract EMPTY>
<!ATTLIST cl-abstract page-count CDATA #IMPLIED
ppf CDATA #IMPLIED
ppl CDATA #IMPLIED>

<!-- Checklist; claims are being furnished

--> <!ELEMENT cl-claims EMPTY>
<!ATTLIST cl-claims page-count CDATA #IMPLIED
ppf CDATA #IMPLIED
ppl CDATA #IMPLIED>

<!-- Checklist; a description is being furnished

--> <!ELEMENT cl-description EMPTY>
<!ATTLIST cl-description page-count CDATA #IMPLIED
ppf CDATA #IMPLIED
ppl CDATA #IMPLIED>

<!-- Checklist; the request is being furnished

--> <!ELEMENT cl-request EMPTY>
<!ATTLIST cl-request page-count CDATA #IMPLIED>

<-- Declaration as to non-prejudicial disclosures or exceptions to lack of novelty
(Rules 4.17(v) and 51bis.1(a)(v))

--> <!ELEMENT declaration5 EMPTY>
<!ATTLIST declaration5 quantity CDATA #REQUIRED>

<-- Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes
of the designation of the United States of America

--> <!ELEMENT declaration4 EMPTY>
<!ATTLIST declaration4 quantity CDATA #REQUIRED>

<-- Declaration as applicant's entitlement, as at the international filing date, to
claim the priority of the earlier application, where the applicant is not the
applicant who filed the earlier application or where the applicant's name has
changed since the filing of the earlier application
<!ELEMENT declaration3 EMP>
<!ATTLIST declaration3  quantity CDATA  #REQUIRED >

Declaración como derecho del solicitante, como en el fecha de presentación internacional, para solicitar y obtener una patente (Reglas 4.17(ii) y 51bis.1(a)(ii)), en caso de que la declaración en virtud de la Regla 4.17(iv) no sea apropiada.

<!ELEMENT declaration2 EMPTY>
<!ATTLIST declaration2  quantity CDATA  #REQUIRED >

Declaración en virtud de la identidad del inventor (Reglas 4.17(i) y 51bis.1(a)(i)).

<!ELEMENT earlier-search-documents EMPTY>
<!ATTLIST earlier-search-documents results-of-earlier-search (yes | no ) #IMPLIED>
<!ATTLIST earlier-search-documents earlier-application (yes | no ) #IMPLIED>
<!ATTLIST earlier-search-documents translation-of-earlier-application (yes | no ) #IMPLIED>
<!ATTLIST earlier-search-documents translation-of-results-of-earlier-search (yes | no ) #IMPLIED>
<!ATTLIST earlier-search-documents documents-cited-in-earlier-search-results (yes | no ) #IMPLIED>
<!ATTLIST earlier-search-documents available-at-isa (yes | no ) #IMPLIED>
<!ATTLIST earlier-search-documents request-ro-to-transmit-to-isa (yes | no ) #IMPLIED >

Priority claim (PCT Regla 4.10)
(INID 32/33/34, ST.32:B320/B330/B340)

<!ELEMENT priority-claim EMP>
<!ATTLIST priority-claim  id ID  #IMPLIED>
<!ATTLIST priority-claim sequence CDATA  #REQUIRED>
<!ATTLIST priority-claim kind (national | regional | international )>
library-identifier attribute intended as an identifying code for the library containing the document to be used where offices support the access of documents from many such libraries.

action-by attribute would indicate the office requested to retrieve the document (for PCT this can be the RO or IB, default IB).

priority-doc-access-code indicates, when present, the access code that the Office (or applicable Offices) should use to obtain the priority document from the specified digital library.

<!ELEMENT priority-doc-from-library EMPTY>
<!ATTLIST priority-doc-from-library library-identifier CDATA #IMPLIED
action-by CDATA #IMPLIED
priority-doc-access-code CDATA #IMPLIED >

<!ELEMENT protection-request (kind-of-protection , document-id?)>
<!ATTLIST protection-request subset (yes | no ) #IMPLIED >

Document identification refers to patents (and patent applications) only. See WIPO ST.14.

<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>
<!ATTLIST document-id lang CDATA #IMPLIED >

<!ELEMENT agent (addressbook+)>  
<!ATTLIST agent sequence CDATA #REQUIRED
rep-type (agent | attorney | common-representative )>

<!ELEMENT deceased-inventor (%name_group;)>  
<!ATTLIST deceased-inventor sequence CDATA #IMPLIED
lang CDATA #IMPLIED >

<!ELEMENT inventor (addressbook+, designated-states?)>
<!ATTLIST inventor sequence CDATA #REQUIRED
designation (all | all-except-us | us-only | as-indicated ) #IMPLIED >
Applicant information:
(INID 71, ST.32:B710)

attributes for applicant
sequence : sequence number of each applicant
e.g., sequence="1"
app-type : applicant type
app-type="applicant" : the applicant is only applicant
app-type="applicant-inventor" : the applicant is also inventor
designation: This person is applicant for the purpose of:
designation="all" : all designated states
designation="all-except-us" : all designated states except US
designation="us-only" : US only
designation="as-indicated" : the states indicated in designated-states element
under applicant element

<!ELEMENT applicant (addressbook+ , nationality , residence , us-rights* ,
designated-states? , designated-states-as-inventor?)>
<!ATTLIST applicant sequence CDATA #REQUIRED
#REQUIRED
app-type (applicant | applicant-inventor ) #REQUIRED
#REQUIRED
designation (all | all-except-us | us-only | as-indicated ) #REQUIRED >

This person is successor to the rights of an inventor who is deceased, insane, or legally incapacitated, for the purposes of the designation of the United States of America

<!ELEMENT us-rights (#PCDATA)>
<!ATTLIST us-rights to-dead-inventor CDATA #REQUIRED
kind (heir | heiress | executor | executrix | estate | legal-representative | administrator | administratrix | legal-representatives | heirs | executors | legal-heirs ) #REQUIRED
id ID #IMPLIED >

ADDRESSBOOK GROUP: 
Holds name and contact information for individuals/organizations

The LANG attribute is REQUIRED for certain document types, e.g., the JPO PCT Request where names and addresses may be repeated in two different languages. If no structure possible use text.

<!ELEMENT addressbook (%name_group; , address , phone* , fax* , email* , url* ,
ead* , dtext?) | text)>
<!ATTLIST addressbook id ID #IMPLIED
lang CDATA #IMPLIED >

Email address
Attribute:
email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up
by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary
means of contact as a replacement of the use of conventional
post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is
equivalent to 'informal'

--> 
<!ELEMENT email (#PCDATA)> 
<!ATTLIST email  email-purpose   (informal | general | advance | main )  #IMPLIED > 

--> 
Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names

--> 
<!ELEMENT name (#PCDATA)> 
<!ATTLIST name  name-type   (legal | natural )  #IMPLIED > 

--> 
Title of the Invention:
(INID 54, ST.32:B540/B542)

Preferably two to seven words when in English or translated into English and
precise. (Rule 4.3)

Recommended id = 'invt'

--> 
<!ELEMENT invention-title (#PCDATA | b | i | u | o | sup | sub)*> 
<!ATTLIST invention-title  id   ID     #IMPLIED 
lang CDATA  #IMPLIED > 

--> 
Underscore: style - single is default

--> 
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)*> 
<!ATTLIST u  style   (single | double | dash | dots )  'single' > 

--> 
Overscore: style - single is default

--> 
<!ELEMENT o (#PCDATA | b | i | smallcaps | sup | sub)*> 
<!ATTLIST o  style   (single | double | dash | dots | leftarrow | rightarrow )  'single' > 

--> 
Signatories

--> 
<!ELEMENT signatories (signatory+)>


The signature must be that of the applicant (if there are several applicants, all must sign); however, the signature may be that of the agent, or the common representative, where a separate power of attorney appointing the agent or the common representative, respectively, or a copy of a general power of attorney is already in possession of the receiving Office, is furnished...
(PCT Rules 4.1(d), 4.15, and 90)

Indicate the capacity of the signer with 'signatory-capacity'

```xml
<!ELEMENT signatory (%name_group; , address? , electronic-signature , signatory-capacity?)>
<!ATTLIST signatory
    id ID #IMPLIED>
```

The capacity in which the person signs

```xml
<!ELEMENT signatory-capacity (#PCDATA)>
```

A PKI / PKCS #7 digital signature data type

```xml
<!ELEMENT enhanced-signature (pkcs7)>
```

PKCS7 digital signature

```xml
<!ELEMENT pkcs7 EMPTY>
```

A non-PKI electronic signature

```xml
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>
```

A simple 'signature';
e.g., clicking a button labeled 'accept' or 'I agree'

```xml
<!ELEMENT click-wrap EMPTY>
```

A simple text string is to be used as the basic electronic signature;
e.g., John Doe <text-string>/jd/</text-string>

```xml
<!ELEMENT text-string (#PCDATA)>
```

Filing language, ISO639 language code, e.g, en,de,ja, etc.
(INID 25, ST.32:B250)

```xml
<!ELEMENT language-of-filing (#PCDATA)>
```
<!-- Figure of the drawings which should accompany the abstract -->
<!ELEMENT figure-to-publish (fig-number+)>

<!-- PCT/RO/101 Box IX: the number of the figure which should accompany the abstract. (ST.32:B598) -->
<!ELEMENT fig-number (#PCDATA)>

<!-- Sequential identification of priority documents. PCT/RO/101 Box VI. -->
<!ELEMENT sequence-number (#PCDATA)>

<!-- Reference number of general power of attorney. -->
<!ELEMENT ref-number (#PCDATA)>

<!-- Checklist; a fee calculation sheet is being furnished -->
<!ELEMENT cl-fee-calculation EMPTY>

<!-- PCT/RO/101 Box No. VIII: DECLARATIONS (Rules 4.1(c)(iii) and 4.17) -->
<!ELEMENT declarations (declaration1? , declaration2? , declaration3? , declaration4? , declaration5?)>

<!-- PCT/RO/101 Box No.VII :International Searching Authority -->
<!ELEMENT search-authority (isa , earlier-search-request? , earlier-search-authorization*)>

<!-- Request to use results of earlier search; reference to that search -->
<!ELEMENT earlier-search-request (document-id , substantially-equivalent? , earlier-search-documents?)>

<!ELEMENT substantially-equivalent EMPTY>

<!-- International Search Authority; international search to be carried out by -->
<!ELEMENT isa (country)>

<!--
PCT/RO/101 BOX No.VI Priority Claim (PCT Rule 4.10)
(INID 30, ST.32:B300)
-->
<!ELEMENT priority-claims (priority-claim+ , incorporation-by-reference?)>

<!--
where an element of the international application referred to in Article 11(1)(iii)(d) or (e) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more elements referred to in Article 11(1)(iii) were first received by the receiving Office, that element or part is, subject to confirmation under Rule 20.6, incorporated by reference in this international application for the purposes of Rule 20.6
-->
<!ELEMENT incorporation-by-reference EMPTY>

<!--
The priority document is attached to the application
-->
<!ELEMENT priority-doc-attached EMPTY>

<!--
The receiving office is requested to prepare and transmit to the IB a certified copy of the earlier application
-->
<!ELEMENT priority-doc-requested EMPTY>

<!--
This element is made when the receiving Office is requested to restore the right of priority.
-->
<!ELEMENT restore-rights EMPTY>

<!--
Where the earlier application is an ARIPO application, indicate at least one country party to the PARIS convention for the protection of industrial property or one member of the WTO for which that earlier application was filed.
-->
<!ELEMENT office-of-filing ((region , country?) | country)>

<!--
PCT/RO/101 Box No.V Designation Of States (PCT Rule 4.9)
-->
<!ELEMENT designation-of-states (designation-pct , (precautionary-designation-statement? , exclusion-from-designation?))>

<!--
Rule 4.9(b),(c)
In addition to the designations made above [i.e, designation-of states], the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental
Box [i.e., exclusion-from-designation] as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.
<!--
The number of the referenced patent (or application) document
-->
<!ELEMENT doc-number (#PCDATA)>

<!--
Kind of protection; e.g., patent, utility model
-->
<!ELEMENT kind-of-protection (#PCDATA)>

<!--
PCT/RO/101 Box No.II, III and IV APPLICANTS, FURTHER APPLICANT(S)
AND/OR (FURTHER) INVENTOR(S) AGENT OR COMMON REPRESENTATIVE;
OR ADDRESS FOR CORRESPONDENCE (PCT Rule 4.5, 4.6, 4.7, 4.8)
(INID 70, ST.32:B700)
-->
<!ELEMENT parties (applicants, inventors?, correspondence-address?, agents?)>

<!--
Information regarding Agents or common representatives
-->
<!ELEMENT agents (customer-number | agent+)>

<!--
Address used for general correspondence
-->
<!ELEMENT correspondence-address (customer-number | addressbook+)> 

<!--
Customer number for agents by office
-->
<!ELEMENT customer-number (#PCDATA)>

<!--
Inventors information:
If the US is designated, all of the inventors must also be named as applicants
for purposes of that designation.
-->
<!ELEMENT inventors (inventor | deceased-inventor)+>

<!--
Applicants information:
At least one of the applicants named must be a resident or national of a PCT
Contracting State for which the receiving Office acts.
-->
<!ELEMENT applicants (applicant+)>

<!--
Rule 4.6(c):
"The request may, for different designated states, indicate different persons
as inventors where, in this respect, the requirements of the national laws of
the designated States are not the same. In such a case, the request shall
contain a separate statement for each designated State or group of States in
which a particular person, or the same person, is to be considered the
inventor, or in which particular persons, or the same persons, are to be considered the inventors."

--> <!ELEMENT designated-states-as-inventor (country* , (region , country+)* )>

<!-- Indication of specific Contracting States in or for which the applicant is seeking protection for his invention (Rule 4.9(a)) -->

--> <!ELEMENT designated-states (country* , (region , country+)* )>

<!-- The region for which protection or exclusion (depending upon context) is desired. -->

--> <!ELEMENT region (country)>

<!-- Country of residence -->

--> <!ELEMENT residence (country)>

<!-- Country of nationality -->

--> <!ELEMENT nationality (country)>

<!-- Descriptive text -->

--> <!ELEMENT dtext (#PCDATA)>

<!-- Universal Resource Locator; e.g. www.wipo.int -->

--> <!ELEMENT url (#PCDATA)>

<!-- Fax number -->

--> <!ELEMENT fax (#PCDATA)>

<!-- Telephone number -->

--> <!ELEMENT phone (#PCDATA)>

<!-- Electronic address use for other than email -->

--> <!ELEMENT ead (#PCDATA)>
Address components:
Address formats differ from country to country
If no structure possible use text

-->
<!ELEMENT address (%address_group;)}>

-->
<!ELEMENT text (#PCDATA)}>

<--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO

-->
<!ELEMENT country (#PCDATA)>}

<--
Postal code or zip code

-->
<!ELEMENT postcode (#PCDATA)}>}

<--
Region of country; e.g., state, province, etc.

-->
<!ELEMENT state (#PCDATA)}>}

<--
County, parish, department, etc (mainly UK, USA)

-->
<!ELEMENT county (#PCDATA)}>}

<--
City or town name

-->
<!ELEMENT city (#PCDATA)}>}

<--
Street may contain house number or name

-->
<!ELEMENT street (#PCDATA)}>}

<--
Building information in address; e.g., Hoffman building

-->
<!ELEMENT building (#PCDATA)}>}

<--
Address floor; e.g., 10th
<!ELEMENT address-floor (#PCDATA)>

<!--
Address room; e.g., Room 55B
-->
<!ELEMENT room (#PCDATA)>

<!--
Post Office Box number
-->
<!ELEMENT pobox (#PCDATA)>

<!--
Organizational mail code
-->
<!ELEMENT mailcode (#PCDATA)>

<!--
Address, fifth line
-->
<!ELEMENT address-5 (#PCDATA)>

<!--
Address, fourth line
-->
<!ELEMENT address-4 (#PCDATA)>

<!--
Address, third line
-->
<!ELEMENT address-3 (#PCDATA)>

<!--
Address, second line
-->
<!ELEMENT address-2 (#PCDATA)>

<!--
Address, first line
-->
<!ELEMENT address-1 (#PCDATA)>

<!--
Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!--
Synonym
-->
<!ELEMENT synonym (#PCDATA)>

<!-- Department, division, section, etc. name -->
<!ELEMENT department (#PCDATA)>

<!-- Organisation name or company name -->
<!ELEMENT orgname (#PCDATA)>

<!-- Role; e.g., President, Chairman, etc. -->
<!ELEMENT role (#PCDATA)>

<!-- SDOBI: Individual id -->
<!ELEMENT iid (#PCDATA)>

<!-- Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.) -->
<!ELEMENT suffix (#PCDATA)>

<!-- Middle name(s) or initial(s) -->
<!ELEMENT middle-name (#PCDATA)>

<!-- First or given name(s), initial(s) -->
<!ELEMENT first-name (#PCDATA)>

<!-- Last, family, surname -->
<!ELEMENT last-name (#PCDATA)>

<!-- Title: e.g., Mr., Mrs., Dr. etc -->
<!ELEMENT prefix (#PCDATA)>

<!-- Bold formatting for text -->
(PCT Rule 4.1(a)): "The request shall contain: (i) a petition,"

(PCT Rule 4.2): "The petition shall be to the following effect and shall preferably be worded as follows: 'The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.'"

--> <!ELEMENT request-petition (#PCDATA)>

--> <!-- Applicant's or agent's file reference, if desired, 12 characters maximum --> <!ELEMENT file-reference-id (#PCDATA)>

--> <!-- Authorization to RO to transmit earlier search --> <!ELEMENT earlier-search-authorization (document-id)>
<!ATTLIST earlier-search-authorization request-ro-not-transmit
3.3 Application body

```xml
<%xml version='1.0' encoding='UTF-8' %>
<p>Asahi HASEBE incorporated changes from PFCs:
..changed version number from v1.6 to v1.7
..added an attribute "color" to "figure".
MO: 01/01/09 incorporated changes from PFC
..changed version number from v1.5 to v1.6
..added element 'summary-of-invention' to description (PFC08/008)
..added element 'description-of-embodiments' to description (PFC08/008)
..added element 'reference-signs-list' to description (PFC08/008)
..added element 'reference-to-deposited-biological-material' to description (PFC08/008)
..added element 'citation-list' to description (PFC08/008)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.4 to v1.5
..added attribute 'email-purpose' to email (PFC08/006)
MO: 01/07 incorporated changes from PFCs:
..changed version number from v1.3 to v1.4
..implementation of PFC06/001
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
```

Indicator used to flag the fact that the drawings of the application have been furnished as color images
The indicator's presence implies the drawings are in color format and absence implies that they are black and white

--> <!-- !ELEMENT figures-in-color EMPTY -->
...added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-text,
p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
...added element 'address-4' to address (PFC06/005)
...added element 'address-5' to address (PFC06/005)
HT: 14/12/04 incorporated changes from PFCs:
...changed element nplcit from '(text | (article , book , online , othercit)*)' to
'(text | article | book | online | othercit)'
...changed element othercit from '
(#PCDATA)' to '(#PCDATA | b | i | u | sup | sub)'
...changed element rel-passage from (text | (passage+ | category? , rel-claims?)) to
text | (passage+ | category+ | rel-claims*)
...changed attribute he, wi of doc-page, img from 'NMTOKEN' to 'CDATA'
...changed value of attribute idref of crossref from 'CDATA' to 'IDREF'
...changed value of attribute tsize of dl from 'NMTOKEN' to 'CDATA'
...changed value of attribute num of patcit, nplcit from '#REQUIRED' to 'IMPLIED'
...changed value of attribute xml:space of pre from '#FIXED 'preserve'' to
'(preserve | default #IMPLIED)'
...changed value name of attribute listing-type of pre from 'software-code' to
'program-listing'
...added element 'pre' to claim-text, dd, li
...added attribute 'id' to addressbook
...added attribute 'chem-type' to chem
...added attribute 'claim-type' to claim, claims
...added attribute 'class-type' to class
...added attribute 'ocr' to doc-page
...added attribute 'other-subname-type' to attribute 'subname-type' of subname
...removed attribute 'lang', 'status', 'dtd-version' from chem
HT: 20/07/04 incorporated changes from PFCs:
...changed version number from v1.2 to v1.3
...changed element article, online, serial from 'subname?' to 'subname*/
...changed element chemistry from '(img)' to '(img|(chem,img?))'
...changed element maths from '(img|math)' to '(img|(math,img?))'
...changed element rel-passage from 'category?, rel-claims?' to 'category*, rel-
claims*/
...added element 'figref' to claim-text, dd, li
...added element 'b', 'i', 'u', 'sup', 'sub', 'smallcaps' to crossref
...added attribute 'num' to li
...added attribute 'subtitle-type' to subtitle
...added value 'chem', 'table', 'math', 'program-listing', 'flowchart' to attribute
...added value 'national-office', 'regional-office' to attribute produced-by of root
...element
...removed attribute 'class-type' from nplcit
HT: 16/12/03 incorporated changes from PFCs:
...changed version number from v1.1 to v1.2
...added element 'pre' to p content model
...added element 'sup2' and 'sub2' to sup and sub
...added attribute 'lang' and 'class-type' to nplcit
...added attribute 'external-type' to table-external
...added attribute 'figure-labels' to figure
JD: 03/02/03 incorporated changes from PFCs:
...changed version number from v1.0 to v1.1
...added attribute 'file-reference-id' to root
...added attribute 'orientation' to doc-page, img
...added attribute 'inline' to img
...added attribute 'ol-style' to ol
...added attribute 'dnum-type' to patcit
...added TABLE-EXTERNAL to p content model
...made postcode optional within address
...added (last-name | orgname) choice to %name_group;
...released br from b, i, smallcaps
2001/12/01
...released version number as v1.0
******************************************************************************
******************************************************************************
******************************************************************************
* XML VERSION FOR FILING OF PCT APPLICATIONS: *
* description, claims, abstract, drawings - *
* it may be utilised by other offices as required - *
* but it is NOT recommended to add or change element and *
* attribute names
  * see: http://pcteasy.wipo.int/efiling_standards/EFPage.htm
  *
  * It is intended for a) Online Filing b) (later) publication, etc
  * within the context of a new version of ST.32 (ST.32X)
  *
- In developing this DTD we have taken into consideration:
  *
  - earlier versions of this dtd
  - ST32 version 3
  - Variations of ST.32 in: WIPO, USPTO, MIMOSA, etc
  - USPTO EFS dtd
  - Trilateral Common data dictionary
  - ISO 12083 dtds, etc

************************************************************************************

* SECTION I - DECLARATION, ENT. REFS, ISO sets, etc
************************************************************************************

--> 
  <!--
  import character entity set. Download from:
  http://pcteasy.wipo.int/efiling_standards/schemaDocs/wipo.ent

  Note that nsgmls-based parsers (SP, Near and Far Designer, etc.)
  may not be able to process this file for reasons described below
  in MathML comments.
  -->
  <!--ENTITY % wipo PUBLIC "-//WIPO//ENTITIES WIPO 1.0//EN" "wipo.ent">
  %wipo;-->

<--
  <!ENTITY % mathml-charent.module "IGNORE" -->
  <!ENTITY % MATHML.prefixed "IGNORE">

<!ENTITY % title "<!ELEMENT title (#PCDATA | b | i | u | sup | sub | smallcaps)* >
APPLICATION-BODY

PCT Art 3(2) states
"(2) An international application shall contain, as specified in this Treaty and
the Regulations, a request, a description, one or more claims, one or more drawings
(where required), and an abstract."
The Request is dealt with by a separate DTD since it will be handled by form
filling software and requires different processing later.
The main application will be authored by the applicant as one word processor file,
the order follows general practice today.
The sequence list (although part of the description) is a separate sub-document
which will reference an ST.25 compliant file.

Attributes:
lang              = language of application - use ISO639 language code
dtd-version       = dtd version number
file              = filename of the whole application
id                = unique id for this application - could be file name
status            = status of the application; values: new = new application
id                = an identifier for this application (could be filename)
country           = WIPO ST.3 code for application
file-reference-id = applicant's or agent's file reference, if any

-->
<!ELEMENT application-body (doc-page+ | (description , claims , abstract? ,
drawings?))>

<!ATTLIST application-body id     ID     #IMPLIED
lang             CDATA  #REQUIRED
dtd-version      CDATA  #IMPLIED
file             CDATA  #IMPLIED
file-reference-id CDATA  #IMPLIED
country          CDATA  #REQUIRED
status           CDATA  #IMPLIED >

-->
Drawings: PCT Article 7 / Rule 7
Drawings shall be required when they are necessary for the understanding of the
invention.
Recommended id = 'draw'

-->
<!ELEMENT drawings (doc-page+ | figure+)>

<!ATTLIST drawings id     ID     #IMPLIED
lang             CDATA  #IMPLIED
status           CDATA  #IMPLIED >

-->
A drawing (figure), necessary for the understanding of the invention
Recommended id = f0001, f0002, etc.
ABSTRACT: PCT Rule 8
(INID 57, ST.32:B570)
A concise summary of the disclosure, 50-150 words.
Recommended id = 'abst' or 'abst0001' for multiple abstracts

The solution to the alleged problem that the invention purports to solve.
Recommended id = 'abss'

The alleged problem that the invention purports to solve
Recommended id = 'absp'

Claims:
the claims shall define the matter sought for patent and be supported by the description.
Recommended id = 'claim' or 'claim0001' for multiple claims

Defines the matter for which protection is sought
See PCT Rule 6:
6.1.a: 'the number of claims shall be reasonable in consideration of what is being claimed.'
6.1.b: 'if there are several claims, they shall be numbered consecutively in Arabic numerals.'
Recommended id values
If parent element is claims and there is only ONE set of claims:
id = c0001, c0002, etc.;num = 0001, 0002, etc.
If parent element is amended-claims and there is only ONE set then;
id = ac0001, ac0002, etc.; num = 0001, 0002, etc.
If parent element is claims and there are multiple sets of claims then:
  id = c01.0001, c01.0002, etc.; num = 0001, 0002, etc.
  id = c02.0001, c02.0002, etc.; num = 0001, 0002, etc.
If parent element is amended-claims and there are multiple sets of
amended-claims then:
  id = ac01.0001, ac01.0002, etc.; num = 0001, 0002, etc.

-->
<!ELEMENT claim (claim-text+)>
<!ATTLIST claim  id         ID     #IMPLIED
    num        CDATA  #REQUIRED
    claim-type CDATA  #IMPLIED >

Reference to a claim

-->
<!ELEMENT claim-ref (#PCDATA)>
<!ATTLIST claim-ref  idref IDREFS  #REQUIRED >

Description:
The description must disclose the invention in a manner sufficiently clear and
complete for it to be carried out by a person skilled in the art (Rule 5).
Recommended id = 'desc'

-->
<!ELEMENT description (doc-page+ | invention-title?, (technical-field |
    background-art | disclosure | summary-of-invention | description-of-drawings |
    description-of-embodiments | best-mode | mode-for-invention | industrial-
    applicability | reference-signs-list | reference-to-deposited-biological-material |
    sequence-list-text | citation-list | (heading*, p*)+)+>)
<!ATTLIST description  id     ID     #IMPLIED
    lang   CDATA  #IMPLIED
    status CDATA  #IMPLIED >

-->
<!ELEMENT citation-list (patent-literature | non-patent-literature | (heading*, p*)+)+>
<!ATTLIST citation-list  id ID  #IMPLIED >

-->
<!ELEMENT non-patent-literature (heading*, p*)+>
<!ATTLIST non-patent-literature  id ID  #IMPLIED >

-->
<!ELEMENT patent-literature (heading*, p*)+>
<!ATTLIST patent-literature  id ID  #IMPLIED >

Sequence listing free text
WIPO ST.25:
"36. Where the sequence listing part of the description contains free text,
any such free text shall be repeated in the main part of the description
in the language thereof.
It is recommended that the free text in the language of the main part of the
description be put in a specific section of the description called "Sequence
Listing Free Text".
Recommended id = 'seqt'

-->
<!ATTLIST description-of-drawings id ID #IMPLIED >

<!ELEMENT summary-of-invention (tech-problem | tech-solution | advantageous-effects | (heading* , p*)+)> 

<!ATTLIST summary-of-invention id ID #IMPLIED >

<!-- Disclosure of the invention with sub-headings: 
technical problem; 
technical solution; 
advantageous effects (of the invention);
Recommended id = 'disc'
-->
<!ELEMENT disclosure ((tech-problem | tech-solution | advantageous-effects)* | (heading* , p*)+)> 

<!ATTLIST disclosure id ID #IMPLIED >

<!-- advantageous effects of the invention (PCT Rule 5.1(a)(iii) 
Recommended id = 'adve'
-->
<!ELEMENT advantageous-effects (heading* , p*)+> 

<!ATTLIST advantageous-effects id ID #IMPLIED >

<!-- The solution to the problem that the invention purports to solve. (PCT Rule 5.1(a)(iii)
-->
<!ELEMENT tech-solution (heading* , p*)+> 

<!ATTLIST tech-solution id ID #IMPLIED >

<!-- The problem the invention purports to solve (Rule 5.1(a)(iii)
-->
<!ELEMENT tech-problem (heading* , p*)+> 

<!ATTLIST tech-problem id ID #IMPLIED >

<!-- Background art, background of the invention.
Recommended id = 'bart'
-->
<!ELEMENT background-art (heading* , p*)+> 

<!ATTLIST background-art id ID #IMPLIED >

<!-- PCT Rule 5.1:
(a) The description shall first state the title of the invention as appearing in the request and shall:
(i) specify the technical field to which the invention relates
-->
<!ELEMENT technical-field (heading* , p*)+> 

<!ATTLIST technical-field id ID #IMPLIED >
<!--
Unordered Lists
list-style may be empty for lists with no bullet or other symbol default
list-style is 'bullets'

Recommended id = ulis0001, ulis0002, etc.
-->
<!ELEMENT ul (li+)>
<!ATTLIST ul  id         ID  #IMPLIED
list-style     (bullet | dash | none )  'bullet'
compact        (compact )  #IMPLIED >

<!--
List item
Recommended id = list0001, list0002, etc.
-->
<!ELEMENT li (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit |
nplcit | bio-deposit | crossref | figref | img | dl | ul | ol | chemistry | maths)*>
<!ATTLIST li  id  ID     #IMPLIED
num CDATA  #IMPLIED >

<!--
MATHEMATICS
This is image data or coded according to mathml, version 2

Recommended id = math0001, math0002, etc.
-->
<!ELEMENT maths (img | (math , img?))>
<!ATTLIST maths  id  ID     #IMPLIED
num CDATA  #REQUIRED >

<!--
Chemistry
Chemical formulae, ring structures, Markush structures, etc.
For now treat as image data.
Depending on industry support we may use, e.g., chemML, CML later

Recommended id = chem0001, chem0002, etc
-->
<!ELEMENT chemistry (img | (chem , img?))>
<!ATTLIST chemistry  id  ID     #IMPLIED
num CDATA  #REQUIRED >

<!--
This is a pointer to an external DTD for chemical markup - to be determined.
For EPO probably CML; http://www.xml-cml.org/
-->
<!ELEMENT chem EMPTY>
<!ATTLIST chem id       ID     #IMPLIED
file      CDATA  #REQUIRED
chem-type CDATA  #IMPLIED >

<!--
Ordered Lists:
attribute 'ol-style'
-->
Recommended use:

- **Arabic numbers**: 1, 2, 3, ...
- **Lower alpha**: a, b, c, ...
- **Upper alpha**: A, B, C, ...
- **Lower roman**: i, ii, iii, ...
- **Upper roman**: I, II, III, ...

```xml
<!ELEMENT ol (li+)>
<!ATTLIST ol id ID #IMPLIED compact (compact ) #IMPLIED ol-style CDATA #IMPLIED >
```

**Image data**

Image is used for any kind of image: art work, figures, complex work units (math, tables, chemistry), etc.

Recommended:

- **ID**: i0001, i0002, etc.
- **He, Wi**: "11" - millimeters - height, width;
- **File**: file name, location; label - not used;
- **Alt**: alternate text if image not shown;
- **Img-content**: drawing is the default;
- **Img-format**: common will be tiff, st33 and st35 in for backward compatibility and, later, publication.
- **Orientation**: orientation of the image (portrait | landscape). Default is portrait
- **Inline**: (yes | no). Whether the image is to be presented inline or separated by line breaks. Default is no.

```xml
<!ELEMENT img EMPTY>
<!ATTLIST img id ID #IMPLIED he CDATA #REQUIRED wi CDATA #REQUIRED file CDATA #REQUIRED alt CDATA #IMPLIED img-content (drawing | photograph | character | dna | undefined | chem | table | program-listing | flowchart | graph ) 'drawing'
img-format (jpg | tif | st33 | st35 ) #REQUIRED orientation (portrait | landscape ) 'portrait'
inline (yes | no ) 'no' >
```

**Figref**

A reference to a figure; e.g., "...as shown in <figref idref='f0001'>figure<b>1</b></figref>..."

```xml
<!ELEMENT figref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*)
<!ATTLIST figref idref IDREFS #IMPLIED num CDATA #IMPLIED >
```

**Cross reference to any other element with an identifier (id)**

```xml
```

---
<!ELEMENT crossref (#PCDATA | b | i | u | o | sup | sub | smallcaps)>
<!ATTLIST crossref idref IDREF #REQUIRED >

<!--
Biological deposit citation (US EFS: biological-deposit)
(INID 83, ST.32:BB30)
According to PCT Rule 13bis, EPC Rule 28
This covers all bio data references long and short within the description and/or
claims
Recommended id = biod0001, biod0002, etc.
--> 
<!ELEMENT bio-deposit (depositary, bio-acnno, date?, term?, dtext?)>
<!ATTLIST bio-deposit id ID #IMPLIED
num CDATA #REQUIRED
url CDATA #IMPLIED
dnum CDATA #IMPLIED >

<!--
Non-Patent Literature (NPL) CITation;

Notes:
This can be free text data without any structure (#PCDATA) which is NOT
recommended
or it can be highly structured data which is marked up according to ST.14 and
ISO 690 layout;

This part of the DTD has used many different sources for element names and DTD
structure and reference:
AACR2 / MARC
ISO 12083 - Electronic manuscript prep. and markup. DTD
Association of American Publishers (AAP) Z39.59 DTD
European Working Group for SGML (EWS) MAJOR DTD
SuperJournal Full Article DTD
www.superjournal.ac.uk/sj
Elsevier DTD
Medline DTD (NLM)

Attributes (recommended):
id - ncit0001, ncit0002, etc
num = 0001, 0002
npl-type - The TYPE of citation is office specific (recommended):;
A - Abstract citation of no specific kind
B - Book citation
I - Biological abstract citation
C - Chemical abstracts citation
E - Database citation
D - Derwent citation
P - Patent cited within NPL group
J - Patent Abstracts of Japan citation (REC 067)
S - Serial / Journal / Periodical citation
W - World Wide Web / Internet search citation
medium - the type of medium
e.g., CD (CD-ROM), MT (Magnetic Tape), DISK, ONLINE
file - file name on local systems eg. XP number in EPO
url - where possible give full web link to document

--> 
<!ELEMENT nplcit ((text | article | book | online | othercit), rel-passage*)>
<!ATTLIST nplcit id ID #IMPLIED
num CDATA #IMPLIED
lang CDATA #IMPLIED
file CDATA #IMPLIED
npl-type CDATA #IMPLIED
medium CDATA #IMPLIED
url CDATA #IMPLIED >
<!--
Reference number (general); for the EPO this is the XP number
-->
<!ELEMENT refno (#PCDATA)>
<!ATTLIST refno  id ID  #IMPLIED >
<!--
Classification code; e.g., ipc, dewey etc.
-->
<!ELEMENT class (#PCDATA)>
<!ATTLIST class  class-type CDATA  #IMPLIED >
<!--
Subordinate responsibility; e.g., editor, translator, etc.
-->
<!ELEMENT subname (%name_group; | addressbook)>
<!ATTLIST subname  subname-type (editor | translator | other-subname-type ) 'editor' >
<!--
Author
Prime responsibility for the work
there is no distinguishing between personal and corporate authors
<auteur> followed by name or addressbook information
use the ID attribute if, for example, there is a need to distinguish between
multiple authors.
Can also include affiliation details
Recommended id = auth0001, auth0002, etc.
-->
<!ELEMENT author (%name_group; | addressbook)>
<!ATTLIST author  id ID  #IMPLIED >
<!--
ADDRESSBOOK GROUP:
Holds name and contact information for individuals/organizations
The LANG attribute is REQUIRED for certain document types,
e.g., the JPO PCT Request where names and addresses may be repeated in two
different languages. If no structure possible use text.
-->
<!ELEMENT addressbook ((%name_group; , address , phone* , fax* , email* , url* ,
ead* , dtext?) | text)>
<!ATTLIST addressbook  id ID  #IMPLIED
lang CDATA  #IMPLIED >
<!--
Email address
Attribute:
email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up
by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary
means of contact as a replacement of the use of conventional
post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is
equivalent to 'informal'

-->  
<!ELEMENT email (#PCDATA)>
<!ATTLIST email email-purpose (informal | general | advance | main ) #IMPLIED >

<!--
PATENT CITATIONS:
(ST.32:B561)
Patent Citation within abstract, description or claims.
For patent citations within Search Report see Search Report DTD

Notes:
Tags arranged according to WIPO ST.14 order.
This can be free text data without any structure (text).
Example:

<!--
<!ELEMENT patcit (text | (document-id , rel-passage*))>
<!ATTLIST patcit  id        ID     #IMPLIED
 num       CDATA  #IMPLIED
 dnum      CDATA  #IMPLIED
 dnum-type CDATA  #IMPLIED
 file      CDATA  #IMPLIED
 url       CDATA  #IMPLIED >

<!--
Document identification refers to patents (and patent applications) only.
See WIPO ST.14

-->  
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>
<!ATTLIST document-id lang CDATA #IMPLIED >

<!--
Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names

-->  
<!ELEMENT name (#PCDATA)>
<!ATTLIST name name-type (legal | natural ) #IMPLIED >

This element is one method to identify content consisting of text objects that require preservation (pre) of their whitespace in order to preserve internal logical relationships. (e.g., sequence listing fragments, computer program listings)

<!ELEMENT pre (#PCDATA)>
<!ATTLIST pre id ID #IMPLIED
xml:space (preserve | default ) #IMPLIED
listing-type (sequence | program-listing | other ) #REQUIRED >

<!--
Heading text; see Rule 5. Recommended id = h0001, h0002, etc.
-->
<!ELEMENT heading (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST heading level (1 | 2 | 3 ) #IMPLIED
id ID #IMPLIED >

<!--
Title of the Invention:
(INID 54, ST.32:B540/B542)
Preferably two to seven words when in English or translated into English and precise. (Rule 4.3)
Recommended id = 'invt'
-->
<!ELEMENT invention-title (#PCDATA | b | i | u | o | sup | sub)*>
<!ATTLIST invention-title id ID #IMPLIED
lang CDATA #IMPLIED >

<!--
Underscore: style - single is default
-->
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)*>
<!ATTLIST u style (single | double | dash | dots ) 'single' >

<!--
Overscore: style - single is default
-->
<!ELEMENT o (#PCDATA | b | i | smallcaps | sup | sub)*>
<!ATTLIST o style (single |
double |
dash |
dots | leftrightarrow | leftrightarrow ) 'single' >

<!--
doc-page - DOCUMENT or PAGE
This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.
Page range attributes are given when required
The text of the claim; also used for sub-para indentation

Identifies the period of time during which the depository must be able to furnish samples of the biological material.

Biological accession number:
(ST.32:B831)
The identification assigned to the biological material by the depository

Information regarding the facility storing the biological deposit.
(ST.32:B832)

Other citations - free form
<!ELEMENT othercit (#PCDATA | b | i | u | o | sup | sub)>-

Online citation
Revised according to ISO-690-2 - Electronic documents and parts thereof.
Please refer to this standard for definitions and examples.
See: http://www.nlc-bnc.ca/iso/tc46sc9/standard/690-2e.htm#Contents
The tagging in fact is a mixture of article and book tags together with specific electronic source tags.
'Online' is taken to mean any kind of electronic documentation:
databases, internet, CD-Roms, DVD, email, etc

EXAMPLES:

Kirk-Othmer Encyclopedia of Chemical Technology [online].
Available from: DIALOG Information Services, Palo Alto (Calif.).

<nplicit id='ncit1' num='0001' type='E' medium='online'>
  <online>
    <online-title>Kirk-Othmer Encyclopedia of Chemical Technology</online-title>
    <imprint>
      <address>New York</address>
      <name>John Wiley</name>
      <pubdate>19840000</pubdate>
    </imprint>
    <avail>dialog information services, palo alto (calif.).</avail>
    <datecit><date>19900103</date></datecit>
  </online>
</nplicit>

* Article on Internet:
Clark, Carol. On the Threshold of a Brave New World.

<nplicit id='ncit1' num='0002' type='E' medium='online'>
  <online>
    <author>
      <name>Clark, Carol</name>
    </author>
    <online-title>On the Threshold of a Brave New World</online-title>
    <imprint>
      <name>CNN.com, 2000</name>
    </imprint>
    <series><text>In-depth specials</text></series>
    <datecit><date>20000824; 10:25 est</date></datecit>
  </online>
</nplicit>

* Personal communication (e-mail)
Message-ID: [002f01c02d60s051a64a0$22a2580c@vaio]. Personal communication.
<nplcit id='ncit3' num='0003' type='E' medium='online'>
<online>
  <author>
    <name>Thacker, Jane</name>
  </author>
  <online-title>MPEG-21 project stream on digital item identification</online-title>
  <subname>
    <name>Message to: <iso.tc46.sc9@nlc-bnc.ca></name>
  </subname>
  <pubdate>3 October 2000; 13:33 EST</pubdate>
  <notes>Personal communication</notes>
  <avail>Message-ID: <002f01c02d60$051a64a0$22a2580c@vaio></avail>
  <datecit><date>6 October 2000; 13:10 EST</date></datecit>
</online>
</nplcit>

-->
<!ELEMENT online (text | (author* , online-title* , hosttitle? , subname* ,
  , srchterm* , srchdate? , refno* , vid? , ino? , doi? , absno?))>

<-- Date of search/retrieval YYYYMMDD
-->
<!ELEMENT srchdate (date)>

<-- Search terms
-->
<!ELEMENT srchterm (#PCDATA)>

<-- Date cited - date on which the citation was cited. May be different from srchdate below
-->
<!ELEMENT datecit (date)>

<-- Availability and access - REQUIRED use for URL, online database, ftp address, email, etc.;
e.g., Available from Internet: http://www.epoline.org
   Available from DIALOG Information Systems, Palo Alto (Calif.)
-->
<!ELEMENT avail (#PCDATA)>

<-- Numeration within host document
-->
<!ELEMENT hostno (#PCDATA)>

<-- History of the article (not serial)
-->
<!ELEMENT history (text | (received | accepted | revised | misc))>
After patent citations the most common citations are articles within serials (periodicals, magazines), books and electronic (eg. internet) sources. This is a very complex and varied area to standardise. The tag set below is drawn from a number of sources as is the order of the tags (which in any case can be changed depending on the stylesheet used).

The order of tags is that of WIPO ST.14 / ISO 690 layout.


<nlcitet id='ncit1' num='0012' type='S' file='XP1234456'>
<article>
  <author>
    <name>DROP, J.G.</name>
  </author>
  <atl>Integrated Circuit Personalization at the Module Level</atl>
  <serial>
    <sertitle>IBM Tech. Dis. Bull.</sertitle>
    <pubdate>19741000</pubdate>
    <vid>17</vid>
    <ino>5</ino>
  </serial>
  <location>
    <pp>1344 and 1345</pp>
</nlcitet>
Note: it is NOT expected that the applicant will create the tagged data - it can be generated from a 'pull down' data entry form (eg. in Word) or generated from internal SR databases

</location>
</refno>XP123456</refno>
</article>
</nplcit>


<!-- Article unique ID - assigned by a publisher to an article -->

<!ELEMENT artid (#PCDATA)>

<!-- Book citation
In the order specified by WIPO ST.14 and ISO 690 and AACR2 rules for layout

WALTON, Herrmann. Microwave quantum theory.

<nplcit id='ncit12' num='0013' type='b'>
<book>
<author>
  <name>WALTON, Herrman</name>
</author>
<book-title>Microwave quantum theory</book-title>
<imprint>
  <text>London</text>
</imprint>
<address>
  <text>Sweet and Maxwell</text>
</address>
<pubdate>19730000</pubdate>
<isbn>0-1234-568-9</isbn>
</book>
</nplcit>

-->

<!-- Keyword; e.g., from a Thesaurus or class. scheme (ST.32:B5550) -->

<!ELEMENT keyword (#PCDATA)>

<!-- Book number -->

<!ELEMENT bookno (#PCDATA)>
<!--
   Edition statement (ST.32:B516)
-->  
<!ELEMENT edition (#PCDATA)>  

-->  
<!ELEMENT subtitle (#PCDATA)>  

<!--
   CONFERENCE GROUP / CITATION
   There is no standard way of citing conference proceedings; date of the conf. may come before or after place, for example. The tags are specified in a set order where it is not possible or correct then simply use <text>
-->  
<!ELEMENT conference (text | (conftitle , confdate? , confno? , confplace? , confsponsor*))>  

<!--  
<!ELEMENT confdate (date | (sdate , edate))>  

<!--
   Conference sponsor
-->  
<!ELEMENT confsponsor (#PCDATA | addressbook)*>  

<!--
   Conference place
-->  
<!ELEMENT confplace (#PCDATA | address)*>  

<!--
   Conference number
-->  
<!ELEMENT confno (#PCDATA)>  

<!--
   Conference title
-->  
<!ELEMENT conftitle (#PCDATA)>  

<!--
   The title of the cited book
-->  
<!ELEMENT book-title (#PCDATA)>
Serial citation data:
This describes the volume or issue as a whole and not a particular article within it.

---


<!ELEMENT doi (#PCDATA)>

<!ELEMENT cpyrt (#PCDATA)>

<!ELEMENT ino (#PCDATA)>

<!ELEMENT vid (#PCDATA)>

<!ELEMENT pubid (#PCDATA)>

<!ELEMENT isbn (#PCDATA)>

<!ELEMENT issn (#PCDATA)>

<!ELEMENT notes (#PCDATA)>

<!ELEMENT physical (#PCDATA)>

Copyright info. Copyright of publisher of serial

---

Issue number

---

Volume id/number

---

Publisher's unique id

---

International Standard Book Number

---

International Standard Serial Number

---

Notes about the journal; e.g. Continues Journal of XYZ 1910-1998, published in French and English, etc.

---

Physical description - generally NOT used in citations in pats; e.g., v., 27cm
<!--
    Descriptive text
-->  
<!ELEMENT dtext (#PCDATA)>

<!--
    Universal Resource Locator; e.g. www.wipo.int
-->  
<!ELEMENT url (#PCDATA)>

<!--
    Fax number
-->  
<!ELEMENT fax (#PCDATA)>

<!--
    Telephone number
-->  
<!ELEMENT phone (#PCDATA)>

<!--
    Electronic address use for other than email
-->  
<!ELEMENT ead (#PCDATA)>

<!--
    Address components:  
    Address formats differ from country to country  
    If no structure possible use text
-->  
<!ELEMENT address (%address_group;)>

<!--
    Postal code or zip code
-->  
<!ELEMENT postcode (#PCDATA)>

<!--
    Region of country; e.g., state, province, etc.
-->  
<!ELEMENT state (#PCDATA)>

<!--
    County, parish, department, etc (mainly UK, USA)
-->  
<!ELEMENT county (#PCDATA)>

<!--
    City or town name
-->  
<!ELEMENT city (#PCDATA)>
<!--
Street may contain house number or name
-->  
<!ELEMENT street (#PCDATA)>  

<!--
Building information in address; e.g., Hoffman building
-->  
<!ELEMENT building (#PCDATA)>  

<!--
Address floor; e.g., 10th
-->  
<!ELEMENT address-floor (#PCDATA)>  

<!--
Address room; e.g., Room 55B
-->  
<!ELEMENT room (#PCDATA)>  

<!--
Post Office Box number
-->  
<!ELEMENT pobox (#PCDATA)>  

<!--
Organizational mail code
-->  
<!ELEMENT mailcode (#PCDATA)>  

<!--
Address, fifth line
-->  
<!ELEMENT address-5 (#PCDATA)>  

<!--
Address, fourth line
-->  
<!ELEMENT address-4 (#PCDATA)>  

<!--
Address, third line
-->  
<!ELEMENT address-3 (#PCDATA)>  

<!--
Address, second line
-->  
<!ELEMENT address-2 (#PCDATA)>
<!-- Address, first line -->
<!ELEMENT address-1 (#PCDATA)>

<!-- Registered number -->
<!ELEMENT registered-number (#PCDATA)>

<!-- Synonym -->
<!ELEMENT synonym (#PCDATA)>

<!-- Department, division, section, etc. name -->
<!ELEMENT department (#PCDATA)>

<!-- Organisation name or company name -->
<!ELEMENT orgname (#PCDATA)>

<!-- Role; e.g., President, Chairman, etc. -->
<!ELEMENT role (#PCDATA)>

<!-- SDOBI : Individual id -->
<!ELEMENT iid (#PCDATA)>

<!-- Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.) -->
<!ELEMENT suffix (#PCDATA)>

<!-- Middle name(s) or initial(s) -->
<!ELEMENT middle-name (#PCDATA)>

<!-- First or given name(s), initial(s) -->
<!ELEMENT first-name (#PCDATA)>
Also includes EP, WO

-->  
<!ELEMENT country (#PCDATA)> 

<!--  
   If no structure is possible, enter text (without markup)
-->  
<!ELEMENT text (#PCDATA)>  

<!--  
   br - break, line break within a paragraph
-->  
<!ELEMENT br EMPTY>  

<!--  
   Bold formatting for text
-->  
<!ELEMENT b (#PCDATA | i | u | o | smallcaps | sup | sub)*>  

<!--  
   Italic formatting for text
-->  
<!ELEMENT i (#PCDATA | b | u | o | smallcaps | sup | sub)*>  

<!--  
   Small capitals
-->  
<!ELEMENT smallcaps (#PCDATA | b | u | i | o)*>  

<!--  
   Subscripted text
-->  
<!ELEMENT sub (#PCDATA | b | u | i | o | sup2 | sub2)*>  

<!--  
   Superscripted text
-->  
<!ELEMENT sup (#PCDATA | b | u | i | o | sup2 | sub2)*>  

<!--  
   Subscripted text
-->  
<!ELEMENT sub2 (#PCDATA | b | u | i | o)>  

<!--  
   Superscripted text
-->  
<!ELEMENT sup2 (#PCDATA | b | u | i | o)>
3.4 Declarations (Rules 4.17 and 51bis.1(a))

```xml
<?xml version='1.0' encoding='UTF-8' ?>
<!ENTITY % name_group "((name | (prefix? , (last-name | orgname) , first-name? , middle-name? , suffix? , iid? , role? , orgname? , department? , synonym*)) ,
registered-number?)">
<!ENTITY % address_group "((address-1? , address-2? , address-3? , address-4? ,
city? , county? , state? , postcode? , country) | text)">
<!--
********************************************************************************
* declaration v1.6     2017  JULY                                             *
********************************************************************************
* PUBLIC                    //WIPO//DTD DECLARATION 1.6//EN"declaration
-v1-6.dtd"            *
********************************************************************************
* https://www.wipo.int/pct
-safe/en/resources/1.17/declaration
-v1-6.dtd        *
***********************
*********************************************************
* contact:                                                                     *
*   WIPO: Yukako SHIBA; yukako.shiba@wipo.int                                  *
************************************
********************************************
* revision history                                                             *
********************************************************************************
Asahi HASEBE: 01/07/17 incorporated changes from PFCs:
..changed version number from v1.5 to v1.6
..added attribute 'id' to lack-of-novelty, entitlement-to-claim-priority,
entitlement-to-be-granted-patent, signatory and matter-name
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.4 to v1.5
..added attribute 'email-purpose' to email (PFC08/006)
MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.3 to v1.4
...implementation of PFC06/001
..changed element '(all-designations | all-designations-except-us | designated-status)
   to '(all-designations | all-designations-except-us | designated-status)?'
   in identity-of-inventor (PFC06/002)
..changed element '(all-designations | all-designations-except-us | designated-status)
   to '(all-designations | all-designations-except-us | designated-status)?'
   in matter (PFC06/002)
...changed element '(all-designations | designated-status)
   to '(all-designations | designated-status)?' in lack-of-novelty (PFC06/002)
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
...added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-
text,
p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
MO: 29/09/05 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..changed occurrence of 'addressbook' in 'inventor-info' from '+' to '*'.
HT: 14/12/04 incorporated changes from PFCs:
..changed attribute he, wi of doc-page from 'NMTOKEN' to 'CDATA'
..added attribute 'id' to addressbook, application-reference
..added attribute 'ocr' to doc-page
HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.1 to v1.2
..changed attribute lang of addressbook from '#REQUIRED' to '#IMPLIED'
```
JD: 03/02/03 incorporated changes from PFCs:
.. changed version number from v1.0 to v1.1
.. added attribute 'file-reference-id' to root
.. added attribute 'orientation' to doc-page
.. added attribute 'lang', 'sequence' to lack-of-novelty
.. added attribute 'tense' to matter
.. added (last-name | orgname) option to %name_group;
.. made postcode optional within address
December 2001
.. released version number as v1.0

********************************************************************************

DECLARATION

Attributes:
lang              = language of application - use ISO639 language code
dtd-version       = dtd version number
file              = filename of the whole application
status            = status of the application; values: new = new application
date-produced     = date this document was produced
file-reference-id = applicant's or agent's file reference, if any

-->
<!ELEMENT declaration (identity-of-inventor | entitlement-to-be-granted-patent | entitlement-to-claim-priority | inventorship | lack-of-novelty)+>
<!ATTLIST declaration  lang CDATA #REQUIRED
dtd-version CDATA #IMPLIED
file CDATA #IMPLIED
date-produced CDATA #IMPLIED
file-reference-id CDATA #IMPLIED
status CDATA #IMPLIED >

<!--
Declaration as to non-prejudicial disclosures or exceptions to lack of novelty
(PCT Rules 4.17(v) and 51bis.1(a)(v))
-->
<!ELEMENT lack-of-novelty (doc-page+ | (application-reference? , %name_group; ,
((date | address | title-of-disclosure | method-of-disclosure | dtext)+ , (all-designations | designated-states)?)))>
<!ATTLIST lack-of-novelty  sequence CDATA #REQUIRED
lang CDATA #IMPLIED
id ID #IMPLIED >

<!--
Declaration of inventorship. For purposes of the United States the declaration
shall be worded with the original and first inventor clause.
-->
<!ATTLIST inventorship  sequence CDATA #REQUIRED
lang CDATA #IMPLIED
id CDATA #IMPLIED >

<!--
A signature represented by electronic means
-->
<!ELEMENT electronic-signature (basic-signature | enhanced-signature)>
<!ATTLIST electronic-signature  date CDATA #REQUIRED
place-signed CDATA #IMPLIED >

<!--
A TIFF image of a signature
<!ELEMENT fax-image EMPTY>

<!ATTLIST fax-image file CDATA #REQUIRED>

<--
Declaration as applicant's entitlement, as at the international filing date, to claim the priority of the earlier application, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application. (Rules 4.17(iii) and 51bis.1(a)(iii))

--> 

<!ELEMENT entitlement-to-claim-priority (doc-page+ | (application-reference?, %name_group; , earlier-app-reference , matter+))>

<!ATTLIST entitlement-to-claim-priority sequence CDATA #REQUIRED
lang CDATA #IMPLIED
id ID #IMPLIED>

<--
Declaration as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate

--> 

<!ELEMENT entitlement-to-be-granted-patent (doc-page+ | (application-reference?, %name_group; , matter+))>

<!ATTLIST entitlement-to-be-granted-patent sequence CDATA #REQUIRED
lang CDATA #IMPLIED
combined (yes | no ) #IMPLIED
id ID #IMPLIED>

<--
Section 212, 213.
Attribute 'item': reason for entitlement. See Sections 212, 213 for values.
  i)  (name) of (address) is the inventor of the subject matter for which protection is sought by way of [the] [this] international application
  ii) (name) [is] [was] entitled as employer of the inventor, (inventor's name)
  iii) an agreement between... (name) and .... (name), dated...
  iv) an assignment from ... (name) to ...(name), dated...
  v) consent from ... (name) in favor of ...(name), dated...
  vi) a court order issued by ... (name of court), effecting a transfer from ... (name) to...(name), dated...
  vii) transfer of entitlement from ...(name) to ...(name) by way of (specify kind of transfer), dated...
  viii) the applicant's name changed from ...(name) to ...(name) on ...(date)

--> 

<!ELEMENT matter ((date | matter-name | addressbook | court-name | kind-of-transfer)+ , (all-designations | all-designations-except-us | designated-states)?)>

<!ATTLIST matter item (i | ii | iii | iv | v | vi | vii | viii | ix ) #IMPLIED
tense (is | was ) #IMPLIED>

<--
Declaration as to the identity of the inventor (Rules 4.17(i) and 51bis.1(a)(i))

--> 

<!ELEMENT identity-of-inventor (doc-page+ | (application-reference?, addressbook+ , (all-designations | all-designations-except-us | designated-states)?)>

<!ATTLIST identity-of-inventor sequence CDATA #REQUIRED
lang CDATA #IMPLIED
combined (yes | no ) #IMPLIED>

<--
doc-page - DOCUMENT or PAGE
This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.

Page range attributes are given when required
pp - page range
ppf - first page
ppl - last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings

Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

-->  
<!ELEMENT doc-page EMPTY>  
<!ATTLIST doc-page  id           ID     #IMPLIED  
he          CDATA  #REQUIRED  
wi          CDATA  #REQUIRED  
type               (jpg | pdf | tif )  #REQUIRED  
alt         CDATA  #IMPLIED  
pp          CDATA  #IMPLIED  
ppf         CDATA  #IMPLIED  
ppl         CDATA  #IMPLIED  
file        CDATA  #REQUIRED  
ocr         CDATA  #IMPLIED  
color              (color | bw )  #IMPLIED  
orientation (portrait | landscape ) 'portrait' >

ADDRESSBOOK GROUP:
Holds name and contact information for individuals/organizations

The LANG attribute is REQUIRED for certain document types, e.g., the JPO PCT Request where names and addresses may be repeated in two different languages. If no structure possible use text.

-->  
<!ELEMENT addressbook ((%name_group; , address , phone* , fax* , email* , url* , ead* , dtext?) | text)>  
<!ATTLIST addressbook id           ID     #IMPLIED  
lang CDATA #IMPLIED >

-->  
Email address

Attribute:
email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary means of contact as a replacement of the use of conventional post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is equivalent to 'informal'

-->  
<!ELEMENT email (#PCDATA)>  
<!ATTLIST email  email          CDATA  #IMPLIED >

-->  
Application reference information: application number, country
(INID 21, ST.32:B210)
Document identification refers to patents (and patent applications) only. See WIPO ST.14

Name:
If no distinction or detail can be given. Also to be used for: personal (natural person) and corporate (legal entity) names

Method by which prior art was disclosed to the public

Other method by which prior art was disclosed to the public

Exceptions to lack of novelty resulting from abuse; Rule 51bis.1(a)(v)

A publication was used as the method of disclosure

An international exhibition was used as the method of disclosure

Title of what is being disclosed under PCT Rule 51bis.1(a)(v)
<!-- Signatories -->
<!ELEMENT signatories (signatory+)>

<!--
PCT/RO/101 Box No. X:
The signature must be that of the applicant (if there are several applicants, all must sign); however, the signature may be that of the agent, or the common representative, where a separate power of attorney appointing the agent or the common representative, respectively, or a copy of a general power of attorney is already in possession of the receiving Office, is furnished... (PCT Rules 4.1(d), 4.15, and 90)

Indicate the capacity of the signer with 'signatory-capacity' -->
<!ELEMENT signatory (%name_group; , address? , electronic-signature , signatory-capacity?)>
<!ATTLIST signatory id ID #IMPLIED>

<!-- The capacity in which the person signs -->
<!ELEMENT signatory-capacity (#PCDATA)>

<!-- A PKI / PKCS #7 digital signature data type -->
<!ELEMENT enhanced-signature (pkcs7)>  
<!ELEMENT pkcs7 EMPTY>

<!-- A non-PKI electronic signature -->
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>  
<!-- A simple 'signature'; e.g., clicking a button labeled 'accept' or 'I agree' -->
<!ELEMENT click-wrap EMPTY>

<!-- A simple text string is to be used as the basic electronic signature; e.g., John Doe <text-string>/jd/</text-string> -->
<!ELEMENT text-string (#PCDATA)>
<!-- Information regarding inventor(s) (INID 72, ST.32:B720) -->

<!ELEMENT inventor-info (addressbook*, us-residence, authority-applicant?)>

<!-- Identifies the authority for the applicant. In certain circumstances an inventor is unable to file his/her own patent application and an authorized individual must do so -->

<!ELEMENT authority-applicant (#PCDATA)>

<!-- Identifies the residence of a U.S. inventor -->

<!ELEMENT us-residence (military-service | (us | non-us))>

<!-- Identifies the residence of a U.S. inventor that does not reside in the U.S. -->

<!ELEMENT non-us (city, country, citizenship?)>

<!-- Identifies the residence of a US inventor that resides in the US -->

<!ELEMENT us (city, state, country, citizenship?)>

<!-- A person's status as a citizen of a country -->

<!ELEMENT citizenship (#PCDATA)>

<!-- Military address where the applicant is considered to reside -->

<!ELEMENT military-service (#PCDATA)>

<!-- Section 212(a)(vii): kind of transfer of entitlement -->

<!ELEMENT kind-of-transfer (#PCDATA)>

<!-- Name of court; e.g., U.S. Supreme Court -->

<!ELEMENT court-name (#PCDATA)>

<!ELEMENT matter-name (%name_group;)

<!ATTLIST matter-name
    id ID #IMPLIED>
Earlier application identification group

Indication of specific Contracting States in or for which the applicant is seeking protection for his invention (Rule 4.9(a))

The region for which protection or exclusion (depending upon context) is desired.

Designated states for which indications are made: all except United States

All designations permitted by the Treaty are made (Rule 4.9(b))

Descriptive text

Universal Resource Locator; e.g. www.wipo.int

Fax number

Telephone number

Electronic address use for other than email
--> <!ELEMENT ead (#PCDATA)>

<!-- Address components:
Address formats differ from country to country
If no structure possible use text
--> <!ELEMENT address (%address_group;)>

<!-- If no structure is possible, enter text (without markup)
--> <!ELEMENT text (#PCDATA)>

<!-- Postal code or zip code
--> <!ELEMENT postcode (#PCDATA)>

<!-- Region of country; e.g., state, province, etc.
--> <!ELEMENT state (#PCDATA)>

<!-- County, parish, department, etc (mainly UK, USA)
--> <!ELEMENT county (#PCDATA)>

<!-- City or town name
--> <!ELEMENT city (#PCDATA)>

<!-- Street may contain house number or name
--> <!ELEMENT street (#PCDATA)>

<!-- Building information in address; e.g., Hoffman building
--> <!ELEMENT building (#PCDATA)>

<!-- Address floor; e.g., 10th
--> <!ELEMENT address-floor (#PCDATA)>
<!-- Address room; e.g., Room 55B
-->
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number
-->
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code
-->
<!ELEMENT mailcode (#PCDATA)>

<!-- Address, fifth line
-->
<!ELEMENT address-5 (#PCDATA)>

<!-- Address, fourth line
-->
<!ELEMENT address-4 (#PCDATA)>

<!-- Address, third line
-->
<!ELEMENT address-3 (#PCDATA)>

<!-- Address, second line
-->
<!ELEMENT address-2 (#PCDATA)>

<!-- Address, first line
-->
<!ELEMENT address-1 (#PCDATA)>

<!-- Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!-- Synonym
-->
<!ELEMENT synonym (#PCDATA)>
<!--
   Department, division, section, etc. name
-->
<!ELEMENT department (#PCDATA)>

<!--
   Organisation name or company name
-->
<!ELEMENT orgname (#PCDATA)>

<!--
   Role; e.g., President, Chairman, etc.
-->
<!ELEMENT role (#PCDATA)>

<!--
   SDOBI : Individual id
-->
<!ELEMENT iid (#PCDATA)>

<!--
   Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->
<!ELEMENT suffix (#PCDATA)>

<!--
   Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!--
   First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--
   Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
   Title: e.g., Mr., Mrs., Dr. etc
-->
<!ELEMENT prefix (#PCDATA)>

<!--
   Date: components of a date. Format: YYYYMMDD
-->
<!ELEMENT date (#PCDATA)>
3.5 Power of attorney

<?xml version='1.0' encoding='UTF-8' ?>


<!--
********************************************************************************
*  power-of-attorney v1.6     2017 JULY                                          *
********************************************************************************

* PUBLIC "//WIPO//DTD POWER OF ATTORNEY 1.6//EN" "power-of-attorney-v1-6.dtd"
********************************************************************************
* contacts:                                                                  *
* WIPO: Yukako SHIBA; yukako.shiba@wipo.int                                  *
********************************************************************************
* revision history                                                            *
********************************************************************************

Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.5 to v1.6
..added an attribute "id" to signatory
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.4 to v1.5
..multiple addressbook allowed in attorney-or-agent (PFC08/001)
..added attribute 'email-purpose' to email (PFC08/006)
MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.3 to v1.4
..implementation of PFC06/001
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-text,
This DTD is based on PCT-EASY power of attorney

Attributes:
- lang = language of application - use ISO639 language code
- dtd-version = dtd version number
- file = filename of the whole application
- status = status of the application; values: new = new application
- date-produced = YYYYMMDD e.g., 20011230 if desired, 12 characters maximum

-->  
<!ELEMENT power-of-attorney (((customer-number?, attorney-or-agent*) , represent-before , (invention-title | file-reference-id | application-reference)^, ro, payor, signatories) | doc-page+)

<!ATTLIST power-of-attorney  
lang CDATA #REQUIRED 
dtd-version CDATA #IMPLIED 
file CDATA #IMPLIED 
date-produced CDATA #IMPLIED 
title (power-of-attorney | general-power-of-attorney) #REQUIRED 
status CDATA #IMPLIED >

-->  
<!ELEMENT electronic-signature (basic-signature | enhanced-signature)> 

<!ATTLIST electronic-signature  
date CDATA #REQUIRED 
place-signed CDATA #IMPLIED >

-->  
<!ELEMENT fax-image EMPTY>

<!ATTLIST fax-image  
file CDATA #REQUIRED >

-->  
<!ELEMENT payor EMPTY>
<!ATTLIST payor role (yes | no ) #REQUIRED >

<!--
doc-page - DOCUMENT or PAGE

This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.

Page range attributes are given when required
pp - page range
ppf - first page
ppl - last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings

Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

--> <!ELEMENT doc-page EMPTY>  

<!ATTLIST doc-page id ID #IMPLIED
he CDATA #REQUIRED
wi CDATA #REQUIRED
type (jpg | pdf | tif ) #REQUIRED
alt CDATA #IMPLIED
pp CDATA #IMPLIED
ppf CDATA #IMPLIED
ppl CDATA #IMPLIED
file CDATA #REQUIRED
ocr CDATA #IMPLIED
color (color | bw ) #IMPLIED
orientation (portrait | landscape ) 'portrait' >

<!--
Application reference information: application number, country
(INID 21, ST.32:B210)

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

<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

<!--
Document identification refers to patents (and patent applications) only.
See WIPO ST.14

--> <!ELEMENT document-id (country , doc-number , kind? , name? , date?)>  

<!ATTLIST document-id lang CDATA #IMPLIED >

<!--
Title of the Invention:
(INID 54, ST.32:B540/B542)

Preferably two to seven words when in English or translated into English and precise. (Rule 4.3)

Recommended id = 'invt'

--> <!ELEMENT invention-title (#PCDATA | b | i | u | o | sup | sub)*>  

<!ATTLIST invention-title id ID #IMPLIED
lang CDATA #IMPLIED >

<!--
Underscore: style - single is default
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)>  
<!ATTLIST u style (single | double | dash | dots) 'single'>  

Overscore: style - single is default

<!ELEMENT o (#PCDATA | b | i | smallcaps | sup | sub)>  
<!ATTLIST o style (single | double | dash | dots | leftarrow | rightarrow | lefttrightarrow) 'single'>  

Applicant's legal representative  
(INID 74, ST.32:B740)

<!ELEMENT attorney-or-agent (addressbook+, range-of-authority*)>  
<!ATTLIST attorney-or-agent rep-type (agent | attorney | common-representative) #REQUIRED>  

ADDRESSBOOK GROUP:  
Holds name and contact information for individuals/organizations  
The LANG attribute is REQUIRED for certain document types,  
e.g., the JPO PCT Request where names and addresses may be repeated in two  
different languages. If no structure possible use text.

<!ELEMENT addressbook ((%name_group; , address , phone* , fax* , email* , url* , ead* , dtext?) | text)>  
<!ATTLIST addressbook id ID #IMPLIED  
lang CDATA #IMPLIED>

Email address

Attribute:
  email-purpose reason for which email address is included:
  informal for informal contact only
  general for any type of communication
  confirmation any type of communication, but formal messages followed up  
  by conventional mailing (to the extent offered)
  main where applicant desires this address to be used as primary  
  means of contact as a replacement of the use of conventional  
  post (to the extent that an Office offers this)  
  the default value depends on e-mail policies of the relevant Office.  
  For PCT purposes as at 1 July 2008, no attribute being included is  
  equivalent to 'informal'

<!ELEMENT email (#PCDATA)>  
<!ATTLIST email email-purpose (informal | general | advance | main) #IMPLIED>  

Name:
If no distinction or detail can be given.  
Also to be used for: personal (natural person) and corporate (legal entity) names
The signature must be that of the applicant (if there are several applicants, all must sign); however, the signature may be that of the agent, or the common representative, where a separate power of attorney appointing the agent or the common representative, respectively, or a copy of a general power of attorney is already in possession of the receiving Office, is furnished...
(PCT Rules 4.1(d), 4.15, and 90)

Indicate the capacity of the signer with 'signatory-capacity'

A PKI / PKCS #7 digital signature data type

PKCS7 digital signature

A non-PKI electronic signature

A simple 'signature';
e.g., clicking a button labeled 'accept' or 'I agree'

A simple text string is to be used as the basic electronic signature;
e.g., John Doe <text-string>/jd/</text-string>

<!--
<!ELEMENT text-string (#PCDATA)>

<!--
Receiving Office
-->
<!ELEMENT ro (country)>

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

<!--
Document kind code; e.g., A1
(INID 13, ST.32:B130)
-->
<!ELEMENT kind (#PCDATA)>

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

<!--
Applicant's or agent's file reference, if desired, 12 characters maximum
-->
<!ELEMENT file-reference-id (#PCDATA)>

<!--
Bold formatting for text
-->
<!ELEMENT b (#PCDATA | i | u | o | smallcaps | sup | sub)*> 

<!--
Italic formatting for text
-->
<!ELEMENT i (#PCDATA | b | u | o | smallcaps | sup | sub)*> 

<!--
Small capitals
-->
<!ELEMENT smallcaps (#PCDATA | b | u | i | o)*>

<!--
Subscripted text
-->
<!ELEMENT sub (#PCDATA | b | u | i | o | sup2 | sub2)*>
<!-- Fax number -->
<!ELEMENT fax (#PCDATA)>

<!-- Telephone number -->
<!ELEMENT phone (#PCDATA)>

<!-- Electronic address use for other than email -->
<!ELEMENT ead (#PCDATA)>

<!-- Address components: Address formats differ from country to country If no structure possible use text -->
<!ELEMENT address (%address_group;)>}

<!-- If no structure is possible, enter text (without markup) -->
<!ELEMENT text (#PCDATA)>

<!-- Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc. Also includes EP, WO -->
<!ELEMENT country (#PCDATA)>

<!-- Postal code or zip code -->
<!ELEMENT postcode (#PCDATA)>

<!-- Region of country; e.g., state, province, etc. -->
<!ELEMENT state (#PCDATA)>

<!-- County, parish, department, etc (mainly UK, USA) -->
<!ELEMENT county (#PCDATA)>

<!-- City or town name -->
<!ELEMENT city (#PCDATA)>

<!--
Street may contain house number or name
-->
<!ELEMENT street (#PCDATA)>

<!--
Building information in address; e.g., Hoffman building
-->
<!ELEMENT building (#PCDATA)>

<!--
Address floor; e.g., 10th
-->
<!ELEMENT address-floor (#PCDATA)>

<!--
Address room; e.g., Room 55B
-->
<!ELEMENT room (#PCDATA)>

<!--
Post Office Box number
-->
<!ELEMENT pobox (#PCDATA)>

<!--
Organizational mail code
-->
<!ELEMENT mailcode (#PCDATA)>

<!--
Address, fifth line
-->
<!ELEMENT address-5 (#PCDATA)>

<!--
Address, fourth line
-->
<!ELEMENT address-4 (#PCDATA)>

<!--
Address, third line
-->
<!ELEMENT address-3 (#PCDATA)>

<!--
Address, second line
-->
<!ELEMENT address-2 (#PCDATA)>

<!--
Address, first line
-->
<!ELEMENT address-1 (#PCDATA)>

<!--
Address, zero line
-->
<!ELEMENT address-0 (#PCDATA)>
<!ELEMENT address-2 (#PCDATA)>

Address, first line

<!ELEMENT address-1 (#PCDATA)>

Registered number

<!ELEMENT registered-number (#PCDATA)>

Synonym

<!ELEMENT synonym (#PCDATA)>

Department, division, section, etc. name

<!ELEMENT department (#PCDATA)>

Organisation name or company name

<!ELEMENT orgname (#PCDATA)>

Role; e.g., President, Chairman, etc.

<!ELEMENT role (#PCDATA)>

SDOBI : Individual id

<!ELEMENT iid (#PCDATA)>

Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)

<!ELEMENT suffix (#PCDATA)>

Middle name(s) or initial(s)

<!ELEMENT middle-name (#PCDATA)>

First or given name(s), initial(s)
3.6 Fee sheet

<?xml version='1.0' encoding='UTF-8' ?>

<!ELEMENT first-name (#PCDATA)>
<!ELEMENT last-name (#PCDATA)>
<!ELEMENT prefix (#PCDATA)>
<!ELEMENT customer-number (#PCDATA)>

-->
<!ELEMENT first-name (#PCDATA)>
<!ELEMENT last-name (#PCDATA)>
<!ELEMENT prefix (#PCDATA)>
<!ELEMENT customer-number (#PCDATA)>

---

3.6 Fee sheet

Yuya USHIDA: 01/04/19 incorporated changes from PFC
..changed version number from v1.8 to v1.9
..added element 'reimbursement-deposit-account' to fee-sheet

Asahi HASEBE: 01/07/17 incorporated changes from PFC
..changed version number from v1.7 to v1.8
..added an attribute "id" to signatory

AH: 01/04/15 incorporated changes from PFC
..added element 'automatic-debit' to 'authorization'

SY: 01/04/10 incorporated changes from PFC
..changed version number from v1.5 to v1.6
..added element 'payment-contact' to fee-sheet (PFC09/007)
..added element 'credit-card' to payment-mode (PFC09/007)

MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.4 to v1.5
..add element 'earlier-search-document-fee' to prescribed-fees (PFC08/003)
Fee calculation sheet annex to the PCT request

Attributes:

- **lang** = language of application - use ISO639 language code
- **dtd-version** = dtd version number
- **file** = filename of the whole application
- **status** = status of the application; values: new = new application
- **produced-by** = creator of this document
- **date-produced** = YYYYMMDD e.g., 20011230 if desired, 12 characters maximum
- **ro** = Receiving office name, country code ST.3

```xml
<!ELEMENT fee-sheet ((file-reference-id?, applicant-name, prescribed-fees, amount-grand-total+, deposit-account?, dtext*, payment-contact?, reimbursement-deposit-account*) | doc-page)>  
<!ATTLIST fee-sheet  
  langCDATA #REQUIRED  
  dtd-versionCDATA #IMPLIED  
  fileCDATA #IMPLIED  
  produced-by(applicant | RO | ISA | IPEA | IB | DO | EO | national-office | regional-office) #REQUIRED  
  date-producedCDATA #IMPLIED  
  roCDATA #REQUIRED  
  statusCDATA #IMPLIED >
```

```xml
<!-- Email address
Attribute:
  email-purpose reason for which email address is included:
  informal for informal contact only
  general for any type of communication
  confirmation any type of communication, but formal messages followed up
    by conventional mailing (to the extent offered)
  main where applicant desires this address to be used as primary
```
means of contact as a replacement of the use of conventional post (to the extent that an Office offers this) the default value depends on e-mail policies of the relevant Office. For PCT purposes as at 1 July 2008, no attribute being included is equivalent to 'informal'

--> 
<!ELEMENT email (#PCDATA)> 
<!ATTLIST email email-purpose (informal | general | advance | main ) #IMPLIED > 
<!-- 
 doc-page - DOCUMENT or PAGE 

This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.

Page range attributes are given when required  
pp - page range  
ppf - first page  
ppl - last page (for pdf).  
The 'img' may also be used for complete pages, e.g. in drawings

Recommended id = docp0001, docp0002, etc.  
Attributes "he" and "wi" mean height and width.

--> 
<!ELEMENT doc-page EMPTY> 
<!ATTLIST doc-page id ID #IMPLIED 
he CDATA #REQUIRED 
wi CDATA #REQUIRED 
type (jpg | pdf | tif ) #REQUIRED 
alt CDATA #IMPLIED 
pp CDATA #IMPLIED 
ppf CDATA #IMPLIED 
ppl CDATA #IMPLIED 
file CDATA #REQUIRED 
ocr CDATA #IMPLIED 
color (color | bw ) #IMPLIED 
orientation (portrait | landscape ) 'portrait' > 

<!-- 
 A signature represented by electronic means

--> 
<!ELEMENT electronic-signature (basic-signature | enhanced-signature)> 
<!ATTLIST electronic-signature date CDATA #REQUIRED 
place-signed CDATA #IMPLIED > 

<!-- 
 A TIFF image of a signature

--> 
<!ELEMENT fax-image EMPTY> 
<!ATTLIST fax-image file CDATA #REQUIRED > 

<!-- 
 The total amount of all fees. Note that more than one grand total amount may be permitted, as there may be multiple currencies in which payment is due.

--> 
<!ELEMENT amount-grand-total (#PCDATA)> 
<!ATTLIST amount-grand-total currency CDATA #REQUIRED > 
<!--
Calculation of prescribed fees

designation-fee-paid: whether the designation fee has been paid or not

-->  
<!ELEMENT prescribed-fees (transmittal-fee , search-fee , international-fee , pdoc-fee? , restoration-fee? , earlier-search-document-fee?)>  
<!ATTLIST prescribed-fees designation-fee-paid (yes | no ) #IMPLIED >  
<!--  
Fee for supply of earlier search documents from the RO  
-->  
<!ELEMENT earlier-search-document-fee (earlier-search-document-quantity , amount-each , amount-total , payment-mode)>  
<!ATTLIST earlier-search-document-fee currency CDATA #REQUIRED >  
<!--  
Fee for restoration of rights  
-->  
<!ELEMENT restoration-fee (restoration-quantity , amount-total , payment-mode)>  
<!ATTLIST restoration-fee currency CDATA #REQUIRED >  
<!--  
Fee for priority document  
-->  
<!ELEMENT pdoc-fee (pdoc-quantity , amount-each , amount-total , payment-mode)>  
<!ATTLIST pdoc-fee currency CDATA #REQUIRED >  
<!--  
International fee:  
The designation fee may be paid at the time of filing the international application. However, if the international application contains a priority claim, the designation fee must be paid within one year from the priority date or within one month from the date of receipt of the international application, whichever expires first, but where the international application does not contain a priority claim, the designation fee must be paid within one year from the date of receipt of the international application. (Rule 15.1)  
-->  
<!ELEMENT international-fee (basic-fee , designation-fee? , fee-reduction* , amount-total , payment-mode)>  
<!ATTLIST international-fee currency CDATA #REQUIRED >  
<!--  
Fee reduction; applicable where PCT electronic filing software is used or where the applicant is a national and natural person who resides in a State whose per capita income is less than 3,000 US dollars  
-->  
<!ELEMENT fee-reduction (amount-each)>  
<!ATTLIST fee-reduction reduction-type CDATA #IMPLIED >  
<!--  
Search fee (PCT Rule 16.1)  
-->  
<!ELEMENT search-fee (amount-total , payment-mode , isa?)>  
<!ATTLIST search-fee currency CDATA #REQUIRED >  
<!--  
Transmittal fees (PCT Rule 14)  
-->
<!ELEMENT transmittal-fee (amount-total, payment-mode)>
<!ATTLIST transmittal-fee currency CDATA #REQUIRED>

<!ELEMENT credit-card EMPTY>
<!ATTLIST credit-card number CDATA #REQUIRED expires CDATA #REQUIRED name CDATA #IMPLIED postal-code CDATA #IMPLIED>

Name:
If no distinction or detail can be given. Also to be used for: personal (natural person) and corporate (legal entity) names

<!ELEMENT name (#PCDATA)>
<!ATTLIST name name-type (legal | natural) #IMPLIED>

payment-contact element for use as container for an email that can be used as the contact point for payment processing

<!ELEMENT payment-contact (%name_group; , email)>

Descriptive text

<!ELEMENT dtext (#PCDATA)>

Authorization to charge or credit deposit account

<!ELEMENT deposit-account (authorization, ro, account-no, date, %name_group; , signatories?)>

Date: components of a date. Format: YYYYMMDD

<!ELEMENT date (#PCDATA)>

Deposit account number

<!ELEMENT account-no (#PCDATA)>

Receiving Office

<!ELEMENT ro (country)>
<!-- Type(s) of authorization -->
<!ELEMENT authorization (total-fee?, deficiency-credit?, fee-for-pdoc?, automatic-debit?)>

<!-- Authorization to charge the fee for priority document -->
<!ELEMENT fee-for-pdoc EMPTY>

<!-- Authorization to charge any deficiency or credit any overpayment -->
<!ELEMENT deficiency-credit EMPTY>

<!-- Authorization to charge the total fees indicated above -->
<!ELEMENT total-fee EMPTY>

<!-- Instruction to reimburse to a deposit account -->
<!ELEMENT reimbursement-deposit-account (ip-office, account-no, date, %name_group; )>

<!-- IP Office code (ST.3 country code, including the regional authorities) -->
<!ELEMENT ip-office (#PCDATA)>

<!-- Signatories -->
<!ELEMENT signatories (signatory+)>

<!-- PCT/RO/101 Box No. X: The signature must be that of the applicant (if there are several applicants, all must sign); however, the signature may be that of the agent, or the common representative, where a separate power of attorney appointing the agent or the common representative, respectively, or a copy of a general power of attorney is already in possession of the receiving Office, is furnished... (PCT Rules 4.1(d), 4.15, and 90) Indicate the capacity of the signer with 'signatory-capacity' -->
<!ELEMENT signatory (%name_group; , address?, electronic-signature , signatory-capacity?)>

<!ATTLIST signatory
  id ID #IMPLIED>

<!-- The capacity in which the person signs -->
<!ELEMENT signatory-capacity (#PCDATA)>

<!ELEMENT enhanced-signature (pkcs?)>

<!ELEMENT pkcs7 EMPTY>

<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>

<!ELEMENT click-wrap EMPTY>

<!ELEMENT text-string (#PCDATA)>

<!ELEMENT address (%address_group;)

<!ELEMENT text (#PCDATA)>

<!ELEMENT postcode (#PCDATA)>

<!ELEMENT state (#PCDATA)>
<!--
    County, parish, department, etc (mainly UK, USA)
-->  
<!ELEMENT county (#PCDATA)>  

<!--
    City or town name
-->  
<!ELEMENT city (#PCDATA)>  

<!--
    Street may contain house number or name
-->  
<!ELEMENT street (#PCDATA)>  

<!--
    Building information in address; e.g., Hoffman building
-->  
<!ELEMENT building (#PCDATA)>  

<!--
    Address floor; e.g., 10th
-->  
<!ELEMENT address-floor (#PCDATA)>  

<!--
    Address room; e.g., Room 55B
-->  
<!ELEMENT room (#PCDATA)>  

<!--
    Post Office Box number
-->  
<!ELEMENT pobox (#PCDATA)>  

<!--
    Organizational mail code
-->  
<!ELEMENT mailcode (#PCDATA)>  

<!--
    Address, fifth line
-->  
<!ELEMENT address-5 (#PCDATA)>  

<!--
    Address, fourth line
-->  
<!ELEMENT address-4 (#PCDATA)>
<!-- Address, third line -->
<!ELEMENT address-3 (#PCDATA)>

<!-- Address, second line -->
<!ELEMENT address-2 (#PCDATA)>

<!-- Address, first line -->
<!ELEMENT address-1 (#PCDATA)>

<!-- Quantity of earlier search documents furnished -->
<!ELEMENT earlier-search-document-quantity (#PCDATA)>

<!-- Quantity of priority document requested -->
<!ELEMENT pdoc-quantity (#PCDATA)>

<!-- Designation fee (Rule 15.1) -->
<!ELEMENT designation-fee (number-of-designation , designation-fee-payable , amount-each , amount-total)>

<!-- Number of designation fees payable, maximum 8. See PCT Applicant's guide, paragraph 197(c)(ii). -->
<!ELEMENT designation-fee-payable (#PCDATA)>

<!-- Number of designations contained in international application -->
<!ELEMENT number-of-designation (#PCDATA)>

<!-- Basic fee (Rule 15.1(i) -->
<!--
<!ELEMENT basic-fee (amount-each, additional-amount?, additional-component?, amount-total)> 

<!-- If sequence listing part of description is filed in computer readable form -->
<!ELEMENT additional-component (amount-each)> 

<!-- Additional amount -->
<!ELEMENT additional-amount (sheets-over-30, amount-each, total-additional-amount)> 

<!-- Total additional amount = # of sheets over 30 * amount each -->
<!ELEMENT total-additional-amount (#PCDATA)> 

<!-- Number of pages in excess of 30 -->
<!ELEMENT sheets-over-30 (#PCDATA)> 

<!-- The amount of each of the fees -->
<!ELEMENT amount-each (#PCDATA)> 

<!-- International Search Authority; international search to be carried out by -->
<!ELEMENT isa (country)> 

<!-- Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc. Also includes EP, WO -->
<!ELEMENT country (#PCDATA)> 

<!-- Mode of payment -->
<!ELEMENT payment-mode (charge | postal-order | cash | coupons | cheque | bank-draft | stamps | other | later-payment | credit-card)> 

<!-- Authorization to later payment -->
<!ELEMENT later-payment EMPTY>
<!!--
  Other method by which prior art was disclosed to the public
-->
<!ELEMENT other (#PCDATA)>

<!!--
  Revenue stamps used as mode of payment
-->
<!ELEMENT stamps EMPTY>

<!!--
  Bank draft to be used as mode of payment
-->
<!ELEMENT bank-draft EMPTY>

<!!--
  Cheque used as payment method
-->
<!ELEMENT cheque EMPTY>

<!!--
  Coupons used as mode of payment
-->
<!ELEMENT coupons EMPTY>

<!!--
  Cash used as payment method
-->
<!ELEMENT cash EMPTY>

<!!--
  Postal money order used as mode of payment
-->
<!ELEMENT postal-order EMPTY>

<!!--
  Authorization to charge deposit account
-->
<!ELEMENT charge EMPTY>

<!!--
  The total amount due for each fee group;
  e.g., search fees, transmittal fees, etc.
-->
<!ELEMENT amount-total (#PCDATA)>

<!!--
  The name of the applicant (without address information)
  (ST.32:B711)
-->
<!ELEMENT applicant-name (%name_group;)>
<!--

Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!--

Synonym
-->
<!ELEMENT synonym (#PCDATA)>

<!--

Department, division, section, etc. name
-->
<!ELEMENT department (#PCDATA)>

<!--

Organisation name or company name
-->
<!ELEMENT orgname (#PCDATA)>

<!--

Role; e.g., President, Chairman, etc.
-->
<!ELEMENT role (#PCDATA)>

<!--

SDOB: Individual id
-->
<!ELEMENT iid (#PCDATA)>

<!--

Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->
<!ELEMENT suffix (#PCDATA)>

<!--

Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!--

First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--

Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>>
<!-- Title: e.g., Mr., Mrs., Dr. etc -->
<!ELEMENT prefix (#PCDATA)>

<!-- Applicant's or agent's file reference, if desired, 12 characters maximum -->
<!ELEMENT file-reference-id (#PCDATA)>

<!-- The Office in its capacity as receiving Office (RO), as International Searching Authority (ISA), and, where applicable, in its capacity as International Preliminary Examining Authority (IPEA) is authorized to automatically debit the identified account with any fees due in the processing of this International Application. -->
<!ELEMENT automatic-debit EMPTY>

3.7 Biological deposit

<?xml version='1.0' encoding='UTF-8' ?>

<!ENTITY % address_group "((address-1?, address-2?, address-3?, address-4?, address-5?, mailcode?, pobox?, room?, address-floor?, building?, street?, city?, county?, state?, postcode?, country) | text)">

<!-- **********************************************************************************************
* indication-bio-deposit v1.3 2012 JULY
* **********************************************************************************************
* PUBLIC "//WIPO//DTD INDICATION BIO DEPOSIT 1.3//EN"
* "indication-bio-deposit-v1-3.dtd"
**********************************************************************************************
* https://www.wipo.int/pct-safe/en/resources/1.17/
* indication-bio-deposit-v1-3.dtd
**********************************************************************************************
* contacts:
* WIPO: Yukako SHIBA; yukako.shiba@wipo.int
**********************************************************************************************
* revision history
**********************************************************************************************

MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..implementation of PFC06/001
HT: 14/12/04 incorporated changes from PFCs:
..changed attribute he, wi of doc-page from 'NMTOKEN' to 'CDATA'
..added attribute 'id' to application-reference
..added attribute 'ocr' to doc-page
HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.1 to v1.2
..added value 'national-office', 'regional-office' to attribute produced-by of root element
JD: 03/02/03 Incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..added 'orientation' attribute to 'doc-page'
..made 'postcode' optional within 'address'
..changed content of root from ((application-reference?,file-reference-id?,
   indications,(bio-deposit,additional-indication?,(all-designations)
designated-states), separate-indications?) + | doc-page+)
..changed content of 'indications' from "((para-number+)
 to (para-number, (bio-deposit, additional-indication?, (all-designations|
 designated-states), separate-indications?))
to better encapsulate information regarding to deposits
2001/12/01
..released version number as v1.0
**************************************************************************

Attributes:
lang = language of application - use ISO639 language code
dtd-version = dtd version number
file = filename of the whole application
status = status of the application; values: new = new application
date-produced = date this document was produced
produced-by = creator of this document
ro = Receiving office name, country code ST.3

-->
<!ELEMENT indication-bio-deposit (((application-reference? ,
 file-reference-id?,
 indications+)) | doc-page+)>

<!ATTLIST indication-bio-deposit
 lang CDATA #REQUIRED
dtd-version CDATA #IMPLIED
file CDATA #IMPLIED
produced-by CDATA (((applicant | 
  RO | 
  ISA | 
  IFPA | 
  IB | 
  DO | 
  EO | 
  national-office | 
  regional-office ) #REQUIRED
date-produced CDATA #IMPLIED
ro CDATA #REQUIRED
status CDATA #IMPLIED >

-->
<!ELEMENT doc-page EMPTY>

<!ATTLIST doc-page
 id CDATA #IMPLIED
he CDATA #REQUIRED
wi CDATA #REQUIRED
type (jpg | pdf | tif ) #REQUIRED
alt CDATA #IMPLIED
pp CDATA #IMPLIED
ppf CDATA #IMPLIED
ppl CDATA #IMPLIED
file CDATA #REQUIRED
ocr CDATA #IMPLIED
color (color | bw ) #IMPLIED
orientation (portrait | landscape ) 'portrait' >
<!-- Biological deposit citation (US EFS: biological-deposit) (INID 83, ST.32:B830)
According to PCT Rule 13bis, EPC Rule 28
This covers all bio data references long and short within the description and/or claims
Recommended id = biod0001, biod0002, etc.
-->
<!ELEMENT bio-deposit (depositary , bio-accno , date? , term? , dtext?)>
<!ATTLIST bio-deposit id ID #IMPLIED
num CDATA #REQUIRED
url CDATA #IMPLIED
dnum CDATA #IMPLIED >

<!-- Application reference information: application number, country (INID 21, ST.32:B210)
-->
<!ELEMENT application-reference (document-id)>
<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

<!-- Document identification refers to patents (and patent applications) only. See WIPO ST.14
-->
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>
<!ATTLIST document-id lang CDATA #IMPLIED >

<!-- Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names
-->
<!ELEMENT name (#PCDATA)>
<!ATTLIST name name-type (legal | natural ) #IMPLIED >

<!-- indications relate to the bio-deposit in the application body
-->
<!ELEMENT indications (para-number , (bio-deposit , additional-indication? , (all-designations | designated-states) , separate-indications?))>

<!-- Separate furnishing of indications
-->
<!ELEMENT separate-indications (#PCDATA)>

<!-- Indication of specific Contracting States in or for which the applicant is seeking protection for his invention (Rule 4.9(a))
-->
<!ELEMENT designated-states (country* , (region , country+)*)>
<!-- The region for which protection or exclusion (depending upon context) is desired. -->

<!ELEMENT region (country)> |

<!-- All designations permitted by the Treaty are made (Rule 4.9(b)) -->

<!ELEMENT all-designations EMPTY> |

<!-- Additional indication information for the deposit -->

<!ELEMENT additional-indication (#PCDATA)> |

<!-- Identifies the period of time during which the depository must be able to furnish samples of the biological material. -->

<!ELEMENT term (#PCDATA)> |

<!-- Descriptive text -->

<!ELEMENT dtext (#PCDATA)> |

<!-- Biological accession number: (ST.32:B831) The identification assigned to the biological material by the depository -->

<!ELEMENT bio-accno (#PCDATA)> |

<!-- Information regarding the facility storing the biological deposit. (ST.32:B832) -->

<!ELEMENT depositary (#PCDATA | address)*> |

<!-- Address components: Address formats differ from country to country If no structure possible use text -->

<!ELEMENT address (%address_group;)> |

<!-- If no structure is possible, enter text (without markup) -->

<!ELEMENT text (#PCDATA)>
<!-- Postal code or zip code -->
<!ELEMENT postcode (#PCDATA)>

<!-- Region of country; e.g., state, province, etc. -->
<!ELEMENT state (#PCDATA)>

<!-- County, parish, department, etc (mainly UK, USA) -->
<!ELEMENT county (#PCDATA)>

<!-- City or town name -->
<!ELEMENT city (#PCDATA)>

<!-- Street may contain house number or name -->
<!ELEMENT street (#PCDATA)>

<!-- Building information in address; e.g., Hoffman building -->
<!ELEMENT building (#PCDATA)>

<!-- Address floor; e.g., 10th -->
<!ELEMENT address-floor (#PCDATA)>

<!-- Address room; e.g., Room 55B -->
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number -->
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code -->
<!ELEMENT mailcode (#PCDATA)>
<!-- Address, fifth line
-->
<!ELEMENT address-5 (#PCDATA)>

<!-- Address, fourth line
-->
<!ELEMENT address-4 (#PCDATA)>

<!-- Address, third line
-->
<!ELEMENT address-3 (#PCDATA)>

<!-- Address, second line
-->
<!ELEMENT address-2 (#PCDATA)>

<!-- Address, first line
-->
<!ELEMENT address-1 (#PCDATA)>

<!-- Indications relate to the bio-deposit in the application body at paragraph number
-->
<!ELEMENT para-number (#PCDATA)>

<!-- Applicant's or agent's file reference, if desired, 12 characters maximum
-->
<!ELEMENT file-reference-id (#PCDATA)>

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

<!-- Document kind code; e.g., A1
 (INID 13, ST.32:B130)
-->
<!ELEMENT kind (#PCDATA)>

<!-- The number of the referenced patent (or application) document
-->
<!ELEMENT doc-number (#PCDATA)>
3.8 Receiving Office Information

<?xml version='1.0' encoding='UTF-8' ?>
<!ENTITY % name_group "((name | (prefix?, (last-name | orgname), first-name?, middle-name?, suffix?, iid?, role?, orgname?, department?, synonym*)) ,
registered-number?)">
<!ENTITY % address_group "((address-1?, address-2? , address-3? , address-4? ,
city? , county? , state? , postcode? , country) | text)">

Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.3 to v1.4
..added an attribute "id" to signatory
HT: 14/12/04 incorporated changes from PFCs:
..changed version number from v1.1 to v1.2
..added attribute 'id' to application-reference
JD: 03/02/03 Incorporated changes from PF
C.s:
..changed version number from v1.0 to v1.1
..made postcode optional within address
December 2001
..released version number as v1.0

PCT receiving office filing information for PCT request

Attributes:
lang = language of application - use ISO639 language code
dtd-version = dtd version number
file = filename of the whole application
status = status of the application; values: new = new application
date-produced = YYYYMMDD e.g. 20011230 if desired, 12 characters maximum
ro = Receiving office name, country code ST.3

--> <!ELEMENT ro-request-receiving-info (application-reference , ro-info ,
signatories?)>

<!ATTLIST ro-request-receiving-info  lang CDATA #REQUIRED
dtd-version CDATA #IMPLIED
file CDATA #IMPLIED
A signature represented by electronic means

-->
<!ELEMENT electronic-signature (basic-signature | enhanced-signature)>

<!ATTLIST electronic-signature date CDATA #REQUIRED
place-signed CDATA #IMPLIED >

A TIFF image of a signature

-->
<!ELEMENT fax-image EMPTY>

<!ATTLIST fax-image file CDATA #REQUIRED >

Application reference information: application number, country
(INID 21, ST.32:B210)

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

<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

Document identification refers to patents (and patent applications) only.
See WIPO ST.14

-->
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>

<!ATTLIST document-id lang CDATA #IMPLIED >

If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names

-->
<!ELEMENT name (#PCDATA)>

<!ATTLIST name name-type (legal | natural ) #IMPLIED >

-->
<!ELEMENT signatories (signatory+)>

-->
<!ELEMENT signatory (%name_group; , address? , electronic-signature , signatory-
<capacity/>
<!ATTLIST signatory
    id ID #IMPLIED>

<!--
The capacity in which the person signs
-->  
<!ELEMENT signatory-capacity (#PCDATA)>

<!--
A PKI / PKCS #7 digital signature data type
-->  
<!ELEMENT enhanced-signature (pkcs7)>

<!--
PKCS7 digital signature
-->  
<!ELEMENT pkcs7 EMPTY>

<!--
A non-PKI electronic signature
-->  
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>

<!--
A simple 'signature';
e.g., clicking a button labeled 'accept' or 'I agree'
-->  
<!ELEMENT click-wrap EMPTY>

<!--
A simple text string is to be used as the basic electronic signature;
e.g., John Doe  <text-string>/jd/</text-string>
-->  
<!ELEMENT text-string (#PCDATA)>

<!--
Address components:
Address formats differ from country to country
If no structure possible use text
-->  
<!ELEMENT address (%address_group;)>  

<!--
If no structure is possible, enter text (without markup)
-->  
<!ELEMENT text (#PCDATA)>

<!--
Postal code or zip code
-->
<!ELEMENT postcode (#PCDATA)>

<!-- Region of country; e.g., state, province, etc. -->
<!ELEMENT state (#PCDATA)>

<!-- County, parish, department, etc (mainly UK, USA) -->
<!ELEMENT county (#PCDATA)>

<!-- City or town name -->
<!ELEMENT city (#PCDATA)>

<!-- Street may contain house number or name -->
<!ELEMENT street (#PCDATA)>

<!-- Building information in address; e.g., Hoffman building -->
<!ELEMENT building (#PCDATA)>

<!-- Address floor; e.g., 10th -->
<!ELEMENT address-floor (#PCDATA)>

<!-- Address room; e.g., Room 55B -->
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number -->
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code -->
<!ELEMENT mailcode (#PCDATA)>

<!-- Address, fifth line -->
<!ELEMENT address-5 (#PCDATA)>

<!--
Address, fourth line
-->  
<!ELEMENT address-4 (#PCDATA)>

<!--
Address, third line
-->  
<!ELEMENT address-3 (#PCDATA)>

<!--
Address, second line
-->  
<!ELEMENT address-2 (#PCDATA)>

<!--
Address, first line
-->  
<!ELEMENT address-1 (#PCDATA)>

<!--
Registered number
-->  
<!ELEMENT registered-number (#PCDATA)>

<!--
Synonym
-->  
<!ELEMENT synonym (#PCDATA)>

<!--
Department, division, section, etc. name
-->  
<!ELEMENT department (#PCDATA)>

<!--
Organisation name or company name
-->  
<!ELEMENT orgname (#PCDATA)>

<!--
Role; e.g., President, Chairman, etc.
-->  
<!ELEMENT role (#PCDATA)>

<!--
SDOI : Individual id
-->
<!ELEMENT iid (#PCDATA)>

<!--
Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->
<!ELEMENT suffix (#PCDATA)>

<!--
Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!--
First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--
Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
Title: e.g., Mr., Mrs., Dr. etc
-->
<!ELEMENT prefix (#PCDATA)>

<!--
PCT receiving office information for PCT application
-->

<!--
Transmittal of search copy delayed until search fee is paid
-->
<!ELEMENT search-copy-delayed EMPTY>

<!--
International Search Authority; international search to be carried out by
-->
<!ELEMENT isa (country)>

<!--
Date of timely receipt of the required corrections under PCT Article 11(2)
-->
<!ELEMENT receipt-pct11-2 (date)>

<!--
Corrected date of actual receipt due to later but timely received documents or

drawings completing the purported international application

-->
<!ELEMENT corrected-date-receipt (date)>

<--
The presence of this empty tag signifies that drawings were not received

-->
<!ELEMENT drawings-not-received EMPTY>

<--
Date of actual receipt of the purported international application.
(ST.32:B234)
The date of receipt will be determined according to the usual principles
applicable to the filing of applications on paper, including filing by electronic
means (such as by facsimile transmission), that is, based on the date
prevailing at the location of the Office at the time when the complete
transmission of the application has been received.

-->
<!ELEMENT date-of-actual-receipt (date)>

<--
Date: components of a date. Format: YYYYMMDD

-->
<!ELEMENT date (#PCDATA)>

<--
Document kind code; e.g., A1
(INID 13, ST.32:B130)

-->
<!ELEMENT kind (#PCDATA)>

<--
The number of the referenced patent (or application) document

-->
<!ELEMENT doc-number (#PCDATA)>

<--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO

-->
<!ELEMENT country (#PCDATA)>

3.9 Table

<?xml version='1.0' encoding='UTF-8' ?>

<!ENTITY % name_group "((name | (prefix? , (last-name | orgname) , first-name? ,
middle-name? , suffix? , iid? , role? , orgname? , department? , synonym*)) ,
registered-number?)">

<!ENTITY % address_group "((address-1? , address-2? , address-3? , address-4? ,
city? , county? , state? , postcode? , country) | text)"
<!--
XML EXCHANGE TABLE MODEL DECLARATION MODULE
*******************************************************************************
* table-external v1.4     2012 JULY                                          *
*******************************************************************************
* PUBLIC "//WIPO/DTD TABLE EXTERNAL 1.4//EN" "table-external-v1.4.dtd"          *
*******************************************************************************
* https://www.wipo.int/pct-safe/en/resources/1.17/table-external-v1.4.dtd      *
*******************************************************************************
* contacts:                                                              *
* WIPO: Yukako SHIBA; yukako.shiba@wipo.int                               *
*******************************************************************************
* revision history                                                         *
*******************************************************************************
MO: 01/07/08 incorporated changes from PFCs:
   ..changed version number from v1.3 to v1.4
   ..added attribute 'email-purpose' to email (PFC08/006)
MO: 01/01/07 incorporated changes from PFCs:
   ..changed version number from v1.2 to v1.3
   ..implementation of PFC06/001
   ..added element 'sup' to u (PFC06/003)
   ..added element 'sub' to b (PFC06/003)
   ..added element 'address-4' to address (PFC06/005)
   ..added element 'address-5' to address (PFC06/005)
HT: 14/12/04 incorporated changes from PFCs:
   ..changed version number from v1.1 to v1.2
   ..changed version number as v1.0
   ..released version number as v1.0
   ..removed attribute 'class-type' from chem
   ..removed attribute 'lang', 'status', 'dtd-version' from chem
   ..removed attribute 'lang' of addressbook from '#REQUIRED' to '#IMPLIED'
   ..removed attribute 'b', 'i', 'u', 'sup', 'sub', 'smallcaps' to crossref
   ..removed attribute 'num' to li
   ..removed attribute 'class-type' from nplcit
   ..removed attribute 'other-subname-type' of subname
   ..removed attribute 'lang', 'status', 'dtd-version' from chem
   ..removed attribute 'lang' of addressbook from '#REQUIRED' to '#IMPLIED'
   ..removed attribute 'b', 'i', 'u', 'sup', 'sub', 'smallcaps' to crossref
   ..removed attribute 'num' to li
   ..removed attribute 'class-type' from nplcit
   ..released version number as v1.0
*******************************************************************************
WIPO PCT E-Filing project modifications: parameter entities

DTD OASIS Open XML Exchange Table Model.
Maintained by OASIS; download from:
http://www.oasis-open.org/specs/soextblx.dtd
Note that the FPI in soextblx.dtd refers to itself as 'calstblx'.
That convention has been followed here.

--><!--
override OASIS Exchange <entry> model
--><!--
ENTITY % tbl.entry.mdl "(#PCDATA | b | i | u | sup | sub | smallcaps | br |
| patcit | nplcit | bio-deposit | crossref | img |
| dl | ul | ol | chemistry | maths)* ">
--><!--
create content for title element in table
--><!--
ENTITY % title "<!ELEMENT title (#PCDATA | b | i | u | sup | sub | smallcaps)* > ">
%title;
--><!--
End WIPO PCT E-Filing project modifications; include
OASIS Exchange Table Model DTD
--><!--
import OASIS Exchange model
--><!--
ENTITY % calstblx PUBLIC "-//OASIS//DTD XML Exchange Table Model 19990315//EN"
"soextblx.dtd">
%calstblx;

--><!--
DTD MathML2: maintained by W3C. Download from:
http://www.w3.org/TR/MathML2/DTD=MathML-20010221.zip
If using nsgmls-based parser (SP, Near & Far Designer, etc.)
uncomment 'mathml-charent-module' switch below or replace the
referenced MathML2 DTD with the version downloadable from:
http://www.w3.org/Math/DTD/dtd-sp.zip
This notice copied from: http://www.w3.org/Math/DTD/

"DTD for nsgmls
Some systems (including the popular nsgmls parser) may not be able
to process files using 'plane 1' characters which have Unicode
numbers higher than #xFFFF. The versions of the DTD provided here
incorporate the modifications mentioned above, but the high
characters are replaced by the equivalent mchar construct
<mchar name='...'></mchar> this allows the DTD to be read and for MathML files to
be validated using such sytems."
--><!--
ENTITY % mathml-charent.module "IGNORE" >
ENTITY % MATHML.prefixed "IGNORE"
ENTITY % MATHML.xmlns "">

<!--
 import MathML2 dtd
-->
<!--
ENTITY % mathml2 PUBLIC "-//W3C//DTD MathML 2.0//EN" "mathml2.dtd">
%mathml2;
-->
***************************************************************************
*
WIPO PCT Efiling project modifications: Elements and Attributes
***************************************************************************
-->
<!ELEMENT table ANY>
<!--
 Definition list
Recommended id = dlis0001, dlis0002, etc.
-->
<!ELEMENT dl (dt , dd)+>
<!ATTLIST dl  tsize   CDATA  #IMPLIED
compact        (compact )  #IMPLIED
id      ID     #IMPLIED >
<!--
 Term to be defined
Recommended id = dtrm0001, dtrm0002, etc.
-->
<!ELEMENT dt (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST dt  id ID  #IMPLIED >
<!--
 Unordered Lists
Recommended id = ulis0001, ulis0002, etc.
-->
<!ELEMENT ul (li+)>
<!ATTLIST ul  id         ID  #IMPLIED
list-style     (bullet | dash | none )  'bullet'
compact        (compact )  #IMPLIED >
<!--
 List item
Recommended id = list0001, list0002, etc.
-->
<!ELEMENT li (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref | figref | img | dl | ul | ol | chemistry | maths)*>
<!ATTLIST li  id  ID     #IMPLIED
num CDATA   #IMPLIED >
<!--
MATHEMATICS
This is image data or coded according to mathml, version 2

Recommended id = math0001, math0002, etc.

<!ELEMENT maths (img | (math , img?))>
<!ATTLIST maths  id  ID     #IMPLIED
num CDATA  #REQUIRED >

Chemistry
Chemical formulae, ring structures, Markush structures, etc.

For now treat as image data.
Depending on industry support we may use, e.g., chemML, CML later

Recommended id = chem0001, chem0002, etc

<!ELEMENT chemistry (img | (chem , img?))>
<!ATTLIST chemistry  id  ID     #IMPLIED
num CDATA  #REQUIRED >

This is a pointer to an external DTD for chemical markup - to be determined.
For EPO probably CML; http://www.xml-cml.org/

<!ELEMENT chem EMPTY>
<!ATTLIST chem  id        ID     #IMPLIED
file      CDATA  #REQUIRED
chem-type CDATA  #IMPLIED >

Ordered Lists:
attribute 'ol-style'

Recommended use:
1  arabic numbers  1, 2, 3, ...
a  lower alpha    a, b, c, ...
A  upper alpha    A, B, C, ...
i  lower roman    i, ii, iii, ...
I  upper roman    I, II, III, ...

<!ELEMENT ol (li+)>
<!ELEMENT pre (#PCDATA)>
<!ATTLIST pre id ID #IMPLIED

xml:space (preserve | default ) #IMPLIED
listing-type (sequence | program-listing | other ) #REQUIRED >

<--

Image data
Image is used for any kind of image: art work, figures, complex work units
(math, tables, chemistry), etc.

Recommended:

id = i0001, i0002, etc.
he, wi = "11" - milimeters - height, width;
file = file name, location; label - not used;
alt = alternate text if image not shown;

img-content = drawing is the default;
img-format = common will be tiff, st33 and st35 in for backward compatibility
and, later, publication.

orientation = orientation of the image (portrait | landscape).

Default is portrait

inline = (yes | no).
Whether the image is to be presented inline or separated by line breaks. Default is no.

-->

<!ELEMENT img EMPTY>
<!ATTLIST img id ID #IMPLIED

he CDATA #REQUIRED
wi CDATA #REQUIRED
file CDATA #REQUIRED
alt CDATA #IMPLIED

img-content (drawing |
photograph |
character |

dna |
undefined |
chem |
table |

math |
program-listing |

flowchart |

graph ) 'drawing'

img-format (jpg | tif | st33 | st35 ) #REQUIRED

orientation (portrait | landscape ) 'portrait'

inline (yes | no ) 'no' >

<--

Cross reference to any other element with an identifier (id)

-->

<!ELEMENT crossref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST crossref idref IDREF #REQUIRED >

<--

Biological deposit citation (US EFS: biological-deposit)
(INID 83, ST.32:B830)
According to PCT Rule 13bis, EPC Rule 28
This covers all bio data references long and short within the description and/or claims

Recommended id = biod0001, biod0002, etc.

-->

<!ELEMENT bio-deposit (depositary, bio-accno , date? , term? , dtext?)>
<!ATTLIST bio-deposit id ID #IMPLIED
num CDATA #REQUIRED
url CDATA #IMPLIED
dnum CDATA #IMPLIED>

<!--
Non-Patent Literature (NPL) CITation;

Notes:
This can be free text data without any structure (#PCDATA) which is NOT recommended
or it can be highly structured data which is marked up according to ST.14 and ISO 690 layout;

This part of the DTD has used many different sources for element names and DTD structure and reference:
AACR2 / MARC
ISO 12083 - Electronic manuscript prep. and markup. DTD
Association of American Publishers (AAP) Z39.59 DTD
European Working Group for SGML (EWS) MAJOUR DTD
SuperJournal Full Article DTD
www.superjournal.ac.uk/sj
Elsevier DTD
Medline DTD (NLM)

Attributes (recommended):
  id - ncit0001, ncit0002, etc
  num - 0001, 0002
  npl-type - The TYPE of citation is office specific (recommended);
    A - Abstract citation of no specific kind
    B - Book citation
    I - Biological abstract citation
    C - Chemical abstracts citation
    E - Database citation
    D - Derwent citation
    P - Patent cited within NPL group
    J - Patent Abstracts of Japan citation (REC 067)
    S - Serial / Journal / Periodical citation
    W - World Wide Web / Internet search citation
    medium - the type of medium
      e.g., CD (CD-ROM), MT (Magnetic Tape), DISK, ONLINE
  file - file name on local systems eg. XP number in EPO
  url - where possible give full web link to document
-->
<!ELEMENT nplcit ((text | article | book | online | othercit), rel-passage*)>

<!ATTLIST nplcit id ID #IMPLIED
num CDATA #IMPLIED
lang CDATA #IMPLIED
file CDATA #IMPLIED
npl-type CDATA #IMPLIED
medium CDATA #IMPLIED
url CDATA #IMPLIED>

<!--
Reference number (general); for the EPO this is the XP number
-->
<!ELEMENT refno (#PCDATA)>

<!ATTLIST refno id ID #IMPLIED>

<!--
Classification code; e.g., ipc, dewey etc.
-->
<!ELEMENT class (#PCDATA)>
<!ATTLIST class class-type CDATA  #IMPLIED >

<!--
Subordinate responsibility; e.g., editor, translator, etc.
-->
<!ELEMENT subname (%name_group; | addressbook)>
<!ATTLIST subname  subname-type (editor | translator | other-subname-type ) 'editor' >

<!--
Author
Prime responsibility for the work
there is no distinguishing between personal and corporate authors
<author> followed by name or addressbook information
use the ID attribute if, for example, there is a need to distinguish between
multiple authors.
Can also include affiliation details
Recommended id = auth0001, auth0002, etc.
-->
<!ELEMENT author (%name_group; | addressbook)>
<!ATTLIST author  id ID  #IMPLIED >

ADDRESSBOOK GROUP:
Holds name and contact information for individuals/organizations
The LANG attribute is REQUIRED for certain document types,
e.g., the JPO PCT Request where names and addresses may be repeated in two
different languages. If no structure possible use text.

<!ELEMENT addressbook ((%name_group; , address , phone* , fax* , email* , url* ,
edad* , dtext?) | text)>
<!ATTLIST addressbook  id ID     #IMPLIED
lang CDATA  #IMPLIED >

<!--
Email address
Attribute:
email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up
by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary
means of contact as a replacement of the use of conventional
post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is
equivalent to 'informal'
-->
<!ELEMENT email (#PCDATA)>
<!ATTLIST email  email-purpose (informal | general | advance | main ) #IMPLIED >

PATENT CITATIONS:
(ST.32:B561)
Patent Citation within abstract, description or claims.
For patent citations within Search Report see Search Report DTD
Notes:
Tags arranged according to WIPO ST.14 order.
This can be free text data without any structure (text).

Example:
```xml
<patcit id='pcit0001' dnum='US4793675A' dnum-type='publication number'>
  <document-id>
    <country>US</country>
    <doc-number>4793675</doc-number>
    <kind>A</kind>
    <name>Handa</name>
    <date>19881227</date>
  </document-id>
</patcit>
```

Note:
It is NOT expected that the applicant will create the tagged data
- it could be generated from a 'pull down' data entry form
or generated from internal SR databases

Attributes (recommended):
- id = pcit0001, pcit0002, etc.
- num = 0001, 0002, etc.
- dnum = use full number as one string, eg, "US5401234A";
- url = where possible give full web link to patent
- file = file name eg. if stored on local systems
- dnum-type = type of document number
  (e.g., application number, publication number)

-->  
<!ELEMENT patcit (text | (document-id , rel-passage*))>  
<!ATTLIST patcit  id        ID     #IMPLIED  
num       CDATA  #IMPLIED  
dnum      CDATA  #IMPLIED  
dnum-type  CDATA  #IMPLIED  
file      CDATA  #IMPLIED  
url       CDATA  #IMPLIED >  

-->  
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>  
<!ATTLIST document-id  lang CDATA  #IMPLIED >  

-->  
<!ELEMENT name (#PCDATA)>  
<!ATTLIST name  name-type   (legal | natural ) #IMPLIED >  

-->  
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)*>  
<!ATTLIST u  style   (single | double | dash | dots ) 'single' >  

-->  
```
Identifies the period of time during which the depository must be able to furnish samples of the biological material.

<!ELEMENT bio-accno (#PCDATA)>

Information regarding the facility storing the biological deposit.

(ST.32:B832)

<!ELEMENT depositary (#PCDATA | address)*>

Other citations - free form

<!ELEMENT othercit (#PCDATA | b | i | u | o | sup | sub)*>

Online citation

Revised according to ISO-690-2 - Electronic documents and parts thereof. Please refer to this standard for definitions and examples. See: http://www.nlc-bnc.ca/iso/tc46sc9/standard/690-2e.htm#Contents

The tagging in fact is a mixture of article and book tags together with specific electronic source tags. 'Online' is taken to mean any kind of electronic documentation: databases, internet, CD-ROMs, DVD, email, etc

EXAMPLES:


<nplcit id='ncit1' num='0001' type='E' medium='online'>
  <online>
* Article on Internet:


* Personal communication (e-mail)

Thacker, Jane. MPEG-21 project stream on digital item identification [online]. Message to: [iso.tc46.sc9@nlc-bnc.ca]. 3 October 2000; 13:33 EST [cited 6 October 2000; 13:10 EST]. Message-ID: [002f01c02d60$051a64a0$22a2580c@vaio]. Personal communication.
<!-- Date article was received -->
<!ELEMENT received (date)>

<!-- Title of the host document/database -->
<!ELEMENT hosttitle (#PCDATA)>

<!-- The title of the electronic resource -->
<!ELEMENT online-title (#PCDATA)>

<!-- Article citations within a 'host' document -->
After patent citations the most common citations are articles within serials (periodicals, magazines), books and electronic (eg. internet) sources. This is a very complex and varied area to standardise. The tag set below is drawn from a number of sources as is the order of the tags (which in any case can be changed depending on the stylesheet used).

The order of tags is that of WIPO ST.14 / ISO 690 layout.

[XPnnnnnnnnn].


<!-- Article unique ID - assigned by a publisher to an article -->
<!ELEMENT artid (#PCDATA)>
WALTON, Herrmann. Microwave quantum theory.

<nplcit id='ncit12' num='0013' type='b'>
    <book>
        <author>WALTON, Herrman</author>
        <book-title>Microwave quantum theory</book-title>
        <imprint>
            <address>London</address>
            <name>Sweet and Maxwell</name>
            <pubdate>19730000</pubdate>
        </imprint>
        <location>pp>138 to 192</location>
        <isbn>0-1234-568-9</isbn>
    </book>
</nplcit>
<!--
Chapter; e.g., in a book. Example: Chapter 2
--><!ELEMENT chapter (#PCDATA)>

<!--
Serial section
--><!ELEMENT sersect (#PCDATA)>

<!--
Part within a serial
--><!ELEMENT serpart (#PCDATA)>

<!--
Abstract number
--><!ELEMENT absno (#PCDATA)>

<!--
Series statement
--><!ELEMENT series (text | (mst, msn?, issn?))>

<!--
Monographic series number
--><!ELEMENT msn (#PCDATA)>

<!--
Monographic series title
--><!ELEMENT mst (#PCDATA)>

<!--
Edition statement
(ST.32:B516)
--><!ELEMENT edition (#PCDATA)>

<!--
Book subtitle
--><!ELEMENT subtitle (#PCDATA)>

<!--
CONFERENCE GROUP / CITATION
There is no standard way of citing conference proceedings; date of the conf. may come before or after place, for example. The tags are specified in a set order
where it is not possible or correct then simply use <text>

-->
<!ELEMENT conference (text | (conftitle, confdate?, confno?, confplace?, confsponsor*))>

<!--

--> 
<!ELEMENT confdate (date | (sdate, edate))>

<!-- Conference sponsor

--> 
<!ELEMENT confsponsor (#PCDATA | addressbook)*>

<!-- Conference place

--> 
<!ELEMENT confplace (#PCDATA | address)*>

<!-- Conference number

--> 
<!ELEMENT confno (#PCDATA)>

<!-- Conference title

--> 
<!ELEMENT conftitle (#PCDATA)>

<!-- The title of the cited book

--> 
<!ELEMENT book-title (#PCDATA)>

<!-- Serial citation data:
This describes the volume or issue as a whole and not a particular article within it.

--> 

<!--

--> 
<!ELEMENT doi (#PCDATA)>

<!-- Copyright info. Copyright of publisher of serial

-->
<!-- Time; format HHMM -->
<!ELEMENT time (#PCDATA)>

<!-- End date used in pubdate -->
<!ELEMENT edate (#PCDATA)>

<!-- Start date used in pubdate -->
<!ELEMENT sdate (#PCDATA)>

<!-- Issue designation; e.g., Annual, 1971-, 1890-1972 -->
<!ELEMENT issue (#PCDATA)>

<!-- Alternate title for serial; e.g. BMJ = British Medical Journal -->
<!ELEMENT altitle (#PCDATA)>

<!-- Serial title -->
<!ELEMENT sertitle (#PCDATA)>

<!-- Article title -->
<!ELEMENT atl (#PCDATA)>

<!-- Descriptive text -->
<!ELEMENT dtext (#PCDATA)>

<!-- Universal Resource Locator; e.g. www.wipo.int -->
<!ELEMENT url (#PCDATA)>

<!-- Fax number -->
<!ELEMENT fax (#PCDATA)>
<!--
Telephone number
-->  
<!ELEMENT phone (#PCDATA)>  

<!-- Electronic address use for other than email -->  
<!ELEMENT ead (#PCDATA)>  

<!-- Address components:  
Address formats differ from country to country  
If no structure possible use text -->  
<!ELEMENT address (%address_group;)>  

<!-- Postal code or zip code -->  
<!ELEMENT postcode (#PCDATA)>  

<!-- Region of country; e.g., state, province, etc. -->  
<!ELEMENT state (#PCDATA)>  

<!-- County, parish, department, etc (mainly UK, USA) -->  
<!ELEMENT county (#PCDATA)>  

<!-- City or town name -->  
<!ELEMENT city (#PCDATA)>  

<!-- Street may contain house number or name -->  
<!ELEMENT street (#PCDATA)>  

<!-- Building information in address; e.g., Hoffman building -->  
<!ELEMENT building (#PCDATA)>  

<!-- Address floor; e.g., 10th -->  
<!ELEMENT address-floor (#PCDATA)>
<!-- Address room; e.g., Room 55B
-->  
<!ELEMENT room (#PCDATA)>  

<!-- Post Office Box number
-->  
<!ELEMENT pobox (#PCDATA)>  

<!-- Organizational mail code
-->  
<!ELEMENT mailcode (#PCDATA)>  

<!-- Address, fifth line
-->  
<!ELEMENT address-5 (#PCDATA)>  

<!-- Address, fourth line
-->  
<!ELEMENT address-4 (#PCDATA)>  

<!-- Address, third line
-->  
<!ELEMENT address-3 (#PCDATA)>  

<!-- Address, second line
-->  
<!ELEMENT address-2 (#PCDATA)>  

<!-- Address, first line
-->  
<!ELEMENT address-1 (#PCDATA)>  

<!-- Registered number
-->  
<!ELEMENT registered-number (#PCDATA)>  

<!-- Synonym
-->  
<!ELEMENT synonym (#PCDATA)>
3.10 Ex-officio correction

```xml
<?xml version='1.0' encoding='UTF-8' ?>
<!--
  ********************************************************************************
  *  ex-officio-correction v1.3  2012  JULY
  ********************************************************************************
  *  PUBLIC "//WIPO//DTD EX OFFICIO CORRECTION 1.3//EN"
  *  http://www.wipo.int/pct-safe/en/resources/1.17/
  *  contacts:
  *  WIPO: Yukako SHIBA; yukako.shiba@wipo.int
  ********************************************************************************
```
Ex officio correction data in electronic record copy

-->
<!ELEMENT ex-officio-correction (application-reference , correction-note+ , authorized-officer?)>

<!ATTLIST ex-officio-correction  
lang CDATA #REQUIRED 
dtd-version CDATA #IMPLIED 
file CDATA #IMPLIED 
status CDATA #IMPLIED 
date-produced CDATA #IMPLIED 
produced-by (applicant | RO | ISA | IPEA | IB | DO | EQ | national-office | regional-office ) #REQUIRED 
ro CDATA #REQUIRED >

A signature represented by electronic means

-->
<!ELEMENT electronic-signature (basic-signature | enhanced-signature)>

<!ATTLIST electronic-signature  
date CDATA #REQUIRED 
place-signed CDATA #IMPLIED >

A TIFF image of a signature

-->
<!ELEMENT fax-image EMPTY>

<!ATTLIST fax-image  
file CDATA #REQUIRED >

Email address

Attribute:
email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary means of contact as a replacement of the use of conventional post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is equivalent to 'informal'.

```xml
<!ELEMENT email (#PCDATA)>
<!ATTLIST email email-purpose (informal | general | advance | main ) #IMPLIED >

Note of ex-officio correction:

```xml
<!ELEMENT correction-note (original-content, corrected-content, action)>
<!ATTLIST correction-note location-xpath CDATA #IMPLIED
sequence CDATA #REQUIRED >

Content after ex-officio correction

```xml
<!ELEMENT action EMPTY>
<!ATTLIST action type-action (delete | add | replace ) #REQUIRED >

Application reference information: application number, country
(INID 21, ST.32:B210)

```xml
<!ELEMENT application-reference (document-id)>
<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

Document identification refers to patents (and patent applications) only.
See WIPO ST.14

```xml
<!ELEMENT document-id (country, doc-number, kind?, name?, date?)>
<!ATTLIST document-id lang CDATA #IMPLIED >

Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names

```xml
<!ELEMENT name (#PCDATA)>
<!ATTLIST name name-type (legal | natural ) #IMPLIED >

Authorized Officer.

```xml
<!ELEMENT authorized-officer (%name_group; , phone? , fax? , email? , electronic-signature?)>

A PKI / PKCS #7 digital signature data type

```xml
<!ELEMENT enhanced-signature (pkcs)>
PKCS7 digital signature

--> <!ELEMENT pkcs7 EMPTY>

<!-- A non-PKI electronic signature -->
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>

<!-- A simple 'signature'; e.g., clicking a button labeled 'accept' or 'I agree' -->
<!ELEMENT click-wrap EMPTY>

<!-- A simple text string is to be used as the basic electronic signature; e.g., John Doe <text-string>/jd/</text-string> -->
<!ELEMENT text-string (#PCDATA)>

<!-- Fax number -->
<!ELEMENT fax (#PCDATA)>

<!-- Telephone number -->
<!ELEMENT phone (#PCDATA)>

<!-- Registered number -->
<!ELEMENT registered-number (#PCDATA)>

<!-- Synonym -->
<!ELEMENT synonym (#PCDATA)>

<!-- Department, division, section, etc. name -->
<!ELEMENT department (#PCDATA)>

<!-- Organisation name or company name -->
<!ELEMENT orgname (#PCDATA)>
<!--
   Role: e.g., President, Chairman, etc.
-->  
<!ELEMENT role (#PCDATA)>

<!--
   SDOBI : Individual id
-->  
<!ELEMENT iid (#PCDATA)>

<!--
   Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->  
<!ELEMENT suffix (#PCDATA)>

<!--
   Middle name(s) or initial(s)
-->  
<!ELEMENT middle-name (#PCDATA)>

<!--
   First or given name(s), initial(s)
-->  
<!ELEMENT first-name (#PCDATA)>

<!--
   Last, family, surname
-->  
<!ELEMENT last-name (#PCDATA)>

<!--
   Title: e.g., Mr., Mrs., Dr. etc
-->  
<!ELEMENT prefix (#PCDATA)>

<!--
   Content after ex-officio correction
-->  
<!ELEMENT corrected-content (#PCDATA)>

<!--
   Original content before ex-officio correction
-->  
<!ELEMENT original-content (#PCDATA)>

<!--
   Date: components of a date. Format: YYYYMMDD
-->  
<!ELEMENT date (#PCDATA)>
4. DTDs for Use in Document Packaging and Transmission

4.1 Package header

<?xml version='1.0' encoding='UTF-8' ?>
<!ENTITY % name_group "((name | (prefix? , (last-name | orgname) , first-name? ,
middle-name? , suffix? , iid? , role? , orgname? , department? , synonym*)) ,
registered-number?)">  
<!ENTITY % address_group "((address-1? , address-2? , address-3? , address-4? ,
city? , county? , state? , postcode? , country) | text)"  

---

* pkgheader v1.4 2012 JULY
* PUBLIC "//WIPO//DTD PKGHEADER 1.4//EN" "pkgheader-v1-4.dtd"
* https://www.wipo.int/pct-safe/en/resources/1.17/pkgheader-v1-4.dtd
* contacts:
*   WIPO: Yukako SHIBA; yukako.shiba@wipo.int
* revision history
* MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.3 to v1.4
..implementation of PFC06/001
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-
text, p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
HT: 14/12/04 incorporated changes from PFCs:
..added attribute 'id' to application-reference, publication-reference
HT: 20/07/04 incorporated changes from PFCs:
..added version number from v1.2 to v1.3
..added element 'address' to first-named-applicant
HT: 16/12/03 incorporated changes from PFCs:
..changed version number from v1.1 to v1.2
..added element 'sup2' and 'sub2' to sup and sub
JD: 03/02/03 Incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..added element 'filelist' to root content model
..added element 'other-filing' to transmittal-info
..added (last-name | orgname) option to %name_group;
..removed br from b, i, smallcaps
2001/12/01
..released version number as v1.0
********************************************************************************

Root element, pkgheader

Attributes:
  lang          = language of application - use ISO639 language code
  dtd-version   = dtd version number
  file          = filename of the whole application
  status        = status of the application; values: new = new application 

-->  
<!ELEMENT pkgheader (wad-message-digest , transmittal-info , ip-type , filelist? , application-software? , transmission-type? , payment?)>

<!ATTLIST pkgheader  lang        CDATA  #REQUIRED
   dtd-version CDATA  #IMPLIED
   file        CDATA  #IMPLIED
   status      CDATA  #IMPLIED >

<!--
Contents of the file received. See Section 704(a):
'and may, at the option of the Office, also indicate or contain such information
as
   (v) the names and sizes of the electronic files received;
   (vi) the dates of creation of the electronic files received;...''

attributes:
  doc-name      = name of the document
  file-name     = name of the electronic file
  size          = size of the file
  date-produced = date of creation of the file 

-->  
<!ELEMENT file-content EMPTY>

<!ATTLIST file-content  doc-name      CDATA  #REQUIRED
   file-name     CDATA  #REQUIRED
   size          CDATA  #IMPLIED
   date-produced CDATA  #IMPLIED
   number-of-notification CDATA  #IMPLIED >

<!--
Credit card used as payment method

-->  
<!ELEMENT credit-card EMPTY>

<!ATTLIST credit-card  number      CDATA  #REQUIRED
   expires      CDATA  #REQUIRED
   name         CDATA  #IMPLIED
   postal-code  CDATA  #IMPLIED >

<!--
Deposit account information


<ELEMENT account EMPTY>

<!ATTLIST account number CDATA #REQUIRED
account-type CDATA #REQUIRED
name CDATA #IMPLIED>

---

Total amount of fees due

---

<!ELEMENT fee-total EMPTY>

<!ATTLIST fee-total amount CDATA #REQUIRED>

---

Amount due

---

<!ELEMENT fee EMPTY>

<!ATTLIST fee fee-code CDATA #REQUIRED
amount CDATA #REQUIRED
quantity CDATA #IMPLIED
currency CDATA #REQUIRED>

---

Information regarding notice

---


<!ATTLIST notice-info notice-id-ref CDATA #REQUIRED>

---

Response term of invitation.

Attributes:

term = period of time
division = discernment of month or day

---

<!ELEMENT response-term EMPTY>

<!ATTLIST response-term unit-of-time CDATA #REQUIRED
value CDATA #REQUIRED>

---

Publication reference information: publication number, date, etc

(INID 11, ST.32:B110)

---

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

<!ATTLIST publication-reference id ID #IMPLIED>

---

Application reference information: application number, country

(INID 21, ST.32:B210)

---

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

<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED>

---

Document identification refers to patents (and patent applications) only.
See WIPO ST.14
<!ELEMENT wad-message-digest (#PCDATA)>

<!--
Payment method
-->
<!ELEMENT payment (fee+, fee-total, (account | credit-card | other-method))>

<!--
Other payment method. Specify
-->
<!ELEMENT other-method (#PCDATA)>

<!--
Transmission type; e.g., submission or dispatch, etc.
-->
<!ELEMENT transmission-type (#PCDATA)>

<!--
The software used to generate the XML document instance
-->
<!ELEMENT application-software (software-name, software-version, software-message?)>

<!--
Any message (e.g., parser response text) returned by the software used to create the document
-->
<!ELEMENT software-message (#PCDATA)>

<!--
The version of the software used to create the document
-->
<!ELEMENT software-version (#PCDATA)>

<!--
The name of the software used to create the document
-->
<!ELEMENT software-name (#PCDATA)>

<!--
Intellectual Property type
-->
<!ELEMENT ip-type (#PCDATA)>

<!--
Transmittal information
-->
<!ELEMENT transmittal-info (new-application | subsequent-filing | office-to-office | office-to-applicant)>
<!-- Document transfer information from office to applicant -->

<!-- The total number of cases ready for notice -->
<!ELEMENT total-number-of-notifications (#PCDATA)>

<!-- A list of the receipts produced by the Office in response to query "what did I send you?" -->
<!ELEMENT receipt-list-info (applicant-name? , receipt-number*)>

<!-- Notification to the applicant of the document code of the object to draft -->
<!ELEMENT drafting-document-info (document-code? , (receipt-number | dispatch-id))>

<!-- Dispatch identifier -->
<!ELEMENT dispatch-id (#PCDATA)>

<!-- Receipt number -->
<!ELEMENT receipt-number (#PCDATA)>

<!-- The Japanese applicant is demanding the notice of the reason for rejection -->
<!ELEMENT reason-for-rejection-info (reason-code , text)>

<!-- Code of the reason for rejection -->
<!ELEMENT reason-code (#PCDATA)>

<!-- Information regarding the agent (without address information) -->
<!ELEMENT agent-info (agent-name+ | customer-number)>

<!-- Customer number for agents by office -->
<!ELEMENT customer-number (#PCDATA)>

<!ELEMENT agent-name (%name_group;)

<!ELEMENT applicant-name (%name_group;)

<!ELEMENT from (country)


<!ELEMENT patent-reference (document-id)

<!ELEMENT kind (#PCDATA)

<!ELEMENT date (#PCDATA)

<!ELEMENT customer-number (#PCDATA)>

The number of the referenced patent (or application) document
<!-- Postal code or zip code -->
<!ELEMENT postcode (#PCDATA)>

<!-- Region of country; e.g., state, province, etc. -->
<!ELEMENT state (#PCDATA)>

<!-- County, parish, department, etc (mainly UK, USA) -->
<!ELEMENT county (#PCDATA)>

<!-- City or town name -->
<!ELEMENT city (#PCDATA)>

<!-- Street may contain house number or name -->
<!ELEMENT street (#PCDATA)>

<!-- Building information in address; e.g., Hoffman building -->
<!ELEMENT building (#PCDATA)>

<!-- Address floor; e.g., 10th -->
<!ELEMENT address-floor (#PCDATA)>

<!-- Address room; e.g., Room 55B -->
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number -->
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code -->
<!ELEMENT mailcode (#PCDATA)>
<!--
Address, fifth line
-->
<!ELEMENT address-5 (#PCDATA)>

<!--
Address, fourth line
-->
<!ELEMENT address-4 (#PCDATA)>

<!--
Address, third line
-->
<!ELEMENT address-3 (#PCDATA)>

<!--
Address, second line
-->
<!ELEMENT address-2 (#PCDATA)>

<!--
Address, first line
-->
<!ELEMENT address-1 (#PCDATA)>

<!--
Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!--
Synonym
-->
<!ELEMENT synonym (#PCDATA)>

<!--
Department, division, section, etc. name
-->
<!ELEMENT department (#PCDATA)>

<!--
Organisation name or company name
-->
<!ELEMENT orgname (#PCDATA)>

<!--
Role; e.g., President, Chairman, etc.
-->
<!ELEMENT role (#PCDATA)>
<!--
  SDQBI : Individual id
  -->
<!ELEMENT iid (#PCDATA)>

<!--
  Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
  -->
<!ELEMENT suffix (#PCDATA)>

<!--
  Middle name(s) or initial(s)
  -->
<!ELEMENT middle-name (#PCDATA)>

<!--
  First or given name(s), initial(s)
  -->
<!ELEMENT first-name (#PCDATA)>

<!--
  Last, family, surname
  -->
<!ELEMENT last-name (#PCDATA)>

<!--
  Title: e.g., Mr., Mrs., Dr. etc
  -->
<!ELEMENT prefix (#PCDATA)>

<!--
  Bold formatting for text
  -->
<!ELEMENT b (#PCDATA | i | u | o | smallcaps | sup | sub)*>

<!--
  Italic formatting for text
  -->
<!ELEMENT i (#PCDATA | b | u | o | smallcaps | sup | sub)*>

<!--
  Small capitals
  -->
<!ELEMENT smallcaps (#PCDATA | b | u | i | o)*>

<!--
  Subscripted text
  -->
<!ELEMENT sub (#PCDATA | b | u | i | o | sup2 | sub2)>
<!-- Superscripted text -->
<!ELEMENT sup (#PCDATA | b | u | i | o | sup2 | sub2)>*

<!-- Subscripted text -->
<!ELEMENT sub2 (#PCDATA | b | u | i | o)>*

<!-- Superscripted text -->
<!ELEMENT sup2 (#PCDATA | b | u | i | o)>*

4.2 Transmission receipt

<?xml version='1.0' encoding='UTF-8' ?>
<!ENTITY % name_group "((name | (prefix?, (last-name | orgname), first-name?, middle-name?, suffix?, iid?, role?, orgname?, department?, synonym*)) , registered-number?)">*

<!ENTITY % address_group "((address-1?, address-2?, address-3?, address-4?, address-5?, mailcode?, pobox?, room?, address-floor?, building?, street?, city?, county?, state?, postcode?, country) | text)>*

<!--***********************************************************************
 * xmit-receipt v1.4  2012 JULY                                             *
 ***********************************************************************

 * PUBLIC "-/WIPO//DTD XMIT RECEIPT 1.4//EN" "xmit-receipt-v1-4.dtd"
 ***********************************************************************

 * https://www.wipo.int/pct-safe/en/resources/1.17/xmit-receipt-v1-4.dtd
 ***********************************************************************

 * contacts: *
 * WIPO: Yukako SHIBA; yukako.shiba@wipo.int
 ***********************************************************************

 * revision history
 ***********************************************************************

MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.3 to v1.4
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sup' to sub (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-text,
  p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)

HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..added element 'address' to first-named-applicant

HT: 16/12/03 incorporated changes from PFCs:
..changed version number from v1.1 to v1.2
..added element 'sup2' and 'sub2' to sup and sub

JD: 03/02/03 incorporated changes from PFCs:
changed version number from v1.0 to v1.1
added (last-name | orgname) choice to %name_group;
removed 'br' from b, i, smallcaps
2001/12/01
released version number as v1.0

TRANSMISSION RECEIPT
Attributes:
  lang = language of application - use ISO639 language code
dtd-version = dtd version number
file = filename of the whole application
status = status of the application; values: new = new application

<!ATTLIST xmit-receipt
  lang CDATA #REQUIRED
dtd-version CDATA #IMPLIED
file CDATA #IMPLIED
status CDATA #IMPLIED>

<!ELEMENT account EMPTY>
<!ATTLIST account
  number CDATA #REQUIRED
account-type CDATA #REQUIRED
name CDATA #IMPLIED>

<!ELEMENT receipt-copy EMPTY>
<!ATTLIST receipt-copy
  file CDATA #REQUIRED>

<!ELEMENT application-copy EMPTY>
<!ATTLIST application-copy
  file CDATA #REQUIRED>

<!ELEMENT file-content EMPTY>
<!ATTLIST file-content
  doc-name CDATA #REQUIRED
file-name CDATA #REQUIRED
size CDATA #REQUIRED
date-produced CDATA #REQUIRED>
Title of the Invention:
(INID 54, ST.32:B540/B542)

Preferably two to seven words when in English or translated into English and precise. (Rule 4.3)
Recommended id = 'invt'

Underscore: style - single is default

Overscore: style - single is default

Document identification refers to patents (and patent applications) only. See WIPO ST.14

Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names

List of files received

Applicant's or agent's file reference, if desired, 12 characters maximum
<!--
<!ELEMENT file-reference-id (#PCDATA)>

<!--
First applicant name in applicant group
-->
<!ELEMENT first-named-applicant (%name_group; , address?)>

<!--
Address components:
Address formats differ from country to country
If no structure possible use text
-->
<!ELEMENT address (%address_group;)>}

<!--
If no structure is possible, enter text (without markup)
-->
<!ELEMENT text (#PCDATA)>

<!--
Postal code or zip code
-->
<!ELEMENT postcode (#PCDATA)>

<!--
Region of country; e.g., state, province, etc.
-->
<!ELEMENT state (#PCDATA)>

<!--
County, parish, department, etc (mainly UK, USA)
-->
<!ELEMENT county (#PCDATA)>

<!--
City or town name
-->
<!ELEMENT city (#PCDATA)>

<!--
Street may contain house number or name
-->
<!ELEMENT street (#PCDATA)>

<!--
Building information in address; e.g., Hoffman building
-->
<!ELEMENT building (#PCDATA)>

<!--
Address floor; e.g., 10th

-->
<!ELEMENT address-floor (#PCDATA)>

<--
Address room; e.g., Room 55B

-->
<!ELEMENT room (#PCDATA)>

<--
Post Office Box number

-->
<!ELEMENT pobox (#PCDATA)>

<--
Organizational mail code

-->
<!ELEMENT mailcode (#PCDATA)>

<--
Address, fifth line

-->
<!ELEMENT address-5 (#PCDATA)>

<--
Address, fourth line

-->
<!ELEMENT address-4 (#PCDATA)>

<--
Address, third line

-->
<!ELEMENT address-3 (#PCDATA)>

<--
Address, second line

-->
<!ELEMENT address-2 (#PCDATA)>

<--
Address, first line

-->
<!ELEMENT address-1 (#PCDATA)>

<--
Bold formatting for text

-->
<!ELEMENT b (#PCDATA | i | u | o | smallcaps | sup | sub)>
Italic formatting for text

<!ELEMENT i (#PCDATA | b | u | o | smallcaps | sup | sub)>
Organisation name or company name

<!ELEMENT orgname (#PCDATA)>

Role; e.g., President, Chairman, etc.

<!ELEMENT role (#PCDATA)>

SDOBI: Individual id

<!ELEMENT iid (#PCDATA)>

Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)

<!ELEMENT suffix (#PCDATA)>

Middle name(s) or initial(s)

<!ELEMENT middle-name (#PCDATA)>

First or given name(s), initial(s)

<!ELEMENT first-name (#PCDATA)>

Last, family, surname

<!ELEMENT last-name (#PCDATA)>

Title: e.g., Mr., Mrs., Dr. etc

<!ELEMENT prefix (#PCDATA)>

What kind of documents were received in the submission receipted.

<!ELEMENT filing-type (#PCDATA)>

Response from server

<!ELEMENT response (code , message)>

<!-->
Response message from server

<!ELEMENT message (#PCDATA)>

<!--
Response code from server
-->
<!ELEMENT code (#PCDATA)>

<!--
Wrapped Application Documents message digest
-->
<!ELEMENT wad-message-digest (#PCDATA)>

<!--
The office that sends the document
-->
<!ELEMENT from (country)>

<!--
Date, time package was received
The date of receipt will be determined according to the usual principles
applicable to the filing of applications on paper, including filing by electronic
means (such as by facsimile transmission), that is, based on the date prevailing
at the location of the Office at the time when the complete transmission of the
application has been received.
-->
<!ELEMENT received-on (date, time?)>

<!--
Time; format HHMM
-->
<!ELEMENT time (#PCDATA)>

<!ELEMENT receipt-id (#PCDATA)>

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

<!--
Document kind code; e.g., A1
(INID 13, ST.32:B130)
-->
<!ELEMENT kind (#PCDATA)>

<!--
The number of the referenced patent (or application) document
-->
<!ELEMENT doc-number (#PCDATA)>
4.3 Dispatch list

<!--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO
-->  
<!ELEMENT country (#PCDATA)>

4.3 Dispatch list

<?xml version='1.0' encoding='UTF-8' ?>
<!ENTITY % name_group "((name | (prefix?, (last-name | orgname) , first-name?,
middle-name?, suffix? , iid? , role? , orgname? , department? , synonym*)) ,
registered-number? )">

<!--
**********************************************************************************************
  dispatch-list v1.2     2012 JULY
********************************************************************************
* PUBLIC "//WIPO//DTD DISPATCH LIST 1.2//EN" "dispatch-list-v1-2.dtd"
********************************************************************************
* https://www.wipo.int/pct-safe/en/resources/1.17/dispatch-list-v1-2.dtd
* contacts: *
  * WIPO: Yukako SHIBA; yukako.shiba@wipo.int
* revision history
**********************************************************************************************
MO: 01/01/07 incorporated changes from PFCs:
  ..changed version number from v1.1 to v1.2
  ..implementation of PFC06/001
HT: 14/12/04 incorporated changes from PFCs:
  ..changed version number from v1.0 to v1.1
  ..added attribute 'id' to application-reference
2003/06/01
...released version number as v1.0
**********************************************************************************************
Root element, dispatch-list

Attributes:
lang          = language of application - use ISO639 language code
dtd-version   = dtd version number
file          = filename of the whole application
status        = status of the application; values: new = new application

-->  
<!ELEMENT dispatch-list (receiver , dispatch-document-list , number-of-the-rest)>

<!ATTLIST dispatch-list lang  CDATA #REQUIRED
  dtd-version CDATA #REQUIRED
  date-produced CDATA #REQUIRED
  time-produced CDATA #REQUIRED >

<!--
The sum total number of cases of "patent, utility model, design, and trademark"
-->  
<!ELEMENT total-number-of-cases EMPTY>

<!ATTLIST total-number-of-cases amount CDATA #REQUIRED >

<!--
The number of cases by patent, utility model, design and trademark
-->  
<!ELEMENT number-of-cases EMPTY>
<!ATTLIST number-of-cases law CDATA #REQUIRED
    amount CDATA #REQUIRED >
<!--
The number of cases which are not displayed
-->
<!ELEMENT number-of-undisplayed EMPTY>
<!ATTLIST number-of-undisplayed amount CDATA #REQUIRED >
<!--
Details of dispatch documents
attribute date = date of dispatch
-->
                          , arrival-time , text? , wad-message-digest)>}
<!ATTLIST dispatch-info date CDATA #REQUIRED >
<!--
Application reference information: application number, country
(INID 21, ST.32:B210)
-->
<!ELEMENT application-reference (document-id)>}
<!ATTLIST application-reference id ID #IMPLIED
    appl-type CDATA #IMPLIED >
<!--
Document identification refers to patents (and patent applications) only. See WIPO ST.14
-->
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>}
<!ATTLIST document-id lang CDATA #IMPLIED >
<!--
Reference to an appealed application
-->
<!ELEMENT appeal-reference (doc-number , date?)>}
<!ATTLIST appeal-reference appeal-type CDATA #REQUIRED >
<!--
Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names
-->
<!ELEMENT name (#PCDATA)>}
<!ATTLIST name name-type (legal | natural ) #IMPLIED >
<!--
The number of cases which remain, not yet having been dispatched
-->
<!ELEMENT number-of-the-rest (number-of-cases+ , total-number-of-cases)>}
<!ATTLIST number-of-the-rest number-of-cases+ total-number-of-cases CDATA #REQUIRED >
<!--
A list of the notice documents
-->
<!ELEMENT dispatch-document-list (dispatch-info+, number-of-undisplayed?)>

<!--
Wrapped Application Documents message digest
-->
<!ELEMENT wad-message-digest (#PCDATA)>

<!--
If no structure is possible, enter text (without markup)
-->
<!ELEMENT text (#PCDATA)>

<!--
Time when notice reached the applicant
-->
<!ELEMENT arrival-time (time)>

<!--
Time; format HHMM
-->
<!ELEMENT time (#PCDATA)>

<!--
Patent reference information: patent number, date, etc
-->
<!ELEMENT patent-reference (document-id)>

<!--
Document kind code; e.g., A1
(INID 13, ST.32:B130)
-->
<!ELEMENT kind (#PCDATA)>

<!--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO
-->
<!ELEMENT country (#PCDATA)>

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

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

<!--
Dispatch identifier
-->
<!--
<!ELEMENT dispatch-id (#PCDATA)>

<!--
Applicant's or agent's file reference, if desired, 12 characters maximum
-->
<!ELEMENT file-reference-id (#PCDATA)>

<!--
For reference to non-PCT document from national office;
code defined by national office
-->
<!ELEMENT document-code (#PCDATA)>

<!--
Those who receive the dispatch list
-->
<!ELEMENT receiver (%name_group;)>  

<!--
Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!--
Synonym
-->
<!ELEMENT synonym (#PCDATA)>

<!--
Department, division, section, etc. name
-->
<!ELEMENT department (#PCDATA)>

<!--
Organisation name or company name
-->
<!ELEMENT orgname (#PCDATA)>

<!--
Role; e.g., President, Chairman, etc.
-->
<!ELEMENT role (#PCDATA)>

<!--
SDOBI : Individual id
-->
<!ELEMENT iid (#PCDATA)>

<!--
Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)

-->
<!ELEMENT suffix (#PCDATA)>

<!--
Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!--
First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--
Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
Title: e.g., Mr., Mrs., Dr. etc
-->
<!ELEMENT prefix (#PCDATA)>

4.4 Receipt list

<?xml version='1.0' encoding='UTF-8' ?>
<!ENTITY % name_group "((name | (prefix? , (last-name | orgname) , first-name? ,
middle-name? , suffix? , iid? , role? , orgname? , department? , synonym*)) ,
registered-number?)">

<!--
application-receipt-list v1.2  2012 JULY
PUBLIC "-//WIPO//DTD APPLICATION RECEIPT LIST 1.2//EN"
"application-receipt-list-v1-2.dtd"
http://www.wipo.int/pct-safe/epct/schemaDocs/1.17/
application-receipt-list-v1-2.dtd
contacts:
  WIPO: Yukako SHIBA; yukako.shiba@wipo.int
revision history
MO: 01/01/07 incorporated changes from PFCs:
  ..changed version number from v1.1 to v1.2
  ..implementation of PFC06/001
HT: 14/12/04 incorporated changes from PFCs:
  ..added attribute 'id' to application-reference
HT: 20/07/04 incorporated changes from PFCs:
  ..changed version number from v1.0 to v1.1
  ..added element 'dtext' to application-receipt-list
2003/06/01
released version number as v1.0
******************************************************************************
Root element, application-receipt-list

Attributes:
lang          = language of application - use ISO639 language code
dtd-version   = dtd version number
file          = filename of the whole application
status        = status of the application; values: new = new application
date-produced = date the file was produced

--> <!ELEMENT application-receipt-list (receiver , receipt-list , dtext*)>

<!ATTLIST application-receipt-list dtd-version CDATA #IMPLIED
file          CDATA #IMPLIED
date-produced CDATA #IMPLIED
status        CDATA #IMPLIED >

<!-- Details of receipt(s) -->

--> <!ELEMENT receipt-info (document-code , file-reference-id? , receipt-number ,
appeal-reference? , application-reference* , number-of-annexation , result-code ,
wad-message-digest)>

<!ATTLIST receipt-info date CDATA #REQUIRED
kind-of-law CDATA #IMPLIED >

<!ELEMENT result-code (#PCDATA)>

<!ATTLIST result-code amount CDATA #REQUIRED >

<!-- Application reference information: application number, country
(INID 21, ST.32:B210) -->

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

<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

<!-- Document identification refers to patents (and patent applications) only. See WIPO ST.14 -->

--> <!ELEMENT document-id (country , doc-number , kind? , name? , date?)>

<!ATTLIST document-id lang CDATA #IMPLIED >

<!-- Reference to an appealed application -->

--> <!ELEMENT appeal-reference (doc-number , date?)>

<!ATTLIST appeal-reference appeal-type CDATA #REQUIRED >

<!-- Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names -->

--> <!ELEMENT name (#PCDATA)>

<!ATTLIST name name-type (legal | natural ) #IMPLIED >
<!-- Descriptive text
-->
<!ELEMENT dtext (#PCDATA)>

<!ELEMENT receipt-list (receipt-info+)>

<!-- Wrapped Application Documents message digest
-->
<!ELEMENT wad-message-digest (#PCDATA)>

<!ELEMENT number-of-annexation (#PCDATA)>

<!-- Document kind code; e.g., A1
(INID 13, ST.32:B130)
-->
<!ELEMENT kind (#PCDATA)>

<!-- Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO
-->
<!ELEMENT country (#PCDATA)>

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

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

<!-- Receipt number
-->
<!ELEMENT receipt-number (#PCDATA)>

<!-- Applicant's or agent's file reference, if desired, 12 characters maximum
-->
<!ELEMENT file-reference-id (#PCDATA)>

<!-- For reference to non-PCT document from national office;
  code defined by national office
-->
<!ELEMENT document-code (#PCDATA)>>
<!--
Those who receive the dispatch list
-->  
<!ELEMENT receiver (%name_group;)>  

<!--
Registered number
-->  
<!ELEMENT registered-number (#PCDATA)>  

<!--
Synonym
-->  
<!ELEMENT synonym (#PCDATA)>  

<!--
Department, division, section, etc. name
-->  
<!ELEMENT department (#PCDATA)>  

<!--
Organisation name or company name
-->  
<!ELEMENT orgname (#PCDATA)>  

<!--
Role; e.g., President, Chairman, etc.
-->  
<!ELEMENT role (#PCDATA)>  

<!--
SDOBI : Individual id
-->  
<!ELEMENT iid (#PCDATA)>  

<!--
Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->  
<!ELEMENT suffix (#PCDATA)>  

<!--
Middle name(s) or initial(s)
-->  
<!ELEMENT middle-name (#PCDATA)>  

<!--
First or given name(s), initial(s)
-->  
<!ELEMENT first-name (#PCDATA)>
5. OTHER E-PCT DTDS

Listed below are a number of DTDs based on the Annex F, Appendix I, E-PCT DTD element set. These DTDs were developed by WIPO for the PCT-SAFE project and the IMPACT COR system.

5.1 Demand form

```xml
<!DOCTYPE demand SYSTEM "demand-v1.10.dtd">

<?xml version='1.0' encoding='UTF-8' ?>

<!ENTITY % name_group "((name | (prefix? , (last-name | orgname) , first-name? , middle-name? , suffix? , iid? , role? , orgname? , department? , synonym*)) ,
registered-number?)">


--
**************************************************************
*  demand v1.10     2019  APRIL                                    *
**************************************************************
* PUBLIC "//WIPO/DTD DEMAND 1.10//EN" "demand-v1.10.dtd"       *
**************************************************************
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.17/demand-v1.10.dtd *
**************************************************************
* contacts:                                                          *
* WIPO: Yukako SHIBA; yukako.shiba@wipo.int                      *
**************************************************************
* revision history                                                    *
**************************************************************

Yuya USHIDA : 01/04/19 incorporated changes from PFC
..changed version number from v1.9 to v1.10
..added element 'postpone-examination-demand-time-limit' to concerning-amendments
..added element 'postpone-examination-amendment-time-limit' to concerning-amendments

Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.8 to v1.9
..added an attribute "id" to signatory and us-rights

Asahi HASEBE : 01/01/15 to update DTD in alignment with the latest PCT Form IPEA401
..changed version number from v1.7 to v1.8
..added an element named as "the-sequence-listing" to "concerning-amendments".

Asahi HASEBE : 01/07/14 to update DTD in alignment with the latest PCT Form IPEA401
..changed version number from v1.6 to v1.7
..added an attribute 'page-count' to cl-letter. (PFC14/001)
..added an attribute 'page-count' to cl-copy-amendments-art19. (PFC14/001)
..added an element named as cl-letter-art19 to demand-check-list. (PFC14/001)

MO: 01/07/09 incorporated changes from PFC
..changed version number from v1.5 to v1.6
```
Attributes for demand

id = unique id for this application - could be file name
country = st.3 code for application
dtd-version = dtd version number
lang = language of application - use ISO639 language code
status = status of the application; values: new = new application
file = filename of the whole application
date-produced = YYYYMMDD e.g., 20011230 if desired, 12 characters maximum
ipea = IPEA office name, country code ST.3
produced-by = creator of this document

-->
This is primarily to be used when data for the whole or major sections of an application are in image format or other formats such as pdf.

Page range attributes are given when required
pp - page range
ppf - first page
ppl - last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings

Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

A signature represented by electronic means

A TIFF image of a signature

Checklist; an additional document is being furnished
<!-- Checklist; a sequence listing table is being furnished -->
<!ELEMENT cl-sequence-listing-table EMPTY>
<!ATTLIST cl-sequence-listing-table quantity CDATA #REQUIRED
for-search-only
(\yes | \no ) #IMPLIED
additional-copies-including-search-copy
(\yes | \no ) #IMPLIED
with-identifying-statement
(\yes | \no ) #IMPLIED
page-count
CDATA #IMPLIED
carriers
(\internal-electronic | \external-electronic | \paper ) #IMPLIED>
<!-- Checklist; a sequence listing or sequence listings is/are being furnished
For carrier-type the listed values represent:
FD  - Floppy Disc
CD  - Compact Disc
BD  - Blu-Ray Disc
DVD - Digital Versatile Disc
Other - Other media types
-->
<!ELEMENT cl-sequence-listing EMPTY>
<!ATTLIST cl-sequence-listing quantity CDATA #REQUIRED
for-search-only
(\yes | \no ) #IMPLIED
additional-copies-including-search-copy
(\yes | \no ) #IMPLIED
with-identifying-statement
(\yes | \no ) #IMPLIED
page-count
CDATA #IMPLIED
carriers
(\internal-electronic | \external-electronic | \paper ) #IMPLIED
carriers-type
(\FD | \CD | \BD | \DVD | \other ) #IMPLIED
<!-- Checklist; a priority document is being furnished
-->
<!ELEMENT cl-priority-document (sequence-number+)>  
<!ATTLIST cl-priority-document quantity CDATA #REQUIRED >}

<!-- Checklist; a statement explaining lack of signature is being furnished
-->
<!ELEMENT cl-lack-of-signature EMPTY>  
<!ATTLIST cl-lack-of-signature quantity CDATA #REQUIRED >}

<!-- Checklist; a copy of the general power of attorney is being furnished
-->
<!ELEMENT cl-copy-general-power-of-attorney (ref-number+)>  
<!ATTLIST cl-copy-general-power-of-attorney quantity CDATA #REQUIRED >}

<!-- Checklist; a general power of attorney is being furnished
-->
<!ELEMENT cl-general-power-of-attorney EMPTY>  
<!ATTLIST cl-general-power-of-attorney quantity CDATA #REQUIRED >}

<!-- Checklist; a separate power of attorney is being furnished
-->
<!ELEMENT cl-separate-power-of-attorney EMPTY>  
<!ATTLIST cl-separate-power-of-attorney quantity CDATA #REQUIRED >}

<!-- Checklist; a letter is being furnished. See PCT/IPEA/401 box VI
-->
<!ELEMENT cl-letter EMPTY>  
<!ATTLIST cl-letter quantity CDATA #REQUIRED 
page-count CDATA #IMPLIED >}

<!-- Checklist; a copy of statement under Article 19 is being furnished
-->
<!ELEMENT cl-copy-statement-art19 EMPTY>  
<!ATTLIST cl-copy-statement-art19 quantity CDATA #REQUIRED 
page-count CDATA #IMPLIED >}

<!-- Checklist; copy of amendments made under Article 19 is being furnished
-->
<!ELEMENT cl-copy-amendments-art19 EMPTY>  
<!ATTLIST cl-copy-amendments-art19 quantity CDATA #REQUIRED >}}
<!doctype html>
<html xmlns="http://www.w3.org/1999/xhtml"><head></head><body><pre>&lt;!-- Checklist; amendments made under Article 34 are being furnished --&gt;
&lt;!ELEMENT cl-amendments-art34 EMPTY&gt;
&lt;!ATTLIST cl-amendments-art34 quantity CDATA #REQUIRED
page-count CDATA #IMPLIED &gt;
&lt;!-- Check-list; a translation of application is being furnished --&gt;
&lt;!ELEMENT cl-translation-of-application-demand EMPTY&gt;
&lt;!ATTLIST cl-translation-of-application-demand quantity CDATA #REQUIRED
lang CDATA #IMPLIED
page-count CDATA #IMPLIED &gt;
&lt;!-- Language for international preliminary examination (Rule 55.1) --&gt;
&lt;!ELEMENT language-for-examination (#PCDATA)&gt;
&lt;!ATTLIST language-for-examination examin-lang (originally-filed |
translation-lsa |
publication |
translation-ipea ) #REQUIRED &gt;
&lt;!-- The drawings are to be used as the basis for international preliminary examination --&gt;
&lt;!ELEMENT the-drawings EMPTY&gt;
&lt;!ATTLIST the-drawings basis (originally | amendment-art34 ) #REQUIRED &gt;
&lt;!-- the claims are to be used as the basis for international preliminary examination. Attribute 'basis':
originally : the applicant wishes the IPEA to start on the basis of
the claims as originally filed
amendment-art19 : the applicant wishes the IPEA to start on the basis of
the claims as amended under Art 19.
amendment-art34 : the applicant wishes the IPEA to start on the basis of
the claims as amended under Art. 34.
amendment-art19-34: the applicant wishes the IPEA to start on the basis of
the claims as amended under Art. 19 and Art. 34 --&gt;
&lt;!ELEMENT the-claims EMPTY&gt;
&lt;!ATTLIST the-claims basis (originally |
amendment-art19 |
amendment-art34 |
amendment-art19-34 ) #REQUIRED &gt;
&lt;!-- The description is to be used as the basis for international preliminary examination --&gt;</pre></body></html>
The application is to be used as the basis for international preliminary examination.

Agent(s) elected specifically for procedures before the International Preliminary Examining Authority (Rule 90.1(a)-(c)).

Agent or common representative (Rules 90.1, 90.2).

Application reference information: application number, country

Document identification refers to patents (and patent applications) only. See WIPO ST.14.

Applicant information:

attributes for applicant
sequence: sequence number of each applicant e.g., sequence="1"
app-type: applicant type
app-type="applicant": the applicant is only applicant
app-type="applicant-inventor": the applicant is also inventor
designation: This person is applicant for the purpose of:
designation="all": all designated states
designation="all-except-us": all designated states except US
designation="us-only": US only
designation="as-indicated": the states indicated in designated-states element under applicant element
<!ELEMENT applicant (addressbook+, nationality, residence, us-rights*, designated-states?, designated-states-as-inventor?)>

<!ATTLIST applicant sequence CDATA #REQUIRED
app-type (applicant | applicant-inventor) #REQUIRED
designation (all | all-except-us | us-only | as-indicated) #REQUIRED>

<!--
This person is successor to the rights of an inventor who is deceased, insane, or
legally incapacitated, for the purposes of the designation of the United States
of America

-->
<!ELEMENT us-rights (#PCDATA)>

<!ATTLIST us-rights to-dead-inventor CDATA #REQUIRED
kind (heir | heiress | executor | executrix | estate | legal-representative | administrator | administratrix | legal-representatives | heirs | executors | legal-heirs) #REQUIRED
id ID #IMPLIED>

<!--
ADDRESSBOOK GROUP:
Holds name and contact information for individuals/organizations

The LANG attribute is REQUIRED for certain document types, e.g., the JPO PCT Request where names and addresses may be repeated in two different languages. If no structure possible use text.

-->
<!ELEMENT addressbook ((%name_group; , address , phone* , fax* , email* , url* , ead* , dtext?) | text)>

<!ATTLIST addressbook id ID #IMPLIED
lang CDATA #IMPLIED>

<!--
Name:

Attribute:
email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary means of contact as a replacement of the use of conventional post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is equivalent to 'informal'

-->
<!ELEMENT email (#PCDATA)>

<!ATTLIST email email-purpose (informal | general | advance | main) #IMPLIED>

<!--
Name:
If no distinction or detail can be given. Also to be used for: personal (natural person) and corporate (legal entity) names

-->  
<!ELEMENT name (#PCDATA)>  
<!ATTLIST name name-type (legal | natural) #IMPLIED>  
<!--
Title of the Invention:
(INID 54, ST.32:B540/B542)
Preferably two to seven words when in English or translated into English and precise. (Rule 4.3)
Recommended id = 'invt'
-->  
<!ELEMENT invention-title (#PCDATA | b | i | u | o | sup | sub)>  
<!ATTLIST invention-title id ID #IMPLIED  
lang CDATA #IMPLIED>  
<!--
Underscore: style - single is default
-->  
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)>  
<!ATTLIST u style (single | double | dash | dots) 'single'>  
<!--
Overscore: style - single is default
-->  
<!ELEMENT o (#PCDATA | b | i | smallcaps | sup | sub)>  
<!ATTLIST o style (single | double | dash | dots | leftarrow | rightarrow | leftrightarrow) 'single'>  
<!--
Signatories
-->  
<!ELEMENT signatories (signatory+)>  
<!--
PCT/RO/101 Box No. X:
The signature must be that of the applicant (if there are several applicants, all must sign); however, the signature may be that of the agent, or the common representative, where a separate power of attorney appointing the agent or the common representative, respectively, or a copy of a general power of attorney is already in possession of the receiving Office, is furnished... (PCT Rules 4.1(d), 4.15, and 90)
Indicate the capacity of the signer with 'signatory-capacity'
-->  
<!ELEMENT signatory (%name_group; , address? , electronic-signature , signatory-capacity?)>  
<!ATTLIST signatory  
id ID #IMPLIED>
The capacity in which the person signs

A PKI / PKCS #7 digital signature data type

PKCS7 digital signature

A non-PKI electronic signature

A simple 'signature';
e.g., clicking a button labeled 'accept' or 'I agree'

A simple text string is to be used as the basic electronic signature;
e.g., John Doe <text-string>/jd/</text-string>

Sequential identification of priority documents. PCT/RO/101 Box VI.

Reference number of general power of attorney.
<!-- Checklist; a fee calculation sheet is being furnished
-->  
<!ELEMENT cl-fee-calculation EMPTY>

<!-- The basis on which the international preliminary examination will start
(PCT/IPEA/401 Box IV, Rule 66.1)
-->  
<!ELEMENT bases-examination (concerning-amendments, language-for-examination)>

<!-- The basis of the international preliminary examination concerns amendments. 
(PCT/IPEA/401 Box IV, 1-3, Rules 53.9(a)(i) and 53.9(c))
-->  

<!-- The applicant may elect to have the examination to start earlier than at the expiration of the applicable time limit under Rule 54bis.1(a) (Demand Box IV 4) This option will no longer be available from July 1, 2019, but is retained in the DTD for backwards compatibility.
-->  
<!ELEMENT begin-examination-early EMPTY>

<!-- "The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d))

This element was named without a descriptor for the relevant time limit as being the time limit for amendments to be made and has been superseded by the element "postpone-examination-amendment-time-limit".

This option will no longer be available from July 1, 2019, but is retained in the DTD for backwards compatibility.
-->  
<!ELEMENT postpone-examination EMPTY>

<!-- "The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d))"
-->  
<!ELEMENT postpone-examination-amendment-time-limit EMPTY>

<!-- "The applicant wishes to postpone the start of the international preliminary examination until the expiration of the applicable time limit under Rule 54bis.1(a)."
-->  
<!ELEMENT postpone-examination-demand-time-limit EMPTY>
The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.

<!ELEMENT reverse-art19-amendment EMPTY>

Address used for general correspondence

<!ELEMENT correspondence-address (customer-number | addressbook+)>  

Customer number for agents by office

<!ELEMENT customer-number (#PCDATA)>  

Where the international application claims the priority of several earlier applications, the filing date of the earliest application whose priority is claimed must be indicated as the priority date.

<!ELEMENT date-of-earliest-priority (date)>  

Date: components of a date. Format: YYYYMMDD

<!ELEMENT date (#PCDATA)>  

Document kind code; e.g., A1 (INID 13, ST.32:B130)

<!ELEMENT kind (#PCDATA)>  

The number of the referenced patent (or application) document

<!ELEMENT doc-number (#PCDATA)>  

Applicant's or agent's file reference, if desired, 12 characters maximum

<!ELEMENT file-reference-id (#PCDATA)>  

Applicants information: At least one of the applicants named must be a resident or national of a PCT Contracting State for which the receiving Office acts.
Rule 4.6(c):

"The request may, for different designated states, indicate different persons as inventors where, in this respect, the requirements of the national laws of the designated States are not the same. In such a case, the request shall contain a separate statement for each designated State or group of States in which a particular person, or the same person, is to be considered the inventor, or in which particular persons, or the same persons, are to be considered the inventors."

<!ELEMENT designated-states-as-inventor (country*, (region, country+)*)>
<!ELEMENT phone (#PCDATA)>

<!--
Electronic address use for other than email
-->
<!ELEMENT ead (#PCDATA)>

<!--
Address components:
Address formats differ from country to country
If no structure possible use text
-->
<!ELEMENT address (%address_group;)

<!--
If no structure is possible, enter text (without markup)
-->
<!ELEMENT text (#PCDATA)>

<!--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO
-->
<!ELEMENT country (#PCDATA)>

<!--
Postal code or zip code
-->
<!ELEMENT postcode (#PCDATA)>

<!--
Region of country; e.g., state, province, etc.
-->
<!ELEMENT state (#PCDATA)>

<!--
County, parish, department, etc (mainly UK, USA)
-->
<!ELEMENT county (#PCDATA)>

<!--
City or town name
-->
<!ELEMENT city (#PCDATA)>

<!--
Street may contain house number or name
-->
<!ELEMENT street (#PCDATA)>
<!--
Building information in address; e.g., Hoffman building

-->  
<!ELEMENT building (#PCDATA)>

<!--
  Address floor; e.g., 10th
-->  
<!ELEMENT address-floor (#PCDATA)>

<!--
  Address room; e.g., Room 55B
-->  
<!ELEMENT room (#PCDATA)>

<!--
  Post Office Box number
-->  
<!ELEMENT pobox (#PCDATA)>

<><!--
  Organizational mail code
-->  
<!ELEMENT mailcode (#PCDATA)>

<!--
  Address, fifth line
-->  
<!ELEMENT address-5 (#PCDATA)>

<!--
  Address, fourth line
-->  
<!ELEMENT address-4 (#PCDATA)>

<!--
  Address, third line
-->  
<!ELEMENT address-3 (#PCDATA)>

<<!--
  Address, second line
-->  
<!ELEMENT address-2 (#PCDATA)>

<<!--
  Address, first line
-->  
<!ELEMENT address-1 (#PCDATA)>

<<!--
Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!--
Synonym
-->
<!ELEMENT synonym (#PCDATA)>

<!--
Department, division, section, etc. name
-->
<!ELEMENT department (#PCDATA)>

<!--
Organisation name or company name
-->
<!ELEMENT orgname (#PCDATA)>

<!--
Role; e.g., President, Chairman, etc.
-->
<!ELEMENT role (#PCDATA)>

<!--
SDOBI : Individual id
-->
<!ELEMENT iid (#PCDATA)>

<!--
Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->
<!ELEMENT suffix (#PCDATA)>

<!--
Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!--
First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--
Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
Title: e.g., Mr., Mrs., Dr. etc

--> 
<!ELEMENT prefix (#PCDATA)>

<!--
Bold formatting for text
--> 
<!ELEMENT b (#PCDATA | i | u | o | smallcaps | sup | sub)*>

<!--
Italic formatting for text
--> 
<!ELEMENT i (#PCDATA | b | u | o | smallcaps | sup | sub)*>

<!--
Small capitals
--> 
<!ELEMENT smallcaps (#PCDATA | b | u | i | o)*>

<!--
Subscripted text
--> 
<!ELEMENT sub (#PCDATA | b | u | i | o | sup2 | sub2)*>

<!--
Superscripted text
--> 
<!ELEMENT sup (#PCDATA | b | u | i | o | sup2 | sub2)*>

<!--
Subscripted text
--> 
<!ELEMENT sub2 (#PCDATA | b | u | i | o)*>

<!--
Superscripted text
--> 
<!ELEMENT sup2 (#PCDATA | b | u | i | o)*>

<!--
Checklist; a letter accompanying the amendments under Article 19 is being furnished. See PCT/IPEA/401 box VI
--> 
<!ELEMENT cl-letter-art19 EMPTY>
<!ATTLIST cl-letter-art19 quantity CDATA #REQUIRED
page-count CDATA #IMPLIED >

<!--
the sequence listing is to be used as the basis for international preliminary examination.
Attribute 'basis':
originally:
the applicant wishes the IPEA to start on the basis of
sequence listing as originally filed

amendment-art34-st25:
the applicant wishes the IPEA to start on the basis of
the
sequence listing as amended under Art. 34
in the form of an AnnexC/ST.25 text file.

amendment-art34-paper-or-image:
the applicant wishes the IPEA to start on the basis of
the
sequence listing as amended under Art. 34
on paper or in the form of an image file.

5.2 Received information on the demand form by IPEA

<?xml version='1.0' encoding='UTF-8' ?>

<!ENTITY % name_group "((name | (prefix? , (last-name | orgname) , first-name? ,
middle-name? , suffix? , iid? , role? , orgname? , department? , synonym*)) ,
registered-number?)">

<!ENTITY % address_group "((address-1? , address-2? , address-3? , address-4? ,
city? , county? , state? , postcode? , country) | text)">

------------------------------------------------------------------------------------------------------------------
* ipea-demand-receiving-info v1.5  2017 JULY
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *  *
* PUBLIC "//WIPO//DTD IPEA DEMAND RECEIVING INFO 1.5//EN" *
* "ipea-demand-receiving-info-v1-5.dtd"
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *  *
* https://www.wipo.int/pct-safe/en/resources/1.17/
* "ipea-demand-receiving-info-v1-5.dtd"
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *  *
* contacts: *
* WIPO: Yukako SHIBA; yukako.shiba@wipo.int
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *  *
* revision history
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *  *
Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.4 to v1.5
..added an attribute "id" to signatory
Asahi HASEBE : 01/07/14 to update DTD in alignment with the latest PCT Form IPEA401
..changed version number from v1.3 to v1.4
..added an attribute 'page-count' to cl-letter. (PFC14/001)
..added an attribute 'page-count' to cl-copy-amendments-art19. (PFC14/001)
..added an element named as cl-letter-art19 to ipea-check-list. (PFC14/001)
..added an element ipea-fee-info and its child elements to ipea-demand-receiving-info. (PFC14/001)
MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
HT: 16/12/03 incorporated changes from PFCs:
..changed version number from v1.0 to v1.2
..added element 'receipt-after-pct-rule54bis1-a', 'receipt-within-pct-rule54bis1-a',
   'receipt-after-pct-rule54bis1-a-excused' to ipea-info
2003/06/01
..released version number as v1.0

Attributes for ipea
lang = language of application - use ISO639 language code 
dtd-version = dtd version number 
date-produced = YYYYMMDD e.g., 20011230 
ro = Receiving office name, country code ST.3

-->

<!ELEMENT ipea-demand-receiving-info (ipea , received-at-ipea , ipea-info , ipea-check-list , ipea-fee-info?, signatories?)>

<!ATTLIST ipea-demand-receiving-info lang CDATA #REQUIRED 
dtd-version CDATA #IMPLIED 
file CDATA #IMPLIED 
date-produced CDATA #IMPLIED 
ipea CDATA #REQUIRED 
status CDATA #IMPLIED >

<!--
A signature represented by electronic means
-->

<!ELEMENT electronic-signature (basic-signature | enhanced-signature)> 

<!ATTLIST electronic-signature date CDATA #REQUIRED 
place-signed CDATA #IMPLIED >

<!--
A TIFF image of a signature
--> 

<!ELEMENT fax-image EMPTY>

<!ATTLIST fax-image file CDATA #REQUIRED >

<!--
If no distinction or detail can be given. 
Also to be used for: personal (natural person) and corporate (legal entity) names
--> 

<!ELEMENT name (#PCDATA)> 

<!ATTLIST name name-type (legal | natural ) #IMPLIED >

<!--
Checklist; an additional document is being furnished
--> 

<!ELEMENT cl-other-document (#PCDATA)> 

<!ATTLIST cl-other-document page-count CDATA #IMPLIED >

<!--
Checklist; a letter is being furnished. See PCT/IPEA/401 box VI
--> 

<!ELEMENT cl-letter EMPTY>

<!ATTLIST cl-letter quantity CDATA #REQUIRED 
page-count CDATA #IMPLIED >

<!--
Checklist; a copy of statement under Article 19 is being furnished
--> 

<!ELEMENT cl-copy-statement-art19 EMPTY>

<!ATTLIST cl-copy-statement-art19 quantity CDATA #REQUIRED 
page-count CDATA #IMPLIED >

<!--
Checklist; copy of amendments made under Article 19 is being furnished

-->  
<!ELEMENT cl-copy-amendments-art19 EMPTY>  
<!ATTLIST cl-copy-amendments-art19 quantity CDATA #REQUIRED  
page-count CDATA #IMPLIED >

<!--  
Checklist; amendments made under Article 34 are being furnished  
-->  
<!ELEMENT cl-amendments-art34 EMPTY>  
<!ATTLIST cl-amendments-art34 quantity CDATA #REQUIRED  
page-count CDATA #IMPLIED >

<!--  
Checklist; a translation of application is being furnished  
-->  
<!ELEMENT cl-translation-of-application-demand EMPTY>  
<!ATTLIST cl-translation-of-application-demand quantity CDATA #REQUIRED  
lang CDATA #IMPLIED  
page-count CDATA #IMPLIED >

<!--  
PCT/IPEA/401  
The date of receipt of the demand is AFTER the expiration of 19 months from the  
priority date  
-->  
<!ELEMENT receipt-after-19month EMPTY>  
<!ATTLIST receipt-after-19month informed (yes | no ) #IMPLIED >

<!--  
Signatories  
-->  
<!ELEMENT signatories (signatory+)>

<!--  
PCT/RO/101 Box No. X:  
The signature must be that of the applicant (if there are several applicants, all  
must sign); however, the signature may be that of the agent, or the common  
representative, where a separate power of attorney appointing the agent or the  
common representative, respectively, or a copy of a general power of attorney is  
already in possession of the receiving Office, is furnished...  
(PCT Rules 4.1(d), 4.15, and 90)  
Indicate the capacity of the signer with 'signatory-capacity'  
-->  
<!ELEMENT signatory (%name_group; , address? , electronic-signature , signatory- 
capacity?)>

<!ATTLIST signatory  
id ID #IMPLIED>  

<!--  
The capacity in which the person signs  
-->  
<!ELEMENT signatory-capacity (#PCDATA)>
<!--
   A PKI / PKCS #7 digital signature data type
-->  
<!ELEMENT enhanced-signature (pkcs7)>  

<!--
   PKCS7 digital signature
-->  
<!ELEMENT pkcs7 EMPTY>  

<!--
   A non-PKI electronic signature
-->  
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>  

<!--
   A simple 'signature';
   e.g., clicking a button labeled 'accept' or 'I agree'
-->  
<!ELEMENT click-wrap EMPTY>  

<!--
   A simple text string is to be used as the basic electronic signature;
   e.g., John Doe <text-string>/jd/</text-string>
-->  
<!ELEMENT text-string (#PCDATA)>  

<!--
   Address components:
   Address formats differ from country to country
   If no structure possible use text
-->  
<!ELEMENT address (%address_group;)>  

<!--
   If no structure is possible, enter text (without markup)
-->  
<!ELEMENT text (#PCDATA)>  

<!--
   Postal code or zip code
-->  
<!ELEMENT postcode (#PCDATA)>  

<!--
   Region of country; e.g., state, province, etc.
-->  
<!ELEMENT state (#PCDATA)>  

<!--
   County, parish, department, etc (mainly UK, USA)
-->  

<!ELEMENT county (#PCDATA)>

<!-- City or town name -->
<!ELEMENT city (#PCDATA)>

<!-- Street may contain house number or name -->
<!ELEMENT street (#PCDATA)>

<!-- Building information in address; e.g., Hoffman building -->
<!ELEMENT building (#PCDATA)>

<!-- Address floor; e.g., 10th -->
<!ELEMENT address-floor (#PCDATA)>

<!-- Address room; e.g., Room 55B -->
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number -->
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code -->
<!ELEMENT mailcode (#PCDATA)>

<!-- Address, fifth line -->
<!ELEMENT address-5 (#PCDATA)>

<!-- Address, fourth line -->
<!ELEMENT address-4 (#PCDATA)>

<!-- Address, third line -->
<!ELEMENT address-3 (#PCDATA)>

<!-- Address, second line -->
<!ELEMENT address-2 (#PCDATA)>

<!-- Address, first line -->
<!ELEMENT address-1 (#PCDATA)>

<!-- Address -->
<!ELEMENT address (#PCDATA)>
<!ELEMENT middle-name (#PCDATA)>

<!--
First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--
Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
Title: e.g., Mr., Mrs., Dr. etc
-->
<!ELEMENT prefix (#PCDATA)>

<!--
Checklist of items received with the demand by the International Preliminary Exmination Authority
-->

<!--
Information relating to the receipt of the demand by the International Preliminary Examination Authority
-->
<!ELEMENT ipea-info (date-of-actual-receipt, receipt-pct-rule60-1?, (receipt-after-19month | receipt-pct-rule80-5 | receipt-pct-rule82 | receipt-after-pct-rule54bis1-a | receipt-within-pct-rule54bis1-a | receipt-after-pct-rule54bis1-a-excused))>

<!--
PCT Rule 54bis1-a: Time Limit for Making a Demand
-->
<!ELEMENT receipt-after-pct-rule54bis1-a-excused EMPTY>

<!--
PCT Rule 54bis1-a: Time Limit for Making a Demand
-->
<!ELEMENT receipt-within-pct-rule54bis1-a EMPTY>

<!--
PCT Rule 54bis1-a: Time Limit for Making a Demand
-->
<!ELEMENT receipt-after-pct-rule54bis1-a EMPTY>

<!--
PCT Rule 82: Irregularities in the Mail Service
-->
<!ELEMENT receipt-after-pct-rule54bis1-a EMPTY>
PCT Rule 80.5: Expiration on a Non-Working Day

"If the expiration of any period during which any document or fee must reach a national Office or intergovernmental organization falls on a day on which such Office or organization is not open to the public for the purposes of transaction of official business, or on which ordinary mail is not delivered in the locality in which such Office or organization is situated, the period shall expire on the next subsequent business day on which neither of the said two circumstances exists."

PCT Rule 60.1: Defects in the Demand

Date of actual receipt of the purported international application.

The date of receipt will be determined according to the usual principles applicable to the filing of applications on paper, including filing by electronic means (such as by facsimile transmission), that is, based on the date prevailing at the location of the Office at the time when the complete transmission of the application has been received.

Date of receipt by International Preliminary Examination Authority

Date: components of a date. Format: YYYYMMDD

International Preliminary Examination Authority

Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc. Also includes EP, WO

Checklist; a letter accompanying the amendments under Article 19 is being furnished. See PCT/IPEA/401 box VI
5.3 Chapter II fee sheet

<?xml version='1.0' encoding='UTF-8' ?>

<!ELEMENT cl-letter-art19 EMPTY>
<!ATTLIST cl-letter-art19 quantity CDATA #REQUIRED
page-count CDATA #IMPLIED >

<!--
Information written in "For International Preliminary Examining Authority use only"
of FEE CALCULATION SHEET - Annex to the Demand (IPEA401)
-->

<!ELEMENT ipea-fee-info (received-at-ipea, ipea-preliminary-examin-fee-info?, ipea-handling-fee-info?, ipea-amount-total-info?)>

<!--
IPEA's note regarding with Preliminary Examination Fee of FEE CALCULATION SHEET of Chapter II Demand.
-->

<!ELEMENT ipea-preliminary-examin-fee-info (#PCDATA)>

<!--
IPEA's note regarding with Handling Fee of FEE CALCULATION SHEET of Chapter II Demand.
-->

<!ELEMENT ipea-handling-fee-info (#PCDATA)>

<!--
IPEA's note regarding with Amount Total of FEE CALCULATION SHEET of Chapter II Demand.
-->

<!ELEMENT ipea-amount-total-info (#PCDATA)>

Yuya USHIDA : 01/04/19 incorporated changes from PFC
..changed version number from v1.4 to v1.5
..added element 'reimbursement-deposit-account' to fee-sheet-chapter2
Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.3 to v1.4
..added an attribute "id" to signatory
..corrected typos in comments
Fee calculation sheet annex to the PCT request (root element)

Attributes:
- lang = language of application - use ISO639 language code
- dtd-version = dtd version number
- file = filename of the whole application
- status = status of the application; values: new = new application
- date-produced = YYYYMMDD e.g., 20011230 if desired, 12 characters maximum
- produced-by = Receiving office name, country code ST.3
- ipea = creator of this document

-->

<!ATTLIST fee-sheet-chapter2 lang CDATA #REQUIRED
dtd-version CDATA #IMPLIED
file CDATA #IMPLIED
produced-by (applicant | RO | ISA | IPEA | IB | DO | EO | national-office | regional-office ) #REQUIRED
date-produced CDATA #IMPLIED
ipea CDATA #REQUIRED
status CDATA #IMPLIED>

<!--
doc-page - DOCUMENT or PAGE

This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.

Page range attributes are given when required
pp = page range
ppf = first page
ppl = last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings

Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

-->
<!ATTLIST name name-type (legal | natural) #IMPLIED>

<!--
Authorization to charge or credit deposit account
-->
<!ELEMENT deposit-account-ipea (authorization-ipea, ipea, account-no, date, %name_group; , signatories?)>

<!--
Deposit account number
-->
<!ELEMENT account-no (#PCDATA)>

<!--
Instruction to reimburse to a deposit account
-->
<!ELEMENT reimbursement-deposit-account (ip-office, account-no, date, %name_group;)> 

<!--
IP Office code (ST.3 country code, including the regional authorities)
-->
<!ELEMENT ip-office (#PCDATA)>

<!--
Signatories
-->
<!ELEMENT signatories (signatory+)>

<!--
PCT/RO/101 Box No. X: 
The signature must be that of the applicant (if there are several applicants, all
must sign); however, the signature may be that of the agent, or the common
representative, where a separate power of attorney appointing the agent or the
common representative, respectively, or a copy of a general power of attorney is
already in possession of the receiving Office, is furnished... 
(PCT Rules 4.1(d), 4.15, and 90)
Indicate the capacity of the signer with 'signatory-capacity'
-->
<!ELEMENT signatory (%name_group; , address?, electronic-signature , signatory-capacity?)>

<!ATTLIST signatory
   id ID #IMPLIED>

<!--
The capacity in which the person signs
-->
<!ELEMENT signatory-capacity (#PCDATA)>

<!--
A PKI / PKCS #7 digital signature data type
-->
<!ELEMENT enhanced-signature (pkcs?)>
PKCS7 digital signature

-->
<!ELEMENT pkcs7 EMPTY>

<!--
A non-PKI electronic signature
-->
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>

<!--
A simple 'signature';
e.g., clicking a button labeled 'accept' or 'I agree'
-->
<!ELEMENT click-wrap EMPTY>

<!--
A simple text string is to be used as the basic electronic signature;
e.g., John Doe  <text-string>/jd/</text-string>
-->  
<!ELEMENT text-string (#PCDATA)>

<!--
Address components:
Address formats differ from country to country
If no structure possible use text
-->  
<!ELEMENT address (%address_group;)>

<!--
If no structure is possible, enter text (without markup)
-->  
<!ELEMENT text (#PCDATA)>

<!--
Postal code or zip code
-->  
<!ELEMENT postcode (#PCDATA)>

<!--
Region of country; e.g., state, province, etc.
-->  
<!ELEMENT state (#PCDATA)>

<!--
County, parish, department, etc (mainly UK, USA)
-->  
<!ELEMENT county (#PCDATA)>

<!--
City or town name
-->  
-->
<!ELEMENT city (#PCDATA)>

<!-- Street may contain house number or name -->
<!ELEMENT street (#PCDATA)>

<!-- Building information in address; e.g., Hoffman building -->
<!ELEMENT building (#PCDATA)>

<!-- Address floor; e.g., 10th -->
<!ELEMENT address-floor (#PCDATA)>

<!-- Address room; e.g., Room 55B -->
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number -->
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code -->
<!ELEMENT mailcode (#PCDATA)>

<!-- Address, fifth line -->
<!ELEMENT address-5 (#PCDATA)>

<!-- Address, fourth line -->
<!ELEMENT address-4 (#PCDATA)>

<!-- Address, third line -->
<!ELEMENT address-3 (#PCDATA)>

<!-- Address, second line -->
<!ELEMENT address-2 (#PCDATA)>
<!ELEMENT address-2 (#PCDATA)>

<!-- Address, first line -->
<!ELEMENT address-1 (#PCDATA)>

<!-- International Preliminary Examination Authority -->
<!ELEMENT ipea (country)>

<!-- Authorization for International Preliminary Examining Authority to charge or credit deposit account -->
<!ELEMENT authorization-ipea (total-fee? , deficiency-credit?)>

<!-- Authorization to charge any deficiency or credit any overpayment -->
<!ELEMENT deficiency-credit EMPTY>

<!-- Authorization to charge the total fees indicated above -->
<!ELEMENT total-fee EMPTY>

<!-- The total amount due for each fee group; e.g., search fees, transmittal fees, etc. -->
<!ELEMENT amount-total (#PCDATA)>

<!-- Accrues to the International Bureau for carrying out various tasks, e.g., translation of international preliminary examination report (Rule 57.1) -->
<!ELEMENT handling-fee (amount-each , payment-mode)>

<!-- Preliminary examination fee (Rule 58.1) -->
<!ELEMENT preliminary-examin-fee (amount-each , payment-mode)>

<!-- Mode of payment -->
<!ELEMENT payment-mode (charge | postal-order | cash | coupons | cheque | bank-draft | stamps | other | later-payment | credit-card)>
<!-- Authorization to later payment -->
<!ELEMENT later-payment EMPTY>

<!-- Other method by which prior art was disclosed to the public -->
<!ELEMENT other (#PCDATA)>

<!-- Revenue stamps used as mode of payment -->
<!ELEMENT stamps EMPTY>

<!-- Bank draft to be used as mode of payment -->
<!ELEMENT bank-draft EMPTY>

<!-- Cheque used as payment method -->
<!ELEMENT cheque EMPTY>

<!-- Coupons used as mode of payment -->
<!ELEMENT coupons EMPTY>

<!-- Cash used as payment method -->
<!ELEMENT cash EMPTY>

<!-- Postal money order used as mode of payment -->
<!ELEMENT postal-order EMPTY>

<!-- Authorization to charge deposit account -->
<!ELEMENT charge EMPTY>

<!-- The amount of each of the fees -->
<!ELEMENT amount-each (#PCDATA)>
<!-- Type of currency for payment -->

<!ELEMENT currency (#PCDATA)>

<!-- The presence of this element indicates that there is more than one applicant. (ST.32:B512/B522) -->

<!ELEMENT further-applicant EMPTY>

<!-- The name of the applicant (without address information) (ST.32:B711) -->

<!ELEMENT applicant-name (%name_group;)

<!-- Registered number -->

<!ELEMENT registered-number (#PCDATA)>

<!-- Synonym -->

<!ELEMENT synonym (#PCDATA)>

<!-- Department, division, section, etc. name -->

<!ELEMENT department (#PCDATA)>

<!-- Organisation name or company name -->

<!ELEMENT orgname (#PCDATA)>

<!-- Role; e.g., President, Chairman, etc. -->

<!ELEMENT role (#PCDATA)>

<!-- SDobi : Individual id -->

<!ELEMENT iid (#PCDATA)>

<!-- Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.) -->

-->
<!ELEMENT suffix (#PCDATA)>

<!--
Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!--
First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--
Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
Title: e.g., Mr., Mrs., Dr. etc
-->
<!ELEMENT prefix (#PCDATA)>

<!--
Applicant's or agent's file reference, if desired, 12 characters maximum
-->
<!ELEMENT file-reference-id (#PCDATA)>

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

<!--
Document kind code; e.g., A1
(INID 13, ST.32:B130)
-->
<!ELEMENT kind (#PCDATA)>

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

<!--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO
-->
<!ELEMENT country (#PCDATA)>
5.4  Priority document bibliographic data

<?xml version='1.0' encoding='UTF-8' ?>
<!ENTITY % name_group "((name | (prefix?, (last-name | orgname), first-name?, middle-name?, suffix?, iid?, role?, orgname?, department?, synonym*))")
<!ENTITY % address_group "((address-1?, address-2?, address-3?, address-4?, address-5?, mailcode?, pobox?, room?, address-floor?, building?, street?, city?, county?, state?, postcode?, country) | text)">
<!--
*****************************************************************************
* priority-doc v1.3  2017 JULY                                           *
*****************************************************************************
***
* PUBLIC "//WIPO//DTD PRIORITY DOC 1.3//EN" "priority-doc-v1-3.dtd" *
*****************************************************************************
*****************************************************************************
* contacts:                                                          *
* WIPO: Yukako SHIBA; yukako.shiba@wipo.int                          *
*****************************************************************************
* revision history                                             *
*****************************************************************************
Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.2 to v1.3
..added an attribute "id" to signatory
MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.1 to v1.2
..implementation of PFC06/001
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
HT: 14/12/04 incorporated changes from PFCs:
..added attribute 'id' to application-reference
HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..added value 'national-office', 'regional-office' to attribute produced-by of root
element
2003/06/01
..released version number as v1.0
*****************************************************************************

PRIORITY DOCUMENT

Attributes:
lang  = language of application - use ISO639 language code
dtd-version = dtd version number
file = filename of the whole application
status = status of the application; values: new = new application
produced-by = creator of this document
date-produced = YYYYMMDD e.g. 20011230 if desired, 12 characters maximum

-->  
<ELEMENT priority-doc (application-reference , pdoc-info , signatories? , pdoc-body-doc+ , pdoc-certificate-doc*)>

<ATTLIST priority-doc lang CDATA #REQUIRED
 dtd-version CDATA #IMPLIED
 file CDATA #IMPLIED
 produced-by (applicant | RO | ISA | IPEA | IB | DO | EO | national-office | regional-office ) #REQUIRED
date-produced CDATA #IMPLIED
<!-- Holds certification data of priority document -->
<!ELEMENT pdoc-certificate-doc EMPTY>
<!ATTLIST pdoc-certificate-doc file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic | external-electronic | paper ) #IMPLIED
jpg ) #REQUIRED
status CDATA #IMPLIED >

<!-- Body of the priority document -->
<!ELEMENT pdoc-body-doc EMPTY>
<!ATTLIST pdoc-body-doc file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic | external-electronic | paper ) #IMPLIED
file-type (xml | pdf | txt | tif | zip | jpg ) #REQUIRED
status CDATA #IMPLIED >

<!-- A signature represented by electronic means -->
<!ELEMENT electronic-signature (basic-signature | enhanced-signature)>
<!ATTLIST electronic-signature date CDATA #REQUIRED
place-signed CDATA #IMPLIED >

<!-- A TIFF image of a signature -->
<!ELEMENT fax-image EMPTY>
<!ATTLIST fax-image file CDATA #REQUIRED >

<!-- PCT Rule 17.1: Obligation to Submit Copy of Earlier National or International Application -->
<!ELEMENT pct-rule17-1 EMPTY>
<!ATTLIST pct-rule17-1 compliance (yes | no ) #REQUIRED >

<!-- Application reference information: application number, country (INID 21, ST.32:B210) -->
<!ELEMENT application-reference (document-id)>
<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

<!-- Document identification refers to patents (and patent applications) only. -->
See WIPO ST.14

-->
<!ELEMENT document-id (country, doc-number, kind?, name?, date?)>
<!ATTLIST document-id lang CDATA #IMPLIED >
<--
Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names
-->
<!ELEMENT name (#PCDATA)>
<!ATTLIST name name-type (legal | natural) #IMPLIED >
<--
Signatories
-->
<!ELEMENT signatories (signatory+)>

<!--
PCT/RO/101 Box No. X:
The signature must be that of the applicant (if there are several applicants, all must sign); however, the signature may be that of the agent, or the common representative, where a separate power of attorney appointing the agent or the common representative, respectively, or a copy of a general power of attorney is already in possession of the receiving Office, is furnished...
(PCT Rules 4.1(d), 4.15, and 90)
Indicate the capacity of the signer with 'signatory-capacity'
-->
<!ELEMENT signatory (%name_group;, address?, electronic-signature, signatory-capacity?)>
<!ATTLIST signatory id ID #IMPLIED>

<!--
The capacity in which the person signs
-->
<!ELEMENT signatory-capacity (#PCDATA)>

<!--
A PKI / PKCS #7 digital signature data type
-->
<!ELEMENT enhanced-signature (pkcs7)>

<!--
PKCS7 digital signature
-->
<!ELEMENT pkcs7 EMPTY>

<!--
A non-PKI electronic signature
-->
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>>
<!--
A simple 'signature';
e.g., clicking a button labeled 'accept' or 'I agree'
-->
<!ELEMENT click-wrap EMPTY>

<!--
A simple text string is to be used as the basic electronic signature;
e.g., John Doe <text-string>/jd/</text-string>
-->
<!ELEMENT text-string (#PCDATA)>

<!--
Address components:
Address formats differ from country to country
If no structure possible use text
-->
<!ELEMENT address (%address_group;)

<!--
If no structure is possible, enter text (without markup)
-->
<!ELEMENT text (#PCDATA)>

<!--
Postal code or zip code
-->
<!ELEMENT postcode (#PCDATA)>

<!--
Region of country; e.g., state, province, etc.
-->
<!ELEMENT state (#PCDATA)>

<!--
County, parish, department, etc (mainly UK, USA)
-->
<!ELEMENT county (#PCDATA)>

<!--
City or town name
-->
<!ELEMENT city (#PCDATA)>

<!--
Street may contain house number or name
-->
<!ELEMENT street (#PCDATA)>

<!--
Building information in address; e.g., Hoffman building
-->
<!ELEMENT building (#PCDATA)>

<!--
Address floor; e.g., 10th
-->
<!ELEMENT address-floor (#PCDATA)>

<!--
Address room; e.g., Room 55B
-->
<!ELEMENT room (#PCDATA)>

<!--
Post Office Box number
-->
<!ELEMENT pobox (#PCDATA)>

<!--
Organizational mail code
-->
<!ELEMENT mailcode (#PCDATA)>

<!--
Address, fifth line
-->
<!ELEMENT address-5 (#PCDATA)>

<!--
Address, fourth line
-->
<!ELEMENT address-4 (#PCDATA)>

<!--
Address, third line
-->
<!ELEMENT address-3 (#PCDATA)>

<!--
Address, second line
-->
<!ELEMENT address-2 (#PCDATA)>

<!--
Address, first line
-->
<!ELEMENT address-1 (#PCDATA)>

<!--
Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!ELEMENT synonym (#PCDATA)>

<!ELEMENT department (#PCDATA)>

<!ELEMENT orgname (#PCDATA)>

<!ELEMENT role (#PCDATA)>

<!ELEMENT iid (#PCDATA)>

<!ELEMENT suffix (#PCDATA)>

<!ELEMENT middle-name (#PCDATA)>

<!ELEMENT first-name (#PCDATA)>

<!ELEMENT last-name (#PCDATA)>

<!ELEMENT title (#PCDATA)>
5.5  Priority document body

<?xml version='1.0' encoding='UTF-8'?>
<!--
*******************************************************************************
* pdoc-body v1.2  2012 JULY                                      *
*******************************************************************************
* PUBLIC "-/WIPO/DTD PDOC BODY 1.2//EN" "pdoc-body-v1-2.dtd"  *
*******************************************************************************
* https://www.wipo.int/pct-safe/en/resources/1.17/pdoc-body-v1-2.dtd *
*******************************************************************************
* contacts:  *
* WIPO: Yukako SHIBA; yukako.shiba@wipo.int  *
*******************************************************************************
* revision history  *
*******************************************************************************
HT: 14/12/04 incorporated changes from PFCs:
..changed attribute he, wi of doc-page from 'NMTOKEN' to 'CDATA'
..added attribute 'ocr' to doc-page
HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..added value 'national-office', 'regional-office' to attribute produced-by of root element
2003/06/01
..released version number as v1.0
*******************************************************************************
Attributes:
lang = language of application - use ISO 639 language code
dtd-version = dtd version number
file = filename of the whole application
status = status of the application; values: new = new application
date-produced = YYYYMMDD e.g., 20011230 if desired, 12 characters maximum
produced-by = creator of this document
country = st.3 code for application

-->  
<!ELEMENT pdoc-body (document-id , (pdoc-doc | doc-page))>  
<!ATTLIST pdoc-body lang CDATA #REQUIRED
dtd-version CDATA #IMPLIED
file CDATA #IMPLIED
country CDATA #REQUIRED
produced-by (applicant | RO | ISA | IPEA | IB | DO | EO | national-office | regional-office) #REQUIRED
date-produced CDATA #IMPLIED
status CDATA #IMPLIED >

<!--
doc-page - DOCUMENT or PAGE

This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.

Page range attributes are given when required
pp = page range
ppf = first page
ppl = last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings

Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

-->
5.6 IB bibliographic data

<?xml version='1.0' encoding='UTF-8' ?>
<!ENTITY % name_group "((name | (prefix? , (last-name | orgname) , first-name? ,
middle-name? , suffix? , iid? , role? , orgname? , department? ,
synonym*)) ,
registered-number?)">
<!ENTITY % address_group "((address-1? , address-2? , address-3? , address-4? ,
city? , county? , state? , postcode? , country) | text)">
--
********************************************************************************
*  WO-BIBLIOGRAPHIC-DATA v1.9  2017 JULY
*  PUBLIC "//WIPO//DTD WO BIBLIOGRAPHIC DATA 1.9//EN"
*  https://www.wipo.int/pct-safe/en/resources/1.17/
*  contacts: WIPO: Yukako SHIBA; yukako.shiba@wipo.int
*  revision history
********************************************************************************
Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.8 to v1.9
..added an attribute "id" to signatory and us-rights
..added an element "earlier-search-authorization" to search-authority
SY: 01/07/12 incorporated changes from PFC:
..changed version number from v1.7 to v1.8
..added attribute 'priority-doc-access-code' to priority-doc-from-library
(PFC12/001)
SY: 01/04/10 incorporated changes from PFC
..changed version number from v1.6 to v1.7
..added element 'priority-doc-from-library' to priority-claim (PFC09/005)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.5 to v1.6
..added element 'substantially-equivalent' to earlier-search-request (PFC08/003)
..added element 'earlier-search-document' to earlier-search-request (PFC08/003)
..added attribute 'email-purpose' to email (PFC08/006)
MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.4 to v1.5
...implementation of PFC06/001
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-
text, p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
..added element 'incorporation-by-reference' to wo-priority-info (PFC06/004)
..added element 'restore-rights' to priority-claim (PFC06/004)
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
..added attribute 'subset' to protection-request (PFC06/005)
MO: 29/09/05 incorporated changes from PFCs:
..changed version number from v1.3 to v1.4
...implementation of PFC05/001
..added element 'sup' to u (PFC05/003)
..added element 'sup' to i (PFC05/003)
..added element 'sup' to b (PFC05/003)
..added element 'sub' to u (PFC05/003)
..added element 'sub' to i (PFC05/003)
..added element 'sub' to b (PFC05/003)
..added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-
text, p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC05/003)
..added element 'incorporation-by-reference' to wo-priority-info (PFC05/004)
..added element 'restore-rights' to priority-claim (PFC05/004)
..added element 'address-4' to address (PFC05/005)
..added element 'address-5' to address (PFC05/005)
..added attribute 'subset' to protection-request (PFC05/005)
MO: 29/09/05 incorporated changes from PFCs:
..changed version number from v1.3 to v1.4
...implementation of PFC06/001
FROM (document-id? , type-of-correction? , wo-repub-code , dtext?)
TO (document-id? , type-of-correction? , wo-repub-code , wo-pubnum? , wo-dtext*)
HT: 14/12/04 incorporated changes from PFCs:
..changed element correction from (document-id? , type-of-correction? , wo-repub-
code, dtext? to (document-corrected , type-of-correction? , gazette-reference? , text?)
..changed element wo-publication-info from (correction* , wo-bio-material-after-pub? , isr-status* , pct-pub-info*) to (wo-correction* , wo-bio-material-after-pub? , isr-status* , pct-pub-info*)
..changed attribute of correction from '#REQUIRED' to '#IMPLIED'
..added element 'classifications-ipcr' to wo-bibliographic-data
..added element 'wo-correction' to wo-publication-info
..added attribute 'id' to addressbook, application-reference, classification-ipc, priority-claim, publication-reference
..added attribute 'sequence', 'id' to further-classification
..removed attribute 'correction'

HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..added value 'national-office', 'regional-office' to attribute produced-by of root element

HT: 16/12/03 incorporated changes from PFCs:
..changed version number from v1.0 to v1.2
..changed designation-of-states from '(precautionary-designation-statement, exclusion-from-designation??)?)'
..added element 'sup2' and 'sub2' to sup and sub

June 2003
..released version number as v1.0

******************************************************************************
* SECTION I - DECLARATION, ENT. REFs, ISO sets, etc                             *
******************************************************************************

<!--
import character entity set. Download from:
http://pcteasy.wipo.int/efiling_standards/schemaDocs/wipo.ent

Note that nsgmls-based parsers (SP, Near and Far Designer, etc.) may not be able to process this file for reasons described below in MathML comments.

<!--ENTITY % wipo PUBLIC "-//WIPO//ENTITIES WIPO 1.0//EN" "wipo.ent">
%wipo;-->

<!--
******************************************************************************
* INCLUDE COMPONENT DTDS (MATHML, OASIS EXCHANGE TABLE MODEL                  *
******************************************************************************

<!-- DTD MathML2: maintained by W3C. Download from:
http://www.w3.org/TR/MathML2/DTD-MathML-20010221.zip

If using nsgmls-based parser (SP, Near and Far Designer, etc.) uncomment 'mathml-charent-module' switch below or replace the referenced MathML2 DTD with the version downloadable from:
http://www.w3.org/Math/DTD/dtd-sp.zip

This notice copied from: http://www.w3.org/Math/DTD/

"DTD for nsgmls
Some systems (including the popular nsgmls parser) may not be able to process files using 'plane 1' characters which have Unicode numbers higher than #xFFFF. The versions of the DTD provided here incorporate the modifications mentioned above, but the high characters are replaced by the equivalent mchar construct
<mchar name="..." /> this allows the DTD to be read and for MathML files to be validated using such systems."

<!--ENTITY % mathml-charent.module "IGNORE" -->
<!ENTITY % MATHML.prefixed "IGNORE">
<!ENTITY % MATHML.xmlns "">
<!-- import MathML2 dtd -->
<!ENTITY % mathml2 PUBLIC "-/W3C//DTD MathML 2.0//EN" "mathml2.dtd">
%mathml2;

<!-- DTD OASIS Open XML Exchange Table Model. Maintained by OASIS; download from:
http://www.oasis-open.org/specs/soextblx.dtd
Note that the FPI in soextblx.dtd refers to itself as 'calstblx'.
That convention has been followed here. -->
<!-- create content for title element in table -->
<!ENTITY % title "<!ELEMENT title (#PCDATA | b | i | u | sup | sub | smallcaps)* >" >
%title;

<!-- override OASIS Exchange <entry> model -->
<!ENTITY % tbl.entry.mdl "(#PCDATA | b | i | u | sup | sub | smallcaps | br |
| patcit | nplcit | bio-deposit | crossref | img |
| dl | ul | ol | chemistry | maths)* ">

<!-- import OASIS Exchange model -->
<!ENTITY % calstblx PUBLIC "-/OASIS//DTD XML Exchange Table Model 19990315//EN" 
"soextblx.dtd">
%calstblx;

<-- ********************************************************************
* SECTION II - DTD *
******************************************************************** -->

<!ELEMENT wo-bibliographic-data (publication-reference?, wo-publication-info?,
wo-demand-info?, file-reference-id?, inven
declaration-info?, classification-ipc?, classifications-ipcr?, figure-to-publish?, signature
tories?, correspondence-address?, dtext? )>

<!ATTLIST wo-bibliographic-data date-produced CDATA #IMPLIED
dtd-version CDATA #IMPLIED
file CDATA #IMPLIED
status CDATA #IMPLIED
office-name CDATA #IMPLIED
produced-by (applicant |
| RO |
| ISA |
| IPEA |
| IB |
| DO |
| EO |
| national-office |
| regional-office ) #REQUIRED >

<!-- Later election information -->

<!ELEMENT later-election (received-at-ib)>

<!ATTLIST later-election expiration-19months (before | after ) #REQUIRED >

<!-- PCT/IPEA/401
The date of receipt of the demand is AFTER the expiration of 19 months from the
priority date -->

<!ELEMENT receipt-after-19month EMPTY>
<!ATTLIST receipt-after-19month informed (yes | no) #IMPLIED>

--> IPER status information, date of receipt at IB, information of new IPER or corrected IPER.

--> <ELEMENT iper-status (received-at-ib?)>

<!ATTLIST iper-status iper-status (new | corrected) #REQUIRED>

<!-- A signature represented by electronic means -->

--> <ELEMENT electronic-signature (basic-signature | enhanced-signature)>

<!ATTLIST electronic-signature date CDATA #REQUIRED
place-signed CDATA #IMPLIED>

<!-- A TIFF image of a signature -->

--> <ELEMENT fax-image EMPTY>

<!ATTLIST fax-image file CDATA #REQUIRED>

<!ELEMENT classifications-ipcr (classification-ipcr)>

<!ATTLIST classifications-ipcr id ID #IMPLIED>

<!-- International Patent Classification (IPC) data; -->


<!ATTLIST classification-ipcr id ID #IMPLIED
sequence CDATA #IMPLIED>

<!-- International Patent Classification (IPC) data; (INID 51, ST.32:B510) -->

--> <ELEMENT classification-ipc (edition, main-classification, further-classification*, (additional-info | linked-indexing-code-group | unlinked-indexing-code)*, text?)>

<!ATTLIST classification-ipc id ID #IMPLIED>

<!-- Further/secondary classification (ST.32:B512/B522) -->

--> <ELEMENT further-classification (#PCDATA)>

<!ATTLIST further-classification id ID #IMPLIED
sequence CDATA #IMPLIED>

<!-- Paragraph
Recommended id = p0001, p0002, etc. num = 0001, 0002, etc. -->
Note: paragraphs may occur in sections other than the description and at
different times eg. for the abstract, in this case use for example "p0001a";
amended claims: "p0001ac", etc.

-->  
<!ELEMENT p (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | dl | ul | ol | crossref | figref | patc | nplcit | bio-deposit | img | chemistry | maths | tables | table-external-doc)*>

<!ATTLIST p  id   ID     #IMPLIED
         num  CDATA  #REQUIRED >

<--
References a stand-alone table authored with the table-external DTD.

-->  
<!ELEMENT table-external-doc (#PCDATA)>

<!ATTLIST table-external-doc  id     ID     #IMPLIED
                        file           CDATA  #REQUIRED
                        lang           CDATA  #IMPLIED
                        carriers     (internal-electronic |
                                        external-electronic |
                                        paper )  #IMPLIED
                        external-type (math |
                                        chemistry |
                                        program-listing |
                                        other )  #IMPLIED
                        status         CDATA  #IMPLIED >

<--
TABLES
This is image data or coded according to OASIS Exchange model with modified cell
'entry' content.

Recommended id = tab10001, tab10002, etc.

-->  
<!ELEMENT tables (img | table)>

<!ATTLIST tables  id   ID     #IMPLIED
               num  CDATA  #REQUIRED >

<--
Definition list

Recommended id = dlis0001, dlis0002, etc.

-->  
<!ELEMENT dl (dt , dd)+

<!ATTLIST dl  tsize   CDATA  #IMPLIED
              compact        (compact )  #IMPLIED
              id           ID     #IMPLIED >

<--
Term to be defined

Recommended id = dtrm0001, dtrm0002, etc.

-->  
<!ELEMENT dt (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>

<!ATTLIST dt  id   ID     #IMPLIED >

<--
Unordered Lists
list-style may be empty for lists with no bullet or other symbol default
list-style is 'bullets'
Recommended id = ulis0001, ulis0002, etc.

-->  
<!ELEMENT ul (li+)>  
<!ATTLIST ul  id         ID  #IMPLIED  
list-style     (bullet | dash | none )  'bullet'  
compact        (compact )  #IMPLIED >  

推荐的项目 id = list0001, list0002, 等等。

-->  
<!ELEMENT li (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref | figref | img | dl | ul | ol | chemistry | maths)*>  
<!ATTLIST li  id  ID  #IMPLIED  
num CDATA  #IMPLIED >  

MATHEMATICS  
This is image data or coded according to mathml, version 2  
Recommended id = math0001, math0002, etc.

-->  
<!ELEMENT maths (img | (math , img?))>  
<!ATTLIST maths  id  ID     #IMPLIED  
num CDATA  #REQUIRED >  

Chemistry  
Chemical formulae, ring structures, Markush structures, etc.  
For now treat as image data.  
Depending on industry support we may use, e.g., chemML, CML later  
Recommended id = chem0001, chem0002, etc

-->  
<!ELEMENT chemistry (img | (chem , img?))>  
<!ATTLIST chemistry  id  ID     #IMPLIED  
num CDATA  #REQUIRED >  

This is a pointer to an external DTD for chemical markup - to be determined.  
For EPO probably CML; http://www.xml-cml.org/

-->  
<!ELEMENT chem EMPTY>  
<!ATTLIST chem  id        ID     #IMPLIED  
file      CDATA  #REQUIRED  
chem-type CDATA  #IMPLIED >  

Ordered Lists:  
attribute 'ol-style'  

Recommended use:  
  1  arabic numbers    1, 2, 3, ...  
a  lower alpha      a, b, c, ...  
A  upper alpha      A, B, C, ...  
i  lower roman      i, ii, iii, ...  
I  upper roman      I, II, III, ...
<!ELEMENT ol (li+)>
<!ATTLIST ol  
  id          ID     #IMPLIED
  compact     (compact )  #IMPLIED
  ol-style CDATA  #IMPLIED >

<!--
Image data
Image is used for any kind of image: art work, figures, complex work units
(math, tables, chemistry), etc.
Recommended:
  id          = i0001, i0002, etc.
  he, wi      = "11" - milimeters - height, width;
  file        = file name, location; label - not used;
  alt         = alternate text if image not shown;
  img-content = drawing is the default;
  img-format  = common will be tiff, st33 and st35 in for backward compatibilty
                 and, later, publication.
  orientation = orientation of the image (portrait | landscape). Default is portrait
  inline      = (yes | no).
                 Whether the image is to be presented inline or separated by line
                 breaks. Default is no.
-->
<!ELEMENT img EMPTY>
<!ATTLIST img  
  id          ID     #IMPLIED
  he          CDATA  #REQUIRED
  wi          CDATA  #REQUIRED
  file        CDATA  #REQUIRED
  alt         CDATA  #IMPLIED
  img-content        (drawing | photograph | character | dna | undefined | chem | table | math | program-listing | flowchart | graph )  'drawing'
  img-format         (jpg | tif | st33 | st35 )  #REQUIRED
  orientation        (portrait | landscape )  'portrait'
  inline           (yes | no )  'no' >

<!--
A reference to a figure;
  e.g., "...as shown in <figref idref='f0001'>figure<b>1</b></figref>..."
-->
<!ELEMENT figref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST figref  
  idref IDREFS  #IMPLIED
  num     CDATA     #IMPLIED >

<!--
Cross reference to any other element with an identifier (id)
-->
<!ELEMENT crossref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST crossref  
  idref IDREF  #REQUIRED >

<!--
Biological deposit citation (US EFS: biological-deposit)
-->
According to PCT Rule 13bis, EPC Rule 28
This covers all bio data references long and short within the description and/or claims

Recommended id = biod0001, biod0002, etc.

<!ELEMENT bio-deposit (depositary , bio-accno , date? , term? , dtext?)>
<!ATTLIST bio-deposit id ID #IMPLIED
num CDATA #REQUIRED
url CDATA #IMPLIED
dnum CDATA #IMPLIED >

Non-Patent Literature (NPL) CITation;

Notes:
This can be free text data without any structure (#PCDATA) which is NOT recommended or it can be highly structured data which is marked up according to ST.14 and ISO 690 layout;

This part of the DTD has used many different sources for element names and DTD structure and reference:
AACR2 / MARC
ISO 12083 - Electronic manuscript prep. and markup. DTD
Association of American Publishers (AAP) 239.59 DTD
European Working Group for SGML (EWS) MAJOUR DTD
SuperJournal Full Article DTD
www.superjournal.ac.uk/sj
Elsevier DTD
Medline DTD (NLM)

Attributes (recommended):
id = ncit0001, ncit0002, etc
num = 0001, 0002
npltype - The TYPE of citation is office specific (recommended);;
A - Abstract citation of no specific kind
B - Book citation
I - Biological abstract citation
C - Chemical abstracts citation
E - Database citation
D - Derwent citation
P - Patent cited within NPL group
J - Patent Abstracts of Japan citation (REC 067)
S - Serial / Journal / Periodical citation
W - World Wide Web / Internet search citation
medium - the type of medium
e.g., CD (CD-ROM), MT (Magnetic Tape), DISK, ONLINE
file - file name on local systems eg. XP number in EPO
url - where possible give full web link to document

<!ELEMENT nplcit ((text | article | book | online | othercit) , rel-passage*)>
<!ATTLIST nplcit id ID #IMPLIED
num CDATA #IMPLIED
lang CDATA #IMPLIED
file CDATA #IMPLIED
npl-type CDATA #IMPLIED
medium CDATA #IMPLIED
url CDATA #IMPLIED >

Reference number (general); for the EPO this is the XP number

<!ELEMENT refno (#PCDATA)>
<!ATTLIST refno  id ID  #IMPLIED >
<!--
Classification code; e.g., ipc, dewey etc.
-->
<!ELEMENT class (#PCDATA)>  
<!ATTLIST class  class-type CDATA  #IMPLIED >
<!--
Subordinate responsibility; e.g., editor, translator, etc.
-->
<!ELEMENT subname (%name_group; | addressbook)>  
<!ATTLIST subname  subname-type (editor | translator | other-subname-type ) 'editor' >
<!--
Author
Prime responsibility for the work
there is no distinguishing between personal and corporate authors
use the ID attribute if, for example, there is a need to distinguish between
multiple authors.
Can also include affiliation details
Recommended id = auth0001, auth0002, etc.
-->
<!ELEMENT author (%name_group; | addressbook)>  
<!ATTLIST author  id ID  #IMPLIED >
<!--
PATENT CITATIONS:
(ST.32:B561)
Patent Citation within abstract, description or claims.
For patent citations within Search Report see Search Report DTD
Notes:
Tags arranged according to WIPO ST.14 order.
This can be free text data without any structure (text).
Example:
<patcit id='pcit0001' dnum='US4793675A' dnum-type='publication number'>
<document-id>
  <country>US</country>
  <doc-number>4793675</doc-number>
  <kind>A</kind>
  <name>Handa</name>
  <date>19881227</date>
</document-id>
</patcit>

Note:
It is NOT expected that the applicant will create the tagged data
- it could be generated from a 'pull down' data entry form
or generated from internal SR databases
Attributes (recommended):
 id    = pcit0001, pcit0002, etc.
 num   = 0001, 0002, etc.
 dnum  = use full number as one string, eg, "US5401234A";
 url   = where possible give full web link to patent
 file  = file name eg. if stored on local systems
 dnum-type = type of document number
(e.g., application number, publication number)

-->  
<!ELEMENT patcit (text | (document-id , rel-passage*))>

<!ATTLIST patcit  id        ID     #IMPLIED
    num       CDATA  #IMPLIED
    dnum      CDATA  #IMPLIED
    dnum-type  CDATA  #IMPLIED
    file      CDATA  #IMPLIED
    url       CDATA  #IMPLIED >

<--
This element is one method to identify content consisting of text objects that
require preservation (pre) of their whitespace in order to preserve internal
logical relationships.
(e.g., sequence listing fragments, computer program listings)

-->  
<!ELEMENT pre (#PCDATA)>

<!ATTLIST pre  id           ID  #IMPLIED
    xml:space        (preserve | default )  #IMPLIED
    listing-type     (sequence | program-listing | other )  #REQUIRED
>
<--
Designated states for declarations

-->  
<!ELEMENT designated-states-as-dec (all-designations | all-designations-except-us | (regional*, national?))>

<!ATTLIST designated-states-as-dec  dec-type  (1 | 2 | 3 | 4 | 5 | combined )  #REQUIRED >

<--
Information of combined declaration(declaration 1 and 2)

-->  
<!ELEMENT combined-declaration EMPTY>

<!ATTLIST combined-declaration  quantity CDATA  #REQUIRED >

<--
Declaration as to non-prejudicial disclosures or exceptions to lack of novelty
(Rules 4.17(v) and 51bis.1(a)(v))

-->  
<!ELEMENT declaration5 EMPTY>

<!ATTLIST declaration5  quantity CDATA  #REQUIRED >

<--
Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes
of the designation of the United States of America

-->  
<!ELEMENT declaration4 EMPTY>

<!ATTLIST declaration4  quantity CDATA  #REQUIRED >

<--
Declaration as applicant's entitlement, as at the international filing date, to
claim the priority of the earlier application, where the applicant is not the
applicant who filed the earlier application or where the applicant's name has
changed since the filing of the earlier application
(Rules 4.17(iii) and 51bis.1(a)(iii))

-->
<!ELEMENT declaration3 EMPTY>
<!ATTLIST declaration3 quantity CDATA #REQUIRED >
<!--
Declaration as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate
-->  
<!ELEMENT declaration2 EMPTY>
<!ATTLIST declaration2 quantity CDATA #REQUIRED >
<!--
Declaration as to the identity of the inventor (Rules 4.17(i) and 51bis.1(a)(i))
-->  
<!ELEMENT declaration1 EMPTY>
<!ATTLIST declaration1 quantity CDATA #REQUIRED >
<!--
-->

<!ELEMENT earlier-search-documents EMPTY>
<!ATTLIST earlier-search-documents results-of-earlier-search (yes | no ) #IMPLIED
earlier-application (yes | no ) #IMPLIED
translation-of-earlier-application (yes | no ) #IMPLIED
translation-of-results-of-earlier-search (yes | no ) #IMPLIED
documents-cited-in-earlier-search-results (yes | no ) #IMPLIED
available-at-isa (yes | no ) #IMPLIED
request-to-transmit-to-isa (yes | no ) #IMPLIED >
<!--
Priority claim (PCT Rule 4.10)
(INID 32/33/34, ST.32:B320/B330/B340)
-->  

<!ATTLIST priority-claim id ID #IMPLIED
sequence CDATA #REQUIRED
kind (national | regional | international ) #REQUIRED >
<!--
library-identifier attribute intended as an identifying code for the library containing the document to be used where offices support the access of documents from many such libraries

action-by attribute would indicate the office requested to retrieve the document (for PCT this can be the RO or IB, default IB)

priority-doc-access-code indicates, when present, the access code that the Office (or applicable Offices) should use to obtain the priority document from the specified digital library

--> <!ELEMENT priority-doc-from-library EMPTY>
<!ATTLIST priority-doc-from-library library-identifier CDATA #IMPLIED
action-by CDATA #IMPLIED
priority-doc-access-code CDATA #IMPLIED >

<!-- PCT Rule 17.1: Obligation to Submit Copy of Earlier National or International Application -->
<!ELEMENT pct-rule17-1 EMPTY>
<!ATTLIST pct-rule17-1 compliance (yes | no ) #REQUIRED >
<!-- Protection request for the designated office. -->
<!ELEMENT protection-request (kind-of-protection , document-id?)>
<!ATTLIST protection-request subset (yes | no ) #IMPLIED >

<!-- Title of the Invention: (INID 54, ST.32:B540/B542) Preferably two to seven words when in English or translated into English and precise. (Rule 4.3) Recommended id = 'invt' -->
<!ELEMENT invention-title (#PCDATA | b | i | u | o | sup | sub)*)
<!ATTLIST invention-title id ID #IMPLIED
lang CDATA #IMPLIED >
<!-- Underscore: style - single is default -->
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)*)
<!ATTLIST u style (single | double | dash | dots ) 'single' >
<!-- Overscore: style - single is default -->
<!ELEMENT o (#PCDATA | b | i | smallcaps | sup | sub)*)
<!ATTLIST o style (single |
  double |
  dash |
  dots |
  leftarrow |
  rightarrow |
<!--
Agent or common representative (Rules 90.1, 90.2)
-->  
<!ELEMENT agent (addressbook+)>
<!ATTLIST agent sequence CDATA #REQUIRED
rep-type (agent | attorney | common-representative ) #REQUIRED >

<!--
Deceased inventor name
-->  
<!ELEMENT deceased-inventor (%name_group;)
<!ATTLIST deceased-inventor sequence CDATA #IMPLIED
lang CDATA #IMPLIED >

<!--
The individual or entity responsible for creating the matter that protection is sought for.
(ST.32:B721)
-->  
<!ELEMENT inventor (addressbook+ , designated-states?)
<!ATTLIST inventor sequence CDATA #REQUIRED
designation (all | all-except-us | us-only | as-indicated ) #IMPLIED >

<!--
Applicant information:
(INID 71, ST.32:B710)

attributes for applicant
sequence : sequence number of each applicant
    e.g, sequence="1"
app-type : applicant type
    app-type="applicant" : the applicant is only applicant
    app-type="applicant-inventor" : the applicant is also inventor
designation: This person is applicant for the purpose of:
designation="all" : all designated states
designation="all-except-us" : all designated states except US
designation="us-only" : US only
designation="as-indicated" : the states indicated in
designated-states element
under applicant element
-->  
<!ELEMENT applicant (addressbook+ , nationality, residence, us-rights*, designated-states?, designated-states-as-inventor?)
<!ATTLIST applicant sequence CDATA #REQUIRED
app-type (applicant | applicant-inventor ) #REQUIRED
designation (all | all-except-us | us-only | as-indicated ) #REQUIRED >

<!--
This person is successor to the rights of an inventor who is deceased, insane, or legally incapacitated, for the purposes of the designation of the United States of America
-->  
<!ELEMENT us-rights (#PCDATA)
<!ATTLIST us-rights to-dead-inventor CDATA #REQUIRED
kind (heir | heiress | executor | executrix | estate | legal-representative | administrator | administratrix | legal-representatives | heirs | executors | legal-heirs ) #REQUIRED

id ID #IMPLIED >

<!--
ADDRESSBOOK GROUP:
Holds name and contact information for individuals/organizations

The LANG attribute is REQUIRED for certain document types,
e.g., the JPO PCT Request where names and addresses may be repeated in two
different languages. If no structure possible use text.
-->
<!ELEMENT addressbook (%name_group; , address , phone* , fax* , email* , url* ,
ed* , dtext?) | text>
<!ATTLIST addressbook id ID #IMPLIED
lang CDATA #IMPLIED>

<!--
Email address
Attribute:
email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up
by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary
means of contact as a replacement of the use of conventional
post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is
equivalent to 'informal'
-->
<!ELEMENT email (#PCDATA)>
<!ATTLIST email email-purpose (informal | general | advance | main ) #IMPLIED >

<!--
Application reference information: application number, country
(INID 21, ST.32:B210)
-->
<!ELEMENT application-reference (document-id)>
<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

<!--
ISR status information, date of receipt at IB,
information of new ISR or corrected ISR.
-->
<!ELEMENT isr-status (received-at-ib?)>
<!ATTLIST isr-status isr-status (new | corrected ) #REQUIRED >
<!--
IB original dtext, br tag is available.

-->  
<!ELEMENT wo-dtext (#PCDATA | br)*>  
<!ATTLIST wo-dtext  lang CDATA  #IMPLIED >

-->  
Publication reference information: publication number, date, etc  
(INID 11, ST.32:B110)

-->  
<!ELEMENT publication-reference (document-id)>  
<!ATTLIST publication-reference  id ID  #IMPLIED >

-->  
Document identification refers to patents (and patent applications) only.  
See WIPO ST.14

-->  
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>  
<!ATTLIST document-id  lang CDATA  #IMPLIED >

-->  
Name:  
If no distinction or detail can be given.  
Also to be used for: personal (natural person) and corporate (legal entity) names

-->  
<!ELEMENT name (#PCDATA)>  
<!ATTLIST name  name-type   (legal | natural )  #IMPLIED >

-->  
information for chapter II demand at IB

-->  

-->  
International Preliminary Examination Authority

-->  
<!ELEMENT ipea (country)>  
<!ATTLIST ipea  country  CDATA  #IMPLIED >

-->  
Date of receipt by International Preliminary Examination Authority

-->  
<!ELEMENT received-at-ipea (date)>  
<!ATTLIST received-at-ipea  country  CDATA  #IMPLIED >

-->  
<!ELEMENT elected-office (country* , (region , country+)*)>  
<!ATTLIST elected-office  country  CDATA  #IMPLIED >

-->  
<!ELEMENT completion-date (date)>  
<!ATTLIST completion-date  country  CDATA  #IMPLIED >

-->  
Signatories

-->  
<!ELEMENT signatories (signatory+)>  
<!ATTLIST signatories  country  CDATA  #IMPLIED >
The signature must be that of the applicant (if there are several applicants, all must sign); however, the signature may be that of the agent, or the common representative, where a separate power of attorney appointing the agent or the common representative, respectively, or a copy of a general power of attorney is already in possession of the receiving Office, is furnished...

(PCT Rules 4.1(d), 4.15, and 90)

Indicate the capacity of the signer with 'signatory-capacity'

-->  
<!ELEMENT signatory (%name_group; , address? , electronic-signature , signatory-capacity?)>  
<!ATTLIST signatory  
id ID #IMPLIED>  

-->  
The capacity in which the person signs  
-->  
<!ELEMENT signatory-capacity (#PCDATA)>  

<!--  
A PKI / PKCS #7 digital signature data type  
-->  
<!ELEMENT enhanced-signature (pkcs?)>  

<!--  
PKCS7 digital signature  
-->  
<!ELEMENT pkcs7 EMPTY>  

<!--  
A non-PKI electronic signature  
-->  
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>  

<!--  
A simple 'signature';  
e.g., clicking a button labeled 'accept' or 'I agree'  
-->  
<!ELEMENT click-wrap EMPTY>  

<!--  
A simple text string is to be used as the basic electronic signature;  
e.g., John Doe <text-string>/jd/</text-string>  
-->  
<!ELEMENT text-string (#PCDATA)>  

<!--  
Figure of the drawings which should accompany the abstract  
-->  
<!ELEMENT figure-to-publish (fig-number+)>
<!--
PCT/RO/101 Box IX: the number of the figure which should accompany the abstract.
(ST.32:B598)
-->
<!ELEMENT fig-number (#PCDATA)>

<!--
Possible sources: human-generated-classification,
machine-propagated-classification, software-analysis-generated-classification
-->
<!ELEMENT classification-data-source (#PCDATA)>

<!--
Possible status: original-classification, reclassified, various-classification,
deleted-classification
-->
<!ELEMENT classification-status (#PCDATA)>

<!--
-->
<!ELEMENT generating-office (country)>

<!--
-->
<!ELEMENT action-date (date)>

<!--
Possible values: invention, non-invention
-->
<!ELEMENT classification-value (#PCDATA)>

<!--
Possible positions: first-symbol-position, later-symbol-position.
-->
<!ELEMENT symbol-position (#PCDATA)>

<!--
-->
<!ELEMENT subgroup (#PCDATA)>

<!--
-->
<!ELEMENT main-group (#PCDATA)>

<!--
-->
<!ELEMENT subclass (#PCDATA)>

<!--

-->  

<!ELEMENT section (#PCDATA)>

%!--  
  Levels: ipcr-advanced, ipcr-core

-->  

<!ELEMENT classification-level (#PCDATA)>

<!--

-->  

<!ELEMENT ipc-version-indicator (date)>

<!--
  Unlinked indexing code.
  (ST.32:B515/B525)

-->  

<!ELEMENT unlinked-indexing-code (#PCDATA)>

<!--
  Linked indexing code.
  (ST.32:B514/B524)

-->  

<!ELEMENT linked-indexing-code-group (main-linked-indexing-code , sub-linked-indexing-code+)>

<!--
  Sub/further Linked Indexing Code.

-->  

<!ELEMENT sub-linked-indexing-code (#PCDATA)>

<!--
  Main Linked Indexing Code.

-->  

<!ELEMENT main-linked-indexing-code (#PCDATA)>

<!--
  Main classification.
  (ST.32:B511/B521)

-->  

<!ELEMENT main-classification (#PCDATA)>

<!--
  Additional information.
  (ST.32:B513)

-->  

<!ELEMENT additional-info (p+)>
!!--
   Definition description
-->
<!ELEMENT dd (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref | figref | img | ul | ol | chemistry | maths)*>

<!--
   Identifies the period of time during which the depository must be able to furnish
   samples of the biological material.
-->
<!ELEMENT term (#PCDATA)>

<!--
   Biological accession number:
   (ST.32:B831)
   The identification assigned to the biological material by the depository
-->
<!ELEMENT bio-acnno (#PCDATA)>

<!--
   Information regarding the facility storing the biological deposit.
   (ST.32:B832)
-->
<!ELEMENT depositary (#PCDATA | address)*>

<!--
   Other citations - free form
-->
<!ELEMENT othercit (#PCDATA | b | i | u | o | sup | sub)*>

<!--
   Online citation
   Revised according to ISO-690-2 - Electronic documents and parts thereof.
   Please refer to this standard for definitions and examples.
   See: http://www.nlc-bnc.ca/iso/tc46sc9/standard/690-2e.htm#Contents
   The tagging in fact is a mixture of article and book tags together with
   specific electronic source tags.
   'Online' is taken to mean any kind of electronic documentation:
   databases, internet, CD-Roms, DVD, email, etc

EXAMPLES:;

Kirk-Othmer Encyclopedia of Chemical Technology [online].
Available from: DIALOG Information Services, Palo Alto (Calif.).

<nplcit id='ncit1' num='0001' type='E' medium='online'>
<online>
   <online-title>Kirk-Othmer Encyclopedia of Chemical Technology</online-title>
   <imprint>
      <address>
         <text>New York</text>
      </address>
      <name>John Wiley</name>
      <pubdate>19840000</pubdate>
   </imprint>
   <avail>dialog information services, palo alto (calif.).</avail>
* Article on Internet:

"Clark, Carol." On the Threshold of a Brave New World [online-title]. CNN.com, 2000 [imprint].

<text>In-depth specials</text>
</online>
</nplcit>

* Personal communication (e-mail)
Thacker, Jane. MPEG-21 project stream on digital item identification [online]. Message to: [iso.tc46.sc9@nlc-bnc.ca]. 3 October 2000; 13:33 EST [cited 6 October 2000; 13:10 EST]. Message-ID: [002f01c02d60$051a64a0$22a2580c@vaio]. Personal communication.

"Thacker, Jane." MPEG-21 project stream on digital item identification [online-title]. Message to: [iso.tc46.sc9@nlc-bnc.ca].

< notes >Personal communication</notes>
< avail >Message-ID: [002f01c02d60$051a64a0$22a2580c@vaio]</avail>
< datecit >6 October 2000; 13:10 EST</datecit>
</online>
</nplcit>

<!--

<!--
Date of search/retrieval  YYYYMMDD
-->
<!ELEMENT srchdate (date)>
After patent citations the most common citations are articles within serials (periodicals, magazines), books and electronic (eg. internet) sources. This is a very complex and varied area to standardise. The tag set below is drawn from a number of sources as is the order of the tags (which in any case can be changed depending on the stylesheet used).

The order of tags is that of WIPO ST.14 / ISO 690 layout.


Note: it is NOT expected that the applicant will create the tagged data - it can be generated from a 'pull down' data entry form (eg. in Word) or generated from internal SR databases
<name>WALTON, Herrman</name>
</author>
<book-title>Microwave quantum theory</book-title>
</imprint>
<address>
<text>London</text>
</address>
<name>Sweet and Maxwell</name>
<pubdate>19730000</pubdate>
</imprint>
<location>
<pp>138 to 192</pp>
</location>
<isbn>0-1234-568-9</isbn>
</book>
</nplcit>

-->  
<!ELEMENT book (text | (author* , (book-title+ | conference) , (subtitle? ,  
ino? , issn?)))>

<!--  
Keyword; e.g., from a Thesaurus or class. scheme  
(ST.32:B550)  
-->  
<!ELEMENT keyword (#PCDATA)>  

<!--  
Book number  
-->  
<!ELEMENT bookno (#PCDATA)>  

<!--  
Location within the cited work  
-->  
, line?))>

<!--  
Referenced line within cited work  
-->  
<!ELEMENT line (#PCDATA | linef | linel)*>  

<!--  
Cited document line, last  
-->  
<!ELEMENT linel (#PCDATA)>  

<!--  
Cited document line, first  
-->  
<!ELEMENT linef (#PCDATA)>  

<!--  
Referenced paragraph within cited work  
-->
<!ELEMENT sersect (#PCDATA)>

<!--
Part within a serial
-->
<!ELEMENT serpart (#PCDATA)>

<!--
Abstract number
-->
<!ELEMENT absno (#PCDATA)>

<!--
Series statement
-->
<!ELEMENT series (text | (mst, msn?, issn?))>

<!--
Monographic series number
-->
<!ELEMENT msn (#PCDATA)>

<!--
Monographic series title
-->
<!ELEMENT mst (#PCDATA)>

<!--
Edition statement
(ST.32:B516)
-->
<!ELEMENT edition (#PCDATA)>

<!--
Book subtitle
-->
<!ELEMENT subtitle (#PCDATA)>

<!--
CONFERENCE GROUP / CITATION
There is no standard way of citing conference proceedings; date of the conf. may come before or after place, for example. The tags are specified in a set order where it is not possible or correct then simply use <text>
-->
<!ELEMENT conference (text | (conftitle, confdate?, confno?, confplace?, confsponsor*))>

<!--
-->
-->
<!ELEMENT confdate (date | (sdate, edate))>

<!-- Conference sponsor
-->
<!ELEMENT confsponsor (#PCDATA | addressbook)>

<!-- Conference place
-->
<!ELEMENT confplace (#PCDATA | address)>

<!-- Conference number
-->
<!ELEMENT confno (#PCDATA)>

<!-- Conference title
-->
<!ELEMENT conftitle (#PCDATA)>

<!-- The title of the cited book
-->
<!ELEMENT book-title (#PCDATA)>

<!-- Serial citation data:
This describes the volume or issue as a whole and not a particular article within it.
-->
<!ELEMENT serial (sertitle, alttitle?, subname*, issue?, imprint?, pubdate?,

<!--
-->
<!ELEMENT doi (#PCDATA)>

<!-- Copyright info. Copyright of publisher of serial
-->
<!ELEMENT cpyrt (#PCDATA)>

<!-- Issue number
-->
<!ELEMENT ino (#PCDATA)>

<!--

<!ELEMENT edate (#PCDATA)>

<!--
Start date used in pubdate
-->
<!ELEMENT sdate (#PCDATA)>

<!--
Issue designation; e.g., Annual, 1890-1972
-->
<!ELEMENT issue (#PCDATA)>

<!--
Alternate title for serial; e.g. BMJ = British Medical Journal
-->
<!ELEMENT alttitle (#PCDATA)>

<!--
Serial title
-->
<!ELEMENT sertitle (#PCDATA)>

<!--
Article title
-->
<!ELEMENT atl (#PCDATA)>

<!--
Relevant passage group within patent; most used in search reports
- use text in abstract, description and claims
-->
<!ELEMENT rel-passage (text | (passage+ , (category , rel-claims?)*))>

<!--
Relevant claims
-->
<!ELEMENT rel-claims (#PCDATA)>

<!--
Category
(ST.32:B563)
-->
<!ELEMENT category (#PCDATA)>

<!--
Passage within the cited patent literature
-->
<!ELEMENT passage (#PCDATA)>

<!--
Declaration information including combined declaration
and designated country

<!ELEMENT declaration-info (declaration1?, declaration2?, declaration3?, declaration4?, declaration5?, combined-declaration?, designated-states-as-dec*)>

<!--
    Designated states for which indications are made: all except United States
-->
<!ELEMENT all-designations-except-us EMPTY>

<!--
    All designations permitted by the Treaty are made (Rule 4.9(b))
-->
<!ELEMENT all-designations EMPTY>

<!--
    PCT/RO/101 Box No.VII :International Searching Authority
-->
<!ELEMENT search-authority (isa , earlier-search-request?, earlier-search-authorization*)>

<!--
    Request to use results of earlier search; reference to that search
-->
<!ELEMENT earlier-search-request (document-id , substantially-equivalent? , earlier-search-documents?)>

<!--
    International Search Authority; international search to be carried out by
-->
<!ELEMENT isa (country)>

<!--
    information of priority claims and priority document.
-->
<!ELEMENT wo-priority-info (priority-claim , priority-claim-ib-info? , incorporation-by-reference?)>

<!--
    where an element of the international application referred to in Article 11(1)(iii)(d) or (e) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more elements referred to in Article 11(1)(iii) were first received by the receiving Office, that element or part is, subject to confirmation under Rule 20.6, incorporated by reference in this international application for the purposes of Rule 20.6
-->
<!ELEMENT incorporation-by-reference EMPTY>
<!-- The priority document is attached to the application
-->
<!ELEMENT priority-doc-attached EMPTY>

<!-- The receiving office is requested to prepare and transmit to the IB a certified copy of the earlier application
-->
<!ELEMENT priority-doc-requested EMPTY>

<!-- This element is made when the receiving Office is requested to restore the right of priority.
-->
<!ELEMENT restore-rights EMPTY>

<!-- Where the earlier application is an ARIPO application, indicate at least one country party to the PARIS convention for the protection of industrial property or one member of the WTO for which that earlier application was filed.
-->
<!ELEMENT office-of-filing ((region , country?) | country)>

<!-- Additional priority claim information by IB
-->
<!ELEMENT priority-claim-ib-info (received-at-ib? , pct-rule17=1? , withdrawn? , considered-not-made?)>

<!-- PCT/RO/101 Box No.V Designation Of States (PCT Rule 4.9)
-->
<!ELEMENT designation-of-states (designation-pct , (precautionary-designation-statement? , exclusion-from-designation?))>

<!-- Rule 4.9(b),(c)
In addition to the designations made above [i.e, designation-of states], the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box [i.e., exclusion-from-designation] as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.
-->
<!ELEMENT precautionary-designation-statement (#PCDATA)>

<!-- State(s) excluded from precautionary designations under Rule 4.9(b)
-->
<!ELEMENT exclusion-from-designation (regional* , national?)>
<!--
The Contracting States in which protection is desired
(Rules 4.1(a)(iv) and 4.9(a))
-->
<!ELEMENT designation-pct (regional* , national? , new-designation-country*)>

<!--
New PCT member country states (e.g., not yet published in WIPO ST.3, joined after
PCT electronic filing software published)
-->
<!ELEMENT new-designation-country (#PCDATA)>

<!--
The States for which protection or exclusion (depending upon context) is desired
-->
<!ELEMENT national (country , protection-request*)+>

<!--
Regional (as opposed to national) protection being sought
-->
<!ELEMENT regional (region , (country , protection-request*)+ , any-other-state?)>

<!--
Any other state in which protection is being sought
-->
<!ELEMENT any-other-state EMPTY>

<!--
Kind of protection; e.g., patent, utility model
-->
<!ELEMENT kind-of-protection (#PCDATA)>

<!--
PCT/RO/101 Box No.II, III and IV APPLICANTS, FURTHER APPLICANT(S)
AND/OR (FURTHER) INVENTOR(S)AGENT OR COMMON REPRESENTATIVE;
OR ADDRESS FOR CORRESPONDENCE (PCT Rule 4.5, 4.6, 4.7, 4.8)
(INID 70, ST.32:B700)
-->
<!ELEMENT parties (applicants , inventors? , correspondence-address? , agents?)>

<!--
Information regarding Agents or common representatives
-->
<!ELEMENT agents (customer-number | agent*)>

<!--
Address used for general correspondence
-->
<!ELEMENT correspondence-address (customer-number | addressbook+)>
Customer number for agents by office

-->  
<!ELEMENT customer-number (#PCDATA)>

-->  
<!ELEMENT inventors (inventor | deceased-inventor)+>

-->  
<!ELEMENT applicants (applicant+)>

-->  
<!ELEMENT b (#PCDATA | i | u | o | smallcaps | sup | sub)*>

-->  
<!ELEMENT i (#PCDATA | b | u | o | smallcaps | sup | sub)*>

-->  
<!ELEMENT smallcaps (#PCDATA | b | u | i | o)*>

-->  
<!ELEMENT sub (#PCDATA | b | u | i | o | sup2 | sub2)*>

-->  
<!ELEMENT sup (#PCDATA | b | u | i | o | sup2 | sub2)*>

-->  
<!ELEMENT sub2 (#PCDATA | b | u | i | o)*>

-->  
<!ELEMENT sup (#PCDATA | b | u | i | o | sup2 | sub2)*>
<!ELEMENT sup2 (#PCDATA | b | u | i | o)>

<!--
Applicant's or agent's file reference, if desired, 12 characters maximum
-->  
<!ELEMENT file-reference-id (#PCDATA)>  
<!--
information of changing of bibliographic data
-->  
<!ELEMENT wo-bib-change-info (bib-change-request)>  
<!--
Bibliographic changing information
address, name,nationality, residence
-->  
<!ELEMENT bib-change-request (received-at-ib, previous-record)>  
<!--
Previous record of bibliographic in application before changing
-->  
<!ELEMENT previous-record (applicant | inventor | deceased-inventor | agent)>  
<!--
Rule 4.6(c):
"The request may, for different designated states, indicate different persons as inventors where, in this respect, the requirements of the national laws of the designated States are not the same. In such a case, the request shall contain a separate statement for each designated State or group of States in which a particular person, or the same person, is to be considered the inventor, or in which particular persons, or the same persons, are to be considered the inventors."
-->  
<!ELEMENT designated-states-as-inventor (country*, (region, country+)*)>  
<!--
Indication of specific Contracting States in or for which the applicant is seeking protection for his invention
(Rule 4.9(a))
-->  
<!ELEMENT designated-states (country*, (region, country+)*)>  
<!--
Country of residence
-->  
<!ELEMENT residence (country)>  
<!--
Country of nationality
-->  
<!ELEMENT nationality (country)>  
<!--
Universal Resource Locator; e.g. www.wipo.int
<!ELEMENT url (#PCDATA)>

<!-- Fax number

<!ELEMENT fax (#PCDATA)>

<!-- Telephone number

<!ELEMENT phone (#PCDATA)>

<!-- Electronic address use for other than email

<!ELEMENT ead (#PCDATA)>

<!-- Address components:
Address formats differ from country to country
If no structure possible use text

<!ELEMENT address (%address_group;)

<!-- If no structure is possible, enter text (without markup)

<!ELEMENT text (#PCDATA)>

<!-- Postal code or zip code

<!ELEMENT postcode (#PCDATA)>

<!-- Region of country; e.g., state, province, etc.

<!ELEMENT state (#PCDATA)>

<!-- County, parish, department, etc (mainly UK, USA)

<!ELEMENT county (#PCDATA)>

<!-- City or town name

<!ELEMENT city (#PCDATA)>
<!--
  Street may contain house number or name
-->
<!ELEMENT street (#PCDATA)>

<!--
  Building information in address; e.g., Hoffman building
-->
<!ELEMENT building (#PCDATA)>

<!--
  Address floor; e.g., 10th
-->
<!ELEMENT address-floor (#PCDATA)>

<!--
  Address room; e.g., Room 55B
-->
<!ELEMENT room (#PCDATA)>

<!--
  Post Office Box number
-->
<!ELEMENT pobox (#PCDATA)>

<!--
  Organizational mail code
-->
<!ELEMENT mailcode (#PCDATA)>

<!--
  Address, fifth line
-->
<!ELEMENT address-5 (#PCDATA)>

<!--
  Address, fourth line
-->
<!ELEMENT address-4 (#PCDATA)>

<!--
  Address, third line
-->
<!ELEMENT address-3 (#PCDATA)>

<!--
  Address, second line
-->
<!ELEMENT address-2 (#PCDATA)>
<!-- Address, first line
-->
<!ELEMENT address-1 (#PCDATA)>

<!-- Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!-- Synonym
-->
<!ELEMENT synonym (#PCDATA)>

<!-- Department, division, section, etc. name
-->
<!ELEMENT department (#PCDATA)>

<!-- Organisation name or company name
-->
<!ELEMENT orgname (#PCDATA)>

<!-- Role; e.g., President, Chairman, etc.
-->
<!ELEMENT role (#PCDATA)>

<!-- SDOBI : Individual id
-->
<!ELEMENT iid (#PCDATA)>

<!-- Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->
<!ELEMENT suffix (#PCDATA)>

<!-- Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!-- First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>
<!--
  Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
  Title: e.g., Mr., Mrs., Dr. etc
-->
<!ELEMENT prefix (#PCDATA)>

<!--
  WIPO amendment information:
  art 19 amendment, date of receipt at IB
-->
<!ELEMENT wo-amendment-info (received-at-ib)>

<!--
  WIPO application information:
  received-at-ib : date of receipt of record copy by International Bureau
-->
<!ELEMENT wo-application-info (date-of-earliest-priority? , received-at-ib? , considered-not-made? , withdrawn?)>

<!--
  Where the international application claims the priority of several earlier applications, the filing date of the earliest application whose priority is claimed must be indicated as the priority date.
-->
<!ELEMENT date-of-earliest-priority (date)>

<!--
  Demand withdrawn by a notice from applicant
  (PCT Article 37; PCT Rule 90bis.4)
-->
<!ELEMENT withdrawn (date)>

<!--
  Declaration by the receiving office or IB that priority claim is considered, for the purposes of the procedure under the Treaty not to have been made
-->
<!ELEMENT considered-not-made (date , made-by?)>

<!ELEMENT made-by (country* , (region , country+)*)>

<!--
  The region for which protection or exclusion (depending upon context) is desired.
-->
<!ELEMENT region (country)>

<!--
  WIPO publication information:
-->

<!ELEMENT wo-publication-info (wo-correction*, wo-bio-material-after-pub?, isr-status*, pct-pub-info*, wo-pubnum?)>

<!ELEMENT wo-pubnum (#PCDATA)>

<!-- PCT published pamphlet information -->

<!ELEMENT pct-pub-info (wo-published-text, pct-art64*)>

<!-- published text in PCT pamphlet front page. -->

<!ELEMENT wo-published-text (wo-text-letter-code*)>

<!ELEMENT wo-text-letter-code (#PCDATA)>

<!-- PCT Article 64: Reservations -->

<!ELEMENT pct-art64 (date?, document-id?)>

<!-- a reference to deposited biological material that was received by IB after completion of technical preparations for international publication -->

<!ELEMENT wo-bio-material-after-pub (received-at-ib, relevant-date?)>

<!-- Relevant date -->

<!ELEMENT relevant-date (date)>

<!-- International Bureau receipt date -->

<!ELEMENT received-at-ib (date)>

<!-- WO Patent correction information. -->

<!ELEMENT wo-correction (document-id?, type-of-correction?, wo-repub-code, wo-pubnum?, wo-dtext*)>

<!-- Descriptive text -->

<!ELEMENT dtext (#PCDATA)>

<!-- br - break, line break within a paragraph -->

-->
<!ELEMENT br EMPTY>
<!ELEMENT wo-repub-code (#PCDATA)>

<!--
Type of correction.
(ST.32:B667)
-->
<!ELEMENT type-of-correction (#PCDATA)>

<!--
Date: components of a date. Format: YYYYYMDD
-->
<!ELEMENT date (#PCDATA)>

<!--
Document kind code; e.g., A1
(INID 13, ST.32:B130)
-->
<!ELEMENT kind (#PCDATA)>

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

<!--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO
-->
<!ELEMENT country (#PCDATA)>

<!--
Authorization to RO to transmit earlier search
-->
<!ELEMENT earlier-search-authorization (document-id )>
<!ATTLIST earlier-search-authorization request-ro-not-transmit
yes | no ) #IMPLIED
applicant-authorizes-ro-transmit
(yes | no ) #IMPLIED >

5.7 IB publication

<?xml version='1.0' encoding='UTF-8' ?>

<!ENTITY % name_group "((name | (prefix?, (last-name | orgname), first-name?,
middle-name?, suffix?, iid?, role?, orgname?, department?, synonym*)},
registered-number?)">

<!ENTITY % address_group "((address-1?, address-2?, address-3?, address-4?,
address-5?, mailcode?, pobox?, room?, address-floor?, building?, street?,
city?, county?, state?, postcode?, country) | text)"
Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.10 to v1.11
..added an attribute "id" to signatory, lack-of-novelty and us-rights
..added an element "earlier-search-authorization" to search-authority
SY: 01/07/12 incorporated changes from PFC:
..changed version number from v1.9 to v1.10
..added attribute 'priority-doc-access-code' to priority-doc-from-library
(PFC12/001)
SY: 01/04/10 incorporated changes from PFC
..changed version number from v1.8 to v1.9
..added element 'priority-doc-from-library' to priority-claim (PFC09/005)
..changed value of attribute lang of amend-statement from '#REQUIRED' to
"#IMPLIED" (PFC09/006)
..changed value of attribute status of amend-statement from '#REQUIRED' to
"#IMPLIED" (PFC09/006)
MO: 01/07/09 incorporated changes from PFC
..changed version number from v1.7 to v1.8
..added attribute 'electronic-format-type' to sequence-list (PFC09/001)
..added attribute 'part-of-application' to sequence-list (PFC09/001)
MO: 01/09/09 incorporated changes from PFC
..changed version number from v1.6 to v1.7
..added element 'summary-of-invention' to description (PFC08/008)
..added element 'description-of-embodiments' to description (PFC08/008)
..added element 'reference-signs-list' to description (PFC08/008)
..added element 'reference-to-deposited-biological-material' to description
(PFC08/008)
..added element 'citation-list' to description (PFC08/008)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.5 to v1.6
..added element 'substantially-equivalent' to earlier-search-request (PFC08/003)
..added element 'earlier-search-document' to earlier-search-request (PFC08/003)
..added attribute 'email-purpose' to email (PFC08/006)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.4 to v1.5
..implementation of PFC06/001
..changed element '(all-designations | all-designations-except-us | designated-status)
'to '(all-designations | all-designations-except-us | designated-status)?'
in identity-of-inventor (PFC06/002)
..changed element '(all-designations | all-designations-except-us | designated-status)
'to '(all-designations | all-designations-except-us | designated-status)?'
in matter (PFC06/002)
..changed element '(all-designations | designated-status)
'to '(all-designations | designated-status)?' in lack-of-novelty (PFC06/002)
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..changed version number from v1.2 to v1.3
..changed version FROM 1.3 TO 1.4

HT: 20/07/04 incorporated changes from PFCs:

..removed attribute 'lang', 'status', 'dtd
..removed attribute 'country' from amended
..added value 'other
..added attribute 'ocr' to doc
..added attribute 'chem
..added attribute 'priority
..added attribute 'id' to addressbook, application
..added element 'wo
..added elemen
..changed value name of attribute listing
..changed value of attribute xml:space of pre from '#FIXED 'preserve'' to
..changed value of attribute num of patci
..changed value of attribute idref of crossref from 'CDATA' to 'IDREF'
..changed attribute he, wi of doc
..changed element name from 'correction' to 'wo
..changed element name from 'amended
doc
..changed element sequence
..changed element rel
correction from '(#PCDATA)' to '(#PCDATA | b | i | u | sup | sub)*'
..changed element nplcit from '(text | (article , book , online , othercit)*' to
..changed element correction from (docu
text? , (document
..changed element wo-pubnum
..changed element wo-correction
..added element wo-pubnum
..added element wo-correction
..added element wo-published-application
..added element wo-ocr-text
..added element wo-xml-application

HT: 14/12/04 incorporated changes from PFCs:
..changed element correction from (document-id? , type-of-correction? , wo-repub-code , dtex
..changed element nplcit from '{(text | (article , book , online , othercit)*} to
..changed element othercit from '{(#PCDATA) to 'شهاد
..changed element rel-passage from (text | (passage+ , category? , rel-claims?)) to (text | (passage+ , category*, rel-claims*)+)
..changed element sequence-list-doc from (docpage+ | sequence-list) to (#PCDATA | doc-page | sequence-list)*
..changed element name from 'amended-claims' to wo-amended-claims''
..changed element name from 'correction' to wo-correction'
..changed attribute of correction from '#REQUIRED' to '#IMPLIED'
..changed attribute he, wi of doc-page, img from 'NM_TOKEN' to 'CDATA'
..changed value of attribute tsize of d1 from 'NM_TOKEN' to 'CDATA'
..changed value of attribute num of patcit, nplcit from '#REQUIRED' to 'IMPLIED'
..changed value of attribute xml:space of pre from '#FIXED 'preserve'' to
..changed value of name of attribute listing-type of pre from 'software-code' to
..added element 'classifications-ipcr' to wo-bibliographic-data
..added element 'pre' to claim-text, dd, li
..added element 'wo-correction' to wo-publication-info
..added attribute 'id' to addressbook, application-reference, classification-ipc, priority-claim, publication-reference
..added attribute 'chem-type' to chem
..added attribute 'claim-type' to claim, claims
..added attribute 'class-type' to class
..added attribute 'ocr' to doc-page
..added attribute 'sequence', 'id' to further-classification
..added value 'other-subname-type' to attribute 'subname-type' of subname
..removed attribute 'country' from amended-claim
..removed attribute 'language', 'status', 'dtd-version' from chem

HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..changed element article, online, serial from 'subname?' to 'subname*'
..changed element chemistry from '(img)' to '(img|(chem,img?))'
..changed element maths from '(img|math)' to '(img|(math,img?))'
..changed element rel-passage from 'category?, rel-claims?' to 'category*, rel-claims*'
..added element 'figref' to claim-text, dd, li
..added element 'b', 'i', 'u', 'sup', 'sub', 'smallcaps' to crossref
..added attribute 'num' to li
..added attribute 'subname-type' to subname
..added value 'chem', 'table', 'math', 'program-listing', 'flowchart' to attribute 'img-content' of img
..added value 'national-office', 'regional-office' to attribute produced-by of root element
..removed attribute 'class-type' from nplcit

HT: 16/12/03 incorporated changes from PFCs:
..changed version number from v1.0 to v1.2
..changed table-external from '#PCDATA' to 'EMPTY'
..changed element designation-of-states from '(precautionary-designation-statement, exclusion-from-designation?)?)' to '(precautionary-designation-statement?, exclusion-from-designation?)?)'
..added element 'pre' to p content model
..added element 'sup2' and 'sub2' to sup and sub
..added attribute 'lang' and 'class-type' to nplcit
..added attribute 'external-type' to table-external
..added attribute 'figure-labels' to figure

June 2003
..released version number as v1.0

************************************************************************
********************************************************************
*  XML VERSION FOR FILING OF PCT APPLICATIONS:
*  description, claims, abstract, drawings -
*  it may be utilised by other offices as required -
*  but it is NOT recommended to add or change element and
*  attribute names
*  see: http://pcteasy.wipo.int/efiling_standards/EFPage.htm
*  It is intended for a) Online Filing b) (later) publication, etc
*  In developing this DTD we have taken into consideration:
*  - earlier versions of this dtd
*  - ST32 version 1
*  - Variations of ST.32 in: WIPO, USPTO, MIMOSA, etc
*  - USPTO EFS dtd
*  - Trilateral Common data dictionary
*  - ISO 12083 dtdds, etc
********************************************************************
************************************************************************

* SECTION I - DECLARATION, ENT. REFS, ISO sets, etc

-->
<!-- import character entity set. Download from:
http://pcteasy.wipo.int/efiling_standards/schemaDocs/wipo.ent

Note that nsgmls-based parsers (SP, Near and Far Designer, etc.)
may not be able to process this file for reasons described below
in MathML comments.
-->
<!--ENTITY % wipo PUBLIC "-//WIPO//ENTITIES WIPO 1.0//EN" "wipo.ent">
%wipo;-->

<-- INCLUDE COMPONENT DTDS (MATHML, OASIS EXCHANGE TABLE MODEL)-->

<-- DTD MathML2: maintained by W3C. Download from:
http://www.w3.org/TR/MathML2/DTD-MathML-20010221.zip-->
If using nsgmls-based parser (SP, Near and Far Designer, etc.) uncomment 'mathml-charent-module' switch below or replace the referenced MathML2 DTD with the version downloadable from: http://www.w3.org/Math/DTD/dtd-sp.zip

This notice copied from: http://www.w3.org/Math/DTD/

"DTD for nsgmls
Some systems (including the popular nsgmls parser) may not be able to process files using 'plane 1' characters which have Unicode numbers higher than #xFFFF. The versions of the DTD provided here incorporate the modifications mentioned above, but the high characters are replaced by the equivalent mchar construct <mchar name="..." /> this allows the DTD to be read and for MathML files to be validated using such systems."

-->
<!ENTITY % mathml-charent.module "IGNORE" -->
<!ENTITY % MATHML.prefixed "IGNORE">

<!ENTITY % MATHML.xmlns "">

<!-- import MathML2 dtd -->
<!ENTITY % mathml2 PUBLIC "-//W3C//DTD MathML 2.0//EN" "mathml2.dtd">
%mathml2;

<!-- DTD OASIS Open XML Exchange Table Model.
Maintained by OASIS; download from:
http://www.oasis-open.org/specs/soextblx.dtd
Note that the FPI in soextblx.dtd refers to itself as 'calstblx'.
That convention has been followed here. -->

<!-- create content for title element in table -->
<!ENTITY % title "<!ELEMENT title (#PCDATA | b | i | u | sup | sub | smallcaps)* > " %title;">

<!-- override OASIS Exchange <entry> model -->
<!ENTITY % tbl.entry.mdl "(#PCDATA | b | i | u | sup | sub | smallcaps | br | patcit | nplcit | bio-deposit | crossref | img | dl | ul | ol | chemistry | maths)*">

<!-- import OASIS Exchange model -->
<!ENTITY % calstblx PUBLIC "-//OASIS//DTD XML Exchange Table Model 19990315//EN" "soextblx.dtd">
%calstblx;

******************************************************************************
* SECTION II - DTD
******************************************************************************

Attributes for demand
id = unique id for this application - could be file name
country = st.3 code for application
dtd-version = dtd version number
lang = language of application - use ISO639 language code
status = status of the application; values: new = new application
file = filename of the whole application
date-produced = YYYYMMDD e.g., 20011230 if desired, 12 characters maximum
ipea = IPEA office name, country code ST.3
produced-by = creator of this document


<!ATTLIST wo-published-application lang CDATA #REQUIRED
Later election information

-->  

<!ELEMENT later-election (received-at-ib)>  

<!ATTLIST later-election expiration-19months (before | after ) #REQUIRED >

<!--  
PCT/IPEA/401  
The date of receipt of the demand is AFTER the expiration of 19 months from the priority date  

-->  

<!ELEMENT receipt-after-19month EMPTY>  

<!ATTLIST receipt-after-19month informed (yes | no ) #IMPLIED >

<!--  
IPER status information, date of receipt at IB, information of new IPER or corrected IPER.  

-->  

<!ELEMENT iper-status (received-at-ib?)>  

<!ATTLIST iper-status iper-status (new | corrected ) #REQUIRED >

<!--  
A signature represented by electronic means  

-->
<!ELEMENT electronic-signature (basic-signature | enhanced-signature)>
<!ATTLIST electronic-signature date CDATA #REQUIRED
place-signed CDATA #IMPLIED >
<!--
A TIFF image of a signature
--><!ELEMENT fax-image EMPTY>
<!ATTLIST fax-image file CDATA #REQUIRED >
<!ELEMENT classifications-ipcr (classification-ipcr+)>  
<!ATTLIST classifications-ipcr id ID #IMPLIED >
<!--
International Patent Classification (IPC) data;
--><!ELEMENT classification-ipcr (ipc-version-indicator , classification-level?,
section , class , subclass , main-group?, subgroup? , symbol-position?,
classification-value? , action-date? , generating-office? , classification-status?,
classification-data-source?) | text)>  
<!ATTLIST classification-ipcr id ID #IMPLIED
sequence CDATA #IMPLIED >
<!--
International Patent Classification (IPC) data;
(INID 51, ST.32:B510)
--><!ELEMENT classification-ipcr (edition , main-classification , further-classification* ,
(additional-info | linked-indexing-code-group | unlinked-indexing-code)* , text?)>  
<!ATTLIST classification-ipcr id ID #IMPLIED >
<!--
Further/secondary classification
(ST.32:B512/B522)
--><!ELEMENT further-classification (#PCDATA)>  
<!ATTLIST further-classification id ID #IMPLIED
sequence CDATA #IMPLIED >
<!--
Designated states for declarations
--><!ELEMENT designated-states-as-dec (all-designations | all-designations-except-us |
(regional* , national?)))>  
<!ATTLIST designated-states-as-dec dec-type (1 | 2 | 3 | 4 | 5 | combined ) #REQUIRED >
<!--
Information of combined declaration(declaration 1 and 2)
--><!ELEMENT combined-declaration EMPTY>  
<!ATTLIST combined-declaration quantity CDATA #REQUIRED >
<!--
Declaration as to non-prejudicial disclosures or exceptions to lack of novelty
-->
(Rules 4.17(v) and 51bis.1(a)(v))

-->  
<!ELEMENT declaration5 EMPTY>
<!ATTLIST declaration5  quantity CDATA  #REQUIRED > 

<!-- Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America

-->  
<!ELEMENT declaration4 EMPTY>
<!ATTLIST declaration4  quantity CDATA  #REQUIRED > 

<!-- Declaration as applicant's entitlement, as at the international filing date, to claim the priority of the earlier application, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii))

-->  
<!ELEMENT declaration3 EMPTY>
<!ATTLIST declaration3  quantity CDATA  #REQUIRED > 

<!-- Declaration as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate

-->  
<!ELEMENT declaration2 EMPTY>
<!ATTLIST declaration2  quantity CDATA  #REQUIRED > 

<!-- Declaration as to the identity of the inventor (Rules 4.17(i) and 51bis.1(a)(i))

-->  
<!ELEMENT declaration1 EMPTY>
<!ATTLIST declaration1  quantity CDATA  #REQUIRED > 

<!--
<!ELEMENT earlier-search-documents EMPTY>
<!ATTLIST earlier-search-documents  results-of-earlier-search (yes | no )  #IMPLIED 

earlier-application (yes | no )  #IMPLIED 

translation-of-earlier-application (yes | no )  #IMPLIED 

translation-of-results-of-earlier-search (yes | no )  #IMPLIED 

documents-cited-in-earlier-search-results (yes | no )  #IMPLIED 

no )  #IMPLIED 

earlier-application 

(yes | no )  #IMPLIED 

translation-of-earlier-application 

(yes | no )  #IMPLIED 

translation-of-results-of-earlier-search 

(yes | no )  #IMPLIED 

documents-cited-in-earlier-search-results 

(yes | no )  #IMPLIED 

no )  #IMPLIED 

earlier-application 

(yes | no )  #IMPLIED 

translation-of-earlier-application 

(yes | no )  #IMPLIED 

translation-of-results-of-earlier-search 

(yes | no )  #IMPLIED 

earlier-application 

(yes | no )  #IMPLIED 

translation-of-earlier-application 

(yes | no )  #IMPLIED 

earlier-application 

(yes | no )  #IMPLIED 

translation-of-earlier-application 

(yes | no )  #IMPLIED 

translation-of-results-of-earlier-search 

(yes | no )  #IMPLIED 
	documents-cited-in-earlier-search-results 

(yes | no )  #IMPLIED 

earlier-application 

(yes | no )  #IMPLIED 

translation-of-earlier-application 

(yes | no )  #IMPLIED 

translation-of-results-of-earlier-search
available-at-isa

no ) #IMPLIED

request-ro-to-transmit-to-isa

no ) #IMPLIED >

<!--
Priority claim (PCT Rule 4.10)
(INID 32/33/34, ST.32:B320/B330/B340)
-->
<!ELEMENT priority-claim (country , doc-number? , date , office-of-filing? ,
(priority-doc-requested | priority-doc-attached | priority-doc-from-library)? ,
restore-rights?)>
<!ATTLIST priority-claim id ID #IMPLIED
sequence CDATA #REQUIRED
kind (national | regional | international ) #REQUIRED >

<!--
library-identifier attribute intended as an identifying code for the library
containing the document ? to be used where offices support the access of documents
from many such libraries

action-by attribute would indicate the office requested to retrieve the document
(for PCT this can be the RO or IB, default IB)

priority-doc-access-code indicates, when present, the access code that the Office
(or applicable Offices) should use to obtain the priority document from the
specified digital library
-->
<!ELEMENT priority-doc-from-library EMPTY>
<!ATTLIST priority-doc-from-library library-identifier CDATA #IMPLIED
action-by CDATA #IMPLIED
priority-doc-access-code CDATA #IMPLIED >

<!--
PCT Rule 17.1: Obligation to Submit Copy of Earlier
National or International Application
-->
<!ELEMENT pct-rule17-1 EMPTY>
<!ATTLIST pct-rule17-1 compliance (yes | no ) #REQUIRED >

<!--
Protection request for the designated office.
-->
<!ELEMENT protection-request (kind-of-protection , document-id?)>
<!ATTLIST protection-request subset (yes | no ) #IMPLIED >

<!--
Agent or common representative (Rules 90.1, 90.2)
-->
<!ELEMENT agent (addressbook+)>
<!ATTLIST agent sequence CDATA #REQUIRED
rep-type (agent | attorney | common-representative ) #REQUIRED >
Deceased inventor name

-->  
<!ELEMENT deceased-inventor (%name_group;)>  
<!ATTLIST deceased-inventor  sequence CDATA  #IMPLIED  
lang CDATA  #IMPLIED >

-->  
The individual or entity responsible for creating the matter that protection is sought for.  
(ST.32:B721)

-->  
<!ELEMENT inventor (addressbook+, designated-states?)>  
<!ATTLIST inventor  sequence    CDATA  #REQUIRED  
designation (all | all-except-us | us-only | as-indicated )  #IMPLIED >

-->  
Applicant information:  
(INID 71, ST.32:B710)  
attributes for applicant  
  sequence : sequence number of each applicant  
    e.g., sequence="1"  
  app-type : applicant type  
    app-type="applicant" : the applicant is only applicant  
    app-type="applicant-inventor" : the applicant is also inventor  
  designation: This person is applicant for the purpose of:  
    designation="all" : all designated states  
    designation="all-except-us" : all designated states except US  
    designation="us-only" : US only  
    designation="as-indicated" : the states indicated in  
      designated-states element  
      under applicant element

-->  
<!ELEMENT applicant (addressbook+, nationality, residence, us-rights*, 
  designated-states?, designated-states-as-inventor?)>  
<!ATTLIST applicant  sequence CDATA  #REQUIRED  
app-type (applicant | applicant-inventor )  
#REQUIRED  
designation (all | all-except-us | us-only | as-indicated )  #REQUIRED >

-->  
This person is successor to the rights of an inventor who is deceased, insane, or  
legally incapacitated, for the purposes of the designation of the United States of America

-->  
<!ELEMENT us-rights (#PCDATA)>  
<!ATTLIST us-rights  to-dead-inventor CDATA  #REQUIRED  
kind (heir | heiress | executor | executrix | estate | legal-representative | administrator | administratrix | legal-representatives | heirs | executors | legal-heirs )  #REQUIRED  
id ID  #IMPLIED >
<!--
ISR status information, date of receipt at IB,
information of new ISR or corrected ISR.
-->  
<!ELEMENT isr-status (received-at-ib?)>  
<!ATTLIST isr-status isr-status (new | corrected) #REQUIRED >  
<!--
Publication reference information: publication number, date, etc
(INID 11, ST.32:B110)
-->  
<!ELEMENT publication-reference (document-id)>  
<!ATTLIST publication-reference id ID #IMPLIED >  
<!--
IB XML application
-->  
<!ELEMENT wo-xml-application (description, claims, abstract*, wo-amended-claims?, amend-statement?, drawings?)>  
<!ATTLIST wo-xml-application lang CDATA #REQUIRED status CDATA #IMPLIED >  
<!--
Text data made by the OCR system
-->  
<!ELEMENT wo-ocr-text (wo-dtext)>  
<!ATTLIST wo-ocr-text file CDATA #IMPLIED >  
<!--
IB original dtext, br tag is available.
-->  
<!ELEMENT wo-dtext (#PCDATA | br)*>  
<!ATTLIST wo-dtext lang CDATA #IMPLIED >  
<!--
Biological material component in PCT publication
-->  
<!ATTLIST biological-material-doc id ID #IMPLIED lang CDATA #IMPLIED status CDATA #IMPLIED >  
<!--
Declaration as to non-prejudicial disclosures or exceptions to lack of novelty
(PCT Rules 4.17(v) and 51bis.1(a)(v))
-->  
<!ELEMENT lack-of-novelty (doc-page+ | (application-reference?, %name_group; , ((date | address | title-of-disclosure | method-of-disclosure | dtext)+ , (all-designations | designated-states))))>  
<!ATTLIST lack-of-novelty sequence CDATA #REQUIRED lang CDATA #IMPLIED id ID #IMPLIED >  
<!--
Application reference information: application number, country
(INID 21, ST.32:B210)

-->
<!ELEMENT application-reference (document-id)>
<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED>

<!--
Priority claim considered not made (Rule 26bis2(b))
-->
<!ELEMENT priority-claim-considered-not-made (doc-page+ | priority-claim-considered-not-made-doc)>
<!ATTLIST priority-claim-considered-not-made lang CDATA #IMPLIED
id ID #IMPLIED
status CDATA #IMPLIED>

<!--
PCT Rule91.1(f): "Any authority which authorizes or refuses any rectification shall promptly notify the applicant of the authorization or refusal and, in the case of refusal, of the reasons therefor."
-->
<!ELEMENT pct-rule91-1f (doc-page+ | pct-rule91-1f-doc)>
<!ATTLIST pct-rule91-1f lang CDATA #IMPLIED
id ID #IMPLIED
status CDATA #IMPLIED>

<!--
international search report
-->
<!ELEMENT wo-search-report (doc-page+ | search-report)>
<!ATTLIST wo-search-report lang CDATA #IMPLIED
id ID #IMPLIED
status CDATA #IMPLIED>

<!--
Search report
-->
<!ELEMENT search-report EMPTY>
<!ATTLIST search-report id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic | external-electronic | paper ) #IMPLIED
status CDATA #IMPLIED>

<!--
PCT Article 17.2(a):
"If the International Searching Authority considers
(i) that the international application relates to a subject matter which the International Searching Authority is not required, under the Regulations, to search, and in the particular case decides not to search, or
(ii) that the description, claims, or the drawings, fail to comply with the prescribed requirements to such an extent that a meaningful search could not be carried out, the said Authority shall so declare and shall notify the applicant and the International Bureau that no international search report will be established."
-->


SEQUENCE LISTING

According to WIPO ST.25: STANDARD FOR THE PRESENTATION OF NUCLEOTIDE AND AMINO ACID SEQUENCE LISTINGS IN PATENT APPLICATIONS:

see http://www.wipo.int/scit/en/index.html

"The sequence listing as defined in paragraph 2(i) shall, where it is filed together with the application, be placed at the end of the description part of the application. This part shall be entitled Sequence Listing, begin on a new page and preferably have independent page numbering.

The sequence listing forms an integral part of the description; it is therefore unnecessary, subject to paragraph 36, to describe the sequences elsewhere in the description." Therefore we create here a separate sub-document for sequence listings, it should follow any drawings or the claims.

It should follow the format of Annex C/ST.25 and be an external file

Amended content of original application

Replace referenced object with new content;

@e.g.,

<replace-object id="p02">
  <p id="p01a" num="001a">(new content)</p>
</replace-object>

Replace referenced object with new content;
<!--
Insert new content after referenced object;
e.g.,
<insert-after-object id="p02">
  <p id="p03" num="003">(new content)</p>
</insert-after-object>
-->
<!ELEMENT insert-after-object (%amend_content;)

<!ATTLIST insert-after-object id  ID  #IMPLIED
  num    CDATA  #IMPLIED
  location CDATA  #IMPLIED >

<!--
Insert new content before referenced object;
e.g.,
<insert-before-object id="p02">
  <p id="p01a" num="001a">(new content)</p>
</insert-before-object>
-->
<!ELEMENT insert-before-object (%amend_content;)

<!ATTLIST insert-before-object id  ID  #IMPLIED
  num    CDATA  #IMPLIED
  location CDATA  #IMPLIED >

<!--
Delete object from document; e.g., paragraph, claim, etc.
e.g.,
<delete-object id='p06'></delete-object>
-->
<!ELEMENT delete-object EMPTY>

<!ATTLIST delete-object id  ID  #IMPLIED
  num    CDATA  #IMPLIED
  location CDATA  #IMPLIED >

<!--
Amend entire sections of the application-body
-->
<!ELEMENT amend-body (doc-page+ | (description? , claims? , abstract? ,
drawings?))>

<!ATTLIST amend-body id  ID  #IMPLIED
  lang    CDATA  #IMPLIED
  status  CDATA  #IMPLIED >

<!--
Drawings: PCT Article 7 / Rule 7
Drawings shall be required when they are necessary for the understanding of the
invention.
Recommended id = 'draw'
-->
<!ELEMENT drawings (doc-page+ | figure+)> 

<!ATTLIST drawings id  ID  #IMPLIED
  lang    CDATA  #IMPLIED
  status  CDATA  #IMPLIED >

<!--
A drawing (figure), necessary for the understanding of the invention
Recommended id = f0001, f0002, etc.
-->
Amendment statement (PCT Article 19.1, PCT Rule 46.4). May consist of a statement or an attached file.

---

Claims: the claims shall define the matter sought for patent and be supported by the description.

Recommended id = 'claim' or 'claim0001' for multiple claims.

---

Defines the matter for which protection is sought. See PCT Rule 6:
6.1.a: 'the number of claims shall be reasonable in consideration of what is being claimed.'
6.1.b: 'if there are several claims, they shall be numbered consecutively in Arabic numerals.'

Recommended id values:
If parent element is claims and there is only ONE set of claims:
id = c0001, c0002, etc.;num = 0001, 0002, etc.
If parent element is amended-claims and there is only ONE set then:
id = ac0001, ac0002, etc.;num = 0001, 0002, etc.
If parent element is claims and there are MULTIPLE sets of claims then:
id = c01.0001, c01.0002, etc.;num = 0001, 0002, etc.
id = c02.0001, c02.0002, etc.;num = 0001, 0002, etc.
If parent element is amended-claims and there are MULTIPLE sets of amended-claims then:
id = ac01.0001, ac01.0002, etc.;num = 0001, 0002, etc.

---

Reference to a claim.

---
Description:
The description must disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Rule 5).

Recommended id = 'desc'

<!ELEMENT description (doc-page+ | (invention-title? , (technical-field | background-art | disclosure | summary-of-invention | description-of-drawings | description-of-embodiments | best-mode | mode-for-invention | industrial-applicability | reference-signs-list | reference-to-deposited-biological-material | sequence-list-text | citation-list | (heading* , p*)+)+)> }

<!ATTLIST description id ID #IMPLIED>

<!ELEMENT citation-list (patent-literature | non-patent-literature | (heading* , p*)+)+>

<!ATTLIST citation-list id ID #IMPLIED>

<!ELEMENT non-patent-literature (heading* , p*)+>

<!ATTLIST non-patent-literature id ID #IMPLIED>

<!ELEMENT patent-literature (heading* , p*)+>

<!ATTLIST patent-literature id ID #IMPLIED>

<!ELEMENT sequence-list-text (heading* , p*)+>

<!ATTLIST sequence-list-text id ID #IMPLIED>

<!ELEMENT reference-to-deposited-biological-material (heading* , p*)+>

<!ATTLIST reference-to-deposited-biological-material id ID #IMPLIED>

<!ELEMENT reference-signs-list (heading* , p*)+>

<!ATTLIST reference-signs-list id ID #IMPLIED>

<!ATTLIST citation-list id ID #IMPLIED>

Sequence listing free text
WIPO ST.25:
"36. Where the sequence listing part of the description contains free text, any such free text shall be repeated in the main part of the description in the language thereof. It is recommended that the free text in the language of the main part of the description be put in a specific section of the description called "Sequence Listing Free Text".

Recommended id = 'seqt'

<!ELEMENT reference-to-deposited-biological-material (heading* , p*)+>

<!ATTLIST reference-to-deposited-biological-material id ID #IMPLIED>

<!ELEMENT reference-signs-list (heading* , p*)+>

<!ATTLIST reference-signs-list id ID #IMPLIED>

<!ATTLIST citation-list id ID #IMPLIED>

Article 33(4): "For purposes of the international preliminary examination, a claimed invention shall be considered industrially applicable if, according to its nature, it can be made or used (in the technological sense) in any kind of industry.

Recommended id = 'inap'
<!ELEMENT industrial-applicability (heading* , p*)+

<!ATTLIST industrial-applicability id ID #IMPLIED >

<!--
PCT Rule 5.1(a)(vi): "The description shall...indicate explicitly, when it is not obvious from the description or nature of the invention, the way in which the invention is capable of exploitation in industry and the way in which it can be made and used..."

Recommended id = 'mode'

-->  

<!ELEMENT mode-for-invention (heading* , p*)+

<!ATTLIST mode-for-invention id ID #IMPLIED
mode-num CDATA #IMPLIED >

<!--
The best mode contemplated by the applicant for carrying out the invention claimed.

Recommended id = 'bmod'

-->  

<!ELEMENT best-mode (heading* , p*)+

<!ATTLIST best-mode id ID #IMPLIED >

<!--

<!ELEMENT description-of-embodiments (embodiments-example | (heading* , p*)*)+

<!ATTLIST description-of-embodiments id ID #IMPLIED >

<!--

<!ELEMENT embodiments-example (heading* , p*)+

<!ATTLIST embodiments-example id ID #IMPLIED
ex-num CDATA #IMPLIED >

<!--
Brief description of the drawings (Rule 5.1(a)(iv)

Recommended id = 'desd'

-->  

<!ELEMENT description-of-drawings (heading* , p*)+

<!ATTLIST description-of-drawings id ID #IMPLIED >

<!--

<!ELEMENT summary-of-invention (tech-problem | tech-solution | advantageous-effects | (heading* , p*)*)+

<!ATTLIST summary-of-invention id ID #IMPLIED >

<!--
Disclosure of the invention with sub-headings:
  technical problem;
  technical solution;
  advantageous effects (of the invention);

Recommended id = 'disc'

-->  

<!ELEMENT disclosure (((tech-problem | tech-solution | advantageous-effects)* | (heading* , p*)*)*)

<!ATTLIST disclosure id ID #IMPLIED >
advantageous effects of the invention (PCT Rule 5.1(a)(iii))

The solution to the problem that the invention purports to solve. (PCT Rule 5.1(a)(iii))

The problem the invention purports to solve (Rule 5.1(a)(iii))

Background art, background of the invention.

PCT Rule 5.1:
(a) The description shall first state the title of the invention as appearing
in the request and shall:
   (i) specify the technical field to which the invention relates

Title of the Invention:
(INID 54, ST.32:B540/B542)

Preferably two to seven words when in English or translated into English and
precise. (Rule 4.3)

Title of the Invention: (INID 54, ST.32:B540/B542)
<!---
Front page of the published application
-->
<!ELEMENT front-page (doc-page+)>  
<!ATTLIST front-page id ID #IMPLIED  
lang CDATA #IMPLIED  
status CDATA #IMPLIED >

<!---
Note: the abstract figure (if there is one) may be the actual image,  
e.g.  
<br>  
Attribute fig-status values: (taken from form PCT/ISA/210)  
1 = as suggested by the applicant  
2 = because the applicant failed to suggest a figure  
3 = because this figure better characterises the invention  
4 = none of the figures  

-->
<!ELEMENT abstract-figure ((fig-number+) | img+)>  
<!ATTLIST abstract-figure id ID #IMPLIED  
fig-status (1 | 2 | 3 | 4) '1'  
orelation CDATA #IMPLIED  
lang CDATA #IMPLIED >

<!---
 ABSTRACT: PCT Rule 8  
(INID 57, ST.32:B570)  
A concise summary of the disclosure, 50-150 words.  
Recommended id = 'abst' or 'abst0001' for multiple abstracts  

-->
<!ELEMENT abstract (doc-page+ | (abst-problem , abst-solution) | p+)>  
<!ATTLIST abstract id ID #IMPLIED  
lang CDATA #IMPLIED  
status CDATA #IMPLIED >

<!---
The solution to the alleged problem that the invention purports to solve.  
Recommended id = 'abss'  

-->
<!ELEMENT abst-solution (p+)>  
<!ATTLIST abst-solution id ID #IMPLIED >

<!---
The alleged problem that the invention purports to solve  
Recommended id = 'absp'  

-->  
<!ELEMENT abst-problem (p+)>  
<!ATTLIST abst-problem id ID #IMPLIED >

<!---
Paragraph
Recommended id = p0001, p0002, etc. num = 0001, 0002, etc.

Note: paragraphs may occur in sections other than the description and at different times e.g. for the abstract, in this case use for example "p0001a"; amended claims: "p0001ac", etc.

References a stand-alone table authored with the table-external DTD.

TABLES
This is image data or coded according to OASIS Exchange model with modified cell 'entry' content.

Recommended id = tabl0001, tabl0002, etc.

Definition list
Recommended id = dlis0001, dlis0002, etc.

Term to be defined
Recommended id = dtrm0001, dtrm0002, etc.

Unordered Lists
list-style may be empty for lists with no bullet or other symbol default
list-style is 'bullets'

Recommended id = ulis0001, ulis0002, etc.

--> 
<!ELEMENT ul (li+)> 
<!ATTLIST ul id ID #IMPLIED 
list-style (bullet | dash | none) 'bullet' 
compact (compact) #IMPLIED > 

<!--
List item
Recommended id = list0001, list0002, etc.
--> 
<!ELEMENT li (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref | figref | img | dl | ul | ol | chemistry | maths)> 
<!ATTLIST li id ID #IMPLIED 
num CDATA #IMPLIED > 

<!--
MATHEMATICS
This is image data or coded according to mathml, version 2
Recommended id = math0001, math0002, etc.
--> 
<!ELEMENT maths (img | (math , img?))> 
<!ATTLIST maths id ID #IMPLIED 
num CDATA #REQUIRED > 

<!--
Chemistry
Chemical formulae, ring structures, Markush structures, etc.
For now treat as image data.
Depending on industry support we may use, e.g., chemML, CML later
Recommended id = chem0001, chem0002, etc
--> 
<!ELEMENT chemistry (img | (chem , img?))> 
<!ATTLIST chemistry id ID #IMPLIED 
num CDATA #REQUIRED > 

<!--
This is a pointer to an external DTD for chemical markup - to be determined.
For EPO probably CML; http://www.xml-cml.org/
--> 
<!ELEMENT chem EMPTY> 
<!ATTLIST chem id ID #IMPLIED 
file CDATA #REQUIRED 
chem-type CDATA #IMPLIED > 

<!--
Ordered Lists:
attribute 'ol-style'
Recommended use:
  1 arabic numbers  1, 2, 3, ...
  a lower alpha a, b, c, ...
  A upper alpha A, B, C, ...

---
---
<!ELEMENT ol (li+)>
<!ATTLIST ol  id       ID     #IMPLIED
compact         (compact ) #IMPLIED
ol-style CDATA  #IMPLIED >
<!--
Image data
Image is used for any kind of image: art work, figures, complex work units
(math, tables, chemistry), etc.
Recommended:
id          = i0001, i0002, etc.
he, wi      = "11" - millimeters - height, width;
file        = file name, location; label - not used;
alt         = alternate text if image not shown;
ing-content = drawing is the default;
ing-format = common will be tiff, st33 and st35 in for backward compatability
and, later, publication.
orientation = orientation of the image (portrait | landscape).
                Default is portrait
inline      = (yes | no).
                Whether the image is to be presented inline or separated by line
                breaks. Default is no.
-->
<!ELEMENT img EMPTY>
<!ATTLIST img  id          ID     #IMPLIED
he          CDATA  #REQUIRED
wi          CDATA  #REQUIRED
file        CDATA  #REQUIRED
alt         CDATA  #IMPLIED
img-content (drawing | photograph | character | dna | undefined | chem | table | math | program-listing | flowchart | graph ) 'drawing'
ing-format   (jpg | tif | st33 | st35 ) #REQUIRED
orientation   (portrait | landscape ) 'portrait'
inline       (yes | no ) 'no' >
<!--
A reference to a figure;
e.g., "...as shown in <figref idref='f0001'>figure<b>1</b></figref>..."
-->
<!ELEMENT figref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST figref idref IDREFS  #IMPLIED
num   CDATA   #IMPLIED >
<!--
Cross reference to any other element with an identifier (id)
-->
Biological deposit citation (US EFS: biological-deposit)  
(INID 83, ST.32:B830)  
According to PCT Rule 13bis, EPC Rule 28  
This covers all bio data references long and short within the description and/or claims  
Recommended id = biod0001, biod0002, etc.  

<!ELEMENT bio-deposit (depositary, bio-acnno, date?, term?, dtext?)>  
<!ATTLIST bio-deposit  id   ID     #IMPLIED  
num  CDATA  #REQUIRED  
url  CDATA  #IMPLIED  
dnum CDATA  #IMPLIED >

Non-Patent Literature (NPL) CITation;  
Notes:  
This can be free text data without any structure (#PCDATA) which is NOT recommended  
or it can be highly structured data which is marked up according to ST.14 and ISO 690 layout;  
This part of the DTD has used many different sources for element names and DTD structure and reference:  
AACR2 / MARC  
ISO 12083 - Electronic manuscript prep. and markup. DTD  
Association of American Publishers (AAP) Z39.59 DTD  
European Working Group for SGML (EWS) MAJOR DTD  
SuperJournal Full Article DTD  
www.superjournal.ac.uk/sj  
Elsevier DTD  
Medline DTD (NLM)  
Attributes (recommended):  
id = ncit0001, ncit0002, etc  
um = 0001, 0002  
npl-type - The TYPE of citation is office specific (recommended);  
A - Abstract citation of no specific kind  
B - Book citation  
I - Biological abstract citation  
C - Chemical abstracts citation  
E - Database citation  
D - Derwent citation  
P - Patent cited within NPL group  
J - Patent Abstracts of Japan citation (REC 067)  
S - Serial / Journal / Periodical citation  
W - World Wide Web / Internet search citation  
medium - the type of medium  
e.g., CD (CD-ROM), MT (Magnetic Tape), DISK, ONLINE  
file - file name on local systems eg. XP number in EPO  
url - where possible give full web link to document  

Reference number (general); for the EPO this is the XP number
<!ELEMENT refno (#PCDATA)>
<!ATTLIST refno  id ID  #IMPLIED >

Classification code; e.g., ipc, dewey etc.

<!ELEMENT class (#PCDATA)>
<!ATTLIST class  class-type CDATA  #IMPLIED >

Subordinate responsibility; e.g., editor, translator, etc.

<!ELEMENT subname (%name_group; | addressbook)>
<!ATTLIST subname  subname-type (editor | translator | other-subname-type ) 'editor' >

Prime responsibility for the work there is no distinguishing between personal and corporate authors
<author> followed by name or addressbook information use the ID attribute if, for example, there is a need to distinguish between multiple authors. Can also include affiliation details
Recommended id = auth0001, auth0002, etc.

<!ELEMENT author (%name_group; | addressbook)>
<!ATTLIST author  id ID  #IMPLIED >

ADDRESSBOOK GROUP: Holds name and contact information for individuals/organizations
The LANG attribute is REQUIRED for certain document types, e.g., the JPO PCT Request where names and addresses may be repeated in two different languages. If no structure possible use text.

<!ELEMENT addressbook ((%name_group; , address , phone* , fax* , email* , url* , ead* , dtext?) | text)>
<!ATTLIST addressbook  id ID  #IMPLIED
lang CDATA  #IMPLIED >

Email address
Attribute:
email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary means of contact as a replacement of the use of conventional post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is equivalent to 'informal'
<!ELEMENT email (#PCDATA)>
<!ATTLIST email email-purpose (informal | general | advance | main ) #IMPLIED >
<!--
PATENT CITATIONS:
(ST.32:B561)
Patent Citation within abstract, description or claims.
For patent citations within Search Report see Search Report DTD

Notes:
Tags arranged according to WIPO ST.14 order.
This can be free text data without any structure (text).

Example:
<patcit id='pcit0001' dnum='US4793675A' dnum-type='publication number'>
<document-id>
 <country>US</country>
 <doc-number>4793675</doc-number>
 <kind>A</kind>
 <name>Handa</name>
 <date>19881227</date>
 </document-id>
</patcit>

Note:
It is NOT expected that the applicant will create the tagged data
- it could be generated from a 'pull down' data entry form
or generated from internal SR databases

Attributes (recommended):
id = pcit0001, pcit0002, etc.
um = 0001, 0002, etc.
dnum = use full number as one string, eg, "US5401234A";
url = where possible give full web link to patent
file = file name eg. if stored on local systems
dnum-type = type of document number
(e.g., application number, publication number)
-->
<!ELEMENT patcit (text | (document-id , rel-passage*))>
<!ATTLIST patcit  id        ID #IMPLIED
 num       CDATA  #IMPLIED
dnum      CDATA  #IMPLIED
dnum-type  CDATA  #IMPLIED
file      CDATA  #IMPLIED
url       CDATA  #IMPLIED >
<!--
Document identification refers to patents (and patent applications) only.
See WIPO ST.14
-->
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>
<!ATTLIST document-id lang CDATA #IMPLIED >
<!--
Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names
-->
<!ELEMENT name (#PCDATA)>
<!ATTLIST name name-type (legal | natural ) #IMPLIED >
<!--
This element is one method to identify content consisting of text objects that require preservation (pre) of their whitespace in order to preserve internal logical relationships. (e.g., sequence listing fragments, computer program listings)

```xml
<!ELEMENT pre (#PCDATA)>  
<!ATTLIST pre id ID #IMPLIED >  
    xml:space (preserve | default ) #IMPLIED  
    listing-type (sequence | program-listing | other ) #REQUIRED >

<!--
Underscore: style - single is default
-->
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)*>  
<!ATTLIST u style (single | double | dash | dots ) 'single' >

<!--
Overscore: style - single is default
-->
<!ELEMENT o (#PCDATA | b | i | smallcaps | sup | sub)*>  
<!ATTLIST o style (single | double | dash | dots | leftarrow | rightarrow | leftrightarrow ) 'single' >

<!ELEMENT doc-page EMPTY>  
<!ATTLIST doc-page id ID #IMPLIED >  
    he CDATA #REQUIRED >  
    wi CDATA #REQUIRED >  
    type (jpg | pdf | tif ) #REQUIRED >  
    alt CDATA #IMPLIED >  
    pp CDATA #IMPLIED >  
    ppf CDATA #IMPLIED >  
    ppl CDATA #IMPLIED >  
    file CDATA #REQUIRED >  
    ocr CDATA #IMPLIED >  
    color (color | bw ) #IMPLIED >  
    orientation (portrait | landscape ) 'portrait' >

<!--
This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.
Page range attributes are given when required
pp - page range
ppf - first page
ppl - last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings
Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

-->

<!--
International Preliminary Examination Authority
-->
<!ELEMENT ipea (country)>

<!--
Date of receipt by International Preliminary Examination Authority
-->
<!ELEMENT received-at-ipea (date)>

<!ELEMENT elected-office (country*, (region, country+)*)>  

<!ELEMENT completion-date (date)>

<!--
Signatories
-->
<!ELEMENT signatories (signatory+)>  

<!--
PCT/RO/101 Box No. X: The signature must be that of the applicant (if there are several applicants, all must sign); however, the signature may be that of the agent, or the common representative, where a separate power of attorney appointing the agent or the common representative, respectively, or a copy of a general power of attorney is already in possession of the receiving Office, is furnished... (PCT Rules 4.1(d), 4.15, and 90) 
Indicate the capacity of the signer with 'signatory-capacity'
-->
<!ELEMENT signatory (%name_group; , address?, electronic-signature , signatory-capacity?)>

<!ATTLIST signatory
  id ID #IMPLIED>

<!--
The capacity in which the person signs
-->
<!ELEMENT signatory-capacity (#PCDATA)>  

<!--
A PKI / PKCS #7 digital signature data type
-->
<!ELEMENT enhanced-signature (pkcs7)>  

<!--
PKCS7 digital signature
-->
<!ELEMENT pkcs7 EMPTY>
A non-PKI electronic signature

A simple 'signature';
e.g., clicking a button labeled 'accept' or 'I agree'

A simple text string is to be used as the basic electronic signature;
e.g., John Doe  <text-string>/jd/</text-string>

Figure of the drawings which should accompany the abstract

Possible sources: human-generated-classification,
machine-propagated-classification, software-analysis-generated-classification

Possible status: original-classification, reclassified, various-classification,
deleted-classification

Possible values: invention, non-invention
Possible positions: first-symbol-position, later-symbol-position.

--> 
<!ELEMENT symbol-position (#PCDATA)>

<!--

--> 
<!ELEMENT subgroup (#PCDATA)>

<!--

--> 
<!ELEMENT main-group (#PCDATA)>

<!--

--> 
<!ELEMENT subclass (#PCDATA)>

<!--

--> 
<!ELEMENT section (#PCDATA)>

<!--
 Levels: ipcr-advanced, ipcr-core

--> 
<!ELEMENT classification-level (#PCDATA)>

<!--

--> 
<!ELEMENT ipc-version-indicator (date)>

<!--
 Unlinked indexing code.
 (ST.32:B515/B525)

--> 
<!ELEMENT unlinked-indexing-code (#PCDATA)>

<!--
 Linked indexing code.
 (ST.32:B514/B524)

--> 
<!ELEMENT linked-indexing-code-group (main-linked-indexing-code , sub-linked-indexing-code+)>

<!--
 Sub/further Linked Indexing Code.

--> 
<!ELEMENT sub-linked-indexing-code (#PCDATA)>
<!--
Main Linked Indexing Code.
-->
<!ELEMENT main-linked-indexing-code (#PCDATA)>

<!--
Main classification.
(ST.32:B511/B521)
-->
<!ELEMENT main-classification (#PCDATA)>

<!--
Additional information.
(ST.32:B513)
-->
<!ELEMENT additional-info (p+)> 

<!--
Declaration information including combined declaration and designated country
-->

<!--
Designated states for which indications are made: all except United States
-->
<!ELEMENT all-designations-except-us EMPTY>

<!--
PCT/RO/101 Box No.VII :International Searching Authority
-->
<!ELEMENT search-authority (isa , earlier-search-request?, earlier-search-authorization*)>

<!--
Request to use results of earlier search; reference to that search
-->
<!ELEMENT earlier-search-request (document-id , substantially-equivalent? , earlier-search-documents?)>>

<!--
Information of priority claims and priority document.
-->
<!ELEMENT isa (country)>
where an element of the international application referred to in Article 11(1)(iii)(d) or (e) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more elements referred to in Article 11(1)(iii) were first received by the receiving Office, that element or part is, subject to confirmation under Rule 20.6, incorporated by reference in this international application for the purposes of Rule 20.6.

The priority document is attached to the application.

The receiving office is requested to prepare and transmit to the IB a certified copy of the earlier application.

This element is made when the receiving Office is requested to restore the right of priority.

Where the earlier application is an ARIPO application, indicate at least one country party to the PARIS convention for the protection of industrial property or one member of the WTO for which that earlier application was filed.

Additional priority claim information by IB.

PCT/RO/101 Box No.V Designation Of States (PCT Rule 4.9)

Rule 4.9(b), (c)
In addition to the designations made above [i.e., designation-of states], the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box [i.e., exclusion-from-designation] as being excluded form the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.

```xml
<!ELEMENT precautionary-designation-statement (#PCDATA)>
<!ELEMENT exclusion-from-designation (regional*, national?)>
<!ELEMENT designation-pct (regional*, national?, new-designation-country*)>
<!ELEMENT new-designation-country (#PCDATA)>
<!ELEMENT national (country, protection-request*)+>
<!ELEMENT regional (region, (country, protection-request*)+, any-other-state?)>
<!ELEMENT any-other-state EMPTY>
<!ELEMENT kind-of-protection (#PCDATA)>
```
<!ELEMENT parties (applicants?, inventors?, correspondence-address?, agents?)>

<!-- Information regarding Agents or common representatives

-->  
<!ELEMENT agents (customer-number | agent+)>

<!-- Address used for general correspondence

-->  
<!ELEMENT correspondence-address (customer-number | addressbook+)>

<!-- Customer number for agents by office

-->  
<!ELEMENT customer-number (#PCDATA)>

<!-- Inventors information:
   If the US is designated, all of the inventors must also be named as applicants
   for purposes of that designation.

-->  
<!ELEMENT inventors (inventor | deceased-inventor)+>

<!-- Applicants information:
   At least one of the applicants named must be a resident or national of a PCT
   Contracting State for which the receiving Office acts.

-->  
<!ELEMENT applicants (applicant+)>

<!-- information of changing of bibliographic data

-->  
<!ELEMENT wo-bib-change-info (bib-change-request+)>  

<!-- Bibliographic changing information
   address, name, nationality, residence

-->  
<!ELEMENT bib-change-request (received-at-ib, previous-record)>  

<!-- Previous record of bibliographic in application before changing

-->  
<!ELEMENT previous-record (applicant | inventor | deceased-inventor | agent)>  

<!-- Rule 4.6(c):
   "The request may, for different designated states, indicate different persons
   as inventors where, in this respect, the requirements of the national laws of
   the designated States are not the same. In such a case, the request shall
contain a separate statement for each designated State or group of States in
which a particular person, or the same person, is to be considered the
inventor, or in which particular persons, or the same persons, are to be
considered the inventors."

--> !ELEMENT designated-states-as-inventor (country*, (region , country+)*)

<!--
Country of residence
--> !ELEMENT residence (country)

<!--
Country of nationality
--> !ELEMENT nationality (country)

<!-- WIPO amendment information:
art 19 amendment, date of receipt at IB
--> !ELEMENT wo-amendment-info (received-at-ib)

<!-- WIPO application information:
received-at-ib : date of receipt of record copy by International Bureau
--> !ELEMENT wo-application-info (date-of-earliest-priority?, received-at-ib?,
considered-not-made?, withdrawn?)

<!-- Where the international application claims the priority of several earlier
applications, the filing date of the earliest application whose priority is
claimed must be indicated as the priority date.
--> !ELEMENT date-of-earliest-priority (date)

<!-- Demand withdrawn by a notice from applicant
(PCT Article 37; PCT Rule 90bis.4)
--> !ELEMENT withdrawn (date)

<!-- Declaration by the receiving office or IB that priority claim is considered,
for the purposes of the procedure under the Treaty not to have been made
--> !ELEMENT considered-not-made (date , made-by?)

<!-- WIPO publication information:
-->
-->
<!ELEMENT wo-publication-info (wo-correction* , wo-bio-material-after-pub? , isr-status* , pct-pub-info* , wo-pubnum?)>

<!ELEMENT wo-pubnum (#PCDATA)>

<--
PCT published pamphlet information
-->
<!ELEMENT pct-pub-info (wo-published-text , pct-art64*)>

<--
published text in PCT pamphlet front page.
-->
<!ELEMENT wo-published-text (wo-text-letter-code*)>
<!ELEMENT wo-text-letter-code (#PCDATA)>

<--
PCT Article 64: Reservations
-->
<!ELEMENT pct-art64 (date? , document-id?)>

<--
a reference to deposited biological material that was received by IB after completion of technical preparations for international publication
-->
<!ELEMENT wo-bio-material-after-pub (received-at-ib , relevant-date?)>

<--
Relevant date
-->
<!ELEMENT relevant-date (date)>

<--
International Bureau receipt date
-->
<!ELEMENT received-at-ib (date)>

<--
WO Patent correction information.
-->

<!ELEMENT wo-repub-code (#PCDATA)>

<--
Type of correction.
(ST.32:B66?)
-->
<!ELEMENT type-of-correction (#PCDATA)>
indications relate to the bio-deposit in the application body

Separate furnishing of indications

Additional indication information for the deposit

Indications relate to the bio-deposit in the application body at paragraph number

Applicant's or agent's file reference, if desired, 12 characters maximum

Indication of specific Contracting States in or for which the applicant is seeking protection for his invention (Rule 4.9(a))

The region for which protection or exclusion (depending upon context) is desired.

All designations permitted by the Treaty are made (Rule 4.9(b))

Method by which prior art was disclosed to the public

Other method by which prior art was disclosed to the public
Exceptions to lack of novelty resulting from abuse; Rule 51bis.1(a)(v)

A publication was used as the method of disclosure

An international exhibition was used as the method of disclosure

Title of what is being disclosed under PCT Rule 51bis.1(a)(v)

Document (e.g., XML) containing information relating to a priority claim considered not made.

Document (e.g., XML) containing information relating to PCT Rule 91-1f.

A document (e.g., XML) containing information relating to article 17.2a.

Statement concerning amendments (PCT Article 19.1, PCT Rule 46.4)

The text of the claim; also used for sub-para indentation
PCT/RO/101 Box IX: the number of the figure which should accompany the abstract.
(ST.32:B598)

<!ELEMENT fig-number (#PCDATA)>

Definition description

<!ELEMENT dd (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | crossref | figref | img | chemistry | maths)*>

Identifies the period of time during which the depository must be able to furnish samples of the biological material.

<!ELEMENT term (#PCDATA)>

Biological accession number:
(ST.32:B831)
The identification assigned to the biological material by the depository

<!ELEMENT bio-acnno (#PCDATA)>

Information regarding the facility storing the biological deposit.
(ST.32:B832)

<!ELEMENT depositary (#PCDATA | address)*>

Other citations - free form

<!ELEMENT othercit (#PCDATA | b | i | u | o | sup | sub)*>

Online citation
Revised according to ISO-690-2 - Electronic documents and parts thereof.
Please refer to this standard for definitions and examples.
See: http://www.nlc-bnc.ca/iso/tc46sc9/standard/690-2e.htm#Contents
The tagging in fact is a mixture of article and book tags together with specific electronic source tags.
'Online' is taken to mean any kind of electronic documentation:
databases, internet, CD-Roms, DVD, email, etc

EXAMPLES:

Kirk-Othmer Encyclopedia of Chemical Technology [online].
Available from: DIALOG Information Services, Palo Alto (Calif.).

<nplcit id='ncit1' num='0001' type='E' medium='online'>
<online>
* Article on Internet:

* Personal communication (e-mail)
Thacker, Jane. MPEG-21 project stream on digital item identification [online]. Message to: [iso.tc46.sc9@nlc-bnc.ca]. 3 October 2000; 13:33 EST [cited 6 October 2000; 13:10 EST]. Message-ID: [002f01c02d60$051a64a0$22a2580c@vaio]. Personal communication.
After patent citations the most common citations are articles within serials (periodicals, magazines), books and electronic (eg. internet) sources. This is a very complex and varied area to standardise. The tag set below is drawn from a number of sources as is the order of the tags (which in any case can be changed depending on the stylesheet used).

The order of tags is that of WIPO ST.14 / ISO 690 layout.


Note: it is NOT expected that the applicant will create the tagged data - it can be generated from a 'pull down' data entry form (eg. in Word) or generated from internal SR databases

<nplicit id='ncit12' num='0013' type='b'>
<book>
  <author>
    <name>WALTON, Herrman</name>
  </author>
  <book-title>Microwave quantum theory</book-title>
  <imprint>
    <address>
      <text>London</text>
    </address>
    <name>Sweet and Maxwell</name>
    <pubdate>19730000</pubdate>
  </imprint>
  <location>
    <pp>138 to 192</pp>
  </location>
  <isbn>0-1234-568-9</isbn>
</book>
</nplicit>

<!--
Keyword; e.g., from a Thesaurus or class. scheme (ST.32:B550)
-->

<!ELEMENT keyword (#PCDATA)>

<!--
Book number
-->

<!ELEMENT bookno (#PCDATA)>

<!--
Location within the cited work
-->

<!ELEMENT location (text | (serpart?, sersect?, chapter?, pp?, column?, para?, line?))>

<!--
Referenced line within cited work
-->

<!ELEMENT line (#PCDATA | linel | linef)*>

<!--
Cited document line, last
-->

<!ELEMENT linel (#PCDATA)>
<!--
   Chapter; e.g., in a book. Example: Chapter 2
-->
<!ELEMENT chapter (#PCDATA)>

<!--
Serial section
-->
<!ELEMENT sersect (#PCDATA)>

<!--
Part within a serial
-->
<!ELEMENT serpart (#PCDATA)>

<!--
Abstract number
-->
<!ELEMENT absno (#PCDATA)>

<!--
Series statement
-->
<!ELEMENT series (text | (mst , msn? , issn?))>

<!--
Monographic series number
-->
<!ELEMENT msn (#PCDATA)>

<!--
Monographic series title
-->
<!ELEMENT mst (#PCDATA)>

<!--
Edition statement
(ST.32:B516)
-->
<!ELEMENT edition (#PCDATA)>

<!--
Book subtitle
-->
<!ELEMENT subtitle (#PCDATA)>

<!--
CONFERENCE GROUP / CITATION
There is no standard way of citing conference proceedings; date of the conf. may come before or after place, for example. The tags are specified in a set order
-->
where it is not possible or correct then simply use <text>

--> 
<!ELEMENT conference (text | (conftitle, confdate?, confno?, confplace?,
  confsponsor*))>

<!--

--> 
<!ELEMENT confdate (date | (sdate, edate))>

<!-- Conference sponsor

--> 
<!ELEMENT confsponsor (#PCDATA | addressbook)*> 

<!-- Conference place

--> 
<!ELEMENT confplace (#PCDATA | address)>*

<!-- Conference number

--> 
<!ELEMENT confno (#PCDATA)>

<!-- Conference title

--> 
<!ELEMENT conftitle (#PCDATA)>

<!-- The title of the cited book

--> 
<!ELEMENT book-title (#PCDATA)>

<!-- Serial citation data:
This describes the volume or issue as a whole and not a particular article within
it.

--> 
<!ELEMENT serial (sertitle, alttitle?, subname*, issue?, imprint?, pubdate?,

<!--

--> 
<!ELEMENT doi (#PCDATA)>

<!-- Copyright info. Copyright of publisher of serial

-->
<!ELEMENT cpyrt (#PCDATA)>

<!--
 Issue number
 -->
<!ELEMENT ino (#PCDATA)>

<!--
 Volume id/number
 -->
<!ELEMENT vid (#PCDATA)>

<!--
 Publisher's unique id
 -->
<!ELEMENT pubid (#PCDATA)>

<!--
 International Standard Book Number
 -->
<!ELEMENT isbn (#PCDATA)>

<!--
 International Standard Serial Number
 -->
<!ELEMENT issn (#PCDATA)>

<!--
 Notes about the journal; e.g. Continues Journal of XYZ 1910-1998, published in French and English, etc.
 -->
<!ELEMENT notes (#PCDATA)>

<!--
 Physical description - generally NOT used in citations in pats; e.g., v., 27cm
 -->
<!ELEMENT descrip (#PCDATA)>

<!--
 Imprint:
 Publication / creation data
 Place of publication : publisher, date(s) of publication usually only date of publication is used for journal citations
 -->
<!ELEMENT imprint (text | (address? , name , pubdate*))>

<!--
 Publication date used in npl citations
 -->
<!ELEMENT pubdate (#PCDATA | sdate | edate | time)*>
<!--
Time; format HHMM
-->
<!ELEMENT time (#PCDATA)>

<!--
End date used in pubdate
-->
<!ELEMENT edate (#PCDATA)>

<!--
Start date used in pubdate
-->
<!ELEMENT sdate (#PCDATA)>

<!--
Issue designation; e.g., Annual, 1971-, 1890-1972
-->
<!ELEMENT issue (#PCDATA)>

<!--
Alternate title for serial; e.g. BMJ = British Medical Journal
-->
<!ELEMENT alttitle (#PCDATA)>

<!--
Serial title
-->
<!ELEMENT sertitle (#PCDATA)>

<!--
Article title
-->
<!ELEMENT atl (#PCDATA)>

<!--
Descriptive text
-->
<!ELEMENT dtext (#PCDATA)>

<!--
Universal Resource Locator; e.g. www.wipo.int
-->
<!ELEMENT url (#PCDATA)>

<!--
Fax number
-->
<!ELEMENT fax (#PCDATA)>
<!-- Telephone number
-->
<!ELEMENT phone (#PCDATA)>

<!-- Electronic address use for other than email
-->
<!ELEMENT ead (#PCDATA)>

<!-- Address components:
Address formats differ from country to country
If no structure possible use text
-->
<!ELEMENT address (%address_group;)

<!-- Postal code or zip code
-->
<!ELEMENT postcode (#PCDATA)>

<!-- Region of country; e.g., state, province, etc.
-->
<!ELEMENT state (#PCDATA)>

<!-- County, parish, department, etc (mainly UK, USA)
-->
<!ELEMENT county (#PCDATA)>

<!-- City or town name
-->
<!ELEMENT city (#PCDATA)>

<!-- Street may contain house number or name
-->
<!ELEMENT street (#PCDATA)>

<!-- Building information in address; e.g., Hoffman building
-->
<!ELEMENT building (#PCDATA)>

<!-- Address floor; e.g., 10th
-->
<!ELEMENT address-floor (#PCDATA)>
<!--
Department, division, section, etc. name
-->
<!ELEMENT department (#PCDATA)>

<!--
Organisation name or company name
-->
<!ELEMENT orgname (#PCDATA)>

<!--
Role; e.g., President, Chairman, etc.
-->
<!ELEMENT role (#PCDATA)>

<!--
SDOBI : Individual id
-->
<!ELEMENT iid (#PCDATA)>

<!--
Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->
<!ELEMENT suffix (#PCDATA)>

<!--
Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!--
First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--
Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
Title: e.g., Mr., Mrs., Dr. etc
-->
<!ELEMENT prefix (#PCDATA)>

<!--
Relevant passage group within patent; most used in search reports
- use text in abstract, description and claims
-->
Bold formatting for text

-->
<!ELEMENT b (#PCDATA | i | u | o | smallcaps | sup | sub)*>

<!--
Italic formatting for text
-->
<!ELEMENT i (#PCDATA | b | u | o | smallcaps | sup | sub)*>

<!--
Small capitals
-->
<!ELEMENT smallcaps (#PCDATA | b | u | i | o)*>

<!--
Subscripted text
-->
<!ELEMENT sub (#PCDATA | b | u | i | o | sup2 | sub2)*>

<!--
Superscripted text
-->
<!ELEMENT sup (#PCDATA | b | u | i | o | sup2 | sub2)*>

<!--
Subscripted text
-->
<!ELEMENT sub2 (#PCDATA | b | u | i | o)*>

<!--
Superscripted text
-->
<!ELEMENT sup2 (#PCDATA | b | u | i | o)>
5.8 **Filing of amendments and statements under Articles 19 and 34.2(b)**

```xml
<?xml version='1.0' encoding='UTF-8' ?>
<!ENTITY % name_group "((name | (prefix?, (last-name | orgname), first-name?, middle-name?, suffix?, iid?, role? , orgname? , department? , synonym*)) ,
registered-number?)">
<!ENTITY % amend_content "(invention-title | heading+ | p+ | doc-page+ | claim+ | figure+)">

```

Asahi HASEBE incorporated changes from PFCs:
..changed version number from v1.5 to v1.6
..added an attribute "color" to "figure"
SY: 01/04/10 incorporated changes from PFC
..changed version number from v1.4 to v1.5
..changed value of attribute lang of amend-statement from '#REQUIRED' to '#IMPLIED'(PFC09/006)
..changed value of attribute status of amend-statement from '#REQUIRED' to '#IMPLIED'(PFC09/006)
MO: 01/01/09 incorporated changes from PFC
..changed version number from v1.3 to v1.4
..added element 'summary-of-invention' to description (PFC08/008)
..added element 'description-of-embodiments' to description (PFC08/008)
..added element 'reference-signs-list' to description (PFC08/008)
..added element 'reference-to-deposited-biological-material' to description (PFC08/008)
..added element 'citation-list' to description (PFC08/008)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..added attribute 'email-purpose' to email (PFC08/006)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.1 to v1.2
..implementation of PFC06/001
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-text, p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
HT: 14/12/04 incorporated changes from PFCs:
..changed element nplcit from '(text | (article , book , online , othercit)*)' to '
'(text | article | book | online | othercit)
..changed element othercit from '('#PCDATA')' to '('#PCDATA | b | i | u | sup | sub)'
..changed element rel-passage from (text | (passage+ , category? , rel-claims?)) to (text | (passage+ , category* , rel-claims*)+)
..changed attribute he, wi of doc-page, img from 'NMTOKEN' to 'CDATA'
..changed value of attribute idref of crossref from 'CDATA' to 'IDREF'
```
..changed value of attribute tsize of dl from 'NM_TOKEN' to 'CDATA'
..changed value of attribute num of patcit, nplcit from '#REQUIRED' to 'IMPLIED'
..changed value of attribute xml:space of pre from '#FIXED 'preserve'' to '(preserve | default #IMPLIED)'
..changed value name of attribute listing-type of pre from 'software-code' to 'program-listing'
..added element 'pre' to claim-text, dd, li
..added attribute 'id' to addressbook
..added attribute 'chem-type' to chem
..added attribute 'claim-type' to claim, claims
..added attribute 'class-type' to class
..added attribute 'ocr' to doc-page
..added value 'other-subname-type' to attribute 'subname-type' of subname
..removed attribute 'lang', 'status', 'dtd-version' from chem
HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..changed element article, online, serial from 'subname?' to 'subname*'
..changed element chemistry from '(img)' to '(img|(chem,img?))'
..changed element maths from '(img|math)' to '(img|(math,img?))'
..changed element rel-passage from 'category?, rel-claims?' to 'category*, rel-claims*'
..added element 'figref' to claim-text, dd, li
..added element 'b', 'i', 'u', 'sup', 'sub', 'smallcaps' to crossref
..added attribute 'num' to li
..added attribute 'subname-type' to subname
..added value 'chem', 'table''', 'math''', 'program-listing', 'flowchart' to attribute img-content of img
..added value 'national-office', 'regional-office' to attribute produced-by of root element
..removed attribute 'class-type' from nplcit
HT: 16/12/03 incorporated changes from PFCs:
..changed version number from v0.5 to v1.0
..added element 'pre' to p content model
..added element 'sup2' and 'sub2' to sup and sub
..added attribute 'lang' and 'class-type' to nplcit
..added attribute 'external-type' to table-external
..added attribute 'figure-labels' to figure
JD: 03/02/03 revised
..changed version number from v0.4 to v0.5
..added attribute 'file-reference-id' to root
..added attribute 'orientation' to img and doc-page
..added attribute 'inline' to img
..added attribute 'ol-style' to ol
..added attribute 'dnum-type' to patcit
..added TABLE-EXTERNAL to p content model
..added (last-name | orgname) choice to %name_group;
..made postcode optional within address
..removed element 'br' from b, i, smallcaps
2001/12/01
..released version number as v0.4
******************************************************************************
************************************************************************************
* SECTION I - DECLARATION, ENT. REFs, ISO sets, etc                       *
******************************************************************************
-->
<!--
import character entity set. Download from:
http://pcteasy.wipo.int/efiling_standards/schemaDocs/wipo.ent

Note that ngmmls-based parsers (SP, Near and Far Designer, etc.)
may not be able to process this file for reasons described below
in MathML comments.
-->
<!ENTITY % wipo PUBLIC "-//WIPO//ENTITIES WIPO 1.0//EN" "wipo.ent">
%wipo;-->
<!--
******************************************************************************
******************************************************************************
* INCLUDE COMPONENT DTDS (MATHML, OASIS EXCHANGE TABLE MODEL) *
******************************************************************************
**SECTION II - DTD**

* Attributes:
  - `amend-type = type of amendment`
  - `lang = language of application - use ISO639 language code`
  - `dtd-version = dtd version number`
  - `file = filename of the whole application`
  - `status = status of the application; values: new = new application`
  - `date-produced = date this document was produced`
  - `produced-by = creator of this document`
  - `file-reference-id = applicant's or agent's file reference, if any.`

```xml
<!ELEMENT amendment-request ((amend-statement?, (amend-body | (delete-object | (insert-before-object | insert-after-object | replace-object)))+), remarks?)>
<!ATTLIST amendment-request amend-type pct-article-34 | pct-
```
<!--
Amend entire sections of the application-body
-->
<!ELEMENT amend-body (doc-page+ | (description?, claims?, abstract?, drawings?))>

<!ATTLIST amend-body id ID #IMPLIED
lang CDATA #REQUIRED
status CDATA #IMPLIED >

<!--
Drawings: PCT Article 7 / Rule 7
Drawings shall be required when they are necessary for the understanding of the invention.
Recommended id = 'draw'
-->
<!ELEMENT drawings (doc-page+ | figure+)>  
<!ATTLIST drawings id ID #IMPLIED
lang CDATA #IMPLIED
status CDATA #IMPLIED >

<!--
A drawing (figure), necessary for the understanding of the invention
Recommended id = f0001, f0002, etc.
-->
<!ELEMENT figure (img)> 
<!ATTLIST figure id ID #IMPLIED
num CDATA #REQUIRED
figure-labels CDATA #IMPLIED
color (color | bw) #IMPLIED>

<!--
ABSTRACT: PCT Rule 8
(INID 57, ST.32:B570)
A concise summary of the disclosure, 50-150 words.
Recommended id = 'abst' or 'abst0001' for multiple abstracts
-->
<!ELEMENT abstract (doc-page+ | (abst-problem , abst-solution) | p+)>  
<!ATTLIST abstract id ID #IMPLIED
lang CDATA #IMPLIED
status CDATA #IMPLIED >

<!--
The solution to the alleged problem that the invention purports to solve.
Recommended id = 'abss'
-->
<!ELEMENT abst-solution (p+)>  
<!ATTLIST abst-solution id ID #IMPLIED >

<!--
The alleged problem that the invention purports to solve
Recommended id = 'absp'
-->
<!ELEMENT abst-problem (p+)>


<!ATTLIST abst-problem id ID #IMPLIED >

<--
Claims:
the claims shall define the matter sought for patent and be supported by the
description.

Recommended id = 'claim' or 'claim0001' for multiple claims

-->  
<!ELEMENT claims (doc-page+ | claim+)>  
<!ATTLIST claims id ID #IMPLIED
lang CDATA #IMPLIED 
claim-type CDATA #IMPLIED
status CDATA #IMPLIED >

<--
Defines the matter for which protection is sought
See PCT Rule 6:
6.1.a: 'the number of claims shall be reasonable in consideration of what is
being claimed.'
6.1.b: 'if there are several claims, they shall be numbered consecutively in
Arabic numerals.'

Recommended id values
If parent element is claims and there is only ONE set of claims:
id = c0001, c0002, etc.;num = 0001, 0002, etc.
If parent element is amended-claims and there is only ONE set then;
id = ac0001, ac0002, etc.;num = 0001, 0002, etc.
If parent element is claims and there are MULTIPLE sets of claims then:
id = c01.0001, c01.0002, etc.;num = 0001, 0002, etc.
id = c02.0001, c02.0002, etc.;num = 0001, 0002, etc.
If parent element is amended-claims and there are MULTIPLE sets of
amended-claims then:
id = ac01.0001, ac01.0002, etc.;num = 0001, 0002, etc.

-->  
<!ELEMENT claim (claim-text+)>  
<!ATTLIST claim id ID #IMPLIED
num CDATA #REQUIRED
claim-type CDATA #IMPLIED >

<--
Reference to a claim

-->  
<!ELEMENT claim-ref (#PCDATA)>  
<!ATTLIST claim-ref idref IDREFS #REQUIRED >

<--
Description:
The description must disclose the invention in a manner sufficiently clear and
complete for it to be carried out by a person skilled in the art (Rule 5).

Recommended id = 'desc'

-->  
<!ELEMENT description (doc-page+ | {invention-title? , (technical-field |
background-art | disclosure | summary-of-invention | description-of-drawings |
description-of-embodiments | best-mode | mode-for-invention | industrial-
applicability | reference-signs-list | reference-to-deposited-biological-material |
sequence-list-text | citation-list | (heading* , p+)++)})>
<!ATTLIST description id ID #IMPLIED
lang CDATA #IMPLIED 
status CDATA #IMPLIED >
Sequence listing free text

WIPO ST.25:
"36. Where the sequence listing part of the description contains free text, any such free text shall be repeated in the main part of the description in the language thereof. It is recommended that the free text in the language of the main part of the description be put in a specific section of the description called "Sequence Listing Free Text".

Recommended id = 'seqt'

Reference to deposited biological material

Article 33(4): "For purposes of the international preliminary examination, a claimed invention shall be considered industrially applicable if, according to its nature, it can be made or used (in the technological sense) in any kind of industry.

Recommended id = 'inap'

Mode for invention

PCT Rule 5.1(a)(vi): "The description shall...indicate explicitly, when it is not obvious from the description or nature of the invention, the way in which the invention is capable of exploitation in industry and the way in which it can be made and used..."

Recommended id = 'mode'
The best mode contemplated by the applicant for carrying out the invention claimed.

Recommended id = 'bmod'

-->
<!ELEMENT best-mode (heading* , p*)>
<!ATTLIST best-mode  id ID  #IMPLIED>

-->
<!ELEMENT description-of-embodiments (embodiments-example | (heading* , p*)*)>
<!ATTLIST description-of-embodiments  id ID  #IMPLIED>

-->
<!ELEMENT embodiments-example (heading* , p*)>
<!ATTLIST embodiments-example  id ID  #IMPLIED
  ex-num CDATA  #IMPLIED>

<!--
Brief description of the drawings (Rule 5.1(a)(iv)

Recommended id = 'desd'

-->
<!ELEMENT description-of-drawings (heading* , p*)>
<!ATTLIST description-of-drawings  id ID  #IMPLIED>

-->
<!ELEMENT summary-of-invention (tech-problem | tech-solution | advantageous-effects | (heading* , p*)*)>
<!ATTLIST summary-of-invention  id ID  #IMPLIED>

<!--
Disclosure of the invention with sub-headings:
technical problem;
technical solution;
advantageous effects (of the invention);

Recommended id = 'disc'

-->
<!ELEMENT disclosure ((tech-problem | tech-solution | advantageous-effects)* | (heading* , p*)*)>
<!ATTLIST disclosure  id ID  #IMPLIED>

<!--
advantageous effects of the invention (PCT Rule 5.1(a)(iii)

Recommended id = 'adve'

-->
<!ELEMENT advantageous-effects (heading* , p*)>
<!ATTLIST advantageous-effects  id ID  #IMPLIED>

<!--
The solution to the problem that the invention purports to solve.
(PCT Rule 5.1(a)(iii)

-->
<!ELEMENT tech-solution (heading* , p*)>
The problem the invention purports to solve (Rule 5.1(a)(iii))

PCT Rule 5.1:
(a) The description shall first state the title of the invention as appearing in the request and shall:
   (i) specify the technical field to which the invention relates

Paragraph
Recommended id = p0001, p0002, etc. num = 0001, 0002, etc.

Note: paragraphs may occur in sections other than the description and at different times eg. for the abstract, in this case use for example "p0001a"; amended claims: "p0001ac", etc.

References a stand-alone table authored with the table-external DTD.

TABLES
This is image data or coded according to OASIS Exchange model with modified cell 'entry' content.
Recommended id = tabl0001, tabl0002, etc.

-->  
<!ELEMENT tables (img | table)>
<!ATTLIST tables id ID #IMPLIED
   num CDATA #REQUIRED >

-->  
Definition list
Recommended id = dlis0001, dlis0002, etc.

-->  
<!ELEMENT dl (dt , dd)+
<!ATTLIST dl tsize CDATA #IMPLIED
   compact (compact ) #IMPLIED
   id ID #IMPLIED >

-->  
Term to be defined
Recommended id = dtrm0001, dtrm0002, etc.

-->  
<!ELEMENT dt (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST dt id ID #IMPLIED >

-->  
Unordered Lists
list-style may be empty for lists with no bullet or other symbol default
list-style is 'bullets'

Recommended id = ulis0001, ulis0002, etc.

-->  
<!ELEMENT ul (li+)>
<!ATTLIST ul id ID #IMPLIED
   list-style (bullet | dash | none ) 'bullet'
   compact (compact ) #IMPLIED >

-->  
List item
Recommended id = list0001, list0002, etc.

-->  
<!ELEMENT li (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref | figref | img | dl | ul | ol | chemistry | maths)*>
<!ATTLIST li id ID #IMPLIED
   num CDATA #IMPLIED >

-->  
MATHEMATICS
This is image data or coded according to mathml, version 2

Recommended id = math0001, math0002, etc.

-->  
<!ELEMENT maths (img | (math , img?)))>
<!ATTLIST maths id ID #IMPLIED
   num CDATA #REQUIRED >
Chemistry
Chemical formulae, ring structures, Markush structures, etc.

For now treat as image data.
Depending on industry support we may use, e.g., chemML, CML later

Recommended id = chem0001, chem0002, etc

-->
<!ELEMENT chemistry (img | (chem , img?))>
<!ATTLIST chemistry id ID #IMPLIED
num CDATA #REQUIRED >

-->
This is a pointer to an external DTD for chemical markup - to be determined.
For EPO probably CML; http://www.xml-cml.org/

-->
<!ELEMENT chem EMPTY>
<!ATTLIST chem id ID #IMPLIED
file CDATA #REQUIRED
chem-type CDATA #IMPLIED >

-->
Ordered Lists:
attribute 'ol-style'

Recommended use:
  1   arabic numbers   1, 2, 3, ...
  a   lower alpha     a, b, c, ...
  A   upper alpha     A, B, C, ...
  i   lower roman     i, ii, iii, ...
  I   upper roman     I, II, III, ...

-->
<!ELEMENT ol (li+)>  
<!ATTLIST ol id ID #IMPLIED
compact (compact ) #IMPLIED
ol-style CDATA #IMPLIED >

-->
Image data
Image is used for any kind of image: art work, figures, complex work units
(math, tables, chemistry), etc.

Recommended:
  id = i0001, i0002, etc.
  he, wi = "11" - millimeters - height, width;
  file = file name,location; label - not used;
  alt = alternate text if image not shown;
  img-content = drawing is the default;
  img-format = common will be tiff, st33 and st35 in for backward compatibility
and, later, publication.
  orientation = orientation of the image (portrait | landscape).
               Default is portrait
  inline = (yes | no).
           Whether the image is to be presented inline or separated by line
           breaks. Default is no.

-->
<!ELEMENT img EMPTY>
<!ATTLIST img id ID #IMPLIED
he CDATA #REQUIRED
wi CDATA #REQUIRED
file CDATA #REQUIRED>
<!-- A reference to a figure; e.g., "...as shown in <figref idref='f0001'>figure<b>1</b></figref>..." -->
<!ELEMENT figref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST figref  idref IDREFS  #IMPLIED
num CDATA  #IMPLIED >
<!-- Cross reference to any other element with an identifier (id) -->
<!ELEMENT crossref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST crossref  idref IDREF  #REQUIRED >
<!-- Biological deposit citation (US EFS: biological-deposit) (INID 83, ST.32:B830) According to PCT Rule 13bis, EPC Rule 28 This covers all bio data references long and short within the description and/or claims Recommended id = biod0001, biod0002, etc. -->
<!ELEMENT bio-deposit (depositary, bio-acnno, date?, term?, dtext?)>
<!ATTLIST bio-deposit  id   ID     #IMPLIED
num CDATA  #REQUIRED
url CDATA  #IMPLIED
dnum CDATA  #IMPLIED >
<!-- Non-Patent Literature (NPL) CITation; Notes: This can be free text data without any structure (#PCDATA) which is NOT recommended or it can be highly structured data which is marked up according to ST.14 and ISO 690 layout; This part of the DTD has used many different sources for element names and DTD structure and reference: AACR2 / MARC ISO 12083 - Electronic manuscript prep. and markup. DTD Association of American Publishers (AAP) 239.59 DTD European Working Group for SGML (EWS) MAJOUR DTD SuperJournal Full Article DTD www.superjournal.ac.uk/sj Elsevier DTD Medline DTD (NLM)-->
Attributes (recommended):
  id - ncit0001, ncit0002, etc
  num - 0001, 0002
  npltype - The TYPE of citation is office specific (recommended):
    A - Abstract citation of no specific kind
    B - Book citation
    I - Biological abstract citation
    C - Chemical abstracts citation
    E - Database citation
    D - Derwent citation
    P - Patent cited within NPL group
    J - Patent Abstracts of Japan citation (REC 067)
    S - Serial / Journal / Periodical citation
    W - World Wide Web / Internet search citation
  medium - the type of medium
e.g., CD (CD-ROM), MT (Magnetic Tape), DISK, ONLINE
  file - file name on local systems eg. XP number in EPO
  url - where possible give full web link to document

-->
<!ELEMENT nplcit ((text | article | book | online | othercit) , rel-passage*)>
<!ATTLIST nplcit  id       ID     #IMPLIED
  num      CDATA  #IMPLIED
  lang     CDATA  #IMPLIED
  file     CDATA  #IMPLIED
  npl-type CDATA  #IMPLIED
  medium   CDATA  #IMPLIED
  url      CDATA  #IMPLIED >

<--
  Reference number (general); for the EPO this is the XP number

-->
<!ELEMENT refno (#PCDATA)>
<!ATTLIST refno  id ID  #IMPLIED >

<--
  Classification code; e.g., ipc, dewey etc.

-->
<!ELEMENT class (#PCDATA)>
<!ATTLIST class  class-type CDATA  #IMPLIED >

<--
  Subordinate responsibility; e.g., editor, translator, etc.

-->
<!ELEMENT subname (%name_group; | addressbook)>
<!ATTLIST subname  subname-type (editor | translator | other-subname-type )
  'editor' >

<--
  Author

  Prime responsibility for the work
  there is no distinguishing between personal and corporate authors
  <author> followed by name or addressbook information
  use the ID attribute if, for example, there is a need to distinguish between multiple authors.
  Can also include affiliation details
  Recommended id = auth0001, auth0002, etc.

-->
<!ELEMENT author (%name_group; | addressbook)>
<!ATTLIST author id ID #IMPLIED >

 ADDRESSBOOK GROUP:
 Holds name and contact information for individuals/organizations

 The LANG attribute is REQUIRED for certain document types, e.g., the JPO PCT Request where names and addresses may be repeated in two different languages. If no structure possible use text.

 -->
 <!ELEMENT addressbook ((%name_group; , address , phone* , fax* , email* , url* , ead* , dtext?) | text)>

 <!ATTLIST addressbook id ID #IMPLIED
 lang CDATA #IMPLIED >

 -->
 <!ELEMENT email (#PCDATA)>

 <!ATTLIST email email-(purpose ) (informal | general | advance | main ) #IMPLIED >

 PATENT CITATIONS:
 (ST.32:B561)
 Patent Citation within abstract, description or claims.
 For patent citations within Search Report see Search Report DTD

 Notes:
 Tags arranged according to WIPO ST.14 order.
 This can be free text data without any structure (text).

 Example:
 <patcit id='pcit0001' dnum='US4793675A' dnum-type='publication number'>
  <document-id>
   <country>US</country>
   <doc-number>4793675</doc-number>
   <kind>A</kind>
   <name>Handa</name>
   <date>19881227</date>
  </document-id>
 </patcit>

 Note:
 It is NOT expected that the applicant will create the tagged data - it could be generated from a 'pull down' data entry form or generated from internal SR databases

 Attributes (recommended):
 id - pcit0001, pcit0002, etc.
 num - 0001, 0002, etc.
 dnum - use full number as one string, eg, "US5401234A";
 url - where possible give full web link to patent
<!ELEMENT patcit (text | (document-id , rel-passage*))>
<!ATTLIST patcit id        ID     #IMPLIED
num       CDATA  #IMPLIED
dnum      CDATA  #IMPLIED
dnum-type  CDATA  #IMPLIED
file      CDATA  #IMPLIED
url       CDATA  #IMPLIED >

<!--
Document identification refers to patents (and patent applications) only.
See WIPO ST.14
-->
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>
<!ATTLIST document-id lang CDATA  #IMPLIED >

<!--
Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names
-->
<!ELEMENT name (#PCDATA)>
<!ATTLIST name  name-type   (legal | natural )  #IMPLIED >

<!--
This element is one method to identify content consisting of text objects that
require preservation (pre) of their whitespace in order to preserve internal
logical relationships.
(e.g., sequence listing fragments, computer program listings)
-->
<!ELEMENT pre (#PCDATA)>
<!ATTLIST pre  id           ID  #IMPLIED
xml:space        (preserve | default )  #IMPLIED
listing-type     (sequence | program-listing | other )  #REQUIRED
>
<!--
Heading text; see Rule 5.  Recommended id = h0001, h0002, etc.
-->
<!ELEMENT heading (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST heading  level     (1 | 2 | 3 )  #IMPLIED
id    ID     #IMPLIED >

<!--
Title of the Invention:
(INID 54, ST.32:B540/B542)
Preferably two to seven words when in English or translated into English and
precise. (Rule 4.3)
Recommended id = 'invt'
-->
<!ELEMENT invention-title (#PCDATA | b | i | u | o | sup | sub)*>
<!ATTLIST invention-title  id ID     #IMPLIED
lang CDATA  #IMPLIED >
Amendment statement (PCT Article 19.1, PCT Rule 46.4). May consist of a statement or an attached file.

Underscore: style - single is default.

Overscore: style - single is default.

This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.

Page range attributes are given when required
pp - page range
ppf - first page
ppl - last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings

Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

Remarks section
The text of the claim; also used for for sub-para indentation

Identifies the period of time during which the depository must be able to furnish samples of the biological material.

Biological accession number:
(ST.32:B831)

Information regarding the facility storing the biological deposit.
(ST.32:B832)

Other citations - free form

Online citation
Revised according to ISO-690-2 - Electronic documents and parts thereof. Please refer to this standard for definitions and examples. See: http://www.nlc-bnc.ca/iso/tc46sc9/standard/690-2e.htm#Contents
The tagging in fact is a mixture of article and book tags together with specific electronic source tags. 'Online' is taken to mean any kind of electronic documentation: databases, internet, CD-Roms, DVD, email, etc

EXAMPLES:;

Kirk-Othmer Encyclopedia of Chemical Technology [online].
Available from: DIALOG Information Services, Palo Alto (Calif.).
* Article on Internet:
Clark, Carol. On the Threshold of a Brave New World.

<nplcit id='ncit1' num='0002' type='E' medium='online'>
<online>
<author>
  <name>Clark, Carol</name>
</author>
<online-title>On the Threshold of a Brave New World</online-title>
<imprint>
  <name>CNN.com, 2000</name>
</imprint>
<series>
  <text>In-depth specials</text>
</series>
<datecit>
  <date>20000824; 10:25 est</date>
</datecit>
</online>
</nplcit>

* Personal communication (e-mail)
Message-ID: [002f01c02d60$051a64a0$22a2580c@vaio]. Personal communication.

<nplcit id='ncit3' num='0003' type='E' medium='online'>
<online>
<author>
  <name>Thacker, Jane</name>
</author>
<online-title>MPEG-21 project stream on digital item identification</online-title>
<subname>
  <name>Message to: <iso.tc46.sc9@nlc-bnc.ca></name>
</subname>
<pubdate>3 October 2000; 13:33 EST</pubdate>
<note>Personal communication</note>
<avail>Message-ID: <002f01c02d60$051a64a0$22a2580c@vaio></avail>
<datecit><date>6 october 2000; 13:10 EST</date></datecit>
</online>
</nplcit>
Date article was received

 <!--
 !ELEMENT received (date)>

<--
 Title of the host document/database

 <!--
 !ELEMENT hosttitle (#PCDATA)>

<--
 The title of the electronic resource

 -->
 !ELEMENT online-title (#PCDATA)>

 <!-- Article citations within a 'host' document

 After patent citations the most common citations are articles within serials (periodicals, magazines), books and electronic (eg. internet) sources.
 This is a very complex and varied area to standardise. The tag set below is drawn from a number of sources as is the order of the tags (which in any case can be changed depending on the stylesheet used).

 The order of tags is that of WIPO ST.14 / ISO 690 layout.

 <nplcit id='ncit1' num='0012' type='S' file='XP1234456'>
 <article>
   <author>
     <name>DROP, J.G.</name>
   </author>
   <atl>Integrated Circuit Personalization at the Module Level</atl>
   <serial>
     <sertitle>IBM Tech. Dis. Bull.</sertitle>
     <pubdate>19741000</pubdate>
     <vid>17</vid>
     <ino>5</ino>
   </serial>
   <location>
     <pp>1344 and 1345</pp>
   </location>
   <refno id='XP1'>XP1234456</refno>
 </article>
 </nplcit>

 Note: it is NOT expected that the applicant will create the tagged data - it can be generated from a 'pull down' data entry form (eg. in Word) or generated from internal SR databases

 -->

 <!-- Article unique ID - assigned by a publisher to an article
 -->
 !ELEMENT artid (#PCDATA)>

 <!--
BOOK CITATION

In the order specified by WIPO ST.14 and ISO 690 and AACR2 rules for layout

WALTON, Herrmann. Microwave quantum theory.

<nplcit id='ncit12' num='0013' type='b'>
  <book>
    <author>
      <name>WALTON, Herrman</name>
    </author>
    <book-title>Microwave quantum theory</book-title>
    <imprint>
      <text>London</text>
    </imprint>
    <location>
      <pp>138 to 192</pp>
    </location>
    <isbn>0-1234-568-9</isbn>
  </book>
</nplcit>

-->
<!ELEMENT book (text | (author* , (book-title+ | conference) , (subtitle? ,
ilo? , issn?)))>

<!-- Keyword; e.g., from a Thesaurus or class. scheme (ST.32:B550) -->
<!ELEMENT keyword (#PCDATA)>

<!-- Book number -->
<!ELEMENT bookno (#PCDATA)>

<!-- Location within the cited work -->
<!ELEMENT location (text | (serpart?, sersect?, chapter? , pp?, column?, para?,
line?))>

<!-- Referenced line within cited work -->
<!ELEMENT line (#PCDATA | linef | linel)*>

<!-- Cited document line, last -->
<!ELEMENT linel (#PCDATA)>
<!--
Chapter; e.g., in a book. Example: Chapter 2
--> 
<!ELEMENT chapter (#PCDATA)>

<!--
Serial section
--> 
<!ELEMENT sersect (#PCDATA)>

<!--
Part within a serial
--> 
<!ELEMENT serpart (#PCDATA)>

<!--
Abstract number
--> 
<!ELEMENT absno (#PCDATA)>

<!--
Series statement
--> 
<!ELEMENT series (text | (mst , msn? , issn?))>

<!--
Monographic series number
--> 
<!ELEMENT msn (#PCDATA)>

<!--
Monographic series title
--> 
<!ELEMENT mst (#PCDATA)>

<!--
Edition statement
(ST.32:B516)
--> 
<!ELEMENT edition (#PCDATA)>

<!--
Book subtitle
--> 
<!ELEMENT subtitle (#PCDATA)>

<!--
CONFERENCE GROUP / CITATION
There is no standard way of citing conference proceedings; date of the conf. may come before or after place, for example. The tags are specified in a set order where it is not possible or correct then simply use <text>
-->
<!ELEMENT conference (text | (conftitle, confdate?, confno?, confplace?, confsponsor*))>

<!ELEMENT confdate (date | (sdate, edate))>

<!ELEMENT confsponsor (#PCDATA | addressbook)>

<!ELEMENT confplace (#PCDATA | address)>

<!ELEMENT confno (#PCDATA)>

<!ELEMENT conftitle (#PCDATA)>

<!ELEMENT book-title (#PCDATA)>


<!ELEMENT doi (#PCDATA)>

<!ELEMENT cpyrt (#PCDATA)>
<!--
Issue number
-->
<!ELEMENT ino (#PCDATA)>

<!--
Volume id/number
-->
<!ELEMENT vid (#PCDATA)>

<!--
Publisher's unique id
-->
<!ELEMENT pubid (#PCDATA)>

<!--
International Standard Book Number
-->
<!ELEMENT isbn (#PCDATA)>

<!--
International Standard Serial Number
-->
<!ELEMENT issn (#PCDATA)>

<!--
Notes about the journal; e.g. Continues Journal of XYZ 1910-1998, published in French and English, etc.
-->
<!ELEMENT notes (#PCDATA)>

<!--
Physical description - generally NOT used in citations in pats; e.g., v., 27cm
-->
<!ELEMENT descrip (#PCDATA)>

<!--
Imprint:
Publication / creation data
Place of publication : publisher, date(s) of publication usually only date of publication is used for journal citations
-->
<!ELEMENT imprint (text | (address? , name , pubdate*))>

<!--
Publication date used in npl citations
-->
<!ELEMENT pubdate (#PCDATA | sdate | edate | time)>
Time; format HHMM

<!ELEMENT time (#PCDATA)>

<!ELEMENT edate (#PCDATA)>

<!ELEMENT sdate (#PCDATA)>

<!ELEMENT issue (#PCDATA)>

<!ELEMENT alttitle (#PCDATA)>

<!ELEMENT sertitle (#PCDATA)>

<!ELEMENT atl (#PCDATA)>

<!ELEMENT dtext (#PCDATA)>

<!ELEMENT url (#PCDATA)>

<!ELEMENT fax (#PCDATA)>

<!--
Telephone number

-->  
<!ELEMENT phone (#PCDATA)>

<!--  
Electronic address use for other than email
-->  
<!ELEMENT ead (#PCDATA)>

<!--  
Address components: 
Address formats differ from country to country 
If no structure possible use text
-->  
<!ELEMENT address (%address_group;)> 

<!--  
Postal code or zip code
-->  
<!ELEMENT postcode (#PCDATA)>

<!--  
Region of country; e.g., state, province, etc.
-->  
<!ELEMENT state (#PCDATA)>

<!--  
County, parish, department, etc (mainly UK, USA)
-->  
<!ELEMENT county (#PCDATA)>

<!--  
City or town name
-->  
<!ELEMENT city (#PCDATA)>

<!--  
Street may contain house number or name
-->  
<!ELEMENT street (#PCDATA)>

<!--  
Building information in address; e.g., Hoffman building
-->  
<!ELEMENT building (#PCDATA)>

<!--  
Address floor; e.g., 10th
-->  
<!ELEMENT address-floor (#PCDATA)>
<!-- Address room; e.g., Room 55B -->
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number -->
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code -->
<!ELEMENT mailcode (#PCDATA)>

<!-- Address, fifth line -->
<!ELEMENT address-5 (#PCDATA)>

<!-- Address, fourth line -->
<!ELEMENT address-4 (#PCDATA)>

<!-- Address, third line -->
<!ELEMENT address-3 (#PCDATA)>

<!-- Address, second line -->
<!ELEMENT address-2 (#PCDATA)>

<!-- Address, first line -->
<!ELEMENT address-1 (#PCDATA)>

<!-- Registered number -->
<!ELEMENT registered-number (#PCDATA)>

<!-- Synonym -->
<!ELEMENT synonym (#PCDATA)>
<!--
  Department, division, section, etc. name
-->  
<!ELEMENT department (#PCDATA)>

<!--
  Organisation name or company name
-->  
<!ELEMENT orgname (#PCDATA)>

<!--
  Role; e.g., President, Chairman, etc.
-->  
<!ELEMENT role (#PCDATA)>

<!--
  SDOBI : Individual id
-->  
<!ELEMENT iid (#PCDATA)>

<!--
  Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->  
<!ELEMENT suffix (#PCDATA)>

<!--
  Middle name(s) or initial(s)
-->  
<!ELEMENT middle-name (#PCDATA)>

<!--
  First or given name(s), initial(s)
-->  
<!ELEMENT first-name (#PCDATA)>

<!--
  Last, family, surname
-->  
<!ELEMENT last-name (#PCDATA)>

<!--
  Title: e.g., Mr., Mrs., Dr. etc
-->  
<!ELEMENT prefix (#PCDATA)>

<!--
  Relevant passage group within patent; most used in search reports
  - use text in abstract, description and claims
-->  
<!ELEMENT rel-passage (text | (passage+ , (category , rel-claims?)*)>
5.9 Search report
Asahi HASEBE: 01/07/17 incorporated changes from PFCs:
.. changed version number from v1.2 to 2.0
.. updated elements/attributes for ISR and ISA203
SY: 26/08/10 incorporated changes from PFCs:
..changed version number from v1.2 to v1.21
..For test only (PFC10/002, PFC10/003)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.1 to v1.2
..added element 'earlier-search' to srep-for-pub (PFC08/003)
..added attribute 'email-purpose' to email (PFC08/006)
MO: 01/07/08 incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..implementation of PFC06/001
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-text,
p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
January 2005
..released version number as v1.0
********************************************************************************
************
*** SECTION I - DECLARATION, ENT. REFs, ISO sets, etc
****************************************************************************
Some systems (including the popular nsngmls parser) may not be able to process files using 'plane 1' characters which have Unicode numbers higher than \#xFFFF. The versions of the DTD provided here incorporate the modifications mentioned above, but the high characters are replaced by the equivalent mchar construct <mchar name="..." /> this allows the DTD to be read and for MathML files to be validated using such systems.

```xml
<!ENTITY % mathml-charent.module "IGNORE" ->
<!ENTITY % MATHML.prefixed "IGNORE">
<!ENTITY % MATHML.xmlns "">

<!-- import MathML2 dtd -->
<!ENTITY % mathml2 PUBLIC "-//W3C//DTD MathML 2.0//EN" "mathml2.dtd">
%mathml2;

<!-- DTD OASIS Open XML Exchange Table Model. Maintained by OASIS; download from: http://www.oasis-open.org/specs/soextblx.dtdNote that the FPI in soextblx.dtd refers to itself as 'calstblx'. That convention has been followed here.-->
<!-- create content for title element in table -->
<!ENTITY % title "<!ELEMENT title (#PCDATA | b | i | u | sup | sub | smallcaps)* >" >
%title;

<!-- override OASIS Exchange <entry> model -->
<!ENTITY % tbl.entry.mdl "(#PCDATA | b | i | u | sup | sub | smallcaps | br | patcit | nplcit | bio-deposit | crossref | img | dl | ul | ol | chemistry | maths)* ">

<!-- import OASIS Exchange model -->
<!ENTITY % calstblx PUBLIC "-//OASIS//DTD XML Exchange Table Model 19990315//EN" "soextblx.dtd">
%calstblx;

<-- ********************************************  
  * SECTION II - DTD  
  ******************************************** -->

Notes:

This DTD is intended to process stand-alone search reports (SR) sent to the applicant - use search-report-data when included in patent-doc.: xx-patent-document.dtd Namely the ISR (PCT) and the EPO SR.

This DTD is based on:
Form PCT/ISA/201 Jan. 2004 (International-type SR)
Form PCT/ISA/210 Jan. 2004 (main SR)
Form PCT/ISA/220 Jan. 2004 (transmittal)
Form PCT/ISA/237 Jan. 2004 (written opinion)

Some stylesheet info. has been put in in most places according to the NEW ISR layout - it needs more detailed instructions and will need changing for the published ISR as part of the PCT pamphlet.

It is recommended to use the new layout and not the "box" layout of current paper forms.

Attributes:

id = file = filename of the whole application
lang = language of application - use ISO639 language code
status = status of the application; values: new = new application
date-produced = YYYYMMDD e.g, 20011230 if desired, 12 characters maximum
search-type = type of search expected values are:
isr for International Search Report
siwr for Supplementary International Search Report
international-type for international type search report
national for national search-reports
national-supplementary for supplementary national search reports
srep-type = type of search with detailed office specific values allowed
srep-office = Searching office, country code ST.3
dtd-version = dtd version number
form-version = form version number. e.g. "201501"

--> <!ELEMENT search-report (doc-page+ | (srep-info?, srep-for-pub?, office-specific-srep-data*))>  
<!ATTLIST search-report id            ID     #REQUIRED
file          CDATA  #REQUIRED
lang          CDATA  #IMPLIED
status        CDATA  #IMPLIED
date-produced CDATA  #REQUIRED
search-type    "(international-type |
isr | siwr |
national |
national-supplementary )" #IMPLIED
srep-type      CDATA  #IMPLIED
srep-office    CDATA  #REQUIRED
dtd-version    CDATA  #IMPLIED
form-version   CDATA  #IMPLIED >

--> Office is the ST.3 country code, including the regional authorities.  
Office-dtd is the file which contains the DTD for the office-specific 
bibliographic elements. 
ALTERNATIVELY element names may be grouped directly under this element.  
- add the two letter ST.3 code.

--> <!ELEMENT office-specific-srep-data EMPTY>  
<!ATTLIST office-specific-srep-data office     CDATA  #REQUIRED
office-dtd  CDATA  #REQUIRED
file       CDATA  #REQUIRED
id         ID     #IMPLIED
lang       CDATA  #IMPLIED
status     CDATA  #IMPLIED >

<!--
Earlier search document referenced in search report

--> <!ELEMENT srep-earlier-search (document-id)>  
<!ATTLIST srep-earlier-search id ID #IMPLIED >

<!-- Patent family member.  
(ST.32:B345)

--> <!ELEMENT patent-family (priority-application , (family-member+ | text))>  
<!ATTLIST patent-family id ID #IMPLIED >

<!-- Form PCT/ISA/2003 (April 2005)
If no search is to be carried out the search examiner will complete Form PCT/ISA/203 (Declaration of Non-Establishment of International Search Report), see PCT INTERNATIONAL SEARCH AND PRELIMINARY EXAMINATION GUIDELINES, 9.03.

Where the subject matter of all claims constitutes a subject excluded from the search where no meaningful search is possible for all of the claimed subject matter, a declaration of non-establishment of the international search report is issued pursuant to Article 17(2)(a) on Form PCT/ISA/203, see PCT INTERNATIONAL SEARCH AND PRELIMINARY EXAMINATION GUIDELINES, paragraph 9.40.

The phase attribute contains the code of the procedure, e.g. PCT, EP, US, ... and permits the reuse of the present DTD in national phases. Its values has been defaulted to PCT.

--> 

```xml
<!ATTLIST srep-declaration  phase CDATA  'PCT'>
<--
```

Form PCT/ISA/203 (April 2005)
Points 3. and 4. of Form PCT/ISA/203 (April 2005) indicate deficiencies of the international application related to sequence listings which are subject to the issuance of the declaration under Article 17(2)(a) for non compliance with Rules 13ter.1(c) and (d), namely:

* The late furnishing or the non compliance with Annex C of the Administrative Instruction of a paper or an electronic sequence-listing is indicated by the paper and electronic attribute respectively;
* The late furnishing or the non compliance with Annex C-bis of the Administrative Instruction of tables related to a sequence-listing is indicated by the table attribute;
* The late payment of the furnishing fees is indicated with the late-furnishing-fee attribute.

--> 

```xml
<!ELEMENT srep-declaration-sequence-listing EMPTY>
<!ATTLIST srep-declaration-sequence-listing  paper                 (yes | no ) #IMPLIED
                                    electronic            (yes | no ) #IMPLIED
                                    late-furnishing-fee   (yes | no ) #IMPLIED
                                    table                 (yes | no ) #IMPLIED >
<--
```

Form PCT/ISA/203 (April 2005)
Point 2. of Form PCT/ISA/203 (April 2005) indicates which part(s) of the international application are subject to the issuance of the declaration under Article 17(2)(a).

--> 

```xml
<!ELEMENT srep-declaration-compliance EMPTY>
<!ATTLIST srep-declaration-compliance  description (yes | no ) #IMPLIED
                                                      claims        (yes | no ) #IMPLIED
                                                      drawings      (yes | no ) #IMPLIED >
<--
```

Form PCT/ISA/203 (April 2005)
When it has been established that the subject-matter of the international application falls into one of the exceptions set out in Rule 39, point 1. of Form PCT/ISA/203 (April 2005) is
completed by selecting the exception.
Each attribute refers to a specific type of subject-matter excluded in Rule 39
(PCT International Search and Preliminary Examination Guidelines, chapter 9).

-->
<!ELEMENT srep-declaration-subject-matter EMPTY>
<!ATTLIST srep-declaration-subject-matter scientific-theories (yes | no )
#IMPLIED
mathematic-theories (yes | no )
#IMPLIED
plant-varieties (yes | no )
#IMPLIED
animal-varieties (yes | no )
#IMPLIED
bio-processes (yes | no )
#IMPLIED
business (yes | no )
#IMPLIED
mental-act (yes | no )
#IMPLIED
games (yes | no )
#IMPLIED
treatment-human (yes | no )
#IMPLIED
treatment-animal (yes | no )
#IMPLIED
 diagnostic-methods (yes | no )
#IMPLIED
presentation-information (yes | no )
#IMPLIED
computer-program (yes | no )
#IMPLIED>
<!--
The International Searching Authority (ISA/_______)
has made a declaration under Article 17(2)(a) and has
not established an international search report
(see Form PCT/ISA/203 dated _________________________________
day/month/year)), (Rule 45bis.5(e)).
-->
<!ELEMENT srep-earlier-declaration EMPTY>
<!ATTLIST srep-earlier-declaration taken-into-account (yes | no | not-available ) 'yes'
idref IDREF #IMPLIED >
<!--

-->
<!ELEMENT limitation-of-search (text? , claims-searched* , claims-searched-
incompletely* , claims-not-searched* , reason-limited-search*)>
<!ATTLIST limitation-of-search sequence CDATA #IMPLIED
reason-type CDATA #IMPLIED>
<!--
Heading text identifying the parts of the description (see PCT Rule 5.1(c),
PCT/AI section 204). Recommended id = h0001, h0002, etc. The attribute level
defines a hierarchic level and may be associated with a style. Otherwise the
formatting tags may be used to highlight the heading text.
-->
<!ELEMENT heading (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST heading level (1 | 2 | 3 ) #IMPLIED
id ID #IMPLIED >
<!------------------------------------------
Grouping tag for patent literature (patcit) or non-patent literature (nplcit) plus data related to those citations.

Recommended id='cit0001', 'cit0002', etc.
For the SR: id='sr-cit0001', 'sr-cit0002'
For the WO: id='wo-cit0001'

@reference
Identification given by the party to the document, e.g. A1.

@exam-reference
Identification given by the search or examining division to the document, e.g. D1.

@has-equivalent:
The expected usage of this attribute is that it will only be present in the circumstances where the examiner explicitly chooses to express the fact that the cited document has no equivalent document / patent family members in the rendered search report citation; in other words the attribute when present and having the value "no" will result in the text "No patent family" or "No equivalent documents" in the relevant language being displayed on the search report.

-->
<?ELEMENT citation ((patcit | nplcit) , (rel-passage*, category* , rel-claims*)* ,
corresponding-docs*, classification-ipc? , classifications-ipcr? , classification-national? , doi?)>

<?ATTLIST citation id ID  #IMPLIED
   cited-phase (application | search |
   supplementary-international-search-report |
   international-type-search-report |
   national-search-report |
   supplementary-national-search-report |
   examination |
   international-examination |
   national-examination |
   opposition |
   limitation )  #IMPLIED
   cited-by (applicant | examiner | opponent | third-party )  #IMPLIED
   reference CDATA  #IMPLIED
   exam-reference CDATA  #IMPLIED
   has-equivalent (yes | no)  #IMPLIED >

-->
Domestic or national classification.
(INID 52, ST.32:B520)

@scheme-name:
This attribute is used when it is necessary to distinguish between different classification schemes which may be in use at the same Office. In general, abbreviated forms should be used where they are widely recognized, for example scheme-name="CPC" for the Cooperative Patent Classification.

-->
<?ELEMENT classification-national (country , edition? , main-classification ,
further-classification* , (additional-info | linked-indexing-code-group | unlinked-indexing-code)* , text?)>

<?ATTLIST classification-national id ID  #IMPLIED
   scheme-name CDATA  #IMPLIED>
<!ELEMENT classifications-ipcr (classification-ipcr+)>
<!ATTLIST classifications-ipcr id ID #IMPLIED >
<-- International Patent Classification (IPC) data; -->
<!ATTLIST classification-ipcr id ID #IMPLIED sequence CDATA #IMPLIED >
<-- International Patent Classification (IPC) data; (INID 51, ST.32:B510) -->
<!ELEMENT classification-ipcr (edition , main-classification , further-classification* , (additional-info | linked-indexing-code-group | unlinked-indexing-code)* , text?)>
<!ATTLIST classification-ipcr id ID #IMPLIED >
<-- Further/secondary classification (ST.32:B512/B522) -->
<!ELEMENT further-classification (#PCDATA)>
<!ATTLIST further-classification id ID #IMPLIED sequence CDATA #IMPLIED >
<-- Stylesheet (for new layout) generates (for PCT) at the beginning: -->
PATENT COOPERATION TREATY (PCT)
INTERNATIONAL SEARCH REPORT (ISR) - PART 1 (PCT Articles 18 and Rules 43 and 44).
SUPPLEMENTARY INTERNATIONAL SEARCH REPORT (SISR) - PART 1 (PCT Rule 45bis)
FOR FURTHER ACTION see Notification of Transmittal of ISR (Form PCT/ISA/220) as well as, where applicable, abstract information below.
**This will need modifying depending on stylesheet and output required**
SREP - INFO DETAILS
This is a repetition of data found elsewhere but we put it here also for convenience, formatting, etc
The order has changed from the paper form.
PCT covers Forms: 201, 210, 220
EPO - covers Form 1507
<!ATTLIST srep-info total-page-count CDATA #IMPLIED >
<-- Information relevant to a previous search-report on which is referred to by the present search-report. -->
Abstract Drawing

The figure of the drawings to be published with the abstract is:
Figure No.
followed by text of attribute value:
by-applicant = as suggested by the applicant.
none-suggested = selected by the examiner because the applicant failed to
suggest a figure.
by-examiner = selected by the examiner because this figure better characterizes
the invention.

or:

none = None of the figures is to be published with the abstract
(Old PCT/ISA/210- 6 a and b)

Abstract
(followed by:)
The text is approved as submitted by the applicant [attribute]e "yes" (default)]
(or)
The text has been established according to Rule 38.2(b), ]by this ISA as it
appears below. The applicant may, within one month from the date of mailing of
this ISR, submit comments to this ISA.
a revised abstract if present [attribute "no"] (Old PCT/ISA/210 - 5)

-->
<!ELEMENT srep-abstract (abstract?)>
<!ATTLIST srep-abstract abs-approval (yes | no ) 'yes' >
</!

ABSTRACT: PCT Rule 8
(INID 57, ST.32:B570)
A concise summary of the disclosure, 50-150 words.
Recommended id = 'abst' or 'abst0001' for multiple abstracts

-->
<!ELEMENT abstract (doc-page+ | (abst-problem , abst-solution) | p+)>  
<!ATTLIST abstract id ID #IMPLIED
lang CDATA #IMPLIED
status CDATA #IMPLIED >
</!

The solution to the alleged problem that the invention purports to solve.
Recommended id = 'abss'

-->
<!ELEMENT abst-solution (p+)>  
<!ATTLIST abst-solution id ID #IMPLIED >
</!

The alleged problem that the invention purports to solve
Recommended id = 'absp'

-->
<!ELEMENT abst-problem (p+)>  
<!ATTLIST abst-problem id ID #IMPLIED >
</!

Title followed by:
The text is approved as submitted by the applicant - [attribute "yes" (default)]
or
The text has been established by this ISA to read as follows:
[a revised title if present - attribute "no"] (Old PCT/ISA/210 - 4)

-->
<!ELEMENT srep-invention-title (invention-title?)>
<!ATTLIST srep-invention-title title-approval (yes | no ) 'yes' >
</!

Title of the Invention:
(INID 54, ST.32:B540/B542)
Preferably two to seven words when in English or translated into English and precise. (Rule 4.3)
Recommended id = 'invt'

-->
<!ELEMENT invention-title (#PCDATA | b | i | u | o | sup | sub)>  
<!ATTLIST invention-title id ID #IMPLIED
lang CDATA #IMPLIED >
Observations where unity of invention is lacking

This ISA found multiple inventions in this international application, as follows: (use text data)

The attribute number-of-inventions indicates the number of inventions identified by the (S)ISA.

Where the applicant requests the Authority to review this opinion, the applicant is hereby invited, within one month from the date of mailing of this report, to pay a review fee (Rule 45bis.6(c)) in the amount of ________________ (currency/amount).

At the request of the applicant, this supplementary international search report is limited to the invention specified by the applicant under Rule 45bis.1(d) and those parts of the international application which relate to that invention (Rule 45bis.5(b)).

This Authority specified for supplementary search agrees with the conclusions of the International Searching Authority regarding the issue of unity of invention (see Forms PCT/ISA/210 and 237 dated ________________ ) and refers the applicant to these documents for further details. The idref attribute refers to the corresponding earlier-search element.

Remark on protest Attribute values:

no-protest = No protest accompanied the payment of additional search fees;
protest-fee-paid = The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee;
protest-fee-not-paid = The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified by the invitation.
The attribute "reason" defines the reason for which certain claims have not been searched.

<!ELEMENT srep-claims-not-searched (claim-num*, claim-remark?)>
<!ATTLIST srep-claims-not-searched reason (subject-matter-not-searched-by-is | no-meaningful-search | dependent-claims-incorrectly-drafted | limited-to-claim-fees-paid | limited-to-first-claims | not-subject-of-isr) #REQUIRED>

This supplementary international search report has been established taking due account of the international search report, or the declaration under Article 17(2)(a) that no international search report will be established, and the written opinion established under Rule 43bis.1. The idref attribute refers to the corresponding earlier search element.

<!ELEMENT srep-earlier-search-or-declaration-considered EMPTY>
<!ATTLIST srep-earlier-search-or-declaration-considered taken-into-account (yes | no | not-available) 'yes' idref IDREF #IMPLIED>

--
c. time of filing/furnishing

<!ELEMENT sequence-listing-filing-time (#PCDATA)>
<!ATTLIST sequence-listing-filing-time in-application (yes | no) #REQUIRED>
<!ATTLIST sequence-listing-filing-time together-with-application (yes | no) #REQUIRED>
<!ATTLIST sequence-listing-filing-time furnished-for-search (yes | no) #REQUIRED>
<!ATTLIST sequence-listing-filing-time amendment (yes | no) #IMPLIED>

--
b. format of material

<!ELEMENT sequence-listing-material-format EMPTY>
<!ATTLIST sequence-listing-material-format paper (yes | no) #REQUIRED>
<!ATTLIST sequence-listing-material-format electronic (yes | no) 'yes'>

--
a. type of material

<!ELEMENT sequence-listing-material-type EMPTY>
<!ATTLIST sequence-listing-material-type sequence-listing (yes | no) 'yes'>
<!ATTLIST sequence-listing-material-type table (yes | no) #IMPLIED>
<!--
Paragraph

Recommended id = p0001, p0002, etc. num = 0001, 0002, etc.

Note: paragraphs may occur in sections other than the description and at
different times eg. for the abstract, in this case use for example "p0001a";
amended claims: "p0001ac", etc.
-->
<!ELEMENT p (PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | dl | ul | ol | crossref | figref | patcit | nplcit | bio-deposit | img | chemistry | maths | tables | table-external-doc)*>
<!ATTLIST p id ID #IMPLIED
num CDATA #REQUIRED >
<!--
References a stand-alone table authored with the table-external DTD.
-->
<!ELEMENT table-external-doc (#PCDATA)>
<!ATTLIST table-external-doc id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic | external-electronic | paper ) #IMPLIED
external-type (math | chemistry | program-listing | other ) #IMPLIED
status CDATA #IMPLIED >

<!-- TABLES
This is image data or coded according to OASIS Exchange model with modified cell
'entry' content.

Recommended id = tabl0001, tabl0002, etc.
-->
<!ELEMENT tables (img | table)>
<!ATTLIST tables id ID #IMPLIED
num CDATA #REQUIRED >
<!-- Definition list

Recommended id = dlis0001, dlis0002, etc.
-->
<!ELEMENT dl (dt , dd)>    
<!ATTLIST dl tsize CDATA #IMPLIED
compact (compact ) #IMPLIED
id ID #IMPLIED >
<!-- Term to be defined

Recommended id = dtrm0001, dtrm0002, etc.
-->
<!ELEMENT dt (#PCDATA | b | i | u | o | sup | sub | smallcaps)>
<!-- Unordered Lists
list-style may be empty for lists with no bullet or other symbol default
list-style is 'bullets'

Recommended id = ulis0001, ulis0002, etc.

-->
<!ELEMENT ul (li+)>
<!ATTLIST ul  id         ID  #IMPLIED
list-style (bullet | dash | none )  'bullet'
compact        (compact )  #IMPLIED >

<!-- List item
Recommended id = list0001, list0002, etc.

-->
<!ELEMENT li (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref | figref | img | dl | ul | ol | chemistry | maths)*>
<!ATTLIST li  id  ID     #IMPLIED
num CDATA  #IMPLIED >

<!-- MATHEMATICS
This is image data or coded according to mathml, version 2

Recommended id = math0001, math0002, etc.

-->
<!ELEMENT maths (img | formula-text | (math , img?))>
<!ATTLIST maths  id  ID     #IMPLIED
num CDATA  #REQUIRED >

<!-- Chemistry
Chemical formulae, ring structures, Markush structures, etc.

For now treat as image data.
Depending on industry support we may use, e.g., chemML, CML later

Recommended id = chem0001, chem0002, etc

-->
<!ELEMENT chemistry (img | formula-text | (chem , img?))>
<!ATTLIST chemistry  id  ID     #IMPLIED
num CDATA  #REQUIRED >

<!-- This is a pointer to an external DTD for chemical markup - to be determined.
For EPO probably CML; http://www.xml-cml.org/

-->
<!ELEMENT chem EMPTY>
<!ATTLIST chem  id  ID     #IMPLIED
file      CDATA  #REQUIRED
chem-type CDATA  #IMPLIED >

<!-- Ordered Lists:
attribute 'ol-style'

Recommended use:
1 arabic numbers 1, 2, 3, ...
 a lower alpha a, b, c, ...
 A upper alpha A, B, C, ...
 i lower roman i, ii, iii, ...
 I upper roman I, II, III, ...

-->  
<!ELEMENT ol (li+)>  
<!ATTLIST ol  id       ID     #IMPLIED  
compact         (compact )  #IMPLIED  
ol-style CDATA  #IMPLIED >  

<--
 Image data
 Image is used for any kind of image: art work, figures, complex work units
 (math, tables, chemistry), etc.
 Recommended:
 id          = i0001, i0002, etc.
 he, wi      = "11" - millimeters - height, width;
 file        = file name, location; label - not used;
 alt         = alternate text if image not shown;
 img-content = drawing is the default;
 img-format  = common will be tiff, st33 and st35 in for backward compatibility
 and, later, publication.
 orientation = orientation of the image (portrait | landscape).
 Default is portrait
 inline      = (yes | no).
 Whether the image is to be presented inline or separated by line
 breaks. Default is no.

-->  
<!ELEMENT img EMPTY>  
<!ATTLIST img  id          ID     #IMPLIED  
he          CDATA  #REQUIRED  
wi          CDATA  #REQUIRED  
file        CDATA  #REQUIRED  
alt         CDATA  #IMPLIED  
img-content (drawing | photograph | character | dna | undefined | chem | table | math | program-listing | flowchart | graph )  'drawing'  
img-format  (jpg | tif | st33 | st35 )  #REQUIRED  
orientation (portrait | landscape )  'portrait'  
inline      (yes | no )  'no' >  

<--
 A reference to a figure;
 e.g., "...as shown in <figref idref='f0001'>figure<b>1</b></figref>..."  

-->  
<!ELEMENT figref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>  
<!ATTLIST figref  idref IDREFS  #IMPLIED  
num   CDATA   #IMPLIED >  

<--
 Cross reference to any other element with an identifier (id)

-->  
<!ELEMENT crossref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST crossref idref IDREF #REQUIRED >

<!--
Biological deposit citation (US EFS: biological-deposit)
(INID 83, ST.32:B830)
According to PCT Rule 13bis, EPC Rule 28
This covers all bio data references long and short within the description and/or
claims
Recommended id = biod0001, biod0002, etc.
-->  
<!ELEMENT bio-deposit (depositary , bio-accno , date? , term? , dtext?)>
<!ATTLIST bio-deposit id   ID     #IMPLIED
num  CDATA  #REQUIRED
url  CDATA  #IMPLIED
dnum CDATA  #IMPLIED >

<!--
Non-Patent Literature (NPL) CITation;

Notes:
This can be free text data without any structure (#PCDATA) which is NOT
recommended
or it can be highly structured data which is marked up according to ST.14 and
ISO 690 layout;

This part of the DTD has used many different sources for element names and DTD
structure and reference:
AACR2 / MARC
ISO 12083 - Electronic manuscript prep. and markup. DTD
Association of American Publishers (AAP) Z39.59 DTD
European Working Group for SGML (EWS) MAJOUR DTD
SuperJournal Full Article DTD
www.superjournal.ac.uk/sj
Elsevier DTD
Medline DTD (NLM)

Attributes (recommended):
id - ncit0001, ncit0002, etc
num - 0001, 0002
npltype - The TYPE of citation is office specific (recommended);
A - Abstract citation of no specific kind
B - Book citation
I - Biological abstract citation
C - Chemical abstracts citation
E - Database citation
D - Derwent citation
P - Patent cited within NPL group
J - Patent Abstracts of Japan citation (REC 067)
S - Serial / Journal / Periodical citation
W - World Wide Web / Internet search citation
medium - the type of medium
e.g., CD (CD-ROM), MT (Magnetic Tape), DISK, ONLINE
file - file name on local systems eg. XP number in EPO
url - where possible give full web link to document
-->  
<!ELEMENT nplcit ((text | article | book | online | othercit) , rel-passage*)>
<!ATTLIST nplcit id   ID     #IMPLIED
num  CDATA  #IMPLIED
lang  CDATA  #IMPLIED
file  CDATA  #IMPLIED
npl-type CDATA  #IMPLIED
medium CDATA  #IMPLIED
url  CDATA  #IMPLIED >
<!--
  Reference number (general); for the EPO this is the XP number
-->
<!ELEMENT refno (#PCDATA)>
<!ATTLIST refno id ID #IMPLIED >

<!--
  Classification code; e.g., ipc, dewey etc.
-->
<!ELEMENT class (#PCDATA)>
<!ATTLIST class class-type CDATA #IMPLIED >

<!--
  Subordinate responsibility; e.g., editor, translator, etc.
-->
<!ELEMENT subname (%name_group; | addressbook)>
<!ATTLIST subname subname-type (editor | translator | other-subname-type ) 'editor' >

<!--
  Author
Prime responsibility for the work
there is no distinguishing between personal and corporate authors
<a>uthor</a> followed by name or addressbook information
use the ID attribute if, for example, there is a need to distinguish between
multiple authors.
Can also include affiliation details
Recommended id = auth0001, auth0002, etc.
-->
<!ELEMENT author (%name_group; | addressbook)>
<!ATTLIST author id ID #IMPLIED >

<!--
  PATENT CITATIONS:
(ST.32:B561)
Patent Citation within abstract, description or claims.
For patent citations within Search Report see Search Report DTD
Notes:
  Tags arranged according to WIPO ST.14 order.
  This can be free text data without any structure (text).
Example:
  <patcit id='pcit0001' dnum='US4793675A' dnum-type='publication number'>
    <document-id>  
      <country>US</country>  
      <doc-number>4793675</doc-number>  
      <kind>A</kind>  
      <name>Handa</name>  
      <date>19881227</date>  
    </document-id>  
  </patcit>

Note:
  It is NOT expected that the applicant will create the tagged data
- it could be generated from a 'pull down' data entry form
or generated from internal SR databases
Attributes (recommended):
  id = pcit0001, pcit0002, etc.
1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

This opinion has been established on the basis of a translation from the original language into the following language________________ , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
This part preceded by - on old PCT/ISA/210:
This international search report has been prepared by this ISA and is transmitted to the applicant according to Article 18.
A copy is being transmitted to the International Bureau.

This international search report consists of a total of _____ sheets.
It is also accompanied by a copy of each prior art document cited in this report.
(This text will need modification for electronic transmission of the SR).

If the attribute value is "yes" then the prior art may accompany the SR as paper, image data, or xml (application-body) data

-->  
<!ELEMENT srep-prior-art-docs (doc-page | prior-art-xml-doc)*>  
<!ATTLIST srep-prior-art-docs prior-art (yes | no ) #REQUIRED >

--> XML version prior art document, if any
To be checked may be application-body.

-->  
<!ELEMENT prior-art-xml-doc EMPTY>  
<!ATTLIST prior-art-xml-doc id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic | external-electronic | paper ) #IMPLIED
status CDATA #IMPLIED >

<-- With regard to the protest against payment of (an) additional fee(s)
under Rule 40.2, the applicant is notified that:

if yes:
the protest together with the decision thereon has been transmitted to the
International Bureau together with the applicant's request to forward the texts
of both the protest and the decision thereon to the designated Offices.

if no:
no decision has been made yet on the protest; the applicant will be notified
as soon as a decision is made.

- Syntlesheet note: this data is followed by Reminders and Notes (if printed)
only put a link in to the relevant text.

-->  
<!ELEMENT srep-protest-fees EMPTY>  
<!ATTLIST srep-protest-fees srep-protest (yes | no ) 'yes' >

<-- Form PCT/ISA/220 (January 2004)
If yes:
The applicant is hereby notified that the international search report and the
written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46): When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report. Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: +41 22 740 14 35 if no: The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

--> <!ELEMENT srep-established EMPTY>
<!ATTLIST srep-established srep-established (yes | no) 'yes' >

Application reference information: application number, country (INID 21, ST.32:B210)

--> <!ELEMENT application-reference (document-id)>
<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

Document identification refers to patents (and patent applications) only. See WIPO ST.14

--> <!ELEMENT document-id (country , doc-number , kind? , name? , date?)>
<!ATTLIST document-id lang CDATA #IMPLIED >

ADDRESSBOOK GROUP: Holds name and contact information for individuals/organizations

The LANG attribute is REQUIRED for certain document types, e.g., the JPO PCT Request where names and addresses may be repeated in two different languages. If no structure possible use text.

--> <!ELEMENT addressbook (%name_group; , address , phone* , fax* , email* , url* , ead* , dtext?) | text>

<!ATTLIST addressbook id ID #IMPLIED
lang CDATA #IMPLIED >

Email address

Attribute: email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary means of contact as a replacement of the use of conventional post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office. For PCT purposes as at 1 July 2008, no attribute being included is
equivalent to 'informal'

```
<!ELEMENT email (#PCDATA)>
<!ATTLIST email email-purpose (informal | general | advance | main ) #IMPLIED >
</--

Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names

<!ELEMENT name (#PCDATA)>
<!ATTLIST name name-type (legal | natural ) #IMPLIED >
</--

doc-page = DOCUMENT or PAGE
This is primarily to be used when data for the whole or major sections of an
application are in image format OR other formats such as pdf.

Page range attributes are given when required
pp = page range
ppf = first page
ppl = last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings

Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

<!ELEMENT doc-page EMPTY>
<!ATTLIST doc-page id ID #IMPLIED
he CDATA #REQUIRED
wi CDATA #REQUIRED
type (jpg | pdf | tif ) #REQUIRED
alt CDATA #IMPLIED
pp CDATA #IMPLIED
ppf CDATA #IMPLIED
ppl CDATA #IMPLIED
file CDATA #REQUIRED
ocr CDATA #IMPLIED
color (color | bw ) #IMPLIED
orientation (portrait | landscape ) 'portrait' >
</--

SECTION III OF DTD
The actual search report - start a new page

The Heading is:
<B>INTERNATIONAL SEARCH REPORT (ISR) - PART 2</B>
<HR></HR>
Repeat international application number (?)
IPC, FIELDS and DATABASES SEARCHED
CLASSIFICATION OF SUBJECT MATTER

<!ELEMENT srep-for-pub (doc-page+ | (classification-ipc? , classifications-ipcr? ,
classification-national? , srep-fields-searched , srep-citations , srep-incomplete-
search? , srep-declaration? , srep-admin? , srep-patent-family? , srep-earlier-
search* , sisr-scope?))>
</--

Explanations with regard to the citations and/or the scope of the search (Rule
<!ELEMENT sisr-scope (heading* , p*)>

<!ELEMENT srep-patent-family (text?, patent-family+)>

<!ELEMENT family-member (document-id, rel-passage?)>

<!ELEMENT priority-application (document-id)>

<!ELEMENT srep-admin (examiners?, srep-office?, date-search-completed?, date-search-report-mailed?)>

<!ELEMENT examiners (primary-examiner?, assistant-examiner?, authorized-officer?)>

<!ELEMENT examiners (primary-examiner?, assistant-examiner?, authorized-officer?)>

<!ELEMENT priority-application (document-id)>

<!ELEMENT family-member (document-id, rel-passage?)>

<!ELEMENT sisr-scope (heading* , p*)>

<!ELEMENT srep-patent-family (text?, patent-family+)>

<!ELEMENT family-member (document-id, rel-passage?)>

<!ELEMENT priority-application (document-id)>

<!ELEMENT srep-admin (examiners?, srep-office?, date-search-completed?, date-search-report-mailed?)>

<!ELEMENT examiners (primary-examiner?, assistant-examiner?, authorized-officer?)>

<!ELEMENT examiners (primary-examiner?, assistant-examiner?, authorized-officer?)>
<!ELEMENT other-documentation (#PCDATA)>

<!--
Minimum documentation searched
-->
<!ELEMENT minimum-documentation (classification-ipc?, classifications-ipcr?, classification-national?)>  

<!--
Possible sources: human-generated-classification, machine-propagated-classification, software-analysis-generated-classification
-->
<!ELEMENT classification-data-source (#PCDATA)>

<!--
Possible status: original-classification, reclassified, various-classification, deleted-classification
-->
<!ELEMENT classification-status (#PCDATA)>

<!--->
<!ELEMENT generating-office (country)>  

<!--->
<!ELEMENT action-date (date)>  

<!--
Possible values: invention, non-invention
-->
<!ELEMENT classification-value (#PCDATA)>

<!--
Possible positions: first-symbol-position, later-symbol-position.
-->
<!ELEMENT symbol-position (#PCDATA)>

<!--->
<!ELEMENT subgroup (#PCDATA)>

<!--->
<!ELEMENT main-group (#PCDATA)>

<!--->
-->  
<!ELEMENT subclass (#PCDATA)>  

<!--  
<!ELEMENT section (#PCDATA)>  

<!--  
Levels: ipcr-advanced, ipcr-core  
-->  
<!ELEMENT classification-level (#PCDATA)>  

<!--  
<!ELEMENT ipc-version-indicator (date)>  

<!--  
Unlinked indexing code.  
(ST.32:B515/B525)  
-->  
<!ELEMENT unlinked-indexing-code (#PCDATA)>  

<!--  
Linked indexing code.  
(ST.32:B514/B524)  
-->  
<!ELEMENT linked-indexing-code-group (main-linked-indexing-code , sub-linked-indexing-code+)>  

<!--  
Sub/further Linked Indexing Code.  
-->  
<!ELEMENT sub-linked-indexing-code (#PCDATA)>  

<!--  
Main Linked Indexing Code.  
-->  
<!ELEMENT main-linked-indexing-code (#PCDATA)>  

<!--  
Main classification.  
(ST.32:B511/B521)  
-->  
<!ELEMENT main-classification (#PCDATA)>  

<!--  
Grouping tag referencing all previous to which a (supplementary) international search report refers to.  

<!ELEMENT earlier-searches (earlier-search+)>  

<Date of completion of search report.  
(ST.32:B565)>  

<!ELEMENT date-search-completed (date)>  

<Date of reception of the request for (supplementary) search>  

<!ELEMENT srep-request-received-date (date)>  

<Date of mailing of search report.  
(ST.32:B566)>  

<!ELEMENT date-search-report-mailed (date)>  

<!ELEMENT srep-office (addressbook)>  

<!ELEMENT authorized-officer (%name_group; , phone? , fax? , email? , electronic-signature?)>  

<!ELEMENT srep-info-admin (authorized-officer? , srep-office? , date-search-report-mailed? , date-opinion-completed?)>  

<!ELEMENT date-opinion-completed (date)>  

<!ELEMENT srep-other-info (srep-information+)>  

<!ELEMENT srep-information (srep-info-admin+)>  

<!ELEMENT authorized-officer (name-group , phone , fax , email , electronic-signature)>  

<!ELEMENT enhanced-signature (pkcs7)>  

<!ENTITY pkcs7 digital signature>
<!ELEMENT pkcs7 EMPTY>

<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>

<!ELEMENT click-wrap EMPTY>

<!ELEMENT text-string (#PCDATA)>

<!ELEMENT amount-total (#PCDATA)>

<!ELEMENT figure-to-publish (fig-number+)> 

<!ELEMENT fig-number (#PCDATA)>

<!ELEMENT srep-search-fees (srep-fee-1?, srep-fee-2?, srep-fee-3?, srep-fee-4?)>

<!ELEMENT srep-fee-4 (claim-num+)> 

<!ELEMENT srep-fee-3 (claim-num+)>
As all searchable claims could be searched without effort justifying an additional fee, this ISA did not invite payment of any additional fees.

As all required additional search fees were timely paid by the applicant, this ISR covers all searchable claims.

(Old PCT/ISA/210 - Box No. II) Observations where certain claims were found unsearchable

This ISR has not been established in respect of certain claims under Article 17(2)(a) for the following reasons.
The reasons for which sets of claims where not searched will be provided with an element srep-claims-not-searched for each set.

Remarks on these claims

Claim numbers

PCT/ISA/210 Box 1::Basis of the Report

This supplementary international search report has been established taking into account the rectification of an obvious mistake notified to this Authority under Rule 91 (Rules 45.6bis(a) and 45bis.7(c)).

A sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
(PCT/ISA/210 Box No. I Nucleotide and/or amino acid sequence(s)

Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

(PCT/ISA/237 Box No. I Basis of this opinion)

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

(PCT/IPEA/409 Supplemental Box Relating to Sequence Listing)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this report was established on the basis of:

(PCT/IPEA/408 Supplemental Box Relating to Sequence Listing)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion was established on the basis of:

Additional information.

(Basis of this opinion)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

(PCT/IPEA/409 Supplemental Box Relating to Sequence Listing)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this report was established on the basis of:

(PCT/IPEA/408 Supplemental Box Relating to Sequence Listing)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion was established on the basis of:

Additional information.

Definition description

This is for a simple mathematical or chemical formulae.

Identifies the period of time during which the depository must be able to furnish samples of the biological material.

Biological accession number:

The identification assigned to the biological material by the depository.
Information regarding the facility storing the biological deposit.
(ST.32:B832)

<!ELEMENT depositary (#PCDATA | address)>  

<!ELEMENT othercit (#PCDATA | b | i | u | o | sup | sub)>  

<!ELEMENT othercit (#PCDATA | b | i | u | o | sup | sub)>  

Online citation
Revised according to ISO-690-2 - Electronic documents and parts thereof. Please refer to this standard for definitions and examples. See: http://www.nlc-bnc.ca/iso/tc46sc9/standard/690-2e.htm#Contents

The tagging in fact is a mixture of article and book tags together with specific electronic source tags. 'Online' is taken to mean any kind of electronic documentation: databases, internet, CD-Roms, DVD, email, etc

EXAMPLES:;


<nplcit id='ncit1' num='0001' type='E' medium='online'>
  <online>
    <online-title>Kirk-Othmer Encyclopedia of Chemical Technology</online-title>
    <imprint>
      <address>New York</address>
      <name>John Wiley</name>
      <pubdate>19840000</pubdate>
    </imprint>
    <avail>dialog information services, palo alto (calif.).</avail>
    <datecit>
      <date>19900103</date>
    </datecit>
  </online>
</nplcit>

* Article on Internet:

<nplcit id='ncit1' num='0002' type='E' medium='online'>
  <online>
    <author>
      <name>Clark, Carol</name>
    </author>
    <online-title>On the Threshold of a Brave New World</online-title>
    <imprint>
      <name>CNN.com, 2000</name>
    </imprint>
    <series>
      <text>In-depth specials</text>
    </series>
  </online>
</nplcit>
* Personal communication (e-mail)

Message-ID: [002f01c02d603051a64a0$22a2580c@vaio]. Personal communication.

```xml
<online>
  <author>
    <name>Thacker, Jane</name>
  </author>
  <online-title>MPEG-21 project stream on digital item identification</online-title>
  <subname>
    <name>Message to: [iso.tc46.sc9@nlc-bnc.ca]</name>
  </subname>
  <pubdate>3 October 2000; 13:33 EST</pubdate>
  <notes>Personal communication</notes>
  <avail>Message-ID: [002f01c02d603051a64a0$22a2580c@vaio]</avail>
</online>
```


```
<!-- Date of search/retrieval  YYYYMMDD

<!ELEMENT srchdate (date)>

<!!-- Search terms

<!ELEMENT srchterm (#PCDATA)>

<!-- Date cited - date on which the citation was cited. May be different from srchdate below

<!ELEMENT datecit (date)>

<!-- Availability and access - REQUIRED use for URL, online database, ftp address, email, etc.; e.g., Available from Internet: http://www.epoline.org Available from DIALOG Information Systems, Palo Alto (Calif.)

<!ELEMENT avail (PCDATA)>
```
<!-- Numeration within host document
--> 
<!ELEMENT hostno (#PCDATA)> 

<!-- History of the article (not serial)
--> 
<!ELEMENT history (text | (received | accepted | revised | misc))> 

<!-- Miscellaneous information relating to the history of the article; see ISO 12083
--> 
<!ELEMENT misc (#PCDATA | date)> 

<!-- Date article was revised
--> 
<!ELEMENT revised (date)> 

<!-- Date article was accepted
--> 
<!ELEMENT accepted (date)> 

<!-- Date article was received
--> 
<!ELEMENT received (date)> 

<!-- Title of the host document/database
--> 
<!ELEMENT hosttitle (#PCDATA)> 

<!-- The title of the electronic resource
--> 
<!ELEMENT online-title (#PCDATA)> 

<!-- Article citations within a 'host' document
--> 

After patent citations the most common citations are articles within serials (periodicals, magazines), books and electronic (eg. internet) sources. This is a very complex and varied area to standardise. The tag set below is drawn from a number of sources as is the order of the tags (which in any case can be changed depending on the stylesheet used).

The order of tags is that of WIPO ST.14 / ISO 690 layout.
Note: it is NOT expected that the applicant will create the tagged data - it can be generated from a 'pull down' data entry form (eg. in Word) or generated from internal SR databases

-->

<!-- Article unique ID - assigned by a publisher to an article

-->
<!ELEMENT artid (#PCDATA)>

<!-- Book citation
In the order specified by WIPO ST.14 and ISO 690 and AACR2 rules for layout

WALTON, Herrmann. Microwave quantum theory.


PCT/AI/DTD/14
page 370
<!-- Keyword; e.g., from a Thesaurus or class. scheme (ST.32:B550) -->
<!ELEMENT keyword (#PCDATA)>

<!-- Book number -->
<!ELEMENT bookno (#PCDATA)>

<!-- Location within the cited work -->
<!ELEMENT location (text | (serpart?, sersect?, chapter?, pp?, column?, para?, line?))>

<!-- Referenced line within cited work -->
<!ELEMENT line (#PCDATA | linef | linel)>

<!-- Cited document line, last -->
<!ELEMENT linel (#PCDATA)>

<!-- Cited document line, first -->
<!ELEMENT linef (#PCDATA)>

<!-- Referenced paragraph within cited work -->
<!ELEMENT para (#PCDATA | paraf | paral)>

<!-- Cited paragraph, last -->
<!ELEMENT paral (#PCDATA)>

<!-- Cited paragraph, first -->
<!ELEMENT paraf (#PCDATA)>

<!-- Cited document column numbers -->
<!ELEMENT column (#PCDATA | colf | coll)-->
<!--
Cited document column, last
-->  
<!ELEMENT coll (#PCDATA)>  

<!--
Cited document column, first
-->  
<!ELEMENT colf (#PCDATA)>  

<!--
Cited document page numbers
-->  
<!ELEMENT pp (#PCDATA | ppf | ppl)*>  

<!--
Cited document page, last
-->  
<!ELEMENT ppl (#PCDATA)>  

<!--
Cited document page, first
-->  
<!ELEMENT ppf (#PCDATA)>  

<!--
Chapter; e.g., in a book. Example: Chapter 2
-->  
<!ELEMENT chapter (#PCDATA)>  

<!--
Serial section
-->  
<!ELEMENT sersect (#PCDATA)>  

<!--
Part within a serial
-->  
<!ELEMENT serpart (#PCDATA)>  

<!--
Abstract number
-->  
<!ELEMENT absno (#PCDATA)>  

<!--
Series statement
-->  
<!ELEMENT series (text | (mst , msn? , issn?))>
<!--
   Monographic series number
-->
<!ELEMENT msn (#PCDATA)>

<!--
   Monographic series title
-->
<!ELEMENT mst (#PCDATA)>

<!--
   Edition statement
   (ST.32:B516)
-->
<!ELEMENT edition (#PCDATA)>

<!--
   Book subtitle
-->
<!ELEMENT subtitle (#PCDATA)>

<!--------
   CONFERENC GROUP / CITATION
   There is no standard way of citing conference proceedings; date of the conf. may
   come before or after place, for example. The tags are specified in a set order
   where it is not possible or correct then simply use <text>
-->
<!ELEMENT conference (text | (confitle, confdate?, confno?, confplace?,
   confsponsor*))>

<!--------
   Conference date
-->
<!ELEMENT confdate (date | (sdate, edate))>

<!--
   Conference sponsor
-->
<!ELEMENT confsponsor (#PCDATA | addressbook)*>

<!--
   Conference place
-->
<!ELEMENT confplace (#PCDATA | address)*>

<!--
   Conference number
-->
<!ELEMENT confno (#PCDATA)>
<!ELEMENT pubid (#PCDATA)>

<!--
Notes about the journal; e.g. Continues Journal of XYZ 1910-1998, published in French and English, etc.
-->
<!ELEMENT notes (#PCDATA)>

<!--
Physical description - generally NOT used in citations in pats; e.g., v., 27cm
-->
<!ELEMENT descrip (#PCDATA)>

<!--
Imprint: Publication / creation data
Place of publication : publisher, date(s) of publication usually only date of publication is used for journal citations
-->
<!ELEMENT imprint (text | (address? , name , pubdate*))>

<!--
Publication date used in npl citations
-->
<!ELEMENT pubdate (#PCDATA | sdate | edate | time)>

<!--
Time; format HHMM
-->
<!ELEMENT time (#PCDATA)>

<!--
End date used in pubdate
-->
<!ELEMENT edate (#PCDATA)>

<!--
Start date used in pubdate
-->
<!ELEMENT sdate (#PCDATA)>

<!--
Issue designation; e.g., Annual, 1971-, 1890-1972
-->
<!ELEMENT issue (#PCDATA)>

<!--
Alternate title for serial; e.g. BMJ = British Medical Journal
-->
<!ELEMENT alttitle (#PCDATA)>
In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

Search request number eg. on PCT Form 201.

Date of request for search eg. on PCT Form 201

The name of the applicant (without address information) (ST.32:B711)
Where the international application claims the priority of several earlier applications, the filing date of the earliest application whose priority is claimed must be indicated as the priority date.

```xml
<!--
  Where the international application claims the priority of several earlier
  applications, the filing date of the earliest application whose priority is
  claimed must be indicated as the priority date.
-->
<!ELEMENT date-of-earliest-priority (date)>

<!--
  Date: components of a date. Format: YYYMMDD
-->
<!ELEMENT date (#PCDATA)>

<!--
  Document kind code; e.g., A1
  (INID 13, ST.32:B130)
-->
<!ELEMENT kind (#PCDATA)>

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

<!--
  Applicant's or agent's file reference, if desired, 12 characters maximum
-->
<!ELEMENT file-reference-id (#PCDATA)>

<!--
  Address used for general correspondence
-->
<!ELEMENT correspondence-address (customer-number | addressbook+)>

<!--
  Customer number for agents by office
-->
<!ELEMENT customer-number (#PCDATA)>

<!--
  Descriptive text
-->
<!ELEMENT dtext (#PCDATA)>

<!--
  Universal Resource Locator; e.g. www.wipo.int
-->
<!ELEMENT url (#PCDATA)>

<!--
  Fax number
-->
<!ELEMENT fax (#PCDATA)>

<!-- Telephone number -->
<!ELEMENT phone (#PCDATA)>

<!-- Electronic address use for other than email -->
<!ELEMENT ead (#PCDATA)>

<!-- Address components:
Address formats differ from country to country
If no structure possible use text -->
<!ELEMENT address (%address_group;)>

<!-- If no structure is possible, enter text (without markup) -->
<!ELEMENT text (#PCDATA)>

<!-- Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO -->
<!ELEMENT country (#PCDATA)>

<!-- Postal code or zip code -->
<!ELEMENT postcode (#PCDATA)>

<!-- Region of country; e.g., state, province, etc. -->
<!ELEMENT state (#PCDATA)>

<!-- County, parish, department, etc (mainly UK, USA) -->
<!ELEMENT county (#PCDATA)>

<!-- City or town name -->
<!ELEMENT city (#PCDATA)>
<!-- Street may contain house number or name 
--> 
<!ELEMENT street (#PCDATA)>

<!-- Building information in address; e.g., Hoffman building 
--> 
<!ELEMENT building (#PCDATA)>

<!-- Address floor; e.g., 10th 
--> 
<!ELEMENT address-floor (#PCDATA)>

<!-- Address room; e.g., Room 55B 
--> 
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number 
--> 
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code 
--> 
<!ELEMENT mailcode (#PCDATA)>

<!-- Address, fifth line 
--> 
<!ELEMENT address-5 (#PCDATA)>

<!-- Address, fourth line 
--> 
<!ELEMENT address-4 (#PCDATA)>

<!-- Address, third line 
--> 
<!ELEMENT address-3 (#PCDATA)>

<!-- Address, second line 
--> 
<!ELEMENT address-2 (#PCDATA)>
<!-- Address, first line -->
<!ELEMENT address-1 (PCDATA)>

<!-- Registered number -->
<!ELEMENT registered-number (PCDATA)>

<!-- Synonym -->
<!ELEMENT synonym (PCDATA)>

<!-- Department, division, section, etc. name -->
<!ELEMENT department (PCDATA)>

<!-- Organisation name or company name -->
<!ELEMENT orgname (PCDATA)>

<!-- Role; e.g., President, Chairman, etc. -->
<!ELEMENT role (PCDATA)>

<!-- SDOBI : Individual id -->
<!ELEMENT iid (PCDATA)>

<!-- Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.) -->
<!ELEMENT suffix (PCDATA)>

<!-- Second last name (mother's family surname), for some countries (such as Spain) is legally mandatory. -->
<!ELEMENT second-last-name (PCDATA)>

<!-- First last name (father's family surname), for some countries (such as Spain) is legally mandatory. -->
<!ELEMENT first-last-name (PCDATA)>
5.10  International Preliminary Report on Patentability

<?xml version='1.0' encoding='UTF-8' ?>


<!--
-->

* IPRP (International Preliminary Report on Patentability) v1.2 2012 JULY *
* PUBLIC "////WIPO//DTD IPRP 1.2//EN" "iprp-v1-2.dtd" *
* https://www.wipo.int/pct-safe/en/resources/1.17/iprp-v1-2.dtd *
* contacts: *
*   WIPO: Yukako SHIBA; yukako.shiba@wipo.int *
* revision history *

MO: 01/07/08 incorporated changes from PFCs:
.. changed version number from v1.1 to v1.2
.. added attribute 'email-purpose' to email (PFC08/006)
MO: 01/01/07 incorporated changes from PFCs:
.. changed version number from v1.0 to v1.1
.. implementation of PFC06/001
.. added element 'sup' to u (PFC06/003)
.. added element 'sup' to i (PFC06/003)
.. added element 'sup' to b (PFC06/003)
.. added element 'sub' to u (PFC06/003)
.. added element 'sub' to i (PFC06/003)
.. added element 'sub' to b (PFC06/003)
.. added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-text,
p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
2005/01/01
..released version number as v1.0
*****************************************************************************
* SECTION I - DECLARATION, ENT. REFs, ISO sets, etc                        *
*****************************************************************************
--> <!-- import character entity set. Download from:
   http://pcteasy.wipo.int/efiling_standards/schemaDocs/wipo.ent
   Note that nsgmls-based parsers (SP, Near and Far Designer, etc.)
   may not be able to process this file for reasons described below
   in MathML comments.
   -->
   <!--ENTITY % wipo PUBLIC "-//WIPO//ENTITIES WIPO 1.0//EN" "wipo.ent">
   %wipo;-->
 --> <!-- INCLUDE COMPONENT DTDS (MATHML, OASIS EXCHANGE TABLE MODEL               *
*****************************************************************************
-->
   <!-- DTD MathML2: maintained by W3C. Download from:
   http://www.w3.org/TR/MathML2/DTD-MathML-20010221.zip
   If using nsgmls-based parser (SP, Near and Far Designer, etc.)
   uncomment 'mathml-charent-module' switch below or replace the
   referenced MathML2 DTD with the version downloadable from:
   http://www.w3.org/Math/DTD/dtd-sp.zip
   This notice copied from: http://www.w3.org/Math/DTD/
   "DTD for nsgmls
   Some systems (including the popular nsgmls parser) may not be able
   to process files using 'plane 1' characters which have Unicode
   numbers higher than #xFFFF. The versions of the DTD provided here
   incorporate the modifications mentioned above, but the high
   characters are replaced by the equivalent mchar construct
   <mchar name="..." /> this allows the DTD to be read and for MathML
   files to be validated using such systems."
 -->
   <!--ENTITY % mathml-charent.module "IGNORE" -->
   <!--ENTITY % MATHML.prefixed "IGNORE" -->
   <!--ENTITY % MATHML.xmlns "" -->
   <!-- import MathML2 dtd -->
   <!--ENTITY % mathml2 PUBLIC "-//W3C//DTD MathML 2.0//EN" "mathml2.dtd">
   %mathml2;
   <!-- DTD OASIS Open XML Exchange Table Model.
   Maintained by OASIS; download from:
   http://www.oasis-open.org/specs/soextblx.dtd
   Note that the FPI in soextblx.dtd refers to itself as 'calstblx'.
   That convention has been followed here.
 -->
   <!-- create content for title element in table -->
   <!--ENTITY % title "<!ELEMENT title (#PCDATA | b | i | u | sup | sub | smallcaps)* >
   " -->
   %title;
   <!-- override OASIS Exchange <entry> model -->
   <!--ENTITY % tbl.entry.mdl "(#PCDATA | b | i | u | sup | sub | smallcaps | br
   | patcit | nplcit | bio-deposit | crossref | img
   | dl | ul | ol | chemistry | maths)* " -->
<!-- import OASIS Exchange model -->
<!ENTITY % calstblx PUBLIC "-/OASIS//DTD XML Exchange Table Model 19990315//EN" "soextblx.dtd">
%calstblx;

<!--
**************************************************************************
* SECTION II - DTD
**************************************************************************

This DTD is based on WIPO PCT IPEA Form 409
INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
and
Form PCT/IEPA/416 (January 2004)

NOTIFICATION OF TRANSMITTAL OF
INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)
* see: http://www.wipo.int/pct/en/forms/ipea/index.htm
**************************************************************************

Notes:

Attributes:
  id            = unique id
  lang          = language of application - use ISO639 language code
  dtd-version   = dtd version number
  file          = filename of the whole application
  status        = status of the application; values: new = new application
  iprp-office   = WIPO ST.3 code for application
  date-produced = YYYYMMDD e.g, 20011230

-->  
<ELEMENT iprp (doc-page+ | (iprp-info , iprp-written-opinion? , iprp-annex* , pct-art34* , office-specific-iprp-data*))>

<!ATTLIST iprp  lang          CDATA  #IMPLIED
  dtd-version   CDATA  #IMPLIED
  file          CDATA  #IMPLIED
  status        CDATA  #IMPLIED
  date-produced CDATA  #IMPLIED
  iprp-office   CDATA  #REQUIRED
  id            IDREF  #IMPLIED >

<!--
Office is the ST.3 country code, including the regional authorities.
Office-dtd is the file which contains the DTD for the office-specific elements.

-->  
<!ELEMENT office-specific-iprp-data EMPTY>

<!ATTLIST office-specific-iprp-data office  CDATA  #REQUIRED
  office-dtd CDATA  #IMPLIED
  file      CDATA  #REQUIRED
  id        ID     #IMPLIED
  lang      CDATA  #IMPLIED
  status    CDATA  #IMPLIED

<!ELEMENT pct-art34-doc EMPTY>

<!ATTLIST pct-art34-doc file      CDATA  #REQUIRED
  lang      CDATA  #IMPLIED
  status    CDATA  #IMPLIED
  carriers (internal-electronic | external-electronic | paper ) #IMPLIED
  file-type (xml | pdf | txt | tif | zip | jpg ) #IMPLIED >

<!ELEMENT iprp-annex-doc EMPTY>

PCT WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (ISA)  
(PCT Rule 43bis.1)  
DRAFT FORM PCT/ISA/237)

(The following data is taken from srep-info area):

- Correspondence address
- Date of mailing (day/month/year)
- Applicant s or agent s file reference
- International application No.
- International filing date (day/month/year)
- Priority date (day/month/year)
- International Patent Classification (IPC) or both national classification and IPC
- Applicant name

(followed by the text:)

FOR FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will, except in certain cases where this Authority does not also act as International Preliminary Examining Authority, be considered to be a written opinion of the International Preliminary Examining Authority. In this case, the applicant is invited to submit to the International Preliminary Examining Authority a written reply together, where appropriate, with amendments before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

---


<!ATTLIST iprp-written-opinion consideration-srep-opinion (yes | no ) #REQUIRED
final-date CDATA #REQUIRED
number-of-times CDATA #REQUIRED >

<!--
(PCT/ISA/237 - Box II) - Priority
-->

<!ELEMENT priority-opinion (earlier-appl? , claim-invalid? , additional-info?)>

<!ATTLIST priority-opinion valid CDATA #IMPLIED >

<!--
Form PCT/IPEA/409
IPRP identification information group element
-->

Rule 70.10: Any published application ... shall be accompanied by ... its claimed priority date (if any).
In respect of the priority date of any such document, the report may indicate that, in the opinion of the International Preliminary Examining Authority, such date has not been validly claimed.

-->
<!ELEMENT priority-date (#PCDATA)>
<!ATTLIST priority-date priority-valid (yes | no ) 'yes' >

Reference to other documents, either patent literature (patcit) or non-patent literature (nplcit)
Recommended id = 'cit0001', 'cit0002', etc.

-->
<!ATTLIST citation id ID #IMPLIED
srep-phase CDATA #IMPLIED >
<!ELEMENT classifications-ipcr (classification-ipcr*)>
<!ATTLIST classifications-ipcr id ID #IMPLIED >

International Patent Classification (IPC) data;

-->
<!ATTLIST classification-ipcr id ID #IMPLIED
sequence CDATA #IMPLIED >
<!--
(PCT/ISA/237 ) - Box No. IV Lack of unity of invention

(3) This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
complied with
not complied with for the following reasons
-->
<!ELEMENT compliance-unity-invention (p*)>
<!ATTLIST compliance-unity-invention unity-complied (yes | no ) #REQUIRED >
<!--
In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:

Attribute values:

(PCT/ISA/237 )
1 = paid additional fees
2 = paid additional fees under protest
3 = not paid additional fees
4 = not used
(PCT/IEA/409 and PCT/IEA/408)
1 = restricted the claims
2 = paid additional fees
3 = paid additional fees under protest
4 = neither restricted nor paid additional fees

--> <!ELEMENT invitation-pay-additional-fees EMPTY>
<!ATTLIST invitation-pay-additional-fees unity-fee-code  (1 | 2 | 3 | 4 | 5) #REQUIRED >

<!--
(PCT/ISA/237 and PCT/IEA/408)
The tables related to the nucleotide and/or amino acid sequence listing, if in
computer readable form only, do not comply with the technical requirements
provided for in Annex C-bis of the Administrative Instructions.

(PCT/IEA/409)
The tables related to the nucleotide and/or amino acid sequence listing do not
comply with the technical requirements provided for in Annex C-bis of the
Administrative Instructions in that the computer readable form:

--> <!ELEMENT annex-c-bis EMPTY>
<!ATTLIST annex-c-bis e-tables-missing (yes | no) #REQUIRED
format-error (yes | no) #REQUIRED >

<!--
The nucleotide and/or amino acid sequence listing does not comply with the
standard provided for in Annex C of the Administrative Instructions in that:

--> <!ELEMENT annex-c EMPTY>
<!ATTLIST annex-c e-tables-missing (yes | no) #REQUIRED
format-error (yes | no) #REQUIRED
no-payment (yes | no) #REQUIRED >

<!--
(PCT/ISA/237 - Box II)
Priority
1. The following document has not yet been furnished:

Attribute value:
1 = copy of the earlier application whose priority has been claimed
   (Rules 43bis.1 and 66.7(a)).
2 = translation of the earlier application whose priority has been claimed
   (Rules 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority
claim. This opinion has nevertheless been established on the assumption that the
relevant date is the claimed priority date.

--> <!ELEMENT earlier-appl EMPTY>
<!ATTLIST earlier-appl prio-code (1 | 2) #REQUIRED >

<!--
1. With regard to the language, this report is based on the international
application in the language in which it was filed, unless otherwise indicated
under this item.

This report is based on translations from the original language into the
following language __________________,
which is the language of a translation furnished for the purposes of:

international search (under Rules 12.3 and 23.1(b))
publication of the international application (under Rule 12.4)
international preliminary examination (under Rules 55.2 and/or 55.3)

--> <!ELEMENT basis-language-for-examination EMPTY>
<!ATTLIST basis-language-for-examination lang CDATA #REQUIRED
  examin-lang (originally-filed | publication | translation-isa | translation-iprp )

'originally-filed' >
</!
  c. time of filing/furnishing
--> <!ELEMENT sequence-listing-filing-time (#PCDATA)>  
<!ATTLIST sequence-listing-filing-time in-application (yes | no ) #REQUIRED
  together-with-application (yes | no ) #REQUIRED
  furnished-for-search (yes | no ) #REQUIRED
  amendment (yes | no ) #IMPLIED >
</!
  b. format of material
--> <!ELEMENT sequence-listing-material-format EMPTY>  
<!ATTLIST sequence-listing-material-format paper (yes | no ) #REQUIRED
  electronic (yes | no ) 'yes' >
</!
  a. type of material
--> <!ELEMENT sequence-listing-material-type EMPTY>  
<!ATTLIST sequence-listing-material-type sequence-listing (yes | no ) 'yes'
  table (yes | no ) #REQUIRED >
</!
  The drawings:
  pages ____________________________________________________
as originally filed/furnished pages* __________________________
  received by this Authority on _____________________________
pages* ____________________________________________________
  received by this Authority on _____________________________

--> <!ELEMENT iprp-basis-drawings (text | (rel-pages+ | rel-figures+)+)>  
<!ATTLIST iprp-basis-drawings basis (originally-filed | with-demand | with-letter ) #REQUIRED
  date-letter-received CDATA #IMPLIED >
</!
  The claims:
  pages ____________________________________________
as originally filed/furnished pages* __________________________
as amended (together with any statement) under Article 19 pages* __________
received by this Authority on _____________________________

->
<!ELEMENT iprp-basis-claims (text | claim-num+)>  
<!ATTLIST iprp-basis-claims basis (originally-filed | under-art19 | with-demand | with-letter ) #REQUIRED
date-letter-received CDATA #IMPLIED >

<!--
The description:
pages
as originally filed/furnished pages* __________________________________________________________________
received by this Authority on _____________________________
pages* ____________________________________________________________________
received by this Authority on _____________________________

->
<!ELEMENT iprp-basis-description (text | (rel-pages | rel-para)+)>  
<!ATTLIST iprp-basis-description basis (originally-filed | with-demand | with-letter ) #REQUIRED
date-letter-received CDATA #IMPLIED >

<!--
A signature represented by electronic means

->
<!ELEMENT electronic-signature (basic-signature | enhanced-signature)>  
<!ATTLIST electronic-signature date CDATA #REQUIRED
place-signed CDATA #IMPLIED >

<!--
A TIFF image of a signature

->
<!ELEMENT fax-image EMPTY>  
<!ATTLIST fax-image file CDATA #REQUIRED >

<!--
2. This REPORT consists of a total of ___________ sheets, including this
cover sheet.

->
<!ATTLIST iprp-sheet-of-annexes page-count CDATA #IMPLIED >

<!--
A total of (indicate type and number of electronic carrier(s)) ________________ ,
containing a sequence listing and/or tables related thereto, in computer readable
form only, as indicated in the Supplemental Box Relating to Sequence Listing
(see Section 802 of the Administrative Instructions).

->
<!ELEMENT iprp-annexes-electronic-carrier EMPTY>  
<!ATTLIST iprp-annexes-electronic-carrier quantity CDATA #IMPLIED >

<!--
3. This report is also accompanied by ANNEXES, comprising:
a. a total of ___________ sheets, as follows:

-->  
<!ELEMENT iprp-annexes-sheet (iprp-beyond-disclosure? , iprp-rectifications-authorized?)>

<!ATTLIST iprp-annexes-sheet page-count CDATA #IMPLIED>

-->  
<!ELEMENT classification-national (country , edition?, main-classification , further-classification* , (additional-info | linked-indexing-code-group | unlinked-indexing-code)* , text?)>

<!ATTLIST classification-national id ID #IMPLIED>

<!--  
Domestic or national classification.  
(INID 52, ST.32:B520)

-->  
<!ELEMENT classification_ipc (edition , main-classification , further-classification* , (additional-info | linked-indexing-code-group | unlinked-indexing-code)* , text?)>

<!ATTLIST classification_ipc id ID #IMPLIED>

<!--  
Further/secondary classification  
(ST.32:B512/B522)

-->  
<!ELEMENT further-classification (#PCDATA)>

<!ATTLIST further-classification id ID #IMPLIED
sequence CDATA #IMPLIED>

<!--  
Paragraph  
Recommended id = p0001, p0002, etc. num = 0001, 0002, etc.  
Note: paragraphs may occur in sections other than the description and at different times eg. for the abstract, in this case use for example "p0001a"; amended claims: "p0001ac", etc.

-->  
<!ELEMENT p (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | dl | ul | ol | crossref | figref | patcit | nplcit | bio-deposit | img | chemistry | maths | tables | table-external-doc)>

<!ATTLIST p id ID #IMPLIED
num CDATA #REQUIRED>

<!--  
References a stand-alone table authored with the table-external DTD.

-->  
<!ELEMENT table-external-doc (#PCDATA)>

<!ATTLIST table-external-doc id ID #IMPLIED
file CDATA #REQUIRED
lang CDATA #IMPLIED
carriers (internal-electronic |
external-electronic | paper ) #IMPLIED
external-type (math |
<!!--
TABLES
This is image data or coded according to OASIS Exchange model with modified cell
'entry' content.
Recommended id = tabl0001, tabl0002, etc.
-->  
<!ELEMENT tables (img | table)>  
<!ATTLIST tables  id  ID     #IMPLIED
num CDATA  #REQUIRED >
<!--
Definition list
Recommended id = dlis0001, dlis0002, etc.
-->  
<!ELEMENT dl (dt, dd)+>  
<!ATTLIST dl  tsize   CDATA  #IMPLIED
compact        (compact )  #IMPLIED
id      ID     #IMPLIED >
<!--
Term to be defined
Recommended id = dtrm0001, dtrm0002, etc.
-->  
<!ELEMENT dt (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>  
<!ATTLIST dt  id ID  #IMPLIED >
<!--
Unordered Lists
list-style may be empty for lists with no bullet or other symbol default
list-style is 'bullets'
Recommended id = ulis0001, ulis0002, etc.
-->  
<!ELEMENT ul (li+)>  
<!ATTLIST ul  id         ID  #IMPLIED
list-style     (bullet | dash | none )  'bullet'
compact        (compact )  #IMPLIED >
<!--
List item
Recommended id = list0001, list0002, etc.
-->  
<!ELEMENT li (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref | figref | img | dl | ul | ol | chemistry | maths)*>  
<!ATTLIST li  id  ID  #IMPLIED
num CDATA  #IMPLIED >
<!--
MATHEMATICS
This is image data or coded according to mathml, version 2
Recommended id = math0001, math0002, etc.

-->  
<!ELEMENT maths (img | (math , img?))>  
<!ATTLIST maths  id   ID  #IMPLIED  
num  CDATA  #REQUIRED >  

<!--  
Chemistry  
Chemical formulae, ring structures, Markush structures, etc.  
For now treat as image data.  
Depending on industry support we may use, e.g., chemML, CML later  
Recommended id = chem0001, chem0002, etc  
-->  
<!ELEMENT chemistry (img | (chem , img?))>  
<!ATTLIST chemistry  id   ID  #IMPLIED  
num  CDATA  #REQUIRED >  

<!--  
This is a pointer to an external DTD for chemical markup - to be determined.  
For EPO probably CML; http://www.xml-cml.org/  
-->  
<!ELEMENT chem EMPTY>  
<!ATTLIST chem  id        ID  #IMPLIED  
file      CDATA  #REQUIRED  
chem-type CDATA  #IMPLIED >  

<!--  
Ordered Lists:  
attribute 'ol-style'  
Recommended use:  
1   arabic numbers l, 2, 3, ...  
a   lower alpha a, b, c, ...  
A   upper alpha A, B, C, ...  
i   lower roman i, ii, iii, ...  
I   upper roman I, II, III, ...  
-->  
<!ELEMENT ol (li+)>  
<!ATTLIST ol  id       ID  #IMPLIED  
compact         (compact ) #IMPLIED  
ol-style CDATA  #IMPLIED >  

<!--  
Image data  
Image is used for any kind of image: art work, figures, complex work units (math, tables, chemistry), etc.  
Recommended:  
id   = i0001, i0002, etc.  
he, wi = "11" - milimeters - height, width;  
file = file name,location; label - not used;  
alt  = alternate text if image not shown;  
img-content = drawing is the default;  
img-format = common will be tiff, st33 and st35 in for backward compatibility and, later, publication.  
orientation = orientation of the image (portrait | landscape).  
Default is portrait  
inline = (yes | no).  
Whether the image is to be presented inline or separated by line
breaks. Default is no.

-->
<!ELEMENT img EMPTY>
<!ATTLIST img  id          ID     #IMPLIED
he          CDATA  #REQUIRED
wi          CDATA  #REQUIRED
file        CDATA  #REQUIRED
alt         CDATA  #IMPLIED
img-content (drawing | photograph | character | dna | undefined | chem | table | math | program-listing | flowchart | graph ) 'drawing'
img-format   (jpg | tif | st33 | st35 ) #REQUIRED
orientation  (portrait | landscape ) 'portrait'
inline       (yes | no ) 'no' >

<!--
A reference to a figure;
e.g., "...as shown in <figref idref='f0001'>figure<b>1</b></figref>..."
-->
<!ELEMENT figref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST figref  idref IDREFS  #IMPLIED
num   CDATA  #IMPLIED >

<!--
Cross reference to any other element with an identifier (id)
-->
<!ELEMENT crossref (#PCDATA | b | i | u | o | sup | sub | smallcaps)*>
<!ATTLIST crossref  idref IDREF  #REQUIRED>

<!--
Biological deposit citation (US EFS: biological-deposit)
(INID 83, ST.32:B830)
According to PCT Rule 13bis, EPC Rule 28
This covers all bio data references long and short within the description and/or
claims
Recommended id = biod0001, biod0002, etc.
-->
<!ELEMENT bio-deposit (depositary , bio-acncno , date? , term? , dtext?)>
<!ATTLIST bio-deposit  id   ID     #IMPLIED
num  CDATA  #REQUIRED
url  CDATA  #IMPLIED
dnum CDATA  #IMPLIED >

<!--
Non-Patent Literature (NPL) CITation;
Notes:
This can be free text data without any structure (#PCDATA) which is NOT
recommended
or it can be highly structured data which is marked up according to ST.14 and
ISO 690 layout;
This part of the DTD has used many different sources for element names and DTD
structure and reference:
AACR2 / MARC
ISO 12083 - Electronic manuscript prep. and markup. DTD
Association of American Publishers (AAP) Z39.59 DTD
European Working Group for SGML (EWS) MAJOR DTD
SuperJournal Full Article DTD
www.superjournal.ac.uk/sj
Elsevier DTD
Medline DTD (NLM)

Attributes (recommended):
id - ncit0001, ncit0002, etc
num - 0001, 0002
npltype - The TYPE of citation is office specific (recommended):;
A - Abstract citation of no specific kind
B - Book citation
I - Biological abstract citation
C - Chemical abstracts citation
E - Database citation
D - Derwent citation
P - Patent cited within NPL group
J - Patent Abstracts of Japan citation (REC 067)
S - Serial / Journal / Periodical citation
W - World Wide Web / Internet search citation

medium - the type of medium
e.g., CD (CD-ROM), MT (Magnetic Tape), DISK, ONLINE
file - file name on local systems eg. XP number in EPO
url - where possible give full web link to document

-->
<!ELEMENT nplcit ((text | article | book | online | othercit) , rel-passage*)>

<!ATTLIST nplcit id ID #IMPLIED
num CDATA #IMPLIED
lang CDATA #IMPLIED
file CDATA #IMPLIED
npl-type CDATA #IMPLIED
medium CDATA #IMPLIED
url CDATA #IMPLIED>

<!--
Reference number (general); for the EPO this is the XP number
-->
<!ELEMENT refno (#PCDATA)>

<!ATTLIST refno id ID #IMPLIED>

<!--
Classification code; e.g., ipc, dewey etc.
-->
<!ELEMENT class (#PCDATA)>

<!ATTLIST class class-type CDATA #IMPLIED>

<!--
Subordinate responsibility; e.g., editor, translator, etc.
-->
<!ELEMENT subname (%name_group; | addressbook)>

<!ATTLIST subname subname-type (editor | translator | other-subname-type ) '
editor' >

<!--
Author
Prime responsibility for the work
there is no distinguishing between personal and corporate authors
-->
<author> followed by name or addressbook information use the ID attribute if, for example, there is a need to distinguish between multiple authors.
Can also include affiliation details
Recommended id = auth0001, auth0002, etc.

<!ELEMENT author (%name_group; | addressbook)>
<!ATTLIST author  id ID  #IMPLIED >

 PATENT CITATIONS:
ST.32:B561
Patent Citation within abstract, description or claims.
For patent citations within Search Report see Search Report DTD
Notes:
Tags arranged according to WIPO ST.14 order.
This can be free text data without any structure (text).
Example:
<patcit id='pcit0001' dnum='US4793675A' dnum-type='publication number'>
  <document-id>
    <country>US</country>
    <doc-number>4793675</doc-number>
    <kind>A</kind>
    <name>Handa</name>
    <date>19881227</date>
  </document-id>
</patcit>
Note:
It is NOT expected that the applicant will create the tagged data
- it could be generated from a 'pull down' data entry form
or generated from internal SR databases
Attributes (recommended):
id - pcit0001, pcit0002, etc.
um - 0001, 0002, etc.
dnum - use full number as one string, eg, "US5401234A";
url - where possible give full web link to patent
file - file name eg. if stored on local systems
dnum-type - type of document number
(e.g., application number, publication number)

<!ELEMENT patcit (text | (document-id , rel-passage*))>
<!ATTLIST patcit  id        ID     #IMPLIED
num       CDATA  #IMPLIED
dnum      CDATA  #IMPLIED
dnum-type  CDATA  #IMPLIED
file      CDATA  #IMPLIED
url       CDATA  #IMPLIED >

This element is one method to identify content consisting of text objects that require preservation (pre) of their whitespace in order to preserve internal logical relationships.
(e.g., sequence listing fragments, computer program listings)

<!ELEMENT pre (#PCDATA)>
<!ATTLIST pre  id           ID  #IMPLIED
xml:space        (preserve | default ) #IMPLIED
listing-type     (sequence | program-listing | other )
#REQUIRED >
Underscore: style - single is default

-->
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)*>
<!ATTLIST u style (single | double | dash | dots ) 'single' >

-->
<!ELEMENT o (#PCDATA | b | i | smallcaps | sup | sub)*>
<!ATTLIST o style (single | double | dash | dots | leftarrow | rightarrow | leftrightarrow ) 'single' >

Application reference information: application number, country
(INID 21, ST.32:B210)

-->
<!ELEMENT application-reference (document-id)>
<!ATTLIST application-reference id ID #IMPLIED
appl-type CDATA #IMPLIED >

Document identification refers to patents (and patent applications) only.
See WIPO ST.14

-->
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>
<!ATTLIST document-id lang CDATA #IMPLIED >

ADDRESSBOOK GROUP:
Holds name and contact information for individuals/organizations

The LANG attribute is REQUIRED for certain document types,
e.g., the JPO PCT Request where names and addresses may be repeated in two
different languages. If no structure possible use text.

-->
<!ELEMENT addressbook (%name_group; , address , phone* , fax* , email* , url* ,
ead* , dtext?) | text)>
<!ATTLIST addressbook id ID #IMPLIED
lang CDATA #IMPLIED >

Email address

Attribute:
email-purpose reason for which email address is included:
informal for informal contact only
general for any type of communication
confirmation any type of communication, but formal messages followed up
by conventional mailing (to the extent offered)
main where applicant desires this address to be used as primary
means of contact as a replacement of the use of conventional
post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is equivalent to 'informal'.

-->
<!ELEMENT email (#PCDATA)>
<!ATTLIST email  email-purpose (informal | general | advance | main ) #IMPLIED >
<--
Name:
If no distinction or detail can be given.
Also to be used for: personal (natural person) and corporate (legal entity) names
-->
<!ELEMENT name (#PCDATA)>
<!ATTLIST name  name-type (legal | natural ) #IMPLIED >
<--
doc-page - DOCUMENT or PAGE
This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.
Page range attributes are given when required
  pp - page range
  pff - first page
  ppl - last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings
Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.
-->
<!ELEMENT doc-page EMPTY>  
<!ATTLIST doc-page id          ID     #IMPLIED 
he          CDATA  #REQUIRED
wi          CDATA  #REQUIRED
type        (jpg | pdf | tif )  #REQUIRED
alt         CDATA  #IMPLIED
pp          CDATA  #IMPLIED
pff         CDATA  #IMPLIED
ppl         CDATA  #IMPLIED
file        CDATA  #REQUIRED
ocr         CDATA  #IMPLIED
color        (color | bw )  #IMPLIED
orientation   (portrait | landscape ) 'portrait' >
<--
PCT Article 34 Amendment document
-->
<!ELEMENT pct-art34 (doc-page | pct-art34-doc)>  
<--
Body of the annex to the International Preliminary Examination Report
-->
<!ELEMENT iprp-annex (doc-page | iprp-annex-doc)>  
<--
(PCT/IPEA/408) - Box No. V
Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

<!ELEMENT opinion-citations (certain-published-documents | non-written-disclosures)>

<!ELEMENT opinion (certain-published-documents | non-written-disclosures)>

<!ELEMENT unity-of-invention (invitation-pay-additional-fees?, not-unity-of-invention?, compliance-unity-invention, opinion-established-regarding)>

<!ELEMENT opinion-established-regarding (entire-application | claim-num+)

<!ELEMENT basis-of-iprp-opinion (basis-language-for-examination, iprp-basis-application?, iprp-basis-description*, iprp-basis-claims*, iprp-basis-drawings*, sequence-list-basis*, cancellation-doc?, pct-rule70-2c?)>

<!ELEMENT non-written-disclosures (kind-of-disclosure, date, date-of-written-disclosure)>

<!ELEMENT date-of-written-disclosure (date)>

---

(PCT/IPEA/408 - Box No. VI Certain documents cited)

(PCT/IPEA/408 - Box No. IV Lack of unity of invention)

(PCT/ISA/237) - Box No. IV Lack of unity of invention Consequently, this opinion has been established in respect of the following parts of the international application: all parts the parts relating to claims Nos.

(PCT/IPEA/408 - Box No. I Basis of the opinion) Basis of this opinion

(PCT/IPEA/409) Certain documents cited (Section VI)

(PCT/ISA/237) 2. Non-written disclosures (Rules 43bis.1 and 70.9)

(PCT/IPEA/409 and PCT/IPEA/408) 2. Non-written disclosures (Rule 70.9)

(PCT/ISA/237) 2. Non-written disclosures (kind-of-disclosure, date, date-of-written-disclosure)

(PCT/ISA/237) 2. Non-written disclosures (kind-of-disclosure, date, date-of-written-disclosure)
Kind of non-written disclosure

1. Certain published documents (Rules 43bis.1 and 70.10)
   - Certain published documents (Rule 70.10)

1. Certain published documents (PCT/ISA/237)
   - Certain published documents (PCT/IPEA/409 and PCT/IPEA/408)

Certain observations on the international application (Section VIII).
The following observations on the clarity of the claims, description, and
drawings or on the question whether the claims are fully supported by the
description, are made:

Certain defects in the international application (Section VII).
The following defects in the form or contents of the international application
have been noted:

Reasoned statement under Article 35(2) with regard to novelty, inventive step
or industrial applicability; citations and explanations supporting such
statement (Section V)

Citations and explanations:

Citations and explanations (PCT/ISA/237)

Possible sources: human-generated-classification,
machine-propagated-classification, software-analysis-generated-classification
<!-- Possible status: original-classification, reclassified, various-classification, deleted-classification -->

<!ELEMENT classification-status (#PCDATA)>

<!--

<!ELEMENT generating-office (country)>

<!--

<!ELEMENT action-date (date)>

<!-- Possible values: invention, non-invention -->

<!ELEMENT classification-value (#PCDATA)>

<!-- Possible positions: first-symbol-position, later-symbol-position. -->

<!ELEMENT symbol-position (#PCDATA)>

<!--

<!ELEMENT subgroup (#PCDATA)>

<!--

<!ELEMENT main-group (#PCDATA)>

<!--

<!ELEMENT subclass (#PCDATA)>

<!--

<!ELEMENT section (#PCDATA)>

<!-- Levels: ipcr-advanced, ipcr-core -->

<!ELEMENT classification-level (#PCDATA)>
(PCT/IPEA/409)
Box No. IV Lack of unity of invention

Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
all parts
the parts relating to claims Nos.

(PCT/ISA/237 - Box III)
Non-establishment of opinion with regard to novelty, inventive step and industrial applicability.

-->
<!ELEMENT non-establishment-of-opinion (invention-not-examined, not-annex-c-compliant)>

<!--
(PCT/ISA/237 - Box III)
-->
<!ELEMENT not-annex-c-compliant (annex-c?, annex-c-bis?, additional-info?)>

<!--
The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:
-->

<!--
No international search report has been established for said claims Nos. (rel-claims)
-->
<!ELEMENT non-estab-reason-4 (claim-num+)>  

<!--
The claims, or said claims Nos. (claim nos) are so inadequately supported by the description that no meaningful opinion could be formed.
-->
<!ELEMENT non-estab-reason-3 (claim-num*, p+)>  

<!--
The description, claims or drawings (indicate particular elements below) or said claims Nos are so unclear that no meaningful opinion could be formed (specify):
-->
<!ELEMENT non-estab-reason-2 (claim-num*, p+)>  

<!--
The said international application, or the said claims Nos. "rel-claims" relate to the following subject matter which does not require an international preliminary examination
-->
<!ELEMENT non-estab-reason-1 (claim-num*, p+)>

<!--
The entire international application.
-->
<!ELEMENT entire-application EMPTY>  

<!--
(PCT/IPEA/409)
Box NO. II Priority
-->
<!ELEMENT iprp-priority (earlier-appl?, claim-invalid?, additional-info?)>

<!--
This opinion has been established as if no priority had been claimed due to
the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1).

Thus for the purposes of this opinion, the international filing date indicated
above is considered to be the relevant date.
-->
<!ELEMENT claim-invalid EMPTY>

<!--
(PCT/IPEA/409)
Box No. I Basis of the report
-->
<!ELEMENT iprp-basis ((iprp-basis-application?, iprp-basis-description*, iprp-basis-claims*, iprp-basis-drawings*, sequence-list-basis*), basis-language-for-examination, cancellation-doc?, pct-rule70-2c?)>

<!--
4. This report has been established as if (some of) the amendments annexed to
this report and listed below had not been made, since they have been
considered to go beyond the disclosure as filed, as indicated in the
Supplemental Box (Rule 70.2(c)).
-->
<!ELEMENT pct-rule70-2c (amend-description?, amend-claims?, amend-drawings?, amend-sequence-listing?, amend-sequence-listing-table?)>

<!--
The amendments have resulted in the cancellation of:
-->

<!--
Any table(s) related to sequence listing (specify): ________________
-->
<!ELEMENT amend-sequence-listing-table (text)>

<!--
The sequence listing (specify): ________________________________
-->
<!ELEMENT amend-sequence-listing (text)>

<!--
The drawings, sheets/figs ________________________________
-->
<!ELEMENT amend-drawings (text | (rel-pages+ | rel-figures+)*)>

<!--
The claims, Nos. ________________________________
-->
<!ELEMENT amend-claims (text | claim-num+)>
The description, pages _______________________________________

A sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this report was established on the basis of:

In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

Referenced figure number

---

<!ELEMENT rel-figures (#PCDATA)>
2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as originally filed and are not annexed to this report):

The international application as originally filed/furnished

Date of mailing:

Date of submission of demand, format YYYYMMDD

International Preliminary Examination Authority; international preliminary examination to be carried out by

Persons acting on the document.

(ST.32:B745)
--> <!--  
<!ELEMENT examiners (primary-examiner?, assistant-examiner?, authorized-officer?)>  

<!--  
 Authorized Officer.  
-->  
<!ELEMENT authorized-officer (%name_group; , phone? , fax? , email? , electronic-signature?)>  

<!--  
 Assistant Examiner.  
(ST.32:B747)  
-->  
<!ELEMENT assistant-examiner (%name_group; , electronic-signature?)>  

<!--  
 Primary Examiner.  
(ST.32:B746)  
-->  
<!ELEMENT primary-examiner (%name_group; , electronic-signature?)>  

<!--  
 A PKI / PKCS #7 digital signature data type  
-->  
<!ELEMENT enhanced-signature (pkcs7)>  

<!--  
 PKCS7 digital signature  
-->  
<!ELEMENT pkcs7 EMPTY>  

<!--  
 A non-PKI electronic signature  
-->  
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>  

<!--  
 A simple 'signature';  
 e.g., clicking a button labeled 'accept' or 'I agree'  
-->  
<!ELEMENT click-wrap EMPTY>  

<!--  
 A simple text string is to be used as the basic electronic signature;  
 e.g., John Doe  <text-string>/jd/</text-string>  
-->  
<!ELEMENT text-string (#PCDATA)>  

<!--  
 Sheets which supersede earlier sheets, but which this Authority considers contain  
 an amendment that goes beyond the disclosure in the international application as  
-->
filed, as indicated in item 4 of Box No. I and the Supplemental Box.

-->
<!ELEMENT iprp-rectifications-authorized EMPTY>

<![--
Sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions)
-->
<!ELEMENT iprp-beyond-disclosure EMPTY>

<![--
The name of the applicant (without address information) (ST.32:B711)
-->
<!ELEMENT applicant-name (%name_group;)

<![--
Unlinked indexing code. (ST.32:B515/B525)
-->
<!ELEMENT unlinked-indexing-code (#PCDATA)>

<![--
Linked indexing code. (ST.32:B514/B524)
-->
<!ELEMENT linked-indexing-code-group (main-linked-indexing-code , sub-linked-indexing-code+)

<![--
Sub/further Linked Indexing Code.
-->
<!ELEMENT sub-linked-indexing-code (#PCDATA)>

<![--
Main Linked Indexing Code.
-->
<!ELEMENT main-linked-indexing-code (#PCDATA)>

<![--
Main classification. (ST.32:B511/B521)
-->
<!ELEMENT main-classification (#PCDATA)>

<![--
Additional information. (ST.32:B513)
-->
<!ELEMENT additional-info (p+)>
Definition description

-->
<!ELEMENT dd (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref | figref | img | ul | ol | chemistry | maths)*>

<!--
Identifies the period of time during which the depository must be able to furnish samples of the biological material.
-->
<!ELEMENT term (#PCDATA)>

<!--
Biological accession number:
(ST.32:B831)
The identification assigned to the biological material by the depository
-->
<!ELEMENT bio-accno (#PCDATA)>

<!--
Information regarding the facility storing the biological deposit.
(ST.32:B832)
-->
<!ELEMENT depositary (#PCDATA | address)*>

<!--
Other citations - free form
-->
<!ELEMENT othercit (#PCDATA | b | i | u | o | sup | sub)*>

<!--
Online citation
Revised according to ISO-690-2 - Electronic documents and parts thereof.
Please refer to this standard for definitions and examples.
See: http://www.nlc-bnc.ca/iso/tc46sc9/standard/690-2e.htm#Contents
The tagging in fact is a mixture of article and book tags together with specific electronic source tags.
'Online' is taken to mean any kind of electronic documentation:
databases, internet, CD-Roms, DVD, email, etc

EXAMPLES:,

Kirk-Othmer Encyclopedia of Chemical Technology [online].
Available from: DIALOG Information Services, Palo Alto (Calif.).

<nplcit id='ncit1' num='0001' type='E' medium='online'>
<online>
<online-title>Kirk-Othmer Encyclopedia of Chemical Technology</online-title>
<imprint>
<address>
<text>New York</text>
</address>
<name>John Wiley</name>
<pubdate>19840000</pubdate>
</imprint>
<avail>dialog information services, palo alto (calif.).</avail>
* Article on Internet:
Clark, Carol. On the Threshold of a Brave New World.

  <nplcit id='ncit1' num='0002' type='E' medium='online'>
   <online>
     <author>
       <name>Clark, Carol</name>
     </author>
     <online-title>On the Threshold of a Brave New World</online-title>
     <imprint>
       <name>CNN.com, 2000</name>
     </imprint>
     <series>
       <text>In-depth specials</text>
     </series>
     <datecit><date>20000824; 10:25 est</date></datecit>
   </online>
  </nplcit>

* Personal communication (e-mail)
Thacker, Jane. MPEG-21 project stream on digital item identification [online]. Message to: [iso.tc46.sc98nlc-bnc.ca]. 3 October 2000; 13:33 EST [cited 6 October 2000; 13:10 EST]. Message-ID: [002f01c02d603051a64a0$22a2580c@vaio]. Personal communication.

  <nplcit id='ncit3' num='0003' type='E' medium='online'>
   <online>
     <author>
       <name>Thacker, Jane</name>
     </author>
     <online-title>MPEG-21 project stream on digital item identification</online-title>
     <subname>
       <name>Message to: <iso.tc46.sc98nlc-bnc.ca></name>
     </subname>
     <pubdate>3 October 2000; 13:33 EST</pubdate>
     <notes>Personal communication</notes>
     <avail>Message-ID: <002f01c02d603051a64a0$22a2580c@vaio></avail>
     <datecit><date>6 october 2000; 13:10 EST</datecit></datecit>
   </online>
  </nplcit>
Search terms

<!ELEMENT srchterm (#PCDATA)>

<!--
Date cited - date on which the citation was cited.
May be different from srchdate below
-->!

<!ELEMENT datecit (date)>

<!--
Availability and access - REQUIRED use for URL, online database, ftp address, email, etc.;
e.g., Available from Internet: http://www.epoline.org
Available from DIALOG Information Systems, Palo Alto (Calif.)
-->!

<!ELEMENT avail (#PCDATA)>

<!--
Numeration within host document
-->!

<!ELEMENT hostno (#PCDATA)>

<!--
History of the article (not serial)
-->!

<!ELEMENT history (text | (received | accepted | revised | misc))>

<!--
Miscellaneous information relating to the history of the article; see ISO 12083
-->!

<!ELEMENT misc (#PCDATA | date)>*>

<!--
Date article was revised
-->!

<!ELEMENT revised (date)>

<!--
Date article was accepted
-->!

<!ELEMENT accepted (date)>

<!--
Date article was received
-->!

<!ELEMENT received (date)>

<!--
Title of the host document/database
-->!
<!ELEMENT hosttitle (#PCDATA)>

<!--
The title of the electronic resource
-->
<!ELEMENT online-title (#PCDATA)>

<!--
Article citations within a 'host' document

After patent citations the most common citations are articles within serials (periodicals, magazines), books and electronic (e.g. internet) sources. This is a very complex and varied area to standardise. The tag set below is drawn from a number of sources as is the order of the tags (which in any case can be changed depending on the stylesheet used).

The order of tags is that of WIPO ST.14 / ISO 690 layout.
[XPnnnnnnnnnn].

<nplcit id='ncit1' num='0012' type='S' file='XP1234456'>

Note: it is NOT expected that the applicant will create the tagged data - it can be generated from a 'pull down' data entry form (e.g. in Word) or generated from internal SR databases
-->

<!--
Article unique ID - assigned by a publisher to an article
-->
<!ELEMENT artid (#PCDATA)>

<!--
Book citation
In the order specified by WIPO ST.14 and ISO 690 and AACR2 rules for layout

<nplcit id='ncit12' num='0013' type='b'>
<book>
<author>
<name>WALTON, Herrman</name>
</author>
<book-title>Microwave quantum theory</book-title>
<imprint>
<address>
<text>London</text>
</address>
<name>Sweet and Maxwell</name>
<pubdate>19730000</pubdate>
</imprint>
<location>
<pp>138 to 192</pp>
</location>
<isbn>0-1234-568-9</isbn>
</book>
</nplcit>
<!ELEMENT para (#PCDATA | paraf | paral)*>

<!ELEMENT paral (#PCDATA)>

<!ELEMENT paraf (#PCDATA)>

<!ELEMENT column (#PCDATA | colf | coll)*>

<!ELEMENT coll (#PCDATA)>

<!ELEMENT colf (#PCDATA)>

<!ELEMENT pp (#PCDATA | ppf | ppl)*>

<!ELEMENT ppl (#PCDATA)>

<!ELEMENT ppf (#PCDATA)>

<!ELEMENT chapter (#PCDATA)>

<!--
  Cited paragraph, first
-->

<!--
  Cited paragraph, last
-->

<!--
  Cited document column numbers
-->

<!--
  Cited document column, last
-->

<!--
  Cited document column, first
-->

<!--
  Cited document page numbers
-->

<!--
  Cited document page, last
-->

<!--
  Cited document page, first
-->

<!--
  Chapter; e.g., in a book. Example: Chapter 2
-->

<!--
  Serial section
-->
<!ELEMENT sersect (#PCDATA)>

<!--
Part within a serial
-->
<!ELEMENT serpart (#PCDATA)>

<!--
Abstract number
-->
<!ELEMENT absno (#PCDATA)>

<!--
Series statement
-->
<!ELEMENT series (text | (mst, msn?, issn?))>

<!--
Monographic series number
-->
<!ELEMENT msn (#PCDATA)>

<!--
Monographic series title
-->
<!ELEMENT mst (#PCDATA)>

<!--
Edition statement
(ST.32:B516)
-->
<!ELEMENT edition (#PCDATA)>

<!--
Book subtitle
-->
<!ELEMENT subtitle (#PCDATA)>

<!--
CONFERENCE GROUP / CITATION
There is no standard way of citing conference proceedings; date of the conf. may come before or after place, for example. The tags are specified in a set order where it is not possible or correct then simply use <text>
-->
<!ELEMENT conference (text | (conftitle, confdate?, confno?, confplace?, confsponsor*))>

<!--

-->
<!ELEMENT confdate (date | (sdate , edate))>

<!--
Conference sponsor
-->
<!ELEMENT confsponsor (#PCDATA | addressbook)>

<!--
Conference place
-->
<!ELEMENT confplace (#PCDATA | address)>

<!--
Conference number
-->
<!ELEMENT confno (#PCDATA)>

<!--
Conference title
-->
<!ELEMENT conftitle (#PCDATA)>

<!--
The title of the cited book
-->
<!ELEMENT book-title (#PCDATA)>

<!--
Serial citation data:
This describes the volume or issue as a whole and not a particular article within it.
-->
<!ELEMENT serial (sertitle , alttitle? , subname* , issue? , imprint? , pubdate? ,

<!--

<!ELEMENT doi (#PCDATA)>

<!--
Copyright info. Copyright of publisher of serial
-->
<!ELEMENT cpyrt (#PCDATA)>

<!--
Issue number
-->
<!ELEMENT ino (#PCDATA)>

<!--
Volume id/number

-->
<!ELEMENT vid (#PCDATA)>

<!--
Publisher's unique id
-->
<!ELEMENT pubid (#PCDATA)>

<!--
International Standard Book Number
-->
<!ELEMENT isbn (#PCDATA)>

<!--
International Standard Serial Number
-->
<!ELEMENT issn (#PCDATA)>

<!--
Notes about the journal; e.g. Continues Journal of XYZ 1910-1998, published in French and English, etc.
-->
<!ELEMENT notes (#PCDATA)>

<!--
Physical description - generally NOT used in citations in pats; e.g., v., 27cm
-->
<!ELEMENT descrip (#PCDATA)>

<!--
Publication date used in npl citations
-->
<!ELEMENT pubdate (#PCDATA | sdate | edate | time)*)

<!--
Imprint:
Publication / creation data
Place of publication : publisher, date(s) of publication usually only date of publication is used for journal citations
-->
<!ELEMENT imprint (text | (address?, name, pubdate*))>

<!--
Time; format HHMM
-->
<!ELEMENT time (#PCDATA)>

<!--
End date used in pubdate
-->
<!ELEMENT edate (#PCDATA)>

<!--
Start date used in pubdate
-->
<!ELEMENT sdate (#PCDATA)>

<!--
Issue designation; e.g., Annual, 1971-, 1890-1972
-->
<!ELEMENT issue (#PCDATA)>

<!--
Alternate title for serial; e.g. BMJ = British Medical Journal
-->
<!ELEMENT alttitle (#PCDATA)>

<!--
Serial title
-->
<!ELEMENT sertitle (#PCDATA)>

<!--
Article title
-->
<!ELEMENT atl (#PCDATA)>

<!--
Relevant passage group within patent; most used in search reports
- use text in abstract, description and claims
-->
<!ELEMENT rel-passage (text | (passage+ , (category , rel-claims?)*))>

<!--
Relevant claims
-->
<!ELEMENT rel-claims (#PCDATA)>

<!--
Category
(ST.32:B563)
-->
<!ELEMENT category (#PCDATA)>

<!--
Passage within the cited patent literature
-->
<!ELEMENT passage (#PCDATA)>

<!--
br - break, line break within a paragraph
-->
Where the international application claims the priority of several earlier applications, the filing date of the earliest application whose priority is claimed must be indicated as the priority date.

<!ELEMENT date-of-earliest-priority (date)>
<!-- Document kind code; e.g., A1
(INID 13, ST.32:B130) -->
<!ELEMENT kind (#PCDATA)>

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

<!-- Applicant's or agent's file reference, if desired, 12 characters maximum -->
<!ELEMENT file-reference-id (#PCDATA)>

<!-- Address used for general correspondence -->
<!ELEMENT correspondence-address (customer-number | addressbook+)>

<!-- Customer number for agents by office -->
<!ELEMENT customer-number (#PCDATA)>

<!-- Descriptive text -->
<!ELEMENT dtext (#PCDATA)>

<!-- Universal Resource Locator; e.g. www.wipo.int -->
<!ELEMENT url (#PCDATA)>

<!-- Fax number -->
<!ELEMENT fax (#PCDATA)>

<!-- Telephone number -->
<!ELEMENT phone (#PCDATA)>

<!-- Electronic address use for other than email -->
<!ELEMENT ead (#PCDATA)>
<!--
Address components:
Address formats differ from country to country
If no structure possible use text
-->
<!ELEMENT address (%address_group;)

<!--
If no structure is possible, enter text (without markup)
-->
<!ELEMENT text (#PCDATA)

<!--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO
-->
<!ELEMENT country (#PCDATA)

<!--
Postal code or zip code
-->
<!ELEMENT postcode (#PCDATA)

<!--
Region of country; e.g., state, province, etc.
-->
<!ELEMENT state (#PCDATA)

<!--
County, parish, department, etc (mainly UK, USA)
-->
<!ELEMENT county (#PCDATA)

<!--
City or town name
-->
<!ELEMENT city (#PCDATA)

<!--
Street may contain house number or name
-->
<!ELEMENT street (#PCDATA)

<!--
Building information in address; e.g., Hoffman building
-->
<!ELEMENT building (#PCDATA)

<!--
Address floor; e.g., 10th
-->

<!ELEMENT address-floor (#PCDATA)>

<!-- Address room; e.g., Room 55B
-->
<!ELEMENT room (#PCDATA)>

<!-- Post Office Box number
-->
<!ELEMENT pobox (#PCDATA)>

<!-- Organizational mail code
-->
<!ELEMENT mailcode (#PCDATA)>

<!-- Address, fifth line
-->
<!ELEMENT address-5 (#PCDATA)>

<!-- Address, fourth line
-->
<!ELEMENT address-4 (#PCDATA)>

<!-- Address, third line
-->
<!ELEMENT address-3 (#PCDATA)>

<!-- Address, second line
-->
<!ELEMENT address-2 (#PCDATA)>

<!-- Address, first line
-->
<!ELEMENT address-1 (#PCDATA)>

<!-- Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!-- Synonym
-->
<!ELEMENT synonym (#PCDATA)>

<!--
   Department, division, section, etc. name
-->
<!ELEMENT department (#PCDATA)>

<!--
   Organisation name or company name
-->
<!ELEMENT orgname (#PCDATA)>

<!--
   Role; e.g., President, Chairman, etc.
-->
<!ELEMENT role (#PCDATA)>

<!--
   SDOBI : Individual id
-->
<!ELEMENT iid (#PCDATA)>

<!--
   Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->
<!ELEMENT suffix (#PCDATA)>

<!--
   Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>

<!--
   First or given name(s), initial(s)
-->
<!ELEMENT first-name (#PCDATA)>

<!--
   Last, family, surname
-->
<!ELEMENT last-name (#PCDATA)>

<!--
   Title: e.g., Mr., Mrs., Dr. etc
-->
<!ELEMENT prefix (#PCDATA)>
5.11 Notification of a Change

```xml
<?xml version='1.0' encoding='UTF-8' ?>

<!-- ********************************************************************************
* wo-notification v1.3  2017 JULY                                          *
*******
********************************************************************************
* PUBLIC "//WIPO//DTD WO NOTIFICATION 1.3//EN" "wo-notification-v1-3.dtd" *
********************************************************************************
* https://www.wipo.int/pct-safe/en/resources/1.17/wo-notification-v1-3.dtd *
********************************************************************************
* contacts:                                                           *
* WIPO: Yukako SHIBA; yukako.shiba@wipo.int                             *
********************************************************************************
* revision history                                                             *
**********************************************
**********************************
Asahi HASEBE : 01/07/17 incorporated changes from PFC
..changed version number from v1.2 to v1.3
..added an attribute "id" to signatory and us-rights
MO: 01/07/08 incorporated changes from PFC:
..changed version number from v1.1 to v1.2
..added attribute 'email-purpose' to email (PFC08/006)
MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..added element 'sup' to u (PFC06/003)
..added element 'sup' to i (PFC06/003)
..added element 'sup' to b (PFC06/003)
..added element 'sub' to u (PFC06/003)
..added element 'sub' to i (PFC06/003)
..added element 'sub' to b (PFC06/003)
..added element 'o' to invention-title, b, i, sup, sup2, sub, sub2, heading, claim-text,
  p, small-caps, dt, dd, li, crossref, figref, othercit, statement (PFC06/003)
January 2005
..released version number as v1.0
********************************************************************************
Attributes for notification:
  lang = language of application - use ISO639 language code
  dtd-version = dtd version number
  file = filename of the whole application
  id = unique id for this application - could be file name
  status = status of the application; values: new = new application
  country = WIPO ST.3 code for application
  file-reference-id = applicant's or agent's file reference, if any

Notification by applicant to Office, or from Office to Office, or from Office to applicant; should contain a <signatory> element as provided for in Rule 92.1(a):
92.1 Need for Letter and for Signature
(a) Any paper submitted by the applicant in the course of the international procedure provided for in the Treaty and these Regulations, other than the international application itself, shall, if not itself in the form of a letter, be accompanied by a letter identifying the international application to which it relates. The letter shall be signed by the applicant.

--><ELEMENT wo-notification ((application-reference , parties , wo-notification-doc+ , effective-date? , notify-office? , signatories?)>>
<!ATTLIST wo-notification lang CDATA #REQUIRED
dtd-version CDATA #IMPLIED>
  "http://www.w3.org/2001/04/pctwp4.dtd">

<!ELEMENT electronic-signature (basic-signature | enhanced-signature)>
<!ATTLIST electronic-signature
date CDATA #REQUIRED
place-signed CDATA #IMPLIED>

<!ELEMENT fax-image EMPTY>
<!ATTLIST fax-image
code CDATA #REQUIRED>

<!ELEMENT notify-office (country* , (region , country+)*)>
<!ATTLIST notify-office
office-type (RO | ISA | IPEA | IB ) #REQUIRED>

<!ELEMENT wo-notification-doc (text? , doc-page+)>  
<!ATTLIST wo-notification-doc
sequence CDATA #REQUIRED

document-name CDATA #IMPLIED>
This is primarily to be used when data for the whole or major sections of an application are in image format OR other formats such as pdf.

Page range attributes are given when required
- pp - page range
- ppf - first page
- ppl - last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings

Recommended id = docp0001, docp0002, etc.
Attributes "he" and "wi" mean height and width.

Agent or common representative (Rules 90.1, 90.2)

Deceased inventor name

The individual or entity responsible for creating the matter that protection is sought for.
(ST.32:B721)

Applicant information:
(INID 71, ST.32:B710)

attributes for applicant
sequence : sequence number of each applicant
e.g., sequence="1"
app-type : applicant_type
app-type="applicant" : the applicant is only applicant
app-type="applicant-inventor" : the applicant is also inventor
designation: This person is applicant for the purpose of:
designation="all" : all designated states
designation="all-except-us" : all designated states except US
designation="us-only" : US only
designation="as-indicated" : the states indicated in
                          designated-states element
                          under applicant element

designation="all"          : all designated states
designation="all-except-us" : all designated states except US
designation="us-only"      : US only
designation="as-indicated" : the states indicated in
                          designated-states element
                          under applicant element

This person is successor to the rights of an inventor who is deceased, insane, or
legally incapacitated, for the purposes of the designation of the United States
of America

ADDRESSBOOK GROUP:
Holds name and contact information for individuals/organizations

The LANG attribute is REQUIRED for certain document types,
e.g., the JPO PCT Request where names and addresses may be repeated in two
different languages. If no structure possible use text.
post (to the extent that an Office offers this)
the default value depends on e-mail policies of the relevant Office.
For PCT purposes as at 1 July 2008, no attribute being included is
equivalent to 'informal'

-->  
<!ELEMENT email (#PCDATA)>  
<!ATTLIST email  email-purpose  (informal | general | advance | main )  #IMPLIED >  

-->  
Application reference information: application number, country
(INID 21, ST.32:B210)  

-->  
<!ELEMENT application-reference (document-id)>  
<!ATTLIST application-reference  id  ID   #IMPLIED  
appl-type CDATA   #IMPLIED >  

-->  
Document identification refers to patents (and patent applications) only.  
See WIPO ST.14  

-->  
<!ELEMENT document-id (country , doc-number , kind? , name? , date?)>  
<!ATTLIST document-id  lang CDATA   #IMPLIED >  

-->  
Name:  
If no distinction or detail can be given.  
Also to be used for: personal (natural person) and corporate (legal entity) names  

-->  
<!ELEMENT name (#PCDATA)>  
<!ATTLIST name  name-type  (legal | natural )   #IMPLIED >  

-->  
Signatories  

-->  
<!ELEMENT signatories (signatory+)>  

<!--  
PCT/RO/101 Box No. X:  
The signature must be that of the applicant (if there are several applicants, all  
must sign); however, the signature may be that of the agent, or the common  
representative, where a separate power of attorney appointing the agent or the  
common representative, respectively, or a copy of a general power of attorney is  
already in possession of the receiving Office, is furnished...  
(PCT Rules 4.1(d), 4.15, and 90)  

Indicate the capacity of the signer with 'signatory-capacity'  

-->  
<!ELEMENT signatory (%name_group; , address? , electronic-signature , signatory-  
capacity?)>  
<!ATTLIST signatory  id ID   #IMPLIED>  

<!--  
The capacity in which the person signs  

-->  
<!ELEMENT signatory-capacity (#PCDATA)>
<!--
A PKI / PKCS #7 digital signature data type
-->
<!ELEMENT enhanced-signature (pkcs7)>

<!--
PKCS7 digital signature
-->
<!ELEMENT pkcs7 EMPTY>

<!--
A non-PKI electronic signature
-->
<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>

<!--
A simple 'signature';
e.g., clicking a button labeled 'accept' or 'I agree'
-->
<!ELEMENT click-wrap EMPTY>

<!--
A simple text string is to be used as the basic electronic signature;
e.g., John Doe <text-string>/jd/</text-string>
-->
<!ELEMENT text-string (#PCDATA)>

<!--
The date any proposed changes would take effect.
-->
<!ELEMENT effective-date (date)>

<!--
PCT/RO/101 Box No.II, III and IV APPLICANTS, FURTHER APPLICANT(S)
AND/OR (FURTHER) INVENTOR(S)AGENT OR COMMON REPRESENTATIVE;
OR ADDRESS FOR CORRESPONDENCE (PCT Rule 4.5, 4.6, 4.7, 4.8)
(INID 70, ST.32:B700)
-->
<!ELEMENT parties (applicants , inventors? , correspondence-address? , agents?)>

<!--
Information regarding Agents or common representatives
-->
<!ELEMENT agents (customer-number | agent+)>

<!--
Address used for general correspondence
-->
<!ELEMENT correspondence-address (customer-number | addressbook+)>
Customer number for agents by office

Inventors information:
If the US is designated, all of the inventors must also be named as applicants for purposes of that designation.

Applicants information:
At least one of the applicants named must be a resident or national of a PCT Contracting State for which the receiving Office acts.

Rule 4.6(c):
"The request may, for different designated states, indicate different persons as inventors where, in this respect, the requirements of the national laws of the designated States are not the same. In such a case, the request shall contain a separate statement for each designated State or group of States in which a particular person, or the same person, is to be considered the inventor, or in which particular persons, or the same persons, are to be considered the inventors."

Indication of specific Contracting States in or for which the applicant is seeking protection for his invention (Rule 4.9(a))

The region for which protection or exclusion (depending upon context) is desired.

Country of residence

Country of nationality
Descriptive text

-->  
<!ELEMENT dtext (#PCDATA)>

<!--  
Universal Resource Locator; e.g. www.wipo.int  
-->  
<!ELEMENT url (#PCDATA)>

<!--  
Fax number  
-->  
<!ELEMENT fax (#PCDATA)>

<!--  
Telephone number  
-->  
<!ELEMENT phone (#PCDATA)>

<!--  
Electronic address use for other than email  
-->  
<!ELEMENT ead (#PCDATA)>

<!--  
Address components:
Address formats differ from country to country
If no structure possible use text  
-->  
<!ELEMENT address (%address_group;)>  

<!--  
If no structure is possible, enter text (without markup)  
-->  
<!ELEMENT text (#PCDATA)>

<!--  
Postal code or zip code  
-->  
<!ELEMENT postcode (#PCDATA)>

<!--  
Region of country; e.g., state, province, etc.  
-->  
<!ELEMENT state (#PCDATA)>

<!--  
County, parish, department, etc (mainly UK, USA)  
-->  
<!ELEMENT county (#PCDATA)>
<!--
 City or town name
-->
<!ELEMENT city (#PCDATA)>

<!--
 Street may contain house number or name
-->
<!ELEMENT street (#PCDATA)>

<!--
 Building information in address; e.g., Hoffman building
-->
<!ELEMENT building (#PCDATA)>

<!--
 Address floor; e.g., 10th
-->
<!ELEMENT address-floor (#PCDATA)>

<!--
 Address room; e.g., Room 55B
-->
<!ELEMENT room (#PCDATA)>

<!--
 Post Office Box number
-->
<!ELEMENT pobox (#PCDATA)>

<!--
 Organizational mail code
-->
<!ELEMENT mailcode (#PCDATA)>

<!--
 Address, fifth line
-->
<!ELEMENT address-5 (#PCDATA)>

<!--
 Address, fourth line
-->
<!ELEMENT address-4 (#PCDATA)>

<!--
 Address, third line
-->
<!ELEMENT address-3 (#PCDATA)>
<!ELEMENT address-2 (#PCDATA)>

<!--
 Address, first line
-->
<!ELEMENT address-1 (#PCDATA)>

<!--
 Registered number
-->
<!ELEMENT registered-number (#PCDATA)>

<!--
 Synonym
-->
<!ELEMENT synonym (#PCDATA)>

<!--
 Department, division, section, etc. name
-->
<!ELEMENT department (#PCDATA)>

<!--
 Organisation name or company name
-->
<!ELEMENT orgname (#PCDATA)>

<!--
 Role; e.g., President, Chairman, etc.
-->
<!ELEMENT role (#PCDATA)>

<!--
 SDOBI : Individual id
-->
<!ELEMENT iid (#PCDATA)>

<!--
 Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)
-->
<!ELEMENT suffix (#PCDATA)>

<!--
 Middle name(s) or initial(s)
-->
<!ELEMENT middle-name (#PCDATA)>
5.12 *Information concerning an application*

```xml
<?xml version='1.0' encoding='UTF-8' ?>
<application-info>
  This tag provides a container for any general information concerning an application.
  <application-info (file-reference-id?, application-reference, date-of-earliest-priority?, applicant-name, classifications-ipcr, classification-national*)>
  <file-reference-id (#PCDATA)>
</application-info>
```
Application reference information: application number, country
(INID 21, ST.32:B210)
In case of a filing reference, the kind code is empty and the date refers to
the filing date
--> 
<!ELEMENT application-reference (document-id) >
<!ATTLIST application-reference
  id ID #IMPLIED
  appl-type CDATA #IMPLIED >
<!----Where the international application claims the priority of several earlier
applications, the filing date of the earliest application whose priority is
claimed must be indicated as the priority date.
--> 
<!ELEMENT date-of-earliest-priority (date) >
<!---------------------------
** EPO - Old Form 1507; new layout:
</application-reference> <document-id> = application number
followed by:
The name of the applicant (without address information)
(ST.32:B711)
Example:
<applicant-name><name>IVECO S.P.A.</name></applicant-name>
--> 
<!ELEMENT applicant-name ((name | (prefix?, (last-name | orgname), first-name?,
middle-name?, first-last-name?, second-last-name?, suffix?, iid?, role?,
orgname?, department?, synonym*)), registered-number?) >
<!-----------------------------
Classification IPCR - NEW IPCR8
(INID 53, ST.32:B530)
--> 
<!ELEMENT classifications-ipcr (classification-ipcr+) >
<!ATTLIST classifications-ipcr
  id ID #IMPLIED
  scheme-name CDATA #IMPLIED >
<!---
Domestic or national classification.
(INID 52, ST.32:B520)
@scheme-name:
This attribute is used when it is necessary to distinguish between different
classification schemes
which may be in use at the same Office. In general, abbreviated forms should be
used where they
are widely recognized, for example scheme-name="CPC" for the Cooperative Patent
Classification.
--> 
<!ELEMENT classification-national (country , edition? , main-classification ,
further-classification* , (additional-info | linked-indexing-code-group | unlinked-
indexing-code)* , text?)>
<!ATTLIST classification-national id ID #IMPLIED
  scheme-name CDATA #IMPLIED>
<!---Document identification refers to patents (and patent applications) only. See
WIPO ST.14-->
<!ELEMENT document-id (country, doc-number, kind?, name?, date?) >
<!ATTLIST document-id
  lang CDATA #IMPLIED >
<!---Date: components of a date. Format: YYYYMMDD-->
* IPC DATA - NEW IPC8

International Patent Classification (IPC) data;
- to be implemented in 2006
- use B510 for until week 52, 2005
- see: http://www.wipo.int/scit/en/standards/pdf/03-08-01.pdf:

Industrial property offices are asked to implement this new version of Standard
ST.8 for
all patent documents with a publication date from January 1, 2006, onwards. For patent
documents published prior to that date, the previous version of the Standard should
continue to be used.

This recording convention provides that symbols of the International Patent
Classification (IPC) should be
presented on machine-readable records for the exchange of information in
machine-readable form in a fixed-length field in 50 positions, each part of
the Int. Cl. symbol being recorded in specific positions and in the manner
prescribed.
- this can be recorded within the <text> tag.

Position(s) Content Values
1 Section A-H
2 to 3 Class 01-99
4 Subclass A-Z
5 to 8 Main Group (right aligned) 1-9999, blank
9 Separating character / ("Slash")
10 to 15 Subgroup (left aligned) 00-999999 blank
16 to 19 For future use 4 blanks
20 to 27 Version indicator YYYYMMDD date format
28 Classification level C, A, S
29 First or later position of symbol F, L
30 Classification value (inventive or non-inventive) I, N
31 to 38 Action date YYYYMMDD date format
39 Original or reclassified data BRVD
40 Source of classification data H M G
41-42 Generating office AA ZZ (ST.3)
43-50 For future use 8 blanks

EPO usage:
- we will NOT use the detailed element markup as listed below (it is far too heavy)
- we will use "a fixed-length field in 50 positions" as specified above

EPO layout:
- for the title page to be determined

Example:
<B510EP>
<classification-ipcr sequence="1">
<text>B28B...5/00.......20060101AFI20070601BHEP........</text>
</classification-ipcr>
</B510EP>

<!--
<!ELEMENT classification-ipcr ((ipc-version-indicator,classification-level?,
    section,class,subclass,main-group?,subgroup?,symbol-position?,
    classification-value?,action-date?,generating-office?,
    classification-status?,classification-data-source?) | text) ->

<!ATTLIST classification-ipcr
    id ID #IMPLIED
    sequence CDATA #IMPLIED ->

<!--
International Patent Classification (IPC) data;
(INID 51, ST.32:B510)

-->  
<!ELEMENT classification-ipc (edition , main-classification , further-classification* , (additional-info | linked-indexing-code-group | unlinked-indexing-code)* , text?)>

<!ATTLIST classification-ipc
    id ID #IMPLIED ->

<!--Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc. Also includes EP, WROF-->  
<!ELEMENT country (#PCDATA) >

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

<!--Document kind code; e.g., A1 (INID 13, ST.32:B130)-->
<!ELEMENT kind (#PCDATA) >
Although in the paper publications a version indicator may contain four or six digits, the version indicator in machine-readable records contains eight digits, namely YYYYMMDD with Y for year, M for month and D for day.

-->
<!ELEMENT ipc-version-indicator (date) >

-->
<!ELEMENT icp-classification-level (#PCDATA) >

<--Positions 1 to 19: Recording of the parts of the IPC symbols
IPC symbols are defined in Part 5 of the WIPO Handbook on Industrial Property Information and Documentation and in the latest version of the Guide to the IPC.
-->
<!ELEMENT section (#PCDATA) >

<!ATTLIST class
class-type CDATA #IMPLIED >

<!ELEMENT subclass (#PCDATA) >

<!ELEMENT main-group (#PCDATA) >

<!ELEMENT subgroup (#PCDATA) >

<--Position 29: First or later position of symbols
The position of the first invention information classification can be recognized by this field. The letters F and L are used for first and later position, respectively.
-->
<!ELEMENT symbol-position (#PCDATA) >

<--Position 30: Classification value (inventive or non-inventive)
The difference between invention information and other information is important for the retrieval of the information. The letters I and N are used for the invention and non-invention information, respectively.
-->
<!ELEMENT classification-value (#PCDATA) >

<--Positions 31-38: Action date
The date of assigning the classification symbol (action date) is represented by eight digits, namely YYYYMMDD. This date can be used to check if a classification needs to be reviewed after revision of the scheme, e.g., in case of creating new subdivisions.
-->
Since part of the original data in the advanced level and the reclassified data can be delivered by offices other than the publishing office, the information source of such data is recorded by a field of two characters. The country or office code CC, as defined by WIPO Standard ST.3, must be used.

Original data is the first data assigned to the document. In case of a publishing office assigning classification symbols at the core level, another office may also assign symbols at the advanced level as original data. Reclassified data is data changed due to a change in the classification schemes. Various data is data changed due to an incidental reclassification of an individual document, such as the correction of a mistake. Deleted data is data which has to be deleted from the Master Classification Database, due to a change in assigning of classification symbols to a document.

The indication of the different types of data is marked by the letters B for the basic or original data, R for reclassified data, V for various incidental changes, and D for data to be deleted.

Possible status: original-classification, reclassified, various-classification, deleted-classification

The following sources of classification data are foreseen:
- Intellectual classification by persons, value H for human generated data.
- Machine classification by the propagation of earlier intellectual classification through the use of common priorities in the patent application. The value M is used in this case and will facilitate later corrections.
- Classification symbols generated by software using automatic analysis of the content of the patent document. The letter G is used to indicate this source of generated data.

If no structure is possible, enter text (without markup)

Address components: Address formats differ from country to country. If no structure possible use text

Address, first line

Address, second line

Address, third line

Address, fourth line

Address, fifth line
<!ELEMENT address-floor (#PCDATA)>

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

<!ATTLIST addressbook
id ID    #IMPLIED
lang CDATA    #IMPLIED>

<!ELEMENT assistant-examiner (((name | (prefix?,(last-name | orgname),first-name?,
                      middle-name?,first-last-name?,second-last-name?,suffix?,iid?,role?,
                      orgname?,department?,synonym*)),registered-number?),phone?,fax?,
                      email?,electronic-signature?)>

<!ELEMENT authorized-officer (((name | (prefix?,(last-name | orgname),first-name?,
                      middle-name?,first-last-name?,second-last-name?,suffix?,iid?,role?,
                      orgname?,department?,synonym*)),registered-number?),phone?,fax?,
                      email?,electronic-signature?)>

<!ELEMENT basic-signature (fax-image | text-string | click-wrap)>

<!ELEMENT building (#PCDATA)>

<!ELEMENT city (#PCDATA)>

<!ELEMENT click-wrap EMPTY>

<!ELEMENT communication-info
Information about the communication of data
-->}

<!ELEMENT communication-info (completion-date?,date-of-mailing,office-admin,
                    type-of-notification,examiners?,list-of-copies?)>

<!ELEMENT completion-date -->

<!ELEMENT copy-to (correspondence-address)>

The copy of the document was sent to another office in the following roles:
- ib : International Bureau
- ro : Receiving Office (PCT)
- isa : International Search Authority
- sisa : Supplementary International Search Authority
- ipea : International Preliminary Examination Authority
- do : Designated Office (PCT Chapter I)
- eo : Elected Office (PCT - Chapter II)
- other : to be specified in role-other, intended for national use
<!ATTLIST copy-to
  copy-to-role (ib | ro | isa | sisa | ipea | do | eo | other) #REQUIRED
  role-other CDATA #IMPLIED >

<!--Address used for general correspondence-->
<!ELEMENT correspondence-address (customer-number | addressbook+) >

<!--County, parish, department, etc (mainly UK, USA)-->
<!ELEMENT county (#PCDATA) >

<!--Customer number for agents by office-->
<!ELEMENT customer-number (#PCDATA) >

<!--Date of mailing:
-->
<!ELEMENT date-of-mailing (date) >

<!--Descriptive text-->
<!ELEMENT dtext (#PCDATA) >

<!--Electronic address use for other than email-->
<!ELEMENT ead (#PCDATA) >

<!----
A signature represented by electronic means
-->
<!ELEMENT electronic-signature (basic-signature | enhanced-signature) >

<!ATTLIST electronic-signature
date CDATA #REQUIRED
place-signed CDATA #IMPLIED >

<!--Email address Attribute: email-purpose reason for which email address is
included: informal for informal contact only general for any type of communication
confirmation any type of communication, but formal messages followed up by
conventional mailing (to the extent offered) main where applicant desires this
address to be used as primary means of contact as a replacement of the use of
conventional post (to the extent that an Office offers this) the default value
depends on e-mail policies of the relevant Office. For PCT purposes as at 1 July
2008, no attribute being included is equivalent to 'informal'-->
<!ELEMENT email (#PCDATA) >

<!ATTLIST email
e-mail-purpose (informal | general | advance | main) #IMPLIED >

<!--A PKI / PKCS #7 digital signature data type
-->
<!ELEMENT enhanced-signature (pkcs7) >

<!--Persons acting on the document.
(ST.32:B745)
-->
<!ELEMENT examiners (primary-examiner?,assistant-examiner?,senior-examiner?,
  legal-member?,authorized-officer?,address?) >

<!--Fax number-->
<!ELEMENT fax (#PCDATA) >

<!--A TIFF image of a signature
-->
<!ELEMENT fax-image EMPTY >

<!ATTLIST fax-image
  file CDATA #REQUIRED >

<!ELEMENT important EMPTY >

<!ELEMENT information EMPTY >
<!--Legal Member
EPO: chairman of the examining division
-->
<!ELEMENT legal-member (((name | (prefix?, (last-name | orgname), first-name?,
middle-name?, first-last-name?, second-last-name?, suffix?, iid?, role?,
orgname?, department?, synonym*)), registered-number?), phone?, fax?,
email?, electronic-signature?) >

<!--list-of-copies
List of all addressees to which copies are sent.
The correspondence-address is for the main addressee, the copy-to elements
are used for additional copies sent.
-->
<!ELEMENT list-of-copies (correspondence-address, copy-to*) >

<!--Organizational mail code-->
<!ELEMENT mailcode (#PCDATA) >

<!--office-admin
Provides the correspondence address of the drafting office.
-->
<!ELEMENT office-admin (addressbook) >

<!--payment due
According to the type limit, payment due within a period or by a certain date.
-->
<!ELEMENT payment-due (time-limit) >

<!--Telephone number-->
<!ELEMENT phone (#PCDATA) >

<!--PKCS7 digital signature
-->
<!ELEMENT pkcs7 EMPTY >

<!--Post Office Box number-->
<!ELEMENT pobox (#PCDATA) >

<!--Postal code or zip code-->
<!ELEMENT postcode (#PCDATA) >

<!--Primary Examiner.
(ST.32:B746)
-->
<!ELEMENT primary-examiner (((name | (prefix?, (last-name | orgname), first-name?,
middle-name?, first-last-name?, second-last-name?, suffix?, iid?, role?,
orgname?, department?, synonym*)), registered-number?), phone?, fax?,
email?, electronic-signature?) >

<!--reply due
According to the type limit, reply due within a period or by a certain date.
-->
<!ELEMENT reply-due (time-limit) >

<!ATTLIST reply-due
reply-to (ib | ro | isa | sisa | ipea | do | eo | other) #IMPLIED
reply-to-other CDATA #IMPLIED >

<!--for-further-action
The next action depends on the procedural context.
Text might be added to refer to an item in the text, in the forms or other forms.
-->
<!ELEMENT for-further-action (#PCDATA) >

<!--Address room; e.g., Room 55B-->
<!ELEMENT room (#PCDATA) >

<!--Senior Examiner.
EPO: chairman of the examining division
<!ELEMENT senior-examiner ((name | (prefix?, (last-name | orgname), first-name?, middle-name?, first-last-name?, second-last-name?, suffix?, iid?, role?, orgname?, department?, synonym*)), registered-number?, phone?, fax?, email?, electronic-signature?) >

<!ELEMENT state (#PCDATA) >

<!ELEMENT street (#PCDATA) >

<!ELEMENT text-string (#PCDATA) >

<!ELEMENT time-limit (#PCDATA) >

<!ATTLIST time-limit period (date | months | weeks | days) #IMPLIED >

<!ELEMENT type-of-notification (#PCDATA) >

<!ELEMENT url (#PCDATA) >

<!ELEMENT main-classification (#PCDATA) >

<!ELEMENT further-classification (#PCDATA) >

<!ATTLIST further-classification id ID #IMPLIED sequence CDATA #IMPLIED >

<!ELEMENT linked-indexing-code-group (main-linked-indexing-code, sub-linked-indexing-code+) >

<!ELEMENT sub-linked-indexing-code (#PCDATA) >

<!ELEMENT main-linked-indexing-code (#PCDATA) >
5.13 Written opinion

<?xml version='1.0' encoding='UTF-8' ?>
<!--WRITTEN OPINION
This construction is intended to capture all communications from an examiner to an applicant concerning an application typically referred as written opinions or examination reports. The DTD could also cover minutes of telephone conversation or other formal meetings with the applicant.

Contacts:
Asahi HASEBE, asahi.hasebe@wipo.int


### Version 1.1 ###
- ADDED
  * New element
    <!ELEMENT non-establishment-claims (claim-num*, partially-for-claims?)>
    <!ATTLIST non-establishment-claims %common_id_attribute_group;>
  
  <!ELEMENT citation-opinion(p+)>  
  <!ATTLIST citation-opinion %common_id_attribute_group;>
  
  * <non-establishment-claims> in <non-establishment-of-opinion>
  * <category> and <citation-opinion> in <conflicting-document>
  * <category> and <citation-opinion> in <non-written-disclosure>

### Version 1.0 ###
- Added <classification-national> to <application-info>
- Updated child elements and attributes under <citation>

### Version 0.96 ###
- ADDED
  <iprp-rectifications-not-authorized> to <iprp-annexes-sheet>

### Version 0.95 ###
- ADDED
  "@form-version" to <written-opinion>

### Version 0.94 ###
- ADDED
  * Added "@status" and "@office" to <written-opinion>

### Version 0.93 ###
- ADDED
  * <top-up-search-carried-out> and <no-top-up-search-carried-out> to <application-documents>
in order to update the DTD in align with PCT C.1400.

### Version 0.9 ###

Simplified non-establishment-of-opinion

### Version 0.7 ###

- MODIFIED
  * introduced info-dtd
  * rendered modular to ST.36/Ann F by introducing written-opinion-components

### Version 0.6 ###

- MODIFIED
  * written-opinion-admin brought in-line with info.dtd (PCT Forms discussions)
  Only with needed tags for opinions
  * additional-info: cardinality of p to +

- ADDED
  * office-admin in communication-info
  * attributes id and level to heading

- REMOVED
  * invention-to-be-selected-by-applicant
  In first communication the examiner may defer a detailed reasoning until the applicant has indicated on which invention he wishes the procedure to be based on.
  Intended for future use in PCT/ISA/206
  EPO/JPO/WIPO : to be added in country specific implementation

```xml
<!ELEMENT invention-to-be-selected-by-applicant EMPTY >
```

-->

<!--
******************************************************************************
SECTION WRITTEN-OPINION DTD
This section contains the tags specific to the written opinion.
******************************************************************************

written-opinion
Root element for the written opinion.
The doc-page element has been included to capture communications that would not be produced in XML.
It suggested to have all paragraphs numbered consecutively as they appear.

Attributes:

id
This uniquely identifies each communication. Its usage is required in a file wrapper but not for the transmittal of a single opinion.<br/>
Recommended values: wo-01, wo-02, ...

num
Sequence number.

lang
Language of the present written opinion. Use two letter code (ST.3)

dtd-version
Version of the DTD used for drafting the file, e.g. written-opinion-v1-0.dtd.

procedure
Code of the procedure, suggested value: country code

phase
Phase during which the opinion is issued, e.g.: search, examination, opposition, appeal, ...
opinion-type
Type of report, e.g.: woisa, iper, examination report (exre), ...

status
Status of WOSA, e.g. new, corrected.

office
Code of an office who made WOSA, e.g. EP, CN, JP, etc

form-version
form version number. e.g. "201501"

The following attributes are used extensively across the DTD and are addressed once here (specific examples may be provided for each element using these.

id
Unique identifier, must be unique in each XML instance.
It is suggested to use a tree approach wherein the id of child element is the id of the parent element further completed by the corresponding id.

idref or idrefs
Cross-reference to an element or elements within the XML instance by means of their ids.

gidref or gidrefs
Cross-reference to an element or elements outside the XML instance by means of their global identifier of said elements.

legal-basis and legal-source
Paragraph, article or rule in a legal source relevant for the element.
Suggest values:
Articles : a(followed by the legal number format up to the desired level)
Rules : r(followed by the legal number format up to the desired level)
Paragraphs: use by the legal number format up to the desired level

The legal source should be identified by its commonly agreed acronym (e.g. patent cooperation treaty - PCT, european patent convention - EPC, ...) in lower case followed by its version (either a sequence number or a date in the format YYYY[MM[DD]]).

Examples:
Article 19(1) of the PCT (modified October 3, 2001)
legal-basis="a19(1)" legal-source="pct-20011003"

Rule 86(2) EPC 2000
legal-basis="r86(2)" legal-source="epc-2000"

!! place root element first for viewers
->
<!ELEMENT written-opinion (written-opinion-admin,(doc-page+ | (heading*,p*)+ | (written-opinion-request+,conclusion?)),citations?,annexed-documents?)>

<!ATTLIST written-opinion
 id ID #IMPLIED
 num CDATA #IMPLIED
 lang CDATA #IMPLIED
 dtd-version CDATA #IMPLIED
 procedure CDATA #REQUIRED
 phase CDATA #REQUIRED
 opinion-type CDATA #REQUIRED
 status (new | corrected) 'new'
 office CDATA #IMPLIED
 form-version CDATA #IMPLIED >

<!-- INCLUDE PARENT DTDs -->
<!ENTITY % written-opinion-components PUBLIC "-//WIPO//WRITTEN OPINION COMP 0.5//EN" "written-opinion-components-v1-1.dtd">
%written-opinion-components;
5.14  Written opinion components

<?xml version='1.0' encoding='UTF-8' ?>
<!--
************************************************************************************************************************************

The written opinion DTD is larger than needed by Ann F, for this reason it has been rendered customizable by separating the DTD from the components.

Before instantiating the components declare the following entity:

- for the full set of components (ST.36) :
  Nothing to do
- for the Ann F version:

  <!ENTITY % ST36.DTD  "IGNORE">
  <!ENTITY % ANNF.DTD  "INCLUDE">

************************************************************************************************************************************
-->
<!--WRITTEN OPINION

This construction is intended to capture all communications from an examiner to an applicant concerning an application typically referred as written opinions or examination reports. The DTD could also cover minutes of telephone conversation or other formal meetings with the applicant.

Contacts:
Yukako SHIBA; yukako.shiba@wipo.int

For details about PCT Annex F and about all Annex F DTDs see:
http://www.wipo.int/pct-safe/en/resources/ and for PFCs see:
http://www.wipo.int/efiling_standard/en

### Version 1.1 ###
- ADDED
  *New element
  <!ELEMENT non-establishment-claims (claim-num*, partially-for-claims?)>
  <!ATTLIST non-establishment-claims %common_id_attribute_group;>

  <!ELEMENT citation-opinion(p+)>
  <!ATTLIST citation-opinion
    %common_id_attribute_group;>

  * <non-establishment-claims> in <non-establishment-of-opinion>
  * <category> and <citation-opinion> in <conflicting-document>
  * <category> and <citation-opinion> in <non-written-disclosure>

### Version 1.0 ###
- ADDED
  <classification-national> to <application-info>

### Version 0.7 ###
- MODIFIED
  * introduced entities to enable customization
  * cut in modules: info, components and written-opinion
### Version 0.6 ###

- MODIFIED
  * written-opinion-admin brought in-line with info.dtd (PCT Forms discussions)
  Only with needed tags for opinions
  * additional-info: cardinality of p to +

- ADDED
  * office-admin in communication-info
  * attributes id and level to heading

- REMOVED
  * invention-to-be-selected-by-applicant
  In first communication the examiner may defer a detailed reasoning until the applicant has indicated on which invention he wishes the procedure to be based on.

Intended for future use in PCT/ISA/206
EPO/JPO/WIPO : to be added in country specific implementation

```xml
<!ELEMENT invention-to-be-selected-by-applicant EMPTY >
  * invention-title
  * date-of-actual-receipt
```

### Version 0.3 ###

Changed non-establishment-of-opinion (simplification)

### Version 0.1 ###

Created written-opinion-components based on written-opinion-0.6

--> 

```xml
<!-- info.dtd
Import info DTD for the header/footer components.

QUESTION: To be added here or with the main DTD ?
-->

<!-- ENTITY % info_st36 PUBLIC "-//WIPO//FORMS INFO 1.0//EN" "info-v1-0.dtd">
%info_st36;

<!-- DTD MathML2: maintained by W3C. Download from:
  http://www.w3.org/TR/MathML2/DTD-MathML-20010221.zip

If using nsgmls-based parser (SP, Near & Far Designer, etc.)
 Uncomment 'mathml-charent-module' switch below or replace the Referenced MathML2 DTD with the version downloadable from:
  http://www.w3.org/Math/DTD/dtd-sp.zip

This notice copied from: http://www.w3.org/Math/DTD/

"DTD for nsgmls
Some systems (including the popular nsgmls parser) may not be able to process files using 'plane 1' characters which have Unicode numbers higher than #xFFFF. The versions of the DTD provided here incorporate the modifications mentioned above, but the high characters are replaced by the equivalent mchar construct <mchar name="..." /> this allows the DTD to be read and for MathML files to be validated using such sytems."

ENTITY % mathml-charent.module "IGNORE"

Defaults:

<!-- ENTITY % MATHML.prefixed "IGNORE" -->

<!-- ENTITY % MATHML.xmlns "" -->

<!-- -->
```

<!--
The EPO limits the attributes of the element `math` as follows:

```
display (block | inline) "inline"
```

The following common attributes are not used:

```
MATHML.xmlns.attrib
%MATHML.NamespaceDecl.attrib;
%XLINK.prefix::href  CDATA       #IMPLIED
%XLINK.prefix::type   CDATA       #IMPLIED
```

```
-->
<!ENTITY % att-topinfo "display (block | inline) 'inline'">
<!ENTITY % att-browif "" >
<!-- Attributes shared by all elements ......................... -->

<!ENTITY % MATHML.xmlns.attrib "">
<!ENTITY % MATHML.Common.attrib
 "class        CDATA                    #IMPLIED
 style        CDATA                    #IMPLIED
 id           ID                       #IMPLIED
 xref         IDREF                    #IMPLIED
 other        CDATA                    #IMPLIED"
>
<!--
 import MathML2 dtd
 -->
<!ENTITY % mathml2 PUBLIC "-//W3C//DTD MathML 2.0//EN" "imported\mathml2.dtd">
%MATHML.xmlns.attrib;

<!ENTITY % tbl.table.att  " pgwide    %yesorno;      #IMPLIED">
%MATHML.Common.attrib;
<!--
*******************************************************************************
SECTION ENTITIES DECLARATION
This section contains entities used across the DTD
*******************************************************************************
-->

<!--
address_group
Structure to store an address.
-->
<!ENTITY % address_group
"((address-1?,address-2?,address-3?,address-4?,
    address-5?,mailcode?,pobox?,room?,address-
    floor?,building?,
    street?,city?,county?,state?,postcode?,country)
| text)" >

<!--
name_group
Structure to identify a person.
-->
<!ENTITY % name_group
"((name | (prefix?,(last-
    name | orgname),first-
    name?,
    middle-
    name?,first-
    last-
    name?, second-last-
    name?, suffix?,iid?,
    role?,orgname?,department?,synonym*)),registered-number?)" >

<!-- wo-specific-data -->
<!ENTITY % wo_specific_data
"wo-isa-as-ipea?, iprp-final-date?, demand-submission-date?,
  iprp-sheet-of-annexes?, sis-received-and-considered*"">

<!--
DTD Customisation, the following entities can be redefined before calling the
components to customize the DTD. When doing so, care should be take to maintain
the backward compatibility
-->

<!-- country-specific-data
redefine the entity with the country code element for your country before
including this DTD.

e.g.:

<!ENTITY % country_specific_data ",ep-specific-data" >
!!! do not forget to prepend with a comma

and define ep-specific-data in your own DTD.

-->  
<!ENTITY % country_specific_data "" >

<!-- p_group
Defines the structure of the p tag
-->
<!ENTITY % p_group "(#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre |
dl | ul |
    ol | crossref | figref | legalref | patcit | nplcit | bio-deposit |
    img | chemistry | maths | tables | table-external-doc)*">

<!-- additional_info_group
-->  
<!ENTITY % additional_info_group "application-document*,(p+|xhtml-text)" >

<!-- written_opinion_request_group
-->  
<!ENTITY % written_opinion_request_group "application-documents,priority-opinion?,
  non-establishment-of-opinion?,added-subject-matter-objections?,
<!--
END SECTION ENTITIES DECLARATION
-->
<!--written-opinion-admin
Wrapper for information related to the application and written opinion, as well as specific information for specific procedures/phases.
-->  
<!ELEMENT written-opinion-admin (application-info, communication-info, office-specific-data?)>

<!--wo-isa-as-ipea
The written opinion of the ISA is considered a WO of the IPEA
-->  
<!ELEMENT wo-isa-as-ipea EMPTY>

<!ATTLIST wo-isa-as-ipea considered (yes | no) #IMPLIED>

<!--iprp-final-date
The final date by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2.
-->  
<!ELEMENT iprp-final-date (date)>

<!--Date of submission of demand, format YYYYMMDD
-->  
<!ELEMENT demand-submission-date (date)>

<!--2. This REPORT consists of a total of _________ sheets, including this cover sheet.
-->  

<!ATTLIST iprp-sheet-of-annexes page-count CDATA #IMPLIED>

<!--3. This report is also accompanied by ANNEXES, comprising:
a. a total of _________ sheets, as follows:
-->  

<!ATTLIST iprp-annexes-sheet page-count CDATA #IMPLIED>

<!--Sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions)
-->  
<!ELEMENT iprp-beyond-disclosure EMPTY>

<!--Sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
-->  
<!ELEMENT iprp-beyond-disclosure EMPTY>
sheets containing rectifications, where the decision was made by this Authority not to take them into account because they were not authorized by or notified to this Authority at the time when this Authority began to draw up this report, and any accompanying letters (Rules 66.4bis, 70.2(e), 70.16 and 91.2).

A total of (indicate type and number of electronic carrier(s)) containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

Supplementary international search report was received and considered in the redaction of the opinion. Office code according to ST.3.

Office is the ST.3 country code, including the regional authorities. Office.dtd is the file which contains the DTD for the office-specific elements.

This is primarily to be used when data for the whole or major sections of an application are in image format or other formats such as pdf.

Page range attributes are given when required
pp - page range
ppf - first page
ppl - last page (for pdf).
The 'img' may also be used for complete pages, e.g. in drawings

EPO Required usage:
in the EP publication process this tag is only likely to be used for the search report; then we use:
- id="srep0001"
  - file="srep0001.tif"

in all other cases use:
- id="docp0001"
  - file="docp0001.tif"

** Note: ocr attribute added NOT ANNEX F compatible - for OCR project? CHECK
Example:
<search-report-data id="srep" srep-office="EP" date-produced="20050308">
<doc-page id="srep0001" file="srep0001.tif" he="231" wi="159" type="tif" />
<doc-page id="srep0002" file="srep0002.tif" he="231" wi="159" type="tif"/>
</search-report-data>
-->
<!ELEMENT doc-page EMPTY >
<!ATTLIST doc-page
  id ID #IMPLIED
  file CDATA #REQUIRED
  wi CDATA #REQUIRED
  he CDATA #REQUIRED
  type (jpg | pdf | tif) #REQUIRED
  alt CDATA #IMPLIED
  pp CDATA #IMPLIED
  ppf CDATA #IMPLIED
  ppl CDATA #IMPLIED
  ocr CDATA #IMPLIED
  color (color | bw) #IMPLIED
  orientation (portrait | landscape) "portrait" >
<!--*******************************
HEADINGS
*******************************-->
EPO required usage:
- id="h0001", "h0002", etc.
- level="1" etc MAY be used and are used in PatXML files
EPO PatXML uses:
- For level 1: left justified, bold, line break
- For level 2: left justified, underlined, line
- For level 3: left justified, line break,
  but the rendering tags are included within the <heading>; eg. <b>
- For ALL other headings entered by the contractor just use <heading> using
  bold etc as entered by the applicant
  BUT left justified,
  DO NOT USE level attribute UNLESS it is a PatXML file which can be left "as is".
-->
<!ELEMENT heading (#PCDATA | b | i | u | o | sup | sub | smallcaps)* >
<!ATTLIST heading
  id ID #IMPLIED
  level (1 | 2 | 3) #IMPLIED >
<!--Bold formatting for text-->
<!ELEMENT b (#PCDATA | i | u | o | smallcaps | sup | sub)* >

<!--Italic formatting for text-->
<!ELEMENT i (#PCDATA | b | u | o | smallcaps | sup | sub)* >

<!--Underscore: style - single is default--> 
<!ELEMENT u (#PCDATA | b | i | smallcaps | sup | sub)* >
<!ATTLIST u
  style (single | double | dash | dots) "single" >

<!--Small capitals--> 
<!ELEMENT smallcaps (#PCDATA | b | u | i | o)* >

<!--Overscore: style - single is default--> 
<!ELEMENT o (#PCDATA | b | i | smallcaps | sup | sub)* >
<!ATTLIST o
  ostyle (single | double | dash | dots | leftrightarrow | leftarrow | rightarrow) "single" >

<!--Superscripted text-->
EPO Required usage:
- In case of standard paragraphs in the description: id="p0001", "p0002", etc.
- In case of abstracts: id="pa01", "pa02", etc. (more than three is rare)
- In case of amended claims: id="pc0001", "pc0002", etc.
- In case of search reports: id="ps0001", "ps0002", etc.
- num = 0001, 0002, etc.

EPO style:
- always left justified
- precede by para. number in bold as so: [0001]
- para. text indented 7mm from [0001]
- see esp acenet for examples

PRE

- This element is one method to identify content consisting of text objects that require preservation (pre) of their whitespace in order to preserve internal logical relationships.
  (e.g., sequence listing fragments, computer program listings)

LISTS

DEFINITION LISTS

EPO required usage:
- For dl elements in the main part of the document: id="dl0001"
- If parent element is abstract: id="dla01" BUT contractors should, if possible, not use in abstracts.
  (It is not used in PatXML in abstracts)
- tsize: this is optional and not used in PatXML files (similar to HTML).
Old SGML files have the value of the length of the first <dt> this can be removed
- For new processing tsize is not required; layout will depend on style sheet
- This follows HTML practice

Example:

Old file:
<DL TSIZE=10>
<DT>Fig. 1<DD>shows a 3D surface plot ..
<DT>Fig. 2a<DD>is a schematic diagram ...
</DL>

New file
<dl id="dl0001">
<dt>fig. 1</dt><dd>shows a 3d surface plot ..</dd>
<dt>fig. 2a</dt><dd>is a schematic diagram ..</dd>
</dl>

-->
<!ELEMENT dl (dt,dd)+ >
<!ATTLIST dl
  id ID  #IMPLIED
  tsize CDATA  #IMPLIED
  compact (compact)  #IMPLIED >

<!--Term to be defined
Recommended id="dt0001",etc
EPO required usage:
NOT USED IN EPO.
-->
<!ELEMENT dt (#PCDATA | b | i | u | o | sup | sub | smallcaps)* >
<!ATTLIST dt
  id ID  #IMPLIED >

<!--Definition description
-->
<!ELEMENT dd (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit |
  nplcit | bio-deposit | crossref | figref | img | ul | ol | chemistry |
  maths)* >
<!--PATENT CITATIONS: (ST.32:B561) Patent Citation within abstract, description or claims.
For patent citations within Search Report see Search Report DTD Notes: Tags arranged according to WIPO ST.14 order.
This can be free text data without any structure (text).
Example:
<paticit id='pcit0001' dnum='US4793675A' dnum-type='publication number'>
<document-id><country>US</country> <doc-number>4793675</doc-number> <kind>A</kind>
</document-id><name>Handa</name><date>19881227</date></paticit>

Note: It is NOT expected that the applicant will create the tagged data -  
it could be generated from a 'pull down' data entry form or generated from  
internal SR databases
Attributes (recommended):
  id - pcit0001, pcit0002, etc.
  num - 0001, 0002, etc. dnum - use full number as one string, eg, "US5401234A";
  url - where possible give full web link to patent file - file name eg.
if stored on local systems dnum-type - type of document number
  (e.g., application number, publication number)

REMOVED rel-passage NOT USED
After patent citations the most common citations are articles within serials (periodicals, magazines), books and electronic (eg. internet) sources. This is a very complex and varied area to standardise. The tag set below is drawn from a number of sources as is the order of the tags (which in any case can be changed depending on the stylesheet used). The order of tags is that of WIPO ST.14 / ISO 690 layout.

```xml
<nplcit id='ncit1' num='0012' type='S' file='XP1234456'>
  <article>
    <author> <name>DROP, J.G.</name> </author>
    <atl>Integrated Circuit Personalization at the Module Level</atl>
    <serial>
      <sertitle>IBM Tech. Dis. Bull.</sertitle>
      <pubdate>19741000</pubdate>
      <vid>17</vid>
      <ino>5</ino>
    </serial>
    <location> <pp>1344 and 1345</pp> </location>
    <refno id='XP1'>XP1234456</refno>
  </article>
</nplcit>
```

Note: it is NOT expected that the applicant will create the tagged data - it can be generated from a 'pull down' data entry form (eg. in Word) or generated from internal SR databases.

---

Author Prime responsibility for the work there is no distinguishing between personal and corporate authors <author> followed by name or addressbook information use the ID attribute if, for example, there is a need to distinguish between multiple authors. Can also include affiliation details Recommended id = auth0001, auth0002, etc.

```xml
<author>
  <name>first-last-name?, second-last-name?, middle-name?,
    first-last-name?, second-last-name?, suffix?, iid?, role?, orgname?,
    department?, synonym*)
  <addressbook>
</author>
```

---

Article title

```xml
<atl>
</atl>
```

---

Subordinate responsibility; e.g., editor, translator, etc.

```xml
<subname>
  <name>first-last-name?, second-last-name?, suffix?, iid?, role?, orgname?,
    department?, synonym*)
  <addressbook>
</subname>
```

---

Author

```xml
<author>
  <name>
    first-last-name?, second-last-name?, suffix?, iid?, role?, orgname?,
    department?, synonym*)
  <addressbook>
</author>
```

---

Article

```xml
<article>
  <text>
    <author> <name>DROP, J.G.</name> </author>
    <atl>Integrated Circuit Personalization at the Module Level</atl>
    <serial>
      <sertitle>IBM Tech. Dis. Bull.</sertitle>
      <pubdate>19741000</pubdate>
      <vid>17</vid>
      <ino>5</ino>
    </serial>
    <location> <pp>1344 and 1345</pp> </location>
    <refno id='XP1'>XP1234456</refno>
  </text>
</article>
```
<!--The title of the cited book-->
<!ELEMENT book-title (#PCDATA)>

<!--CONFERENCE GROUP / CITATION There is no standard way of citing conference proceedings; date of the conf. may come before or after place, for example. The tags are specified in a set order where it is not possible or correct then simply use <text>--->
<!ELEMENT conference (text | (conftitle,confdate?,confno?,confplace?,confsponsor*))>

<!--Conference title-->  
<!ELEMENT conftitle (#PCDATA)>

<!----->  
<!ELEMENT confdate (date | (sdate,edate))>

<!--Conference number-->  
<!ELEMENT confno (#PCDATA)>

<!--Conference place-->  
<!ELEMENT confplace (#PCDATA | address)*>

<!--Conference sponsor-->  
<!ELEMENT confsponsor (#PCDATA | addressbook)*>

<!--Book subtitle-->  
<!ELEMENT subtitle (#PCDATA)>

<!--Edition statement (ST.32:B516)-->
<!ELEMENT edition (#PCDATA)>

<!--Series statement-->  
<!ELEMENT series (text | (mst,msn?,issn?))>

<!--Monographic series title-->  
<!ELEMENT mst (#PCDATA)>

<!--Monographic series number-->  
<!ELEMENT msn (#PCDATA)>

<!--Abstract number-->  
<!ELEMENT absno (#PCDATA)>

<!--Location within the cited work-->  
<!ELEMENT location (text | (serpart?,sersect?,chapter?,pp?,column?,para?,line*))>

<!--Part within a serial-->  
<!ELEMENT serpart (#PCDATA)>

<!--Serial section-->  
<!ELEMENT sersect (#PCDATA)>

<!--Chapter; e.g., in a book. Example: Chapter 2-->
<!ELEMENT chapter (#PCDATA)>

<!--Cited document page numbers-->  
<!ELEMENT pp (#PCDATA | ppf | ppl)*>

<!--Cited document page, first-->  
<!ELEMENT ppf (#PCDATA)>

<!--Cited document page, last-->  
<!ELEMENT ppl (#PCDATA)>

<!--Cited document column numbers-->  
<!ELEMENT column (#PCDATA | colf | coll)*>
<!ELEMENT colf (#PCDATA) >
<!ELEMENT coll (#PCDATA) >
<!ELEMENT para  (#PCDATA | paraf | paral)* >
<!ELEMENT paraf  (#PCDATA) >
<!ELEMENT paral  (#PCDATA) >
<!ELEMENT line  (#PCDATA | linef | linel)* >
<!ELEMENT linef  (#PCDATA) >
<!ELEMENT linel  (#PCDATA) >
<!ELEMENT bookno  (#PCDATA) >
<!ELEMENT class  (#PCDATA) >
<!ELEMENT keyword  (#PCDATA) >
<!ELEMENT refno  (#PCDATA) >
<!ATTLIST refno id ID #IMPLIED  >
<!ELEMENT artid  (#PCDATA) >
<!ATTLIST artid id ID #IMPLIED  >
<!ELEMENT artid  (#PCDATA) >
<!ATTLIST artid id ID #IMPLIED  >

<!ATTLIST refno id ID #IMPLIED  >
<!--INCLUDED BY INHERITANCE-->
<!--Classification code; e.g., ipc, dewey etc.-->
<!--Keyword; e.g., from a Thesaurus or class. scheme (ST.32:B550)-->
<!--Reference number (general); for the EPO this is the XP number-->
<!ATTLIST refno id ID #IMPLIED  >
<!--Article unique ID - assigned by a publisher to an article-->
<!ATTLIST refno id ID #IMPLIED  >
According to PCT Rule 13bis, EPC Rule 32
This covers all bio data references long and short within
the description and/or claims.
Recommended id=biod0001, biod0002, etc.

Used in PatXML files

Corresponding SDOBI tags:
ST.32:B831 - depositary
ST.32:B832 - bio-accno
ST.32:B833 - date
ST.32:B834 - term
ST.32:B835 - dtext

<!ELEMENT bio-deposit (depositary,bio-accno,date?,term?,dtext?) >

<!ATTLIST bio-deposit
    id ID    #IMPLIED
    num CDATA    #REQUIRED
    url CDATA    #IMPLIED
    dnum CDATA    #IMPLIED >

<!--Information regarding the facility storing the biological deposit. (ST.32:B831) -->
<!ELEMENT depositary (#PCDATA | address)* >

<!--Biological accession number:
The identification assigned to the biological material by the depository (ST.32:B832) -->
<!ELEMENT bio-accno (#PCDATA) >

<!--Identifies the period of time during which the depository must be able to furnish samples of the biological material. (ST.32:B834) -->
<!ELEMENT term (#PCDATA) >

<!--Cross reference to any other element with an identifier (id) In PatXML files can be to a table only. -->
<!ELEMENT crossref (#PCDATA | b | i | u | o | sup | sub | smallcaps)* >

<!ATTLIST crossref
    idrefs IDREFS    #REQUIRED
    gidrefs CDATA    #IMPLIED >

---------------
REFERENCES:
---------------
A reference to a figure. May be in PatXML files. QUESTION: For discussion with contractor?**
Example: "...as shown in <figref idref='f0001'>Fig.1</figref>..."

<!ELEMENT figref (#PCDATA | b | i | u | o | sup | sub | smallcaps)* >

<!ATTLIST figref
    idrefs IDREFS    #IMPLIED
    gidrefs CDATA    #IMPLIED
    num CDATA    #IMPLIED >

---------------
IMAGE DATA
---------------
Image is used for any kind of image: drawings, art work, figures, complex work units (math, tables, chemistry), etc.

EPO Required usage:
the following attributes must be used in this order:
- id
- file
- wi (in mm) - note wi and he can be in any order (old Datimtex files are he and wi)
- he (in mm)
- img-content="drawing" (default - may be other - see below)
- img-format="tif" (default - no other)
- orientation="portrait" (default for PATXML files - may be landscape)
- inline may be used
- alt is NOT used

- id and file values:
  - For figures within the DRAWINGS section:
    id="if0001", etc.
    file="imgf0001.tif" (where f = figure)
  - For images within the DESCRIPTION and CLAIMS section:
    id="ib0001", etc.
    file="imgb0001.tif" (where b = body)
  - For images within the BODY of the ABSTRACT section eg a chemical formula
    id="ia01", etc.
    file="imga0001.tif" (where a = abstract)
  - For the figure to accompany the ABSTRACT section (abstract drawing): Taken from
    the drawings section NOT in PatXML files.
    id="iaf01", etc.
    file="imgaf001.tif" (where af = abstract figure)

Example:

< ![CDATA[<img id="if0001" file="imgf0001.tif" wi="155" he="230" img-content="drawing" img-format="tif"/>]]>

Note: where images occur, possibly, in other sections, eg. search report data use
similar logic.
-->
<!ELEMENT img  EMPTY >
<!ATTLIST img
    id   ID    #IMPLIED
    file  CDATA    #REQUIRED
    wi  CDATA    #REQUIRED
    he  CDATA    #REQUIRED
    img
        content (drawing | photograph | character | dna | undefined | chem | table | math | program-listing | flowchart | graph) "drawing"
        format (jpg | tif | st33 | st35)   #REQUIRED
        orientation (portrait | landscape) "portrait"
        inline (yes | no) "no"
        alt  CDATA    #IMPLIED >

UNORDERED LISTS:
****************************
List-style may be empty for lists with no bullet or other symbol
default list-style is 'bullets'.

EPO required usage:
- for ul element in the description: id="ul0001"
- If parent element is abstract: id="ula01"; BUT contractors
  should, if possible, not use in abstracts just type in the
  numbers as text (not used in PatXML)
- list-style: "none" means "none" or other type of symbol;
  that is if the applicant used
some other symbol use this and then in the body of the text enter that symbol
- bullet and dash may be used
- compact

EPO style: indent whole list 6mm from left margin
Example:
<ul id="ul0001" list-style="bullet">
  -->
  <!--ELEMENT ul (li+) -->
  <!--ATTLIST ul
    id ID #IMPLIED
    list-style (bullet | dash | none) "bullet"
    compact (compact) #IMPLIED -->
  <!----LIST ITEM
  EPO required usage:
  - DO NOT USE ID
  -->
  <!--ELEMENT li (#PCDATA | b | i | u | o | sup | sub | smallcaps | br | pre | patcit |
    nplcit | bio-deposit | crossref | figref | img | dl | ul | ol | chemistry | maths)* -->
  <!--ATTLIST li
    id ID #IMPLIED
    num CDATA #IMPLIED -->
  <!--***************************************
  ORDERED LISTS:
  ***************************************
  EPO required use:
  - For ol elements in the main part of the document id="ol0001"
  - If parent element is abstract:id="ola01";BUT contractors
    should, if possible, not use in abstracts just type in the
    numbers as text.
  EPO PatXML style ONLY for three levels and ONLY in the description:
  - level 1 use arabic numbers 1, 2, 3, ...
  - level 2 use lower alpha a, b, c, ...
  - level 3 use lower roman i, ii, iii, ...
  Early PatXML files <ol> is nested as above.
  Example (from PatXML version 1.4) :
  <ol id="ol0001" ol-style="l."/>
  <ol id="ol0001" ol-style="a."/>
  <ol id="ol0001" ol-style="i."/>
  Contractors: For all other cases (ie non-PatXML) leave the style
  empty and insert the actual numbering in the text after <li>:
  EPO style: indent whole list 6mm from left margin
  Example:
  <ol id="ol0001" ol-style=""/>
  <li>1.1 List item 1.1</li>
  </ol>
  -->
  <!--ELEMENT ol (li+) -->
  <!--ATTLIST ol
    id ID #IMPLIED
    compact (compact) #IMPLIED
    ol-style CDATA #IMPLIED -->
  <!--***************************************
  CHEMISTRY
  ***************************************
  Chemical formulae, ring structures, Markush structures, etc.
** Added 2006-02-08 - <formula-text> as alternative to image for very simple chemical "formulaes" where it would be useful to indentify them as such.

EPO required usage:
- For now treat as image or text data.
- Depending on industry support we may use, e.g. CML later
- For chemistry elements in the main part of the document: id="chem0001".
- For chemistry elements in the abstract:id="chema01";
- num = 0001, 0002, etc.

<!ELEMENT chemistry (img | formula-text | (chem, img?)) >
<!ATTLIST chemistry
 id  ID    #IMPLIED
 num  CDATA    #REQUIRED >

<!--NEW data element for v.1.1:
formula-text allows the data entry of very simple formulae without the verbosity of full mark up of maths and when available for chemistry -->
<!ELEMENT formula-text (#PCDATA | b | i | u | o | sup | sub | smallcaps)* >

<!--This is a pointer to an external DTD for chemical markup - to be determined.
IDEA: For EPO probably CML; http://www.xml-cml.org/ ?** -->
<!ELEMENT chem EMPTY >
<!ATTLIST chem
 id  ID    #IMPLIED
 file  CDATA    #REQUIRED
 chem-type CDATA    #IMPLIED >

<!--This is image data or coded according to mathml, version 2
** Added 2006-02-08 - <text> as alternative to image for very simple maths which do not need rendition and the "heavy coding" of mathml, eg. 2 x 2 = 4

The top-level element "math" contains MathML encoded mathematics. The "math" element has the browser info attributes if it is also the browser interface element.

EPO required usage:
- id="math0001"
- If parent element is abstract: id="matha01"
- num="0001", 0002, etc. OR
- use the value given by the applicant, usually in parenthesis to the (right) side of the formula, eg. (1)
- old SGML files:
<DF NUM="(1)" > becomes <maths id="math0001" num="(1)">
if there is no number:
<maths id="math0001" num="">
-->
<!ELEMENT maths (img | formula-text | (math, img?)) >
<!ATTLIST maths
 id  ID    #IMPLIED
 num  CDATA    #REQUIRED >

<!--Legal reference
Reference to a law document -->
<!ELEMENT legalref (#PCDATA | b | i | u | o | sup | sub | smallcaps)* >

<!-------------------------------
TABLES
-------------------------------
This is image data or coded according to OASIS Exchange model with modified cell
The parameter entities defined by the CALS table model as published (as part of the Example DTD) in MIL-HDBK-28001, have been removed and replaced by the corresponding values, to simplify reading. LS

<!ELEMENT tables (img | table) >
<!ATTLIST tables
  id  ID    #IMPLIED
  num  CDATA    #REQUIRED  >

Reference a stand-alone table authored with the table-external DTD. This is unlikely to be used by the EPO

<!ELEMENT table-external-doc (#PCDATA) >
<!ATTLIST table-external-doc
  id  ID    #IMPLIED
  file  CDATA    #REQUIRED
  lang  CDATA    #IMPLIED
  carriers (internal-electronic | external-electronic | paper) #IMPLIED
  external-type (math | chemistry | program-listing | other) #IMPLIED
  status CDATA    #IMPLIED >

A written opinion is based on a set of documents (description, claims, drawings, sequence listing material) on file, generally referred to as a request. Although in PCT there is generally only one request on file, some offices authorise the applicant to have multiple requests on file, each being handled separately in a written opinion.

id
Id for the request, suggested values (combine id of written-opinion followed by the sequence number) e.g. : wo-01-01

num
Identifies the level of the request, e.g.: 0=main request, 1=first auxiliary request, ...

request-allowable
Indicates if the request meets all the criteria for patentability.

<!ELEMENT written-opinion-request (%written_opinion_request_group;) >
<!ATTLIST written-opinion-request
  id  ID    #IMPLIED
  num  CDATA    #REQUIRED
  request-allowable (yes | no) #IMPLIED >

Wrapper element to indicate the documents that form part of the request, i.e. which have considered for the establishment of the opinion.

<!ELEMENT application-documents (%application_documents_group;) >
<!ATTLIST application-documents
  translators CDATA    #IMPLIED
  file  CDATA    #REQUIRED
  num  CDATA    #REQUIRED
  translated (yes | no) #IMPLIED >

Indicates that a translation of the application is on file.
A translation has been provided or not.

Language into which the application has been translated.

The reason for which the translation was submitted.
- international-search
  Rules 12.3(a) and 23.1(b) PCT, the translation was submitted for the purpose of international search.
- international-publication
  Rule 12.4(a) PCT, the translation was submitted for the purpose of the international publication
- supplementary-international-search
  Rule 45bis.1(c)(i) PCT, the translation was submitted for the purpose of a supplementary international search
- international-examination
  Rules 55.2(a) and/or 55.3(a) PCT, the translation was submitted for the purpose of international examination (including amendments).
- entry-regional-phase
  The translation was submitted when entering a regional phase

<?ELEMENT translation-of-appl EMPTY ?>

<?ATTLIST translation-of-appl
  translation (yes | no) #REQUIRED
  lang CDATA #IMPLIED
  translation-purpose (international-search | international-publication | supplementary-international-search | international-type-search | international-preliminary-examination | entry-regional-phase | priority-document | national-examination | opposition) #IMPLIED >

<?--application-documents-description
Indicates the documents of the description on which the opinion is based.
-->
<?ELEMENT application-documents-description (application-document+) ?>

<?--application-document
Part of a document provided as basis.

value
Describes the value of the tag, e.g. whether it refers to pages, claims, ...
- free-text
  Take the value as is. Not allowed in PCT.
- page, paragraph
  Identifies a part of the description as page or paragraph.
- claim
  Identifies a claim.
- sheet, figure
  Identifies a part of the drawings either a sheet or a specific figure.

basis, basis-other
Indicates the basis of the provided documents: as filed (default), amended, cancelled, ignored. after-search-report cover the specific case of Article 19(1) PCT.
basis-other is intended to provided for extension for national procedures.

basis-format
the support by which the documents were filed.

basis-date, basis-received
The date of drafting and the date of receipt of the document indicating the changes.

EXAMPLE 1
Pages 1-5 as originally filed:
EXAMPLE 2
Pages 1-5 as originally filed
Page 6 filed with letter of 12 January 2009 received on 15 January 2009
Pages 7-10 filed electronically on 25 March 2009
Claims 1-10 filed electronically on 25 March 2009
Claims 12-15 cancelled with letter of 12 January 2009 received on 15 January 2009
Indicates the documents of the description on which the opinion is based.

`<!ELEMENT application-documents-sequence-list (material-of-sequence-list, material-of-sequence-listing-cancelled?, material-of-sequence-listing-ignored?, presentation-of-statements?, additional-info?) >`

`<!--material-of-sequence-list
Basis of any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention.
Typically used in written opinions to provide the basis, e.g. in forms PCT/ISA/237, PCT/IPEA/408, PCT/IPEA/409.

sequence-listing
Sequence listings were filed (default yes)

  table
  table(s) were filed.

  paper
  Submitted in paper.

  electronic
  Submitted electronically (default yes).

filing
Time of filing/cancellation of sequence listing material
  - in-application-as-filed
    Contained in the international application as filed. Empty tag.
  - electronically-with-application
    Filed together with the international application in electronic form. Empty tag
  - submitted-for-search-or-exam
    Submitted subsequently to this Authority for the purposes of search and/or examination. Empty tag
  - amendment
    Received by this Authority as amendment. The tag contains the date of receipt of the sequence listing material.

  amendment-received-on
  Date of receipt of the amended material.

  cancelled
  Indicates that the part was cancelled.

  ignored
  Indicates that the part (amendment) was ignored because it was considered to go beyond the application as originally filed.

<!ELEMENT material-of-sequence-list (sequence-listing-material-type, sequence-listing-material-format,sequence-listing-filing-time) >`

<!--a. type of material

<!ELEMENT sequence-listing-material-type  EMPTY >

<!ATTLIST sequence-listing-material-type
  sequence-listing (yes | no) "yes"
  table (yes | no)  #REQUIRED >

<!--b. format of material

<!ELEMENT sequence-listing-material-format  EMPTY >

<!ATTLIST sequence-listing-material-format
  paper (yes | no)  #REQUIRED
  electronic (yes | no) "yes" >
c. time of filing/furnishing

The amendments have resulted in the cancellation of sequence listing material.

This opinion has been established as if (some of) the amendments to the sequence listing material below had not been made, since either they are considered to go beyond the disclosure as filed, or they were not accompanied by a letter indicating the basis for the amendments in the application as filed.

In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were submitted.

Indicates if the statements were submitted

Indicates if the authority took into account the correction of obvious mistakes under Rule 91 PCT.

Any observation that does not fit in other elements, typically comments or suggestions made by an authorized officer or examiner.

If no p is provided, generates a standard phrase based on legal-basis, legal-source and the references to the application documents.
This opinion has been established as if no priority had been claimed.

Suggested value for id: wo-01-01-po

<!ELEMENT priority-opinion (earlier-appl?,claim-invalid?,additional-info?) >

<!ATTLIST priority-opinion %common_id_attribute_group; >

<!--(PCT/ISA/237 - Box II) - Priority
Priority 1. The following document has not yet been furnished:
Attribute value:
copy = copy of the earlier application whose priority has been claimed (Rules 43bis.1 and 66.7(a)).
translation = translation of the earlier application whose priority has been claimed (Rules 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.-->

<!ELEMENT earlier-appl EMPTY >

<!ATTLIST earlier-appl
earlier-appl-missing (copy | translation) #IMPLIED >

<!--This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.-->

<!ELEMENT claim-invalid EMPTY >

<!--non-establishment-of-opinion
Non-establishment of opinion with regard to novelty, inventive step and industrial applicability.

entire-application
No opinion could be established with respect to the entire application.

complex-application
Indicates whether the objection results in the application to be treated as a complex application (Articles 17(2)(a)(ii) and 34(4)(a)(ii) PCT (Rule 63 EPC-2000).

Suggested value for id: wo-01-01-ne

-->

<!ELEMENT non-establishment-of-opinion (non-establishment-claims?,non-establishment-reason*,additional-info*) >

<!ATTLIST non-establishment-of-opinion %common_id_attribute_group; >

<!--non-establishment-claims
This element is used to specify the claim numbers for which there is non-establishment of the written opinion.

-->

<!ELEMENT non-establishment-claims (claim-num*, partially-for-claims?)>

<!ATTLIST non-establishment-claims %common_id_attribute_group;>

<!--non-establishment-reason
No opinion was established with respect to claims, sequence-listing or a table.

reason
Reason for not establishing an opinion:
- no-opinion-required
The said application or said claims relate to the following subject matter which does not require an opinion, see statement. See Article 17(2)(a)(i) or 34(4)(a)(i) PCT (20011003), Article 52(2) EPC 2000.

- unclear
The description, claims or drawings (indicate particular elements in statement) or said claims are so unclear that no meaningful opinion could be formed. See Article 6 PCT (20011003), Article 84 EPC 2000.

- not-supported
The claims, or said claims are so inadequately supported by the description that no meaningful opinion could be formed. See Article 5 PCT (20011003), Article 83 EPC 2000.

- no-search-report
No international search report has been established for said claims.

- added-subject-matter
The amendments go beyond the application as originally filed to such an extent that no examination is possible. See Article 19(2) or 34(2)(b) PCT (20011003), Article 123(2) EPC 2000.

- novelty-overflow
The claims are so broad that the search generated such a number of prior documents that no meaningful opinion can be established.

All reasons should be accompanied by a statement except for no-search-report.

Suggested value for id: wo-01-01-ne-01, wo-01-01-ne-02, ...

-->  
<!ELEMENT non-establishment-reason (%claim_defect_group;+) >  
<!ATTLIST non-establishment-reason %common_id_attribute_group;  
  reason (no-opinion-required | unclear | not-supported |  
    no-search-report | added-subject-matter | novelty-overflow |  
    sequence-listing ) #REQUIRED >

<!ENTITY --*******************************************************************************  
END SECTION WRITTEN-OPINION DTD  
*******************************************************************************  
SECTION GENERIC TAGS  
*******************************************************************************

Claim numbers
-->  
<!ELEMENT claim-num (#PCDATA) >  
<!--partially-for-claims
Opinion established to limited aspects of the provided claims, see additional info for details.

Typically used in case of Markush type claims, novelty overflow, ...

-->  
<!ELEMENT partially-for-claims (claim-num+) >  
<!--sequence-list-defect
No opinion was established without the sequence listing.

reason
Reason for not establishing an opinion:
- no-paper-submitted
The applicant did not submit within the prescribed time limit a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the Authority in a form and manner acceptable to it.
- no-electronic-submitted
The applicant did not submit within the prescribed time limit a sequence listing in electronic form complying with the standard
provided for in Annex C of the Administrative Instructions, and such listing was not available to the Authority in a form and manner acceptable to it.
- no-fee-paid
The applicant did not within the prescribed time limit pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rules 13ter.1(a) or (b) and 13ter.2 PCT.

No additional statement required.

-->
<!ELEMENT sequence-list-defect EMPTY >
<!ATTLIST sequence-list-defect
  reason (no-paper-submitted | no-electronic-submitted | no-fee-paid)
  #REQUIRED >

--table-defect
No opinion was established because the tables related to the sequence listings.

reason
Reason for not establishing an opinion:
- not-electronically-submitted
A meaningful opinion could not be formed without the tables related to the sequence listings; the applicant did not, within the prescribed time limit, furnish such tables in electronic form complying with the technical requirements provided for in Annex C-bis of the Administrative Instructions, and such tables were not available to the Authority in a form and manner acceptable to it.
- not-format-compliant
The tables related to the nucleotide and/or amino acid sequence listing, if in electronic form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

No additional statement required.

-->
<!ELEMENT table-defect EMPTY >
<!ATTLIST table-defect
  reason (not-electronically-submitted | not-format-compliant)
  #REQUIRED >

--added-subject-matter-objections
The amendments shall not go beyond the disclosure in the international application as filed (Art 19(2), 28(2), 34(2)(b) and 41(2) PCT - Oct 3, 2001) and further information. The amendment not fullfilling the requirement will be identified and a statement explaining the reason as to why it goes beyond the application as originally filed is provided. When referring to a previous set of objections as a whole, this element only needs to contain the additional objections not yet covered by the referred set.

suggested value for id: wo-01-01-as

-->
<!ELEMENT added-subject-matter-objections (%objections_group;) >
<!ATTLIST added-subject-matter-objections
  id ID #IMPLIED
  idref IDREFS #IMPLIED
  gidref CDATA #IMPLIED >

--object
Identifies any objection related to specific application documents When referring to a previous (set of) objection(s), this element only needs to contain additional information not yet covered by the referred set or element.
The Authority has determined that the present application does (not) relate to one invention only or to a group of inventions so linked as to form a single general inventive concept.

A lack of unity is assessed whenever:

* the special technical features of each of the invention are neither corresponding nor the same, and/or
* the general concept linking all the inventions is neither novel nor inventive unity-of-invention

Indicates if the requirement of unity of invention is satisfied.

complex-application

Indicates whether the objection results in the application to be treated as a complex application (Articles 17(2)(a)(ii) and 34(4)(a)(ii) PCT (Rule 63 EPC-2000).

additional-fees-requested

This Authority found that the requirement of unity of invention is not complied with and chose (not) to invite the applicant to restrict or pay additional fees.

response-additional-fees

The response of the applicant to the request to pay additional fees.

* restricted-claims
  the applicant restricted the claims.
* paid-additional-fees
  the applicant paid the additional fees.
* neither-additional-fees-nor-restricted-claims
  the applicant did neither pay the fees nor restricted the claims.

additional-fees-requested (yes | no) #REQUIRED

response-additional-fees (restricted-claims | paid-additional-fees | neither-additional-fees-nor-restricted-claims) #IMPLIED>
* paid-additional-fees-under-protest
  the applicant paid the additional fees under protest. The protest was paid.
* paid-additional-fees-under-protest-and-protest-fee
  the applicant paid the additional fees under protest. The protest was not paid.
-->
<!ELEMENT additional-fees-paid-under-protest EMPTY>

<!ATTLIST additional-fees-paid-under-protest
protest-fee-paid (yes | no) #REQUIRED >

The requirement of unity of invention is fulfilled only when there exists
a single general inventive concept among the claimed separate inventions
(see claim-num) which finds its expression in one or more of the same or
corresponding special technical features. It should be noted, however,
that it is not required that the concept linking the claimed separate
inventions be expressly stated in the wording of the claims.
If no single general concept can be distinguished, or if the single
general concept is clearly known from the state of the art at hand (see
citations), then the application lacks unity of invention.
-->
<!ELEMENT lack-of-unity-single-general-inventive-concept (p+)>
<!ELEMENT opinion-estimated-regarding (%opinion_established_regarding_group;) >

<!ELEMENT entire-application EMPTY >

<!ELEMENT completely-for-claims EMPTY >

<!ELEMENT not-for-claims EMPTY >

Typically used in case of Markush type claims, novelty overflow, ...

<!ELEMENT selected-invention EMPTY >

<!ATTLIST selected-invention
 idref IDREF #REQUIRED
 gidref CDATA #IMPLIED >

<!ELEMENT clarity-objections (%objections_group;) >

<!ATTLIST clarity-objections %common_id_attribute_group;>

<!ELEMENT insufficiency-of-disclosure-objections (%objections_group;) >

<!ATTLIST insufficiency-of-disclosure-objections %common_id_attribute_group;>

<!ELEMENT compliance-of-invention (novelty-compliance?,inventive-step-compliance?, industrial-applicability-compliance?,additional-info*) >

<!ATTLIST compliance-of-invention %common_id_attribute_group;>

<!ELEMENT novelty-compliance >

A claimed invention shall be considered novel if it is not anticipated by the prior art, Art 33(2) PCT.

Recommended values for id: wo-01-01-pr-n
Said claims comply with the criteria to which this element refers to (novelty, inventive step or industrial applicability) for the reasons provided.

Recommended values for:
- novelty: wo-01-01-pr-n-01, wo-01-01-pr-n-02, ...
- inventive step: wo-01-01-pr-is-01, wo-01-01-pr-is-02, ...
- industrial applicability: wo-01-01-pr-ia-01, wo-01-01-pr-ia-02, ...

Said claims do not comply with the criteria to which this element refers to (novelty, inventive step or industrial applicability) for the reasons provided.

Recommended values for:
- novelty: wo-01-01-pr-n-01, wo-01-01-pr-n-02, ...
- inventive step: wo-01-01-pr-is-01, wo-01-01-pr-is-02, ...
- industrial applicability: wo-01-01-pr-ia-01, wo-01-01-pr-ia-02, ...

A claimed invention shall be considered to involve an inventive step if, having regard to the prior art, it is not, at the prescribed relevant date, obvious to a person skilled in the art, Article 33(3) PCT.

Recommended values: wo-01-01-pr-is

A claimed invention shall be considered industrially applicable if, according to its nature, it can be made or used (in the technological sense) in any kind of industry. Industry shall be understood in its broadest sense, as in the Paris Convention for the Protection of Industrial Property, Article 33(4) PCT.

Recommended values: wo-01-01-pr-ia

Container for all objections related to formal aspects and further additional-infos.

Recommended values: wo-01-01-fd

Container for all observations from the examiner to address arguments of the applicant that were not cover by any of the preceeding points.
Recommended values: wo-01-01-ca

<!ELEMENT comments-of-applicant (additional-info+)>

<!ATTLIST comments-of-applicant %common_id_attribute_group;>

<!--conclusion
Set of statements of additional information concluding either a request or the written opinion.
Stylesheet:
If no p is provided, generates a standard phrase based on legal-basis, legal-source and the references to the application documents.

id
Suggested values:
for a request: wo-01-01-c
for the opinion: wo-01-c

<!ELEMENT conclusion (p*,additional-info*)>

<!ATTLIST conclusion %common_id_attribute_group; legal-basis CDATA #IMPLIED
legal-source CDATA #IMPLIED>

<!--citations
The statement shall be accompanied by the citation of the documents believed to support the stated conclusion with such explanations as the circumstances of the case may require (Article 35(2) PCT).

<!ELEMENT citations (%citations_group;)+>

<!--*******************************
CITATIONS
*******************************
Grouping tag for patent literature (patcit)
or non-patent literature (nplcit) plus data related to those citations.
Recommended id='cit0001', 'cit0002', etc.
For the SR: id='sr-cit0001', 'sr-cit0002'
For the WO: id='wo-cit0001'

@reference
Identification given by the party to the document, e.g. A1.

@exam-reference
Identification given by the search or examining division to the document, e.g. D1.

@has-equivalent:
The expected usage of this attribute is that it will only be present in the circumstances where the examiner explicitly chooses to express the fact that the cited document has no equivalent document / patent family members in the rendered search report citation; in other words the attribute when present and having the value "no" will result in the text "No patent family" or "No equivalent documents" in the relevant language being displayed on the search report.

<!ELEMENT citation ((patcit | nplcit),(rel-passage*,category*,rel-claims*)*,
corresponding-docs*,classification-ipc?, classifications-ipcr?,
classification-national?, doi?)>

<!ATTLIST citation id ID #IMPLIED
cited-phase (application | search | international-search-report |
supplementary-international-search-report |
international-type-search-report | national-search-report |
supplementary-national-search-report | examination |
publication reference information: publication number, date, etc (INID 11, ST.32:B110)

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

<!ATTLIST publication-reference id ID #IMPLIED >

<!--Rule 70.10: Any published application ... shall be accompanied by ... its claimed priority date (if any). In respect of the priority date of any such document, the report may indicate that, in the opinion of the International Preliminary Examining Authority, such date has not been validly claimed.-->
<!ELEMENT priority-date (#PCDATA) >

<!ATTLIST priority-date priority-valid (yes | no) "yes" >

<!--citation-opinion
For cases where the examiner provides an opinion related to a cited document. This element, where present must contain a paragraph contained in a p element. -->
In cases where the making available to the public occurred by means of an oral disclosure, use, exhibition or other non-written means (non-written disclosure) before the relevant date as defined in Rule 64.1(b) and the date of such non-written disclosure is indicated in a written disclosure which has been made available to the public on a date which is the same as, or later than, the relevant date, the non-written disclosure shall not be considered part of the prior art for the purposes of Article 33(2) and (3). Nevertheless, the international preliminary examination report shall call attention to such non-written disclosure in the manner provided for in Rule 70.9.

See also Rules 33.1(b) and 64(2) PCT

Recommended id='cit0001', 'cit0002', etc.
For the SR: id='sr-cit0001', 'sr-cit0002'
For the WO: id='wo-cit0001'

reference
Identification given by the party to the document, e.g. A1.

exam-reference
Identification given by the search or examining division to the document, e.g. D1.

Kind of non-written disclosure

Date of written disclosure Referring to non-written disclosure (day/month/year)

annexed-documents
Documents annexed to an xml files either as facsimile or electronic files

Electronic-file

Exceptional handling for WIPO - EPO data exchange
If the opinion cannot be converted to ST.36, the original XHTML code will be stored in this tag as CDATA

Box I : 6. With regard to top-up searches (Rules 66.1ter and 70.2(f)):
[] A top-up search was carried out by this Authority on
[] Additional relevant documents have been discovered during the top-up
search.

--> 
<!ELEMENT top-up-search-carried-out EMPTY>

<!ATTLIST top-up-search-carried-out
date CDATA #REQUIRED
document-found (yes | no) #REQUIRED>

<!-- no-top-up-search-carried-out
[PCT/IPEA/409]
Box I : 6. With regard to top-up searches (Rules 66.1ter and 70.2(f)):
[] No top-up search was carried out by this Authority because it would serve no useful purpose

--> 
<!ELEMENT no-top-up-search-carried-out EMPTY>

<!--
********************************************************************************
END OF FILE
********************************************************************************
-->