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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 July 1, 2015

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 July 1, 2015. 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 September 16, 2012, with the exception of Annexes A and F (available separately), is contained in document PCT/AI/15 dated August 17, 2012. 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.

ANNEX F
STANDARD FOR THE ELECTRONIC FILING AND PROCESSING
OF INTERNATIONAL APPLICATIONS

APPENDIX I
XML DTDS FOR THE E-PCT STANDARD

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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' ?>

<!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)">

<!--
*****
* package-data v1.6      2010  APRIL                               *
*****
* PUBLIC "-//WIPO//DTD PACKAGE DATA 1.6//EN" "package-data-v1-6.dtd" *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/package-data-v1-6.dtd *
*****
* contacts:                                                       *
*   EPO: Paul Brewin; pbrewin@epo.org                             *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                   *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                      *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@wipo.int             *
*****
* revision history                                               *
*****
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: 01/01/07 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
December 2001
..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-
request | application-body-doc | table-external | chapter2-demand | fee-calculation-

```

```

sheet | declaration-doc | lack-of-signature | biological-material | separate-power-
of-attorney | general-power-of-attorney | copy-general-power-of-attorney | bib-
changes | notification | amendment | priority-document | translation-of-application
| search-report-doc | trans-search-report | preliminary-examination-report | trans-
preliminary-examination-report | published-application | sequence-list |
correspondence | other-documents | wrapped-document | restore-rights-reason | xmit-
receipt-doc | ro-request-receiving-info-doc | pre-conversion-files-package)+>

```

```

<!ATTLIST package-data 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
                        country CDATA #IMPLIED
                        status CDATA #IMPLIED >

```

```

<!--
  Other documents; specify with sub-elements

```

```

-->
<!ELEMENT other-doc (document-name | document-code | dtext)+>

```

```

<!ATTLIST other-doc id ID #IMPLIED
                    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 >

```

```

<!--

```

```

-->
<!ELEMENT pre-conversion-files-package EMPTY>

```

```

<!ATTLIST pre-conversion-files-package id ID #IMPLIED
                                        file CDATA #REQUIRED
                                        lang CDATA #IMPLIED
                                        status CDATA #IMPLIED
                                        carriers (internal-electronic |
                                                  external-electronic |
                                                  paper ) #IMPLIED >

```

```

<!--

```

```

-->
<!ELEMENT ro-request-receiving-info-doc EMPTY>

```

```

<!ATTLIST ro-request-receiving-info-doc id ID #IMPLIED
                                        file CDATA #REQUIRED
                                        lang CDATA #IMPLIED
                                        status CDATA #IMPLIED
                                        carriers (internal-electronic |
                                                  external-electronic |
                                                  paper ) #IMPLIED >

```

```

<!--

```

```

-->
<!ELEMENT xmit-receipt-doc EMPTY>

```

```

<!ATTLIST xmit-receipt-doc id ID #IMPLIED
                           file CDATA #REQUIRED

```



```

                                external-electronic |
                                paper ) #IMPLIED
seq-file-type                  CDATA #FIXED 'ST.25'
electronic-format-type         (text | other ) #IMPLIED
status                         CDATA #IMPLIED
part-of-application           (yes | no ) #IMPLIED >
<!--
  Published application, e.g. PCT Art.20 communication
-->
<!ELEMENT published-application EMPTY>

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

<!--
  English translation of International Preliminary Examination Report
-->
<!ELEMENT trans-preliminary-examination-report EMPTY>

<!ATTLIST trans-preliminary-examination-report  id          ID          #IMPLIED
                                                file         CDATA      #REQUIRED
                                                lang         CDATA      #IMPLIED
                                                carriers      (internal-
electronic |
                                                external-electronic |
                                                paper ) #IMPLIED
                                                status       CDATA      #IMPLIED >

<!--
  International Preliminary Examination Report (IPER) (Article 35)
-->
<!ELEMENT preliminary-examination-report EMPTY>

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

<!--
  English translation of search report
-->
<!ELEMENT trans-search-report EMPTY>

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

<!--
  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 #REQUIRED
                    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
                    status CDATA #IMPLIED
                    carriers (internal-electronic |
                            external-electronic |
                            paper ) #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
-->
<!ELEMENT notice-info (response-term? , applicant-name* , agent-info? , reason-for-
rejection-info? , drafting-document-info?)>

<!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?)>
<!--
```

```
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)>

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

<!--
  Document transfer information from office to applicant
-->
<!ELEMENT office-to-applicant (from , invention-title? , confirmation-number? ,
receipt-list-info? , file-reference-id? , (application-reference+ | (patent-
reference , application-reference+)) , notice-info* , total-number-of-
notifications?)>

<!--
  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.  
-->  
<!ELEMENT office-to-office (invention-title? , first-named-applicant? ,  
confirmation-number? , application-reference , publication-reference? , file-  
reference-id? , from? , to?)>  
  
<!--  
  The office that sends the document  
-->  
<!ELEMENT from (country)>  
  
<!--  
  Subsequent filing information, before Issue Date  
-->  
<!ELEMENT subsequent-filing (invention-title? , first-named-applicant ,  
confirmation-number? , file-reference-id? , appeal-reference? , (application-  
reference+ | (patent-reference , application-reference+)) , document-code* , to)>  
  
<!--  
  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  
-->  
<!ELEMENT new-application (invention-title? , first-named-applicant? , file-  
reference-id? , document-code* , to)>  
  
<!--
```

```
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)*>

<!--
  Superscripted text
-->
```

```
<!ELEMENT sup2 (#PCDATA | b | u | i | o)*>
<!-- bio = stub; not same as element (yet) -->
```

3.2 Request form

```
<?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)">

<!--
*****
* Request v1.8      2012  JULY                                     *
*****
* PUBLIC "-//WIPO//DTD REQUEST 1.8//EN" "request-v1-8.dtd"       *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/request-v1-8.dtd *
*****
* contacts:                                                     *
*   EPO: Paul Brewin; pbrewin@epo.org                           *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                 *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                   *
*   WIPO: Shuhei Yoshiura; shuhei.yoshiura@wipo.int            *
*****
* revision history
-----
SY: 01/07/12 incorporated changes from PFC
..changed version number from v1.7 to v1.8
..modified element 'priority-doc-from-library' adding attribute 'priority-doc-
access-code CDATA #IMPLIED' (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 'substantially-equivalent' to earlier-search-request (PFC08/003)
..added element 'earlier-search-document' to earlier-search-request (PFC08/003)
..added element 'cl-earlier-search-document' to check-list (PFC08/003)
..added attribute 'email-purpose' to email (PFC08/006)
..added attribute 'for-search-only' to cl-sequence-listing-table (PFC08/007)
..added attribute 'additional-copies-including-search-copy' to cl-sequence-listing-
table (PFC08/007)
..added attribute 'with-identifying-statement' to cl-sequence-listing-table
(PFC08/007)
..added attribute 'for-search-only' to cl-sequence-listing (PFC08/007)
..added attribute 'additional-copies-including-search-copy' to cl-sequence-listing
(PFC08/007)
..added attribute 'with-identifying-statement' to cl-sequence-listing (PFC08/007)
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 '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 priority-claims (PFC06/004)
..added element 'restore-rights' to priority-claim (PFC06/004)
..added element 'cl-restore-rights-reason' to checklist (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:
..changed attribute he, wi of doc-page from 'NMTOKEN' to 'CDATA'
..added attribute 'id' to addressbook, priority-claim
..added attribute 'ocr' to doc-page
HT: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..added attribute 'legal-representative', 'administrator', 'administratrix',
  'legal-representatives', 'heirs', 'executors', 'legal-heirs' to us-right
..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
..changed element request from 'dtext?' to 'dtext*'
..changed element designation-of-states
  from '(precautionary-designation-statement, exclusion-from-designation??)'
  to '(precautionary-designation-statement?, exclusion-from-designation?)'
..added element 'sup2' and 'sub2' to sup and sub
..added element 'cl-sequence-listing-table' to check-list
..added attribute 'ppf' and 'ppl' to cl-abstract, cl-claims, cl-description
..added attribute 'fig-count' to cl-drawings
..added attribute 'carriers' to cl-sequence-listing
JD: 03/02/03 incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..changed element inventors from '(inventor+, deceased-inventor*)' to '(inventor |
deceased-inventor)+'
..changed element protection-request from '?' to '*' in national, regional
..added element 'any-other-state' to regional
..added attribute 'total-page-count' to check-list
..added attribute 'page-count' to cl-sequence-listing
..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 : R0101 (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
  ro             = Receiving office name, country code ST.3
  produced-by   = creator of this document

-->
<!ELEMENT request ((file-reference-id? , request-petition , invention-title? ,
parties , designation-of-states? , priority-claims? , search-authority? ,
declarations? , check-list? , figure-to-publish? , language-of-filing? ,
signatories? , store-in-digital-library? , dtext* , office-specific-data*) | doc-
page+)>

<!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 >
<!--
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' >

<!--
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-data EMPTY>

<!ATTLIST office-specific-data office CDATA #REQUIRED
                                office-dtd CDATA #REQUIRED
                                file CDATA #REQUIRED
                                id ID #IMPLIED
                                lang CDATA #IMPLIED
                                status CDATA #IMPLIED >

<!--
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

-->
<!ELEMENT store-in-digital-library EMPTY>

<!ATTLIST store-in-digital-library id ID #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
#REQUIRED                                CDATA
                                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
                                carriers-quantity          CDATA
#IMPLIED
                                size                       CDATA
#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
  (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-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 >

<!--
Protection request for the designated office.

```

```
-->
<!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 >

<!--
  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 >

<!--
  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 = 'inv't'
-->
<!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?)>
<!--
  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)>

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

<!--
  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 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.
-->
<!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>

<!--
  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)>

<!--
  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;)>  
  
<!--  
  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)*>

<!--
  (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)>

```

3.3 Application body

```

<?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)">

<!--
*****
* application-body v1.6      2010  APRIL                               *
*****
* PUBLIC "-//WIPO//DTD APPLICATION BODY 1.6//EN" "application-body-v1-6.dtd" *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/application-body-v1-6.dtd *
*****
* contacts:                                                         *
*   EPO: Paul Brewin; pbrewin@epo.org                               *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                     *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                       *
*   WIPO: Shuhei Yoshiura; shuhei.yoshiura@wipo.int                *
*****
* revision history                                                 *
*****
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: 01/01/07 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:
..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 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 v1.2 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 v1.1 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 | orname) choice to %name_group;
..removed br from b, i , smallcaps
December 2001
..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;-->

<!--
*****
* 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
*****

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.

-->

<!ELEMENT figure (img)>

```
<!ATTLIST figure  id      ID      #IMPLIED
                 num      CDATA   #REQUIRED
                 figure-labels 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 >
```

<!--

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 >

<!--
-->
<!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'
-->
<!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 >

<!--
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))

  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 >

<!--
  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)*>

<!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
              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 (depository , 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
  <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.
  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 >

<!--

```



```

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 = 'inv't'
-->
<!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' >

<!--
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' >

<!--
The text of the claim; also used for for sub-para indentation

-->
<!ELEMENT claim-text (#PCDATA | claim-text | claim-ref | b | i | u | o | sup | sub
| smallcaps | br | pre | crossref | figref | img | chemistry | maths | tables)*>

<!--
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].
  3rd ed. New York : John Wiley, 1984 [cited 3 January 1990].
  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>
      <edition>3rd ed.</edition>
      <imprint>
        <address>
          <text>New York</text>
        </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:
  Clark, Carol. On the Threshold of a Brave New World.
  In Blueprint of the Body [online].
  CNN.com, 2000. [cited 24 August 2000;10:25 EST]. In-depth specials.
  Available from: [http://www.cnn.com/SPECIALS/2000/genome/story/overview/]

  <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>
    </online>
  </nplcit>
```

```
</series>
<avail>http://www.cnn.com/SPECIALS/2000/genome/story/</avail>
<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.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.

```
<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* ,
edition? , (serial | book)? , imprint? , pubdate? , history? , series? , hostno? ,
location? , notes? , avail , class* , keyword* , cpyrt? , issn? , isbn? , datecit?
, 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))>

<!--
  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.
  DROP, J.G.  Integrated Circuit Personalization at the Module Level. IBM Tech.
  Dis. Bull.  October 1974, Vol. 17, No. 5, p. 1344 and 1345.
  [XPnnnnnnnnnnn].
```

```

<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

```

-->
<!ELEMENT article (text | (author* , atl? , subname* , (serial | book) , absno? ,
location? , class* , keyword* , cpyrt? , artid? , refno*))>

```

```

<!--
  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.
  London : Sweet and Maxwell, 1973. ISBN 0123456789.
  Vol.2, p. 138 to 192.

```

```

<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 book (text | (author* , (book-title+ | conference) , (subtitle? ,
subname* , edition? , imprint? , descrip? , series? , absno? , location* , isbn* ,
pubid? , vid? , bookno? , notes? , class* , keyword* , cpyrt? , refno* , doi? ,
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  
-->  
<!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)>

<!--
  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? ,  
descrip? , notes? , isbn? , issn? , pubid? , vid? , ino? , cpyrt? , doi?)>  
  
<!--  
-->  
<!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)>

<!--
  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?)*))>

<!--
  Relevant claims
-->
<!ELEMENT rel-claims (#PCDATA)>

<!--
  Category
  (ST.32:B563)
-->
<!ELEMENT category (#PCDATA)>

<!--
  Passage within the cited patent literature
-->
<!ELEMENT passage (#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)>

<!--
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 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)">

<!--
*****
* declaration v1.5      2010  APRIL                                     *
*****
* PUBLIC "-//WIPO//DTD DECLARATION 1.5//EN" "declaration-v1-5.dtd"   *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/declaration-v1-5.dtd *
*****
* contacts:                                                         *
*   EPO: Paul Brewin; pbrewin@epo.org                               *
*   JPO: Hideto TANAKA; tanaka-hideto@jpo.go.jp                     *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                        *
*   WIPO: Shuhei Yoshiura; shuhei.yoshiura@wipo.int                 *
*****
* revision history                                                 *
*****
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 >

<!--
  Declaration of inventorship. For purposes of the United States the declaration
  shall be worded with the original and first inventor clause.

-->
<!ELEMENT inventorship (doc-page+ | (application-reference? , earlier-app-
reference* , inventor-info+ , signatories? , dtext?))>

<!ATTLIST inventorship  sequence CDATA #REQUIRED
                        lang      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 >

<!--
  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 >

<!--
  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-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 >

<!--
  Method by which prior art was disclosed to the public
-->

<!ELEMENT method-of-disclosure (international-exhibition | publication | abuse |
other)>

<!--
  Other method by which prior art was disclosed to the public
-->

<!ELEMENT other (#PCDATA)>

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

<!ELEMENT abuse (#PCDATA)>

<!--
  A publication was used as the method of disclosure
-->

<!ELEMENT publication (#PCDATA)>

<!--
  An international exhibition was used as the method of disclosure
-->

<!ELEMENT international-exhibition (#PCDATA)>
```

```
<!--
  Title of what is being disclosed under PCT Rule 51bis.1(a)(v)
-->
<!ELEMENT title-of-disclosure (#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?)>

<!--
  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)>

<!--
  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;)>

<!--
  Earlier application identification group
-->
<!ELEMENT earlier-app-reference (document-id)>

<!--
  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)>

<!--
  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>

<!--
  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)>

<!--
  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)>

<!--
  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)>

```

3.5 Power of attorney

```

<?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)">

<!--
*****
* power-of-attorney v1.5      2010  APRIL                               *
*****
* PUBLIC "-//WIPO//DTD POWER OF ATTORNEY 1.5//EN" "power-of-attorney-v1-5.dtd"*
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/power-of-attorney-v1-5.dtd*
*****
* contacts:                                                           *
*   EPO: Paul Brewin; pbrewin@epo.org                               *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                     *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                       *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@wipo.int               *
*****
* revision history                                                    *
*****
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,

```

```
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 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 v1.2 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 v1.1 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 attribute 'orientation' to doc-page
..added (last-name | orgname) option in %name_group;
..made postcode optional within address
..removed br from b, i, smallcaps
December 2001
..released version number as v1.0
*****
```

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 >
```

<!--

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 >
```

<!--

Attorney or agent has the power to make or receive payments on behalf of the applicant (yes| no)

-->

```
<!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 |
                  leftrightarrow ) '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
-->

```

```
-->
<!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?)>

<!--
  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)>

<!--
  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)*>

<!--
  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)*>

<!--
  The body(ies) which the attorney or agent is appointed to represent the applicant
  before
-->
<!ELEMENT represent-before (all-authorities | isa-only | ipea-only)>

<!--
  Representative has power to represent before International Preliminary
  Examination Authority only
-->
<!ELEMENT ipea-only EMPTY>

<!--
  Representative has power to represent before International Search Authority only
-->
<!ELEMENT isa-only EMPTY>

<!--
  Attorney or agent may represent before all authorities
-->
<!ELEMENT all-authorities EMPTY>

<!--
  The type of authority held by the attorney or agent
-->
<!ELEMENT range-of-authority (#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)>

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

```

3.6 Fee sheet

```

<?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)">

<!--
*****
* fee-sheet v1.7      2015  JULY                                     *
*****
* PUBLIC "-//WIPO//DTD FEE SHEET 1.7//EN" "fee-sheet-v1-7.dtd"    *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.13/fee-sheet-v1-7.dtd *
*****
* contacts:                                                       *
*   EPO: Paul Brewin; pbrewin@epo.org                             *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                   *
*   USPTO: Arti Shah; arti.shah@uspto.gov                         *
*   WIPO: Asahi HASEBE; asahi.hasebe@wipo.int                    *
*****
* revision history                                               *
*****
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)
MO: 01/01/07 incorporated changes from PFCs:
..changed version number from v1.3 to v1.4
..added element 'address-4' to address (PFC06/005)
..added element 'address-5' to address (PFC06/005)
..added element 'restoration-fee' to prescribed-fees (PFC07/001)
HT: 14/12/04 incorporated changes from PFCs:
..changed attribute he, wi of doc-page from 'NMTOKEN' to 'CDATA'
..added element 'later-payment' to payment-mode
..added attribute 'ocr' to doc-page

```

```

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 v1.1 to v1.2
..changed element international-fee from 'designation-fee' to 'designation-fee?'
..changed element international-fee from 'fee-reduction?' to 'fee-reduction*'
..added attribute 'reduction-type' to fee-reduction
JD: 03/02/03 Incorporated changes from PFCs:
..changed version number from v1.0 to v1.1
..added element 'dtext' to root content model
..added attribute 'orientation' to 'doc-page'
..added 'last-name | orgname' option in %name_group;
..made 'postcode' optional within 'address'
2001/12/01
..released version number as v1.0
*****

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

-->
<!ELEMENT fee-sheet ((file-reference-id? , applicant-name , prescribed-fees ,
amount-grand-total+ , deposit-account? , dtext* , payment-contact?) | doc-page+)>

<!ATTLIST fee-sheet  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 >

<!--
  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 >

<!--
    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 >

<!--
  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>

<!--
  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?)>

<!--
  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)>

<!--
  Quantity of earlier search documents furnished
```

```
-->
<!ELEMENT earlier-search-document-quantity (#PCDATA)>

<!--

-->
<!ELEMENT restoration-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)>

<!--
  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)>

<!--
  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      2010  APRIL                               *
*****
*   PUBLIC "-//WIPO//DTD INDICATION BIO DEPOSIT 1.3//EN"                   *
*                                                                 "indication-bio-deposit-v1-3.dtd" *
*****
*   http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/                       *
*                                                                 indication-bio-deposit-v1-3.dtd *
*****
*   contacts:                                                                *
*   EPO: Paul Brewin; pbrewin@epo.org                                       *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                             *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                               *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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+)
to "((application-reference?,file-reference-id?,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
December 2001
..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    (applicant |
                                                RO |
                                                ISA |
                                                IPEA |
                                                IB |
                                                DO |
                                                EO |
                                                national-office |
                                                regional-office ) #REQUIRED
                                date-produced CDATA #IMPLIED
                                ro            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.

-->
<!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' >

<!--
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 (depository , 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 depository (#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)>

<!--
Country: use ST.3 country code; e.g. DE, FR, GB, NL, etc.
Also includes EP, WO
-->
<!ELEMENT country (#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? ,
address-5? , mailcode? , pobox? , room? , address-floor? , building? , street? ,
city? , county? , state? , postcode? , country) | text)">
```

```

<!--
*****
*   ro-request-receiving-info v1.3      2010  APRIL                      *
*****
*   PUBLIC "-//WIPO//DTD RO REQUEST RECEIVING INFO 1.3//EN"          *
*   "ro-request-receiving-info-v1-3.dtd" *
*****
*   http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/                *
*   ro-request-receiving-info-v1-3.dtd *
*****
*   contacts:                                                           *
*   EPO: Paul Brewin; pbrewin@epo.org                                  *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                       *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                         *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@wipo.int                 *
*****
*   revision history                                                    *
*****
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 PFCs:
..changed version number from v1.0 to v1.1
..added (last-name | orgname) choice to %name_group;
..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
                                     date-produced CDATA #IMPLIED
                                     ro           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 >

<!--
  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?)>

<!--
  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)>

<!--
  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)>

<!--
  PCT receiving office information for PCT application
-->
<!ELEMENT ro-info (date-of-actual-receipt , drawings-not-received? , corrected-
date-receipt? , receipt-pct11-2? , isa? , search-copy-delayed?)>

<!--
  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? ,
address-5? , mailcode? , pobox? , room? , address-floor? , building? , street? ,
city? , county? , state? , postcode? , country) | text)">

<!--
XML EXCHANGE TABLE MODEL DECLARATION MODULE

*****
* table-external v1.4      2010  APRIL                                     *
*****
* PUBLIC "-//WIPO//DTD TABLE EXTERNAL 1.4//EN" "table-external-v1-4.dtd" *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/table-external-v1-4.dtd *
*****
* contacts:                                                         *
*   EPO: Paul Brewin; pbrewin@epo.org                               *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                     *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                       *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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 '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:
..changed version number from v1.1 to v1.2
..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 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'
..added element 'pre' to dd, li
..added attribute 'id' to addressbook
..added attribute 'chem-type' to chem
..added attribute 'class-type' to class
..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*'
..changed element nplcit from '(text | (article | book | online | othercit)*)' to
'(text | article | book | online | othercit)'
..changed attribute lang of addressbook from '#REQUIRED' to '#IMPLIED'
..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
..removed attribute 'class-type' from nplcit
June 2003
..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 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;

-->
<!--
*****
    WIPO PCT E-filing project modifications: Elements and Attributes
*****

-->
<!ELEMENT table ANY>

<!--
    Definition list

    Recommended id = ddis0001, ddis0002, 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 >

<!--
  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 >

<!--
  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
>

<!--
  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 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' >

<!--
  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 (depository , 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

<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.
  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 >

<!--
  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 >

<!--
  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' >

<!--
  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)*>

<!--
  ** MATH NEEDS CHANGING TO ALLOW MATHML2 - IT SHOULD NOT BE EMPTY**
-->

<!ELEMENT math EMPTY>

```

```
<!-- xsd:include schemaLocation = "../elementTypes/figref.xsd"/ -->

<!--
  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 depository (#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].
3rd ed. New York : John Wiley, 1984 [cited 3 January 1990].
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>
    <edition>3rd ed.</edition>
    <imprint>
      <address>
        <text>New York</text>
      </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:
```

Clark, Carol. On the Threshold of a Brave New World.
In Blueprint of the Body [online].
CNN.com, 2000. [cited 24 August 2000;10:25 EST]. In-depth specials.
Available from: [http://www.cnn.com/SPECIALS/2000/genome/story/overview/]

```
<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>
    <avail>http://www.cnn.com/SPECIALS/2000/genome/story/</avail>
    <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.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.

```
<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* ,
edition? , (serial | book)? , imprint? , pubdate? , history? , series? , hostno? ,
location? , notes? , avail , class* , keyword* , cpyrt? , issn? , isbn? , datecit?
, 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))>

<!--
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.
DROP, J.G. Integrated Circuit Personalization at the Module Level. IBM Tech.
Dis. Bull. October 1974, Vol. 17, No. 5, p. 1344 and 1345.
[XPnnnnnnnnnn].

  <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

-->
<!ELEMENT article (text | (author* , atl? , subname* , (serial | book) , absno? ,
location? , class* , keyword* , cpyrt? , artid? , refno*))>

<!--
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.
London : Sweet and Maxwell, 1973. ISBN 0123456789.
Vol.2, p. 138 to 192.

  <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>
      </imprint>
    </book>
  </nplcit>
-->
```

```
<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? ,
subname* , edition? , imprint? , descrip? , series? , absno? , location* , isbn* ,
pubid? , vid? , bookno? , notes? , class* , keyword* , cpyrt? , refno* , doi? ,
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
-->
<!ELEMENT location (text | (serpart? , sersect? , chapter? , pp? , column? , para?
, line?))>

<!--
  Referenced line within cited work
-->
<!ELEMENT line (#PCDATA | linef | line1)*>

<!--
  Cited document line, last
-->
<!ELEMENT line1 (#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)>

<!--

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? ,
descrip? , notes? , isbn? , issn? , pubid? , vid? , ino? , cpyrt? , doi?)>

<!--

-->
<!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)>

<!--
    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?)*))>

<!--
  Relevant claims
-->
<!ELEMENT rel-claims (#PCDATA)>

<!--
  Category
  (ST.32:B563)
-->
<!ELEMENT category (#PCDATA)>
```

```
<!--  
  Passage within the cited patent literature  
-->  
<!ELEMENT passage (#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)>  
  
<!--  
  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)*>

```

3.10 Ex-officio correction

```

<?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?)">

<!--
*****
* ex-officio-correction v1.3      2010  APRIL                               *
*****
* PUBLIC "-//WIPO//DTD EX OFFICIO CORRECTION 1.3//EN"                    *
*                               "ex-officio-correction-v1-3.dtd"          *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/                      *
*                               ex-officio-correction-v1-3.dtd            *
*****
* contacts:                                                                *
*   EPO: Paul Brewin; pbrewin@epo.org                                     *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                          *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                             *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@wipo.int                     *
*****
* revision history                                                         *
*****
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: 01/01/07 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 'tel', 'fax', 'email' to authorized-officer
..added value 'national-office', 'regional-office' to attribute produced-by of root
element

```

```

June 2003
..released version number as v1.0
*****
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 |
                                                EO |
                                                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'
-->
<!ELEMENT email (#PCDATA)>

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

<!--
  Note of ex-officio correction:
-->
<!ELEMENT correction-note (original-content , corrected-content , action)>

<!ATTLIST correction-note location-xpath CDATA #IMPLIED

```

```
sequence          CDATA #REQUIRED >

<!--
  Content after ex-officio correction
-->
<!ELEMENT action EMPTY>

<!ATTLIST action  type-action  (delete | add | replace ) #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 >

<!--
  Authorized Officer.
-->
<!ELEMENT authorized-officer (%name_group; , phone? , fax? , email? , 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)>

<!--
  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)>  
  
<!--  
  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)>

```

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? ,
address-5? , mailcode? , pobox? , room? , address-floor? , building? , street? ,
city? , county? , state? , postcode? , country) | text)">

<!--
*****
*   pkgheader v1.4      2010  APRIL                                     *
*****
*   PUBLIC "-//WIPO//DTD PKGHEADER 1.4//EN" "pkgheader-v1-4.dtd"      *
*****
*   http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/pkgheader-v1-4.dtd *
*****
*   contacts:                                                       *
*   EPO: Paul Brewin; pbrewin@epo.org                               *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                     *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                       *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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:
..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 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
December 2001

```

```

..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  
-->  
<!ELEMENT notice-info (response-term? , applicant-name* , agent-info? , reason-for-  
rejection-info? , drafting-document-info?)>  
  
<!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' >

<!--
  List of files received
-->
<!ELEMENT filelist (file-content+)>

<!--
  Wrapped Application Documents message digest
-->
<!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
-->
<!ELEMENT office-to-applicant (from , invention-title? , confirmation-number? ,
receipt-list-info? , file-reference-id? , (application-reference+ | (patent-
reference , application-reference+)) , notice-info* , total-number-of-
notifications?)>

<!--
  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.
-->
<!ELEMENT office-to-office (invention-title? , first-named-applicant? ,
confirmation-number? , application-reference , publication-reference? , file-
reference-id? , from? , to?)>

<!--
  The office that sends the document
-->
<!ELEMENT from (country)>

<!--
  Subsequent filing information, before Issue Date
-->
<!ELEMENT subsequent-filing (invention-title? , first-named-applicant ,
confirmation-number? , file-reference-id? , appeal-reference? , (application-
reference+ | (patent-reference , application-reference+)) , document-code* , to)>

<!--
  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
```



```
-->
<!ELEMENT new-application (invention-title? , first-named-applicant? , file-
reference-id? , document-code* , to)>

<!--
  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)*>
```

```

<!--
  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      2010  APRIL                                     *
*****
* PUBLIC "-//WIPO//DTD XMIT RECEIPT 1.4//EN" "xmit-receipt-v1-4.dtd"   *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/xmit-receipt-v1-4.dtd *
*****
* contacts:                                                         *
*   EPO: Paul Brewin; pbrewin@epo.org                               *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                     *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                       *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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 '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: 20/07/04 incorporated changes from PFCs:
..changed version number from v1.2 to v1.3
..added element 'address' to first-named-applicant
..added element 'account' to xmit-receipt
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
December 2001
..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

-->
<!ELEMENT xmit-receipt ((document-id | receipt-id)+ , received-on , from , wad-
message-digest , response+ , filing-type? , wasp-signer? , invention-title? ,
first-named-applicant? , file-reference-id? , filelist? , application-copy? ,
receipt-copy? , account*)>

<!ATTLIST xmit-receipt  lang          CDATA #REQUIRED
                        dtd-version CDATA #IMPLIED
                        file          CDATA #IMPLIED
                        status       CDATA #IMPLIED >

<!--
Deposit account information

-->
<!ELEMENT account EMPTY>

<!ATTLIST account  number          CDATA #REQUIRED
                  account-type CDATA #REQUIRED
                  name             CDATA #IMPLIED >

<!--
A rendered version of this transmittal receipt

-->
<!ELEMENT receipt-copy EMPTY>

<!ATTLIST receipt-copy  file CDATA #REQUIRED >

<!--
A copy of the original application received

-->
<!ELEMENT application-copy EMPTY>

<!ATTLIST application-copy  file CDATA #REQUIRED >

<!--
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 >

<!--
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 = 'inv't'

```

```
-->
<!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' >

<!--
  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 >

<!--
  List of files received
-->
<!ELEMENT filelist (file-content+)>

<!--
  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)*>  
  
<!--  
  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)*>  
  
<!--  
  The signer of the Wrapped And Signed Package  
-->  
<!ELEMENT wasp-signer (%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)>  
  
<!--  
  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)>

<!--
  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      2010 APRIL                                     *
*****
* PUBLIC "-//WIPO//DTD DISPATCH LIST 1.2//EN" "dispatch-list-v1-2.dtd" *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/dispatch-list-v1-2.dtd *
*****
* contacts:                                                         *
*   EPO: Paul Brewin; pbrewin@epo.org                               *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                     *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                       *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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
June 2003
..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
-->
<!ELEMENT dispatch-info (document-code , file-reference-id? , dispatch-id , appeal-
reference? , (application-reference+ | (patent-reference , application-reference+))
 , 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)>

<!--
  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      2010  APRIL                               *
*****
* PUBLIC "-//WIPO//DTD APPLICATION RECEIPT LIST 1.2//EN"                    *
*                                     "application-receipt-list-v1-2.dtd" *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/                          *
*                                     application-receipt-list-v1-2.dtd *
*****
* contacts:                                                                    *
*   EPO: Paul Brewin; pbrewin@epo.org                                         *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                               *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                                  *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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
June 2003
..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)>  
  
<!--  
  Last, family, surname  
-->  
<!ELEMENT last-name (#PCDATA)>
```

```

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

<!--
*****
* demand v1.8      2015  JANUARY
*****
* PUBLIC "-//WIPO//DTD DEMAND 1.8//EN" "demand-v1-8.dtd"
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.12/demand-v1-8.dtd
*****
* contacts:
*   EPO: Paul Brewin; pbrewin@epo.org
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov
*   WIPO: Asahi HASEBE; asahi.hasebe@wipo.int
*****
* revision history
*****
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
..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 attribute 'email-purpose' to email (PFC08/006)
..added attribute 'for-search-only' to cl-sequence-listing-table (PFC08/007)
..added attribute 'additional-copies-including-search-copy' to cl-sequence-listing-
table (PFC08/007)
..added attribute 'with-identifying-statement' to cl-sequence-listing-table
(PFC08/007)
..added attribute 'for-search-only' to cl-sequence-listing (PFC08/007)
..added attribute 'additional-copies-including-search-copy' to cl-sequence-listing
(PFC08/007)
..added attribute 'with-identifying-statement' to cl-sequence-listing (PFC08/007)

```

```

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:
..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 v1.2 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 element name from 'postpone' to 'postpone-examination'
..added element 'begin-examination-early' to concerning-amendments
..added element 'sup2' and 'sub2' to sup and sub
..added element 'cl-sequence-listing-table' to check-list
..added attribute 'carriers' to cl-sequence-listing
..removed element 'election-of-states' from demand
June 2003
..released version number as v1.0
*****

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

-->
<!ELEMENT demand ((file-reference-id? , application-reference? , date-of-earliest-
priority? , invention-title* , applicants , correspondence-address? , agents-for-
demand? , bases-examination , demand-check-list? , signatories?) | doc-page+)>

<!ATTLIST demand lang          CDATA #REQUIRED
                  dtd-version  CDATA #IMPLIED
                  file          CDATA #IMPLIED
                  status        CDATA #IMPLIED
                  produced-by   (applicant |
                                RO |
                                ISA |
                                IPEA |
                                IB |
                                DO |
                                EO |
                                national-office |
                                regional-office ) #REQUIRED
                  date-produced CDATA #IMPLIED
                  ipea          CDATA #REQUIRED
                  ro            CDATA #IMPLIED
                  isa           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.

```
-->
<!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 >

<!--
  Checklist; an additional document is being furnished
-->
<!ELEMENT cl-other-document (#PCDATA)>

<!ATTLIST cl-other-document page-count CDATA #IMPLIED >

<!--
  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 |
) #IMPLIED
                                     additional-copies-including-search-copy
(yes |
                                     no
                                     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
                                carriers-quantity      CDATA
#IMPLIED
                                size                  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 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 >

<!--
  Check-list; 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 >

<!--
  Language for international preliminary examination (Rule 55.1)
-->
<!ELEMENT language-for-examination (#PCDATA)>

<!ATTLIST language-for-examination  examin-lang  (originally-filed |
                                                translation-isa |
                                                publication |
                                                translation-ipea )  #REQUIRED >

<!--
  The drawings are to be used as the basis for international preliminary
  examination
-->
<!ELEMENT the-drawings EMPTY>

<!ATTLIST the-drawings  basis  (originally | amendment-art34 )  #REQUIRED >

<!--
  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
-->
<!ELEMENT the-claims EMPTY>

<!ATTLIST the-claims  basis  (originally |
                             amendment-art19 |
                             amendment-art34 |
                             amendment-art19-34 )  #REQUIRED >

<!--
  The description is to be used as the basis for international preliminary
  examination
-->
<!ELEMENT the-description EMPTY>

<!ATTLIST the-description  basis  (originally | amendment-art34 )  #REQUIRED >

<!--
  The application is to be used as the basis for international preliminary
  examination
-->
<!ELEMENT the-application EMPTY>

<!ATTLIST the-application  basis  (originally )  #REQUIRED >

<!--
  Agent(s) elected specifically for procedures before the International
```

```
Preliminary Examining Authority (Rule 90.1(a)-(c))

-->
<!ELEMENT agents-for-demand (customer-number | agent+)>
<!ATTLIST agents-for-demand kind-agents (addition | new | current ) #REQUIRED >
<!--
  Agent or common representative (Rules 90.1, 90.2)
-->
<!ELEMENT agent (addressbook+)>
<!ATTLIST agent sequence CDATA #REQUIRED
              rep-type (agent | attorney | common-representative )
#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 >
<!--
  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 >

<!--
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 |
                  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?)>

<!--
  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)>

<!--
  PCT/IPEA/401 BOX No.VI Check List
-->
<!ELEMENT demand-check-list (cl-translation-of-application-demand? , cl-amendments-
art34? , cl-copy-amendments-art19? , cl-copy-statement-art19? , cl-letter-art19?,
cl-letter? , cl-fee-calculation? , cl-separate-power-of-attorney? , cl-general-
power-of-attorney? , cl-copy-general-power-of-attorney? , cl-lack-of-signature? ,
cl-priority-document? , cl-sequence-listing? , cl-sequence-listing-table? , cl-
other-document*)>

<!--
  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>

<!--
  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))
-->
```

```
-->
<!ELEMENT concerning-amendments (the-application? , the-description? , the-
sequence-listing? , the-claims? , the-drawings? , reverse-art19-amendment? ,
postpone-examination? , begin-examination-early?)>

<!--
  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)
-->
<!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))
-->
<!ELEMENT postpone-examination EMPTY>

<!--
  PCT/IPEA/401 Box No. IV, checkbox 2:
  "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.
-->
<!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;)>  
  
<!--  
  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
the
      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.
-->
<!ELEMENT the-sequence-listing EMPTY>
<!ATTLIST the-sequence-listing  basis      (originally |
amendment-art34-st25 |
amendment-art34-paper-or-image) #REQUIRED >
```

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? ,
address-5? , mailcode? , pobox? , room? , address-floor? , building? , street? ,
city? , county? , state? , postcode? , country) | text)">

<!--
*****
*   ipea-demand-receiving-info v1.4      2014  JULY                               *
*****
*   PUBLIC "-//WIPO//DTD IPEA DEMAND RECEIVING INFO 1.4//EN"                   *
*                                                                                   *
*                                                                                   *
*   http://www.wipo.int/pct-safe/epct/schemaDocs/1.11/                          *
*                                                                                   *
*                                                                                   *
*   ipea-demand-receiving-info-v1-4.dtd                                         *
*****
* contacts:                                                                       *
*   EPO: Paul Brewin; pbrewin@epo.org                                           *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                                 *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                                    *
*   WIPO: Asahi HASEBE; asahi.hasebe@wipo.int                                   *
*****
* revision history                                                                 *
*****
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
June 2003
..released version number as v1.0
*****

Attributes for iper
  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 >
<!--
  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 >
<!--
  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 >
<!--
  Check-list; 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?)>

<!--
  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)>

<!--
  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)>

<!--
  Checklist of items received with the demand by the International Preliminary
  Examination Authority
-->
<!ELEMENT ipea-check-list (cl-translation-of-application-demand? , cl-amendments-
art34? , cl-copy-amendments-art19? , cl-copy-statement-art19? , cl-letter-art19?,
cl-letter? , cl-other-document*)>

<!--
  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-pct-rule82 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."
-->
<!ELEMENT receipt-pct-rule80-5 EMPTY>

<!--
  PCT Rule 60.1: Defects in the Demand
-->
```

```
<!ELEMENT receipt-pct-rule60-1 (date)>

<!--
  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 of receipt by International Preliminary Examination Authority
-->
<!ELEMENT received-at-ipea (date)>

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

<!--
  International Preliminary Examination Authority
-->
<!ELEMENT ipea (country)>

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

<!--
  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 >

<!--
  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)>
```

5.3 Chapter II fee sheet

```
<?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)">

<!--
*****
* fee-sheet-chapter2 v1.3 2010 APRIL *
*****
* PUBLIC "-//WIPO//DTD FEE SHEET CHAPTER2 1.3//EN" *
* "fee-sheet-chapter2-v1-3.dtd" *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/fee-sheet-chapter2-v1-3.dtd*
*****
* contacts: *
* EPO: Paul Brewin; pbrewin@epo.org *
* JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp *
* USPTO: Bruce B. Cox; bruce.cox@uspto.gov *
* WIPO: Shuhei YOSHIURA; shuhei.yoshiura@wipo.int *
*****
* revision history *
*****
SY: 01/04/10 incorporated changes from PFC
..changed version number from v1.2 to v1.3
..added element 'credit-card' to payment-mode (PFC09/007)
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:
..changed attribute he, wi of doc-page from 'NMOKEN' to 'CDATA'
..added element 'later-payment' to payment-mode
..added attribute 'ocr' to doc-page
..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
June 2003
..released version number as v1.0
*****

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
ro = Receiving office name, country code ST.3
produced-by = creator of this document

-->
<!ELEMENT fee-sheet-chapter2 ((application-reference? , file-reference-id? ,
applicant-name , further-applicant? , currency , preliminary-examin-fee , handling-
fee , amount-total , payment-mode , deposit-account-ipea?) | doc-page+)>

<!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.

-->

<!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 >

<!--
  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 >

<!--
  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 >

<!--
  Authoraization 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)>

<!--
  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?)>
```

```
<!--
  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)>

<!--
  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?)>

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

<!--
  Authoraization 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*)) ,
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)">

<!--
*****
* priority-doc v1.2      2010  APRIL                                     *
*****
* PUBLIC "-//WIPO//DTD PRIORITY DOC 1.2//EN" "priority-doc-v1-2.dtd" *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/priority-doc-v1-2.dtd *
*****
* contacts:                                                         *
*   EPO: Paul Brewin; pbrewin@epo.org                               *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                     *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                        *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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
..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
June 2003
..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
                        status 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
                                file-type (xml | pdf | txt | tif | zip |
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?)>

<!--
  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)>  
  
<!--  
  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)>  
  
<!--  
  Priority document information  
-->  
<!ELEMENT pdoc-info (document-id , (received-at-ro | applicant-requested)? ,  
received-at-ib? , pct-rule17-1?)>  
  
<!--  
  International Bureau receipt date  
-->  
<!ELEMENT received-at-ib (date)>  
  
<!--  
  Date on which applicant requested that RO create and transfer to IB a priority  
  document  
-->  
<!ELEMENT applicant-requested (date)>  
  
<!--  
  Receiving Office date of receipt of priority document  
-->  
<!ELEMENT received-at-ro (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)>
```

5.5 Priority document body

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

<!--
*****
*   pdoc-body v1.2      2010  APRIL                                     *
*****
*   PUBLIC "-//WIPO//DTD PDOC BODY 1.2//EN" "pdoc-body-v1-2.dtd"    *
*****
*   http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/pdoc-body-v1-2.dtd *
*****
*   contacts:                                                       *
*   EPO: Paul Brewin; pbrewin@epo.org                               *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                     *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                       *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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
June 2003
..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.

-->
<!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' >

<!--
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 >

<!--
A proirity document 'document' (e.g., XML), as opposed to doc-page.

-->
<!ELEMENT pdoc-doc (#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)>

```

5.6 *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? ,
address-5? , mailcode? , pobox? , room? , address-floor? , building? , street? ,
city? , county? , state? , postcode? , country) | text)">

<!--
*****
*   WO-BIBLIOGRAPHIC-DATA v1.8      2012  JULY                               *
*****
*   PUBLIC "-//WIPO//DTD WO BIBLIOGRAPHIC DATA 1.8//EN"                   *
*                                                                 "wo-bibliographic-data-v1-8.dtd" *
*****
*   http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/                       *
*                                                                 wo-bibliographic-data-v1-8.dtd *
*****
*   contacts:                                                                *
*   EPO: Paul Brewin; pbrewin@epo.org                                       *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                             *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                               *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@wipo.int                       *
*****
*   revision history                                                         *
*****
SY: 01/07/12 incorporated changes from PFC
..changed version number from v1.7 to v1.8
..modified element 'priority-doc-from-library' adding attribute 'priority-
doc-access-code CDATA #IMPLIED' (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
..changed element wo-correction
    FROM (document-id? , type-of-correction? , wo-repub-code , dttext?)
    TO   (document-id? , type-of-correction? , wo-repub-code , wo-pubnum?, wo-dttext*)
HT: 14/12/04 incorporated changes from PFCs:
..changed element correction from (document-id? , type-of-corection? , wo-repub-
code , dttext? 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-classfication
..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?)?)'
    to '(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 *
*****
-->
```



```

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;
-->
<!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 >

<!--
  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 |
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 >

<!--
  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 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)
  (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 (depository , 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
 <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.
 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-ro-to-transmit-to-isa
(yes |
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 >
<!--
  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' >

<!--
  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 >

<!--
  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 >

<!--
  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
-->
<!ELEMENT wo-demand-info (ipea? , received-at-ipea? , elected-office? , later-
election? , receipt-after-19month? , considered-not-made? , withdrawn? , iper-
status* , completion-date?)>

<!--
  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?)>  
  
<!--  
  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)>

<!--
  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-accno (#PCDATA)>

<!--
  Information regarding the facility storing the biological deposit.
  (ST.32:B832)
-->
<!ELEMENT depository (#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].
3rd ed. New York : John Wiley, 1984 [cited 3 January 1990].
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>
  <edition>3rd ed.</edition>
  <imprint>
    <address>
      <text>New York</text>
    </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:

Clark, Carol. On the Threshold of a Brave New World.
In Blueprint of the Body [online].
CNN.com, 2000. [cited 24 August 2000;10:25 EST]. In-depth specials.
Available from: [<http://www.cnn.com/SPECIALS/2000/genome/story/overview/>]

```
<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>
  <avail>http://www.cnn.com/SPECIALS/2000/genome/story/</avail>
  <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.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.

```
<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* ,
edition? , (serial | book)? , imprint? , pubdate? , history? , series? , hostno? ,
location? , notes? , avail , class* , keyword* , cpyrt? , issn? , isbn? , datecit?
, 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))>

<!--
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.
  DROP, J.G. Integrated Circuit Personalization at the Module Level. IBM Tech.
  Dis. Bull. October 1974, Vol. 17, No. 5, p. 1344 and 1345.
  [XPnnnnnnnnnn].

  <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
-->
<!ELEMENT article (text | (author* , atl? , subname* , (serial | book) , absno? ,
location? , class* , keyword* , cpyrt? , artid? , refno*))>

```

```
<!--
  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.
  London : Sweet and Maxwell, 1973. ISBN 0123456789.
  Vol.2, p. 138 to 192.

  <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 book (text | (author* , (book-title+ | conference) , (subtitle? ,
subname* , edition? , imprint? , descrip? , series? , absno? , location* , isbn* ,
pubid? , vid? , bookno? , notes? , class* , keyword* , cpyrt? , refno* , doi? ,
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
-->
<!ELEMENT location (text | (serpart? , sersect? , chapter? , pp? , column? , para?
, line?))>

<!--
  Referenced line within cited work
```

```
-->
<!ELEMENT line (#PCDATA | linef | line1)*>

<!--
  Cited document line, last
-->
<!ELEMENT line1 (#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)>

<!--
  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? ,
  descrip? , notes? , isbn? , issn? , pubid? , vid? , ino? , cpyrt? , doi?)>

<!--
```

```
-->
<!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)>  
  
<!--  
  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?)>

<!--
  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)>

<!--
  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)>

<!--
  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+)>

<!--
  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)*>

<!--
  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: 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)>

```

5.7 *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)">

<!ENTITY % amend_content "(invention-title | heading+ | p+ | doc-page+ | claim+ |
figure+)">

<!--
*****
*   wo-published-application v1.10      2012  JULY                               *
*****
*   PUBLIC "-//WIPO//DTD WO PUBLISHED APPLICATION 1.10//EN"                   *
*                                                                                   *
*   http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/                         *
*                                                                                   *
*   wo-published-application-v1-10.dtd *
*****
*   contacts:                                                                     *
*   EPO: Paul Brewin; pbrewin@epo.org                                           *
*   JPO: Hideto TANAKA; tanaka-hideto@jpo.go.jp                                  *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                                     *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@wipo.int                            *
*****
*   revision history                                                               *
*****
SY: 01/07/12 incorporated changes from PFC
..changed version number from v1.9 to v1.10
..modified element 'priority-doc-from-library' adding attribute 'priority-doc-
access-code CDATA #IMPLIED' (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: 01/01/09 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: 01/01/07 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)
..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: 04/10/05
..changed version FROM 1.3 TO 1.4
..added attribute 'orientation' to abstract-figure
..added attribute 'lang' to abstract-figure
..changed element wo-publication-info
  FROM (wo-correction* , wo-bio-material-after-pub? , isr-status* , pct-pub-info*)
  TO (wo-correction* , wo-bio-material-after-pub? , isr-status* , pct-pub-info* ,
wo-pubnum?)
..added element 'wo-pubnum'
..changed element wo-correction
  FROM (document-id? , type-of-correction? , wo-repub-code , dtext?)
  TO (document-id? , type-of-correction? , wo-repub-code , wo-pubnum? , wo-dtext*)
..added element wo-dtext
..changed element wo-published-application
  FROM ( ( wo-bibliographic-data , abstract? , abstract-figure? , front-page ,
description? , claims? , wo-amended-claims? , amend-statement? , drawings? ) |
sequence-list-doc | biological-material-doc | lack-of-novelty | pct-rule91-1f |
priority-claim-considered-not-made | pct-art17.2a | wo-search-report)*
  TO ( wo-bibliographic-data , abstract* , abstract-figure* , front-page? ,
description? , claims? , wo-amended-claims? , amend-statement? , drawings? , (
sequence-list-doc | biological-material-doc | lack-of-novelty | pct-rule91-1f |
priority-claim-considered-not-made | pct-art17.2a | wo-search-report ) * , wo-ocr-
text? , wo-xml-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-corection? , wo-repub-
code , dtext? to (document-corrected , type-of-correction? , gazette-reference? ,
text?)
..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 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 '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 '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 '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 '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 *
* 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;-->

<!--
*****
* 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
-->
<!ELEMENT wo-published-application (wo-bibliographic-data , abstract* , abstract-
figure* , front-page? , description? , claims? , wo-amended-claims? , amend-
statement? , drawings? , (sequence-list-doc | biological-material-doc | lack-of-
novelty | pct-rule91-1f | priority-claim-considered-not-made | pct-art17.2a | wo-

```

```

search-report)* , wo-ocr-text? , wo-xml-application?)>

<!ATTLIST wo-published-application 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
                                   office-name CDATA #IMPLIED
                                   status CDATA #IMPLIED >

<!ELEMENT wo-bibliographic-data (publication-reference? , wo-publication-info? ,
application-reference? , wo-application-info? , wo-amendment-info? , wo-bib-change-
info? , wo-demand-info? , file-reference-id? , invention-title* , parties? ,
designation-of-states? , wo-priority-info? , search-authority? , declaration-info?
, classification-ipc? , classifications-ipcr? , figure-to-publish? , signatories? ,
correspondence-address? , dtext?)>

<!ATTLIST wo-bibliographic-data date-produced CDATA #IMPLIED
                                   lang 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;
-->
<!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 >

<!--
  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
                                available-at-isa
(yes |
no ) #IMPLIED
                                request-ro-to-transmit-to-isa
(yes |
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 |
```



```
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."

-->
```

```
<!ELEMENT pct-art17.2a (doc-page+ | art17.2a-doc)>

<!ATTLIST pct-art17.2a lang CDATA #IMPLIED
                    id ID #IMPLIED
                    status CDATA #IMPLIED >

<!--
  Sequence list document component in PCT publication
-->
<!ELEMENT sequence-list-doc (#PCDATA | doc-page | sequence-list)*>

<!ATTLIST sequence-list-doc id ID #IMPLIED
                    lang CDATA #IMPLIED
                    status CDATA #IMPLIED >

<!--
  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
-->
<!ELEMENT sequence-list EMPTY>

<!ATTLIST sequence-list id ID #IMPLIED
                    file CDATA #REQUIRED
                    lang CDATA #IMPLIED
                    carriers (internal-electronic |
                             external-electronic |
                             paper ) #IMPLIED
                    seq-file-type CDATA #FIXED 'ST.25'
                    electronic-format-type (text | other ) #IMPLIED
                    status CDATA #IMPLIED
                    part-of-application (yes | no ) #IMPLIED >

<!--
  Amended content of original application
-->
<!ELEMENT wo-amended-claims ((amend-statement? , (amend-body | (delete-object |
((insert-before-object | insert-after-object | replace-object))))), text?>

<!ATTLIST wo-amended-claims id ID #IMPLIED
                    lang CDATA #REQUIRED
                    claim-type CDATA #IMPLIED
                    status CDATA #IMPLIED >

<!--
  Replace referenced object with new content ;
  e.g.,
  <replace-object id="p02">
    <p id="p01a" num="001a">(new content)</p>
  </replace-object>
-->
<!ELEMENT replace-object (%amend_content;)>

<!ATTLIST replace-object id ID #IMPLIED
                    num CDATA #IMPLIED
                    location CDATA #IMPLIED >
```

```
<!--
  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       #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 >

<!--
  Amendment statement (PCT Article 19.1, PCT Rule 46.4).
  May consist of a statement or an attached file
-->
<!ELEMENT amend-statement (doc-page+ | statement)>

<!ATTLIST amend-statement id ID #IMPLIED
                          lang CDATA #IMPLIED
                          status CDATA #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 >

<!--
-->
<!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'

-->
<!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 >

<!--
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))

    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 >

<!--
    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 >
```

```

<!--
  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.
  <image id='abfig1' file='a1.tif' he='99' wi='74' img-format='tiff'></image>
  or simply a reference to the figure chosen by the applicant
  or the office;

  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'
                           orientation 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 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 = 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 >

<!--
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'

Recommnded 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 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)
(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 (depository , 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
  <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.
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 >

<!--
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
>
```

<!--

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' >
```

<!--

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' >
```

<!--

information for chapter II demand at IB

-->

<!ELEMENT wo-demand-info (ipea? , received-at-ipea? , elected-office? , later-

```
election? , receipt-after-19month? , considered-not-made? , withdrawn? , iper-
status* , completion-date?)>

<!--
  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?)>

<!--
  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)>

<!--
  Figure of the drawings which should accompany the abstract
-->
<!ELEMENT figure-to-publish (fig-number+)>

<!--
  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+)>

<!--
  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>

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

<!--
  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)>

<!--
  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 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.

-->

<!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)>

<!--
  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?)>

<!ELEMENT made-by (country* , (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*)>

<!ELEMENT wo-repub-code (#PCDATA)>

<!--
  Type of correction.
  (ST.32:B667)
-->
<!ELEMENT type-of-correction (#PCDATA)>

<!--
  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)>

<!--
  Additional indication information for the deposit
-->
<!ELEMENT additional-indication (#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)>

<!--
  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>

<!--
  Method by which prior art was disclosed to the public
-->
<!ELEMENT method-of-disclosure (international-exhibition | publication | abuse |
other)>

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

```
<!--  
  Exceptions to lack of novelty resulting from abuse;  
  Rule 51bis.1(a)(v)  
-->  
<!ELEMENT abuse (#PCDATA)>  
  
<!--  
  A publication was used as the method of disclosure  
-->  
<!ELEMENT publication (#PCDATA)>  
  
<!--  
  An international exhibition was used as the method of disclosure  
-->  
<!ELEMENT international-exhibition (#PCDATA)>  
  
<!--  
  Title of what is being disclosed under PCT Rule 51bis.1(a)(v)  
-->  
<!ELEMENT title-of-disclosure (#PCDATA)>  
  
<!--  
  Document (e.g., XML) containing information relating to  
  a priority claim considered not made.  
-->  
<!ELEMENT priority-claim-considered-not-made-doc (#PCDATA)>  
  
<!--  
  Document (e.g., XML) containing information relating to  
  PCT Rule 91-1f.  
-->  
<!ELEMENT pct-rule91-1f-doc (#PCDATA)>  
  
<!--  
  A document (e.g., XML) containing information relating to  
  article 17.2a.  
-->  
<!ELEMENT art17.2a-doc (#PCDATA)>  
  
<!--  
  Statement concerning amendments (PCT Article 19.1, PCT Rule 46.4)  
-->  
<!ELEMENT statement (#PCDATA | b | i | u | o | sup | sub)*>  
  
<!--  
  The text of the claim; also used for for sub-para indentation  
-->  
<!ELEMENT claim-text (#PCDATA | claim-text | claim-ref | b | i | u | o | sup | sub  
| smallcaps | br | pre | crossref | figref | img | chemistry | maths | tables)*>  
  
<!--
```

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 | 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 depository (#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].

3rd ed. New York : John Wiley, 1984 [cited 3 January 1990].

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>

<edition>3rd ed.</edition>

<imprint>

<address>

```

    <text>New York</text>
  </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:

Clark, Carol. On the Threshold of a Brave New World.
 In Blueprint of the Body [online].
 CNN.com, 2000. [cited 24 August 2000;10:25 EST]. In-depth specials.
 Available from: [http://www.cnn.com/SPECIALS/2000/genome/story/overview/]

```

<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>
    <avail>http://www.cnn.com/SPECIALS/2000/genome/story/</avail>
    <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.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.

```

<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* ,
edition? , (serial | book)? , imprint? , pubdate? , history? , series? , hostno? ,
location? , notes? , avail , class* , keyword* , cpyrt? , issn? , isbn? , datecit?
, 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))>

<!--
  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.
  DROP, J.G. Integrated Circuit Personalization at the Module Level. IBM Tech.
  Dis. Bull. October 1974, Vol. 17, No. 5, p. 1344 and 1345.
  [XPnnnnnnnnnn].

  <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
-->
<!ELEMENT article (text | (author* , atl? , subname* , (serial | book) , absno? ,
location? , class* , keyword* , cpyrt? , artid? , refno*))>

<!--
  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.
```

London : Sweet and Maxwell, 1973. ISBN 0123456789.
Vol.2, p. 138 to 192.

```
<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 book (text | (author* , (book-title+ | conference) , (subtitle? ,
subname* , edition? , imprint? , descrip? , series? , absno? , location* , isbn* ,
pubid? , vid? , bookno? , notes? , class* , keyword* , cpyrt? , refno* , doi? ,
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
-->
```

```
<!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)>

<!--
  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? ,
descrip? , notes? , isbn? , issn? , pubid? , vid? , ino? , cpyrt? , doi?)>

<!--

-->
<!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)>

<!--
  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?)*))>

<!--
```

```
Relevant claims

-->
<!ELEMENT rel-claims (#PCDATA)>

<!--
  Category
  (ST.32:B563)
-->
<!ELEMENT category (#PCDATA)>

<!--
  Passage within the cited patent literature
-->
<!ELEMENT passage (#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)>

<!--
  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)*>
```

5.8 Filing of amendments and statements under Articles 19 and 34.2(b)

```

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

<!ENTITY % name_group "((name | (prefix? , (last-name | orname) , first-name? ,
middle-name? , suffix? , iid? , role? , orname? , 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)">

<!ENTITY % amend_content "(invention-title | heading+ | p+ | doc-page+ | claim+ |
figure+)">
<!--
*****
* amendment-request v1.5      2010  APRIL                               *
*****
* PUBLIC "-//WIPO//DTD AMENDMENT REQUEST 1.5/EN" "amendment-request-v1-5.dtd"*
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/amendment-request-v1-5.dtd *
*****
* contacts:                                                            *
*   EPO: Paul Brewin; pbrewin@epo.org                                 *
*   JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp                       *
*   USPTO: Bruce B. Cox; bruce.cox@uspto.gov                         *
*   WIPO: Shuhei Yoshiura; shuhei.yoshiura@wipo.int                  *
*****
* revision history                                                    *
*****
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: 01/01/07 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 '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:
..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 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
December 2001
..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 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:
  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.
-->
<!--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-
article-19 ) #REQUIRED

```

```

lang CDATA #REQUIRED
dtd-version CDATA #IMPLIED
file CDATA #IMPLIED
produced-by CDATA (applicant |
                RO |
                ISA |
                IPEA |
                IB |
                DO |
                EO |
                national-office |
                regional-office ) #REQUIRED
date-produced CDATA #IMPLIED
file-reference-id CDATA #IMPLIED
status CDATA #IMPLIED >

<!--
Replace referenced object with new content ;
e.g.,
  <replace-object id="p02">
    <p id="p01a" num="001a">(new content)</p>
  </replace-object>
-->
<!ELEMENT replace-object (%amend_content;)>

<!ATTLIST replace-object id ID #IMPLIED
                        num CDATA #IMPLIED
                        location CDATA #IMPLIED >

<!--
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   #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 >

<!--
  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+)>
```



```
-->
<!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'

-->
<!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 >

<!--
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))

  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 >
<!--
  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 = ddis0001, ddis0002, 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" - 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'>figure1</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 (depository , 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
  <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.
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 >

<!--
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
-->
<!ELEMENT amend-statement (doc-page+ | statement)>

<!ATTLIST amend-statement  id      ID      #IMPLIED
                             lang    CDATA   #IMPLIED
                             status  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' >

<!--
  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' >

<!--
  Remarks section
-->
<!ELEMENT remarks (p+)>
```

```
<!--
  The text of the claim; also used for for sub-para indentation
-->
<!ELEMENT claim-text (#PCDATA | claim-text | claim-ref | b | i | u | o | sup | sub
| smallcaps | br | pre | crossref | figref | img | chemistry | maths | tables)*>

<!--
  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 depository (#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].
  3rd ed. New York : John Wiley, 1984 [cited 3 January 1990].
  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>
```

```

<edition>3rd ed.</edition>
<imprint>
  <address>
    <text>New York</text>
  </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:

Clark, Carol. On the Threshold of a Brave New World.
 In Blueprint of the Body [online].
 CNN.com, 2000. [cited 24 August 2000;10:25 EST]. In-depth specials.
 Available from: [http://www.cnn.com/SPECIALS/2000/genome/story/overview/]

```

<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>
  <avail>http://www.cnn.com/SPECIALS/2000/genome/story/</avail>
  <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.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.

```

<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* ,
edition? , (serial | book)? , imprint? , pubdate? , history? , series? , hostno? ,
location? , notes? , avail , class* , keyword* , cpyrt? , issn? , isbn? , datecit?
, 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))>

<!--
  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.
  DROP, J.G. Integrated Circuit Personalization at the Module Level. IBM Tech.
  Dis. Bull. October 1974, Vol. 17, No. 5, p. 1344 and 1345.
  [XPnnnnnnnnnn].

  <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

-->
<!ELEMENT article (text | (author* , atl? , subname* , (serial | book) , absno? ,
location? , class* , keyword* , cpyrt? , artid? , refno*))>

<!--
  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.
London : Sweet and Maxwell, 1973. ISBN 0123456789.
Vol.2, p. 138 to 192.

```
<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 book (text | (author* , (book-title+ | conference) , (subtitle? ,
subname* , edition? , imprint? , descrip? , series? , absno? , location* , isbn* ,
pubid? , vid? , bookno? , notes? , class* , keyword* , cpyrt? , refno* , doi? ,
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

-->
<!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)>  
  
<!--  
  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? ,
descrip? , notes? , isbn? , issn? , pubid? , vid? , ino? , cpyrt? , doi?)>

<!--

-->
<!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)>

```
<!--  
  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?)*))>
```

```
<!--
  Relevant claims
-->
<!ELEMENT rel-claims (#PCDATA)>

<!--
  Category
  (ST.32:B563)
-->
<!ELEMENT category (#PCDATA)>

<!--
  Passage within the cited patent literature
-->
<!ELEMENT passage (#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)>

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

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

<!--
  Statement concerning amendments (PCT Article 19.1, PCT Rule 46.4)
```

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

<!--
  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)*>
```


5.9 Search report

```

<?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)">

<!--
*****
* search-report (International Search Report) v1.2      2009  JANUARY      *
*****
* PUBLIC "-//WIPO//DTD SEARCH REPORT 1.2//EN" "search-report-v1-2.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?)">

<!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)">

<!--
*****
* search-report (International Search Report) v1.2      2010  APRIL      *
*****
* PUBLIC "-//WIPO//DTD SEARCH REPORT 1.2//EN" "search-report-v1-2.dtd"      *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/search-report-v1-2.dtd      *
*****
* contacts:      *
* EPO: Paul Brewin; pbrewin@epo.org      *
* JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp      *
* USPTO: Bruce B. Cox; bruce.cox@uspto.gov      *
* WIPO: Shuhei YOSHIURA; shuhei.yoshiura@wipo.int      *
*****
* revision history      *
*****
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: 01/01/07 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)
January 2005
..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 *
*****

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:

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
 produced-by = creator of this document
 country = WIPO ST.3 code for application
 date = YYYYMMDD e.g, 20011230
 search-type = type of search conducted Search report as a separate document and sub-document in publication , etc.
 Mainly for the PCT ISR and EP SRs.

-->

```
<!ELEMENT search-report (doc-page+ | (srep-info? , srep-for-pub? , srep-written-opinion? , office-specific-srep-data*))>
```

```
<!ATTLIST search-report id ID #REQUIRED
                        file CDATA #REQUIRED
                        lang CDATA #IMPLIED
                        status CDATA #IMPLIED
                        date-produced CDATA #REQUIRED
                        srep-type CDATA #IMPLIED
                        srep-office CDATA #REQUIRED
                        dtd-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 elemnt 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 >
```

<!--

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' >

<!--
(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/IPEA/409 and PCT/IPEA/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/IPEA/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/IPEA/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
-->
<!ELEMENT priority-opinion (earlier-appl? , claim-invalid? , additional-info?)>
<!ATTLIST priority-opinion  valid CDATA  #IMPLIED >
<!--
(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 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)).

-->
<!ELEMENT translation-of-appl EMPTY>
<!ATTLIST translation-of-appl  lang CDATA  #IMPLIED >
<!--

-->
<!ELEMENT earlier-search (document-id)>
<!ATTLIST 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 >
<!--
  Reference to other documents, either patent literature (patcit)
  or non-patent literature (nplcit)

  Recommended id = 'cit0001', 'cit0002', etc.

-->
<!ELEMENT citation ((patcit | nplcit) , (rel-passage* , category* , rel-claims*)* ,
corresponding-docs* , classification-ipc? , classifications-ipcr? , classification-
```

```
national? , doi?)>

<!ATTLIST citation id ID #IMPLIED
                 srep-phase CDATA #IMPLIED >

<!--
  Domestic or national classification.
  (INID 52, ST.32:B520)

-->
<!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 >

<!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-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 >

<!--
  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)

  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
```

```
-->
<!ELEMENT srep-info (doc-page+ | (correspondence-address? , file-reference-id? ,
application-reference+ , date-of-earliest-priority? , applicant-name , srep-
established? , srep-protest-fees? , srep-request-date? , srep-request-number? ,
srep-prior-art-docs* , srep-basis? , srep-claims-info? , srep-unity-of-invention? ,
srep-invention-title , srep-abstract , srep-figure-to-publish , srep-info-admin ,
srep-other-info? , text*))>

<!ATTLIST srep-info total-page-count CDATA #IMPLIED >

<!ELEMENT srep-information (#PCDATA)>

<!ATTLIST srep-information srep-code 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 >

<!--
  Abstract Drawing

  The figure of the drawings to be published with the abstract is:
  Figure No.
  followed by text of attribute value:
    1 = as suggested by the applicant.
    2 = because the applicant failed to suggest a figure.
    3 = because this figure better characterizes the invention.

  or:

    4 = None of the figures is to be published with the abstract
      (Old PCT/ISA/210 - 6 a and b)
-->
<!ELEMENT srep-figure-to-publish (figure-to-publish?)>

<!ATTLIST srep-figure-to-publish figinfo (1 | 2 | 3 | 4 ) #REQUIRED >

<!--
  Abstract
  (followed by:)
  The text is approved as submitted by the applicant [attribute "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 >
<!--
  Remark on protest

  Attribute values:
  no = No protest accompanied the payment of additional search fees
  yes = The additional search fees were accompanied by the applicant's protest.

-->
<!ELEMENT search-fee-protest EMPTY>
```



```

<!ATTLIST search-fee-protest  protest    ( 1 | 2 | 3 ) #REQUIRED >

<!--
  PCT/ISA/210
  Box 1: Basis of the Report
  a. With regard to the language, the international search was carried out on the
     basis of the international application in the language in which it was field,
     unless otherwise indicated under this item.

  attribute value = "no":

  The international search was carried out on the basis of a translation of the
  international application furnished to this Authority (Rule 23.1(b)).

-->
<!ELEMENT basis-language-for-search EMPTY>

<!ATTLIST basis-language-for-search  translation    (yes | no ) 'no'
                                           lang          CDATA #IMPLIED >

<!--
  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 >

<!--
  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)*>

<!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'

Recommnded 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'>figure1</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 (depository , 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
  <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.
  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

```



```
<!--
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.
-
Sytylesheet note: this data is followed by Reminders and Notes (if printed)
otherwise 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' >

<!--
PCT WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (ISA)
(PCT Rule 43bis.1)
(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 be considered to be a written opinion of the International Preliminary
Examining Authority ( IPEA ) except that this does not apply where the
applicant chooses an Authority other than this one to be the IPEA and the
chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that
written opinions of this International Searching Authority will not be so
considered.
If this opinion is, as provided above, considered to be a written opinion of
the IPEA, the applicant is invited to submit to the IPEA 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.
For further options, see Form PCT/ISA/220.

-->
<!ELEMENT srep-written-opinion (doc-page+ | (basis-of-srep-opinion , priority-
opinion? , non-establishment-of-opinion? , unity-of-invention? , pct-rule43bis-
statement , opinion-citations , defect-in-application? , observation-on-
application? , text*))>

<!--
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:

-->
<!ELEMENT observation-on-application (p+)>

<!--
Certain defects in the international application (Section Vii).
The following defects in the form or contents of the international application
have been noted:

-->
<!ELEMENT defect-in-application (p+)>

<!--
(PCT/IPEA/408 - Box No. VI Certain documents cited)

-->
```

```
<!ELEMENT opinion-citations (certain-published-documents | non-written-
disclosures)*>

<!--
(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)
-->
<!ELEMENT non-written-disclosures (kind-of-disclosure , date , date-of-written-
disclosure)>

<!--
    Date of written disclosure

    Referring to non-written disclosure (day/month/year)
-->
<!ELEMENT date-of-written-disclosure (date)>

<!--
    Kind of non-written disclosure
-->
<!ELEMENT kind-of-disclosure (#PCDATA)>

<!--
(PCT/ISA/237 )
    1. Certain published documents (Rules 43bis.1 and 70.10)

(PCT/IPEA/409 and PCT/IPEA/408 )
    1. Certain published documents (Rule 70.10)
-->
<!ELEMENT certain-published-documents ((citation+ , filing-date , priority-date?) |
text)>

<!--
(PCT/ISA/237 - Box V)
    Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive
    step or industrial applicability;
    citations and explanations supporting such statement.
-->
<!ELEMENT pct-rule43bis-statement (novelty-valid , novelty-not-valid , inventive-
step-valid , inventive-step-not-valid , applicability-valid , applicability-not-
valid , citations-explanations?)>

<!--
    Citations and explanations:
-->
<!ELEMENT citations-explanations ((citation+ , filing-date? , priority-date?) |
p+)>

<!ELEMENT filing-date (date)>

<!ELEMENT applicability-not-valid (claim-num*)>
```

```
<!ELEMENT applicability-valid (claim-num*)>

<!ELEMENT inventive-step-not-valid (claim-num*)>

<!ELEMENT inventive-step-valid (claim-num*)>

<!ELEMENT novelty-not-valid (claim-num*)>

<!ELEMENT novelty-valid (claim-num*)>

<!--
  (PCT/IPEA/408 - Box No. IV Lack of unity of invention)
-->
<!ELEMENT unity-of-invention (invitation-pay-additional-fees? , not-unity-of-
invention? , compliance-unity-invention , opinion-established-regarding)>

<!--
  (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.
-->
<!ELEMENT opinion-established-regarding (entire-application | claim-num+)>

<!--
  (PCT/ISA/237 ) - Box No. IV Lack of unity of invention (2)
  This Authority found that the requirement of unity of invention is not complied
  with and chose not to invite the applicant to pay additional fees.

  (PCT/IPEA/409 )
  This Authority found that the requirement of unity of invention is not complied
  with and chose, according to Rule 68.1, not to invite the applicant to restrict
  or pay additional fees.
-->
<!ELEMENT not-unity-of-invention EMPTY>

<!--
  (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:
-->
<!ELEMENT invention-not-examined ((entire-application | claim-num+ ) , non-estab-
```

```
reason-1? , non-estab-reason-2? , non-estab-reason-3? , non-estab-reason-4?)>

<!--
  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>

<!--
  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>

<!--
  Form PCT/ISA/237 (Box No. I) (January 2004)
  Basis of this opinion
-->
<!ELEMENT basis-of-srep-opinion (translation-of-appl? , sequence-list-basis?)>

<!--
  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 , incomplete-
search? , srep-admin? , srep-patent-family? , earlier-search*))>

<!--
  This is the old 210 (patent family annex)
  Patent family information according to WIPO ST.14
  For EP SR can be used for Annex to the EP SR.(Form P0459)
-->
<!ELEMENT srep-patent-family (text? , patent-family+)>

<!--
  Patent family.
  (ST.32:B345)
-->
<!ELEMENT family-member (document-id)>

<!--
  Priority application number.
  (INID 31, ST.32:B310)
-->
<!ELEMENT priority-application (document-id)>

<!--
  SR - ADMINISTRATIVE DETAILS
  example layout:

  ISA/Examiner: EPO
  DE LAERE, Ann
  PB 5818, Patentlaan 2
  NL 2280 HV Rijswijk
  Tel. +31 - 70 340 2040
  Fax. +31 - 70 340 3016
  Search completed: 10 August 1992
  ISR mailed: 24 August 1992

  ** End of ISR **
-->
<!ELEMENT srep-admin (examiners? , srep-office? , date-search-completed , date-
search-report-mailed?)>

<!--
  Date of completion of search report.
  (ST.32:B565)
-->
<!ELEMENT date-search-completed (date)>

<!--
  Persons acting on the document.
  (ST.32:B745)
-->
<!ELEMENT examiners (primary-examiner? , assistant-examiner? , authorized-
officer?)>
```

```
<!--
  Assistant Examiner.
  (ST.32:B747)

-->
<!ELEMENT assistant-examiner (%name_group; , electronic-signature?)>

<!--
  Primary Examiner.
  (ST.32:B746)

-->
<!ELEMENT primary-examiner (%name_group; , electronic-signature?)>

<!--
  The element is to process EPO SR FORM 1503 - partial SR.
  e.g., EP 99305342

-->
<!ELEMENT incomplete-search (text | limitation-of-search+)>

<!--

-->
<!ELEMENT limitation-of-search (text? , claims-searched* , claims-searched-
incompletely* , claims-not-searched* , reason-limited-search*)>

<!ELEMENT reason-limited-search (p+)>

<!ELEMENT claims-not-searched (#PCDATA)>

<!ELEMENT claims-searched-incompletely (#PCDATA)>

<!ELEMENT claims-searched (#PCDATA)>

<!--
  CITATIONS GROUP

  Stylesheet:DOCUMENTS CONSIDERED TO BE RELEVANT
  (Citation, any relevant passage (*), followed by category and claim number(s))

-->
<!ELEMENT srep-citations (text | citation+)>

<!--
  Patent family and corresponding-docs

-->
<!ELEMENT corresponding-docs ((patcit | nplcit) , (rel-passage* , category* , rel-
claims*)*)>

<!--
  FIELDS SEARCHED (old B. box)

-->
<!ELEMENT srep-fields-searched (minimum-documentation , other-documentation* ,
database-searched?)>
```

```
<!--  
  Database(s) searched  
-->  
<!ELEMENT database-searched (text | nplcit)>  
  
<!--  
  Documentation searched other than minimum documentation  
-->  
<!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)>

<!--
  This is a place marker since there may be other information added at a later
  stage which has not been foreseen.

-->
<!ELEMENT srep-other-info (srep-information+)>

<!ELEMENT srep-info-admin (authorized-officer? , srep-office? , date-search-report-
mailed? , date-opinion-completed?)>

<!--

-->
<!ELEMENT date-opinion-completed (date)>

<!--
  Date of mailing of search report.
  (ST.32:B566)

-->
<!ELEMENT date-search-report-mailed (date)>

<!--
  International Search Authority; international search to be carried out by

-->
<!ELEMENT srep-office (addressbook)>

<!--
  Authorized Officer.

-->
<!ELEMENT authorized-officer (%name_group; , phone? , fax? , email? , 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)>

<!--
  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)>

<!--
  (Old PCT/ISA/210 - Box No. III)
  Observations where unity of invention is lacking
  This ISA found multiple inventions in this international application, as
  follows: (use text data)
-->
<!ELEMENT srep-unity-of-invention (p* , srep-search-fees , search-fee-protest?)>

<!ELEMENT srep-search-fees (srep-fee-1? , srep-fee-2? , srep-fee-3? , srep-fee-4?)>

<!--
  No required additional search fees were timely paid by the applicant.
  Consequently, this ISR is restricted to the invention first mentioned in the
  claims; it is covered by claim number(s):
-->
<!ELEMENT srep-fee-4 (claim-num+)>

<!--
  As only some of the required additional search fees were timely paid by the
  applicant, this ISR covers only those claims for which fees were paid,
  specifically claim number(s):
-->
<!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.
-->
<!ELEMENT srep-fee-2 EMPTY>
```

```
<!--
  As all required additional search fees were timely paid by the applicant,
  this ISR covers all searchable claims.

-->
<!ELEMENT srep-fee-1 EMPTY>

<!--
  (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:

  (followed by one of the following three reasons:)

-->
<!ELEMENT srep-claims-info (clms-reason-1? , clms-reason-2? , clms-reason-3?)>

<!--
  Claim number(s) (insert value from cliaim-no)
  because they are dependent claims and are not drafted in accordance with the
  second and third sentences of PCT Rule 6.4(a)

-->
<!ELEMENT clms-reason-3 (claim-num+)>

<!--
  Claims Nos.: (insert value from claim-no)
  because they relate to parts of the international application that do not comply
  with the prescribed requirements to such an extent that no meaningful
  international search can be carried out, specifically:

-->
<!ELEMENT clms-reason-2 (claim-num+ , claim-remark)>

<!--
  Claims Nos.: (insert value from cliaim-no)
  because they relate to subject matter not required to be searched by this
  Authority, namely:

-->
<!ELEMENT clms-reason-1 (claim-num+ , claim-remark)>

<!--
  Remarks on these claims

-->
<!ELEMENT claim-remark (p+)>

<!--
  Claim numbers

-->
<!ELEMENT claim-num (#PCDATA)>

<!--
  PCT/ISA/210
  Box 1::Basis of the Report

-->
<!ELEMENT srep-basis (basis-language-for-search , sequence-list-basis?)>
```

```
<!--
  A sequence listing and/or any related table(s) - see Supplemental Box Relating
  to Sequence Listing.
-->
<!ELEMENT sequence-list-basis (material-of-sequence-list , presentation-of-
statements? , additional-info?)>

<!--
  (PCT/ISA/210 Box No. I Nucleotide and/or amino acid sequence(s)

  (Continuation of item1.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:
-->
<!ELEMENT material-of-sequence-list (sequence-listing-material-type , sequence-
listing-material-format , sequence-listing-filing-time)>

<!--
  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].
  3rd ed. New York : John Wiley, 1984 [cited 3 January 1990].
  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>
      <edition>3rd ed.</edition>
      <imprint>
        <address>
          <text>New York</text>
        </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:
  Clark, Carol. On the Threshold of a Brave New World.
  In Blueprint of the Body [online].
  CNN.com, 2000. [cited 24 August 2000;10:25 EST]. In-depth specials.
  Available from: [http://www.cnn.com/SPECIALS/2000/genome/story/overview/]

  <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>
```

```
<avail>http://www.cnn.com/SPECIALS/2000/genome/story/</avail>
<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.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.

```
<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* ,
edition? , (serial | book)? , imprint? , pubdate? , history? , series? , hostno? ,
location? , notes? , avail , class* , keyword* , cpyrt? , issn? , isbn? , datecit?
, 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))>  
  
<!--  
  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)>  
  
<!--  
  Edition statement  
  (ST.32:B516)  
-->  
<!ELEMENT edition (#PCDATA)>  
  
<!--  
  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.

DROP, J.G. Integrated Circuit Personalization at the Module Level. IBM Tech. Dis. Bull. October 1974, Vol. 17, No. 5, p. 1344 and 1345.
[XPnnnnnnnnnnn].

```
<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

-->

```
<!ELEMENT article (text | (author* , atl? , subname* , (serial | book) , absno? ,
location? , class* , keyword* , cpyrt? , artid? , refno*))>
```

<!--

Article unique ID - assigned by a publisher to an article

-->

```
<!ELEMENT artid (#PCDATA)>
```

<!--

Keyword; e.g., from a Thesaurus or class. scheme
(ST.32:B550)

-->

```
<!ELEMENT keyword (#PCDATA)>
```

<!--

Location within the cited work

-->

```
<!ELEMENT location (text | (serpart? , sersect? , chapter? , pp? , column? , para?
, line?))>
```

<!--

Book citation

In the order specified by WIPO ST.14 and ISO 690 and AACR2 rules for layout

WALTON, Herrmann. Microwave quantum theory.
London : Sweet and Maxwell, 1973. ISBN 0123456789.
Vol.2, p. 138 to 192.

```
<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 book (text | (author* , (book-title+ | conference) , (subtitle? ,
subname* , edition? , imprint? , descrip? , series? , absno? , location* , isbn* ,
pubid? , vid? , bookno? , notes? , class* , keyword* , cpyrt? , refno* , doi? ,
ino? , issn?)))>

<!--
  Book number
-->
<!ELEMENT bookno (#PCDATA)>

<!--
  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)>

<!--
  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? ,
descrip? , notes? , isbn? , issn? , pubid? , vid? , ino? , cpyrt? , doi?)>

<!--

-->
<!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)>  
  
<!--  
  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  
-->  
<!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)*>

<!--
  (PCT/ISA/210 and PCT/ISA/237 )
  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.

  (PCT/IPEA/409 and PCT/IPEA/408 )
  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.
-->
<!ELEMENT presentation-of-statements EMPTY>

<!--
  Search request number eg. on PCT Form 201.
-->
<!ELEMENT srep-request-number (#PCDATA)>

<!--
  Date of request for search eg. on PCT Form 201
-->
<!ELEMENT srep-request-date (date)>

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



```
<!--
  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)>

<!--
  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)>

```

5.10 International Preliminary Report on Patentability

```

<?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)">

<!--
*****
* IPRP (International Preliminary Report on Patentability) v1.2 2010 APRIL *
*****
* PUBLIC "-//WIPO//DTD IPRP 1.2//EN" "iprp-v1-2.dtd" *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/iprp-v1-2.dtd *
*****
* contacts: *
* EPO: Paul Brewin; pbrewin@epo.org *
* JPO: Hideto Tanaka; tanaka-hideto@jpo.go.jp *
* USPTO: Bruce B. Cox; bruce.cox@uspto.gov *
* WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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)
January 2005
..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/IPEA/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 #REQUIRED
                                   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 )
#REQUIRED >
```

```
<!ELEMENT iprp-annex-doc EMPTY>
```

```
<!ATTLIST iprp-annex-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 )
#REQUIRED >
```

<!--

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.

```
-->
<!ELEMENT iprp-written-opinion (doc-page+ | (basis-of-iprp-opinion , priority-
opinion? , non-establishment-of-opinion? , unity-of-invention? , pct-rule66-2-
statement , opinion-citations , defect-in-application? , observation-on-
application? , text*))>

<!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
-->
<!ELEMENT iprp-info (correspondence-address? , file-reference-id? , application-
reference+ , date-of-earliest-priority? , classification-ipc? , classification-
national? , applicant-name , iprp-sheet-of-annexes , iprp-admin? , iprp-basis ,
iprp-priority? , non-establishment-of-opinion? , iprp-unity-of-invention , pct-
art35-2-statement , iprp-citations? , defect-in-application? , observation-on-
application? , text*)>

<!ATTLIST iprp-info  total-page-count CDATA #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' >

<!--
  Reference to other documents, either patent literature (patcit)
  or non-patent literature (nplcit)

  Recommended id = 'cit0001', 'cit0002', etc.
-->
<!ELEMENT citation ((patcit | nplcit) , (rel-passage* , category* , rel-claims*)* ,
corresponding-docs* , classification-ipc? , classifications-ipcr? , classification-
national? , doi?)>

<!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;
-->
<!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 >

<!--
(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/IPEA/409 and PCT/IPEA/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 >
```



```
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.
-->
<!ELEMENT iprp-sheet-of-annexes (iprp-annexes-sheet? , iprp-annexes-electronic-
carrier?)>

<!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 >

<!--
Domestic or national classification.
(INID 52, ST.32:B520)
```

```

-->
<!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 >

<!--
  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 | 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 = tab10001, tab10002, etc.
-->

```

```
-->
<!ELEMENT tables (img | table)>

<!ATTLIST tables id ID #IMPLIED
                 num CDATA #REQUIRED >

<!--
  Definition list

  Recommended id = ddis0001, ddis0002, 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 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)
(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 (depository , 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
  <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.
  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 >

<!--
  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' >

<!--
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' >

<!--
  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 pct-rule66-2-statement (novelty-valid , novelty-not-valid , inventive-
step-valid , inventive-step-not-valid , applicability-valid , applicability-not-
valid , citations-explanations?)>

<!--
  (PCT/IPEA/408 - Box No. VI Certain documents cited)

-->
<!ELEMENT opinion-citations (certain-published-documents | non-written-
disclosures)*>
```

```
<!--
(PCT/IPEA/408 - Box No. IV Lack of unity of invention)

-->
<!ELEMENT unity-of-invention (invitation-pay-additional-fees? , not-unity-of-
invention? , compliance-unity-invention , opinion-established-regarding)>

<!--
(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.

-->
<!ELEMENT opinion-established-regarding (entire-application | claim-num+)>

<!--
(PCT/IPEA/408 - Box No. I Basis of the opinion)
Basis of this opinion

-->
<!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?)>

<!--
(PCT/IPEA/409)
Certain documents cited (Section VI)

-->
<!ELEMENT iprp-citations (certain-published-documents | non-written-disclosures |
text)*>

<!--
(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)

-->
<!ELEMENT non-written-disclosures (kind-of-disclosure , date , date-of-written-
disclosure)>

<!--
Date of written disclosure

Referring to non-written disclosure (day/month/year)

-->
<!ELEMENT date-of-written-disclosure (date)>

<!--
Kind of non-written disclosure

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

<!--
(PCT/ISA/237 )
1. Certain published documents (Rules 43bis.1 and 70.10)
```

(PCT/IPEA/409 and PCT/IPEA/408)

1. Certain published documents (Rule 70.10)

-->

<!ELEMENT certain-published-documents ((citation+ , filing-date , priority-date?) | text)>

<!--

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:

-->

<!ELEMENT observation-on-application (p+)>

<!--

Certain defects in the international application (Section Vii).
The following defects in the form or contents of the international application have been noted:

-->

<!ELEMENT defect-in-application (p+)>

<!--

(PCT/IPEA/409)

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement (Section V)

-->

<!ELEMENT pct-art35-2-statement (novelty-valid , novelty-not-valid , inventive-step-valid , inventive-step-not-valid , applicability-valid , applicability-not-valid , citations-explanations?)>

<!--

Citations and explanations:

-->

<!ELEMENT citations-explanations ((citation+ , filing-date? , priority-date?) | p+)>

<!ELEMENT filing-date (date)>

<!--

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)>

<!--
    Patent family and corresponding-docs
-->
```

```
<!ELEMENT corresponding-docs ((patcit | nplcit) , (rel-passage* , category* , rel-claims*))*>

<!ELEMENT applicability-not-valid (claim-num*)>

<!ELEMENT applicability-valid (claim-num*)>

<!ELEMENT inventive-step-not-valid (claim-num*)>

<!ELEMENT inventive-step-valid (claim-num*)>

<!ELEMENT novelty-not-valid (claim-num*)>

<!ELEMENT novelty-valid (claim-num*)>

<!--
(PCT/IPEA/409)
Box No. IV Lack of unity of invention
-->
<!ELEMENT iprp-unity-of-invention (invitation-pay-additional-fees? , not-unity-of-invention? , compliance-unity-invention , subject-examination)>

<!--
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.
-->
<!ELEMENT subject-examination (entire-application | (claim-num+ | p*))>

<!--
(PCT/ISA/237 ) - Box No. IV Lack of unity of invention (2)
This Authority found that the requirement of unity of invention is not complied
with and chose not to invite the applicant to pay additional fees.

(PCT/IPEA/409 )
This Authority found that the requirement of unity of invention is not complied
with and chose, according to Rule 68.1, not to invite the applicant to restrict
or pay additional fees.
-->
<!ELEMENT not-unity-of-invention EMPTY>

<!--
(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:
-->
<!ELEMENT invention-not-examined ((entire-application | claim-num+), non-estab-
reason-1? , non-estab-reason-2? , non-estab-reason-3? , non-estab-reason-4?)>

<!--
  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:
-->
<!ELEMENT cancellation-doc (amend-description? , amend-claims? , amend-drawings? ,
amend-sequence-listing? , amend-sequence-listing-table?)>

<!--
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 _____
-->
<!ELEMENT amend-description (text | (rel-pages | rel-para+))>

<!--
A sequence listing and/or any related table(s) - see Supplemental Box Relating
to Sequence Listing.
```

```
-->
<!ELEMENT sequence-list-basis (material-of-sequence-list , presentation-of-
statements? , additional-info?)>

<!--
(PCT/ISA/210 Box No. I Nucleotide and/or amino acid sequence(s)

(Continuation of item1.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:

-->
<!ELEMENT material-of-sequence-list (sequence-listing-material-type , sequence-
listing-material-format , sequence-listing-filing-time)>

<!--
(PCT/ISA/210 and PCT/ISA/237 )
  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.

(PCT/IPEA/409 and PCT/IPEA/408 )
  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.

-->
<!ELEMENT presentation-of-statements EMPTY>

<!--
  Referenced figure number

-->
<!ELEMENT rel-figures (#PCDATA)>

<!--
  Claim numbers

-->
<!ELEMENT claim-num (#PCDATA)>

<!--
  Referenced paragraph

-->
```

```
<!ELEMENT rel-para (#PCDATA)>

<!--
  Referenced pages
-->
<!ELEMENT rel-pages (#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
  goriginally filed h and are not annexed to this report):

  The international application as originally filed/furnished
-->
<!ELEMENT iprp-basis-application EMPTY>

<!--
  IPRP administration data group
-->
<!ELEMENT iprp-admin (examiners? , iprp-office? , completion-date , demand-
submission-date? , date-of-mailing?)>

<!--
  Date of mailing:
-->
<!ELEMENT date-of-mailing (date)>

<!--
  Date of submission of demand, format YYYYMMDD
-->
<!ELEMENT demand-submission-date (date)>

<!ELEMENT completion-date (date)>

<!--
  International Preliminary Examination Authority; international preliminary
  examination to be carried out by
-->
<!ELEMENT iprp-office (addressbook)>

<!--
  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 depository (#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].
  3rd ed. New York : John Wiley, 1984 [cited 3 January 1990].
  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>
      <edition>3rd ed.</edition>
      <imprint>
        <address>
          <text>New York</text>
        </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:
  Clark, Carol. On the Threshold of a Brave New World.
  In Blueprint of the Body [online].
  CNN.com, 2000. [cited 24 August 2000;10:25 EST]. In-depth specials.
  Available from: [http://www.cnn.com/SPECIALS/2000/genome/story/overview/]
```

```
<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>
    <avail>http://www.cnn.com/SPECIALS/2000/genome/story/</avail>
    <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.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.

```
<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* ,
edition? , (serial | book)? , imprint? , pubdate? , history? , series? , hostno? ,
location? , notes? , avail , class* , keyword* , cpyrt? , issn? , isbn? ,
datecit? , 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))>

<!--
  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.

DROP, J.G. Integrated Circuit Personalization at the Module Level. IBM Tech. Dis. Bull. October 1974, Vol. 17, No. 5, p. 1344 and 1345.
[XPnnnnnnnnnnn].

```
<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

```
-->
<!ELEMENT article (text | (author* , atl? , subname* , (serial | book) , absno? ,
location? , class* , keyword* , cpyrt? , artid? , refno*))>
```

```
<!--
  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.
London : Sweet and Maxwell, 1973. ISBN 0123456789.
Vol.2, p. 138 to 192.

```
<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 book (text | (author* , (book-title+ | conference) , (subtitle? ,
subname* , edition? , imprint? , descrip? , series? , absno? , location* , isbn* ,
pubid? , vid? , bookno? , notes? , class* , keyword* , cpyrt? , refno* , doi? ,
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
-->
<!ELEMENT location (text | (serpart? , sersect? , chapter? , pp? , column? ,
para? , line?))>

<!--
  Referenced line within cited work
-->
<!ELEMENT line (#PCDATA | linef | line1)*>

<!--
  Cited document line, last
-->
<!ELEMENT line1 (#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)>  
  
<!--  
  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? ,
descrip? , notes? , isbn? , issn? , pubid? , vid? , ino? , cpyrt? , doi?)>

<!--

-->
<!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
-->
<!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)*>  
  
<!--  
  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)>

<!--
  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 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)">

<!--
*****
```

```

* wo-notification v1.2      2010 APRIL *
*****
* PUBLIC "-//WIPO//DTD WO NOTIFICATION 1.2//EN" "wo-notification-v1-2.dtd" *
*****
* http://www.wipo.int/pct-safe/epct/schemaDocs/1.10/wo-notification-v1-2.dtd *
*****
* contacts: *
*   WIPO: Shuhei YOSHIURA; shuhei.yoshiura@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
..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
                          file          CDATA #IMPLIED
                          status        CDATA #IMPLIED
                          id            ID   #IMPLIED
                          country       CDATA #REQUIRED
                          file-reference-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 >

<!--
  Office(s) to be notified of changes

  Attribute 'office-type'
  Specifies capacity of Office receiving correspondence

  Values:
  RO - Receiving Office
  ISA - International Search Authority
  IPEA - International Preliminary Examination Authority
  IB - International Bureau
-->
<!ELEMENT notify-office (country* , (region , country+)*)>

<!ATTLIST notify-office  office-type  (RO | ISA | IPEA | IB )  #REQUIRED >

<!--
  The contents of notification sent by Applicant to Office
-->
<!ELEMENT wo-notification-doc (text? , doc-page+)>

<!ATTLIST wo-notification-doc  sequence          CDATA  #REQUIRED
                                notification-type  (change-name |
                                                change-address |
                                                change-nationality |
                                                change-residence |
                                                change-person |
                                                withdrawal-application |
                                                withdrawal-designations |
                                                withdrawal-priority-claim |
                                                withdrawal-demand |
                                                withdrawal-elections |
                                                request-early-publication |
                                                change-reference-number |
                                                art19-amendments |
                                                statement-lack-of-signature |
                                                earlier-search-copy |
                                                separate-poa-doc |
                                                correction-declarations |
                                                correction-drawings |
                                                response-notification |
                                                other-notification )
                                #REQUIRED
                                document-name      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.
-->

```

```

<!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' >

<!--
  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 >

<!--
  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 >

<!--
  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?)>

<!--
  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
-->
<!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;)>

<!--
  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)>  
  
<!--  
  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)>
```

[End of document]