

<?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? , 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 v1.4 2006 JANUARY \*

\*\*\*\*\*

\* PUBLIC "-//WIPO//DTD WO PUBLISHED APPLICATION 1.4//EN" \*

\* "wo-published-application-v1-4.dtd"\*

\*\*\*\*\*

\* http://www.wipo.int/pct-safe/epct/schemaDocs/1.3/ \*

\* wo-published-application-v1-4.dtd \*

\*\*\*\*\*

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\* revision history \*

\*\*\*\*\*

MO: 16/06/05

..added element wo-dtext

..changed element wo-correction FROM (document-id? , type-of-correction? , wo-repub-code , dtext\*)  
TO (document-id? , type-of-correction? , wo-repub-code , wo-dtext\*)  
..changed element wo-ocr-text FROM (dtext)  
TO (wo-dtext)

MO: 01/06/05

..changed version FROM 1.3 TO 1.4

..changed element wo-published-application FROM

<!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)\*>

TO

<!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?)>

MO: 23/05/05

..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? , dtext?)>  
..changed element dtext FROM (#PCDATA)  
TO (#PCDATA | br)\*  
..added attribute 'lang' to dtext  
..changed element wo-correction FROM (document-id? , type-of-correction? , wo-repub-code , wo-pubnum? , dtext?)  
TO (document-id? , type-of-correction? , wo-repub-code , wo-pubnum? , dtext\*)

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? , te  
xt?)  
..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](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"
"soetblx.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

-->
```

C:\TEMP\wo-published-application-v1-4.dtd

```
<!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? , wo-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 >

<!--

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)?)>

<!ATTLIST priority-claim id ID #IMPLIED  
sequence CDATA #REQUIRED  
kind (national | regional | international ) #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 >

<!--

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 >

<!--  
ISR status information, date of receipt at IB,  
information of new ISR or corrected ISR.

-->  
<!ELEMENT isr-status (received-at-ib?)>

<!ATTLIST isr-status isr-status (new | corrected ) #REQUIRED >

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

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

<!ATTLIST publication-reference id ID #IMPLIED >

<!--  
Biological material component in PCT publication

-->  
<!ELEMENT biological-material-doc ((application-reference? , file-reference-id? , indications+) | doc-page+)>

<!ATTLIST biological-material-doc id ID #IMPLIED  
lang CDATA #IMPLIED

status CDATA #IMPLIED >

```
<!--  
  Declaration as to non-prejudicial disclosures or exceptions to lack of novelty  
  (PCT Rules 4.17(v) and 51bis.1(a)(v))  
-->  
<!ELEMENT lack-of-novelty (doc-page+ | (application-reference? , %name_group; , ((date | address | title-of-disclosure | method-of-disclosure | dtext)+ , (all-designat  
ions | designated-states))))>
```

```
<!ATTLIST lack-of-novelty  sequence CDATA #REQUIRED  
                           lang   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 #REQUIRED >
```

```
<!--  
  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 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 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'
    status CDATA #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 = f01, f02, 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 #REQUIRED

status CDATA #REQUIRED >

<!--

Claims:

the claims shall define the matter sought for patent and be supported by the description.

Recommended id = 'claim'

-->

<!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 = c01, c02, etc.; num 001, 002, 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 | description-of-drawings | best-mode | mode-for-invention | indus
trial-applicability | sequence-list-text | (heading* , p+)+)+))>

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

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

Recommended id = 'seqt'

-->

<!ELEMENT sequence-list-text (heading\* , p+)+>

<!ATTLIST sequence-list-text 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 >  
  
<!--  
  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 >

<!--  
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 >

<!--  
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 = h01, h02, etc.

-->

<!ELEMENT heading (#PCDATA | b | i | u | 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'

-->

<!ELEMENT invention-title (#PCDATA | b | i | u | 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'  
-->  
<!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 = p01, p02, etc. num = 001, 002, etc.  
-->
```

```
<!ELEMENT p (#PCDATA | b | i | u | sup | sub | smallcaps | br | pre | dl | ul | o | 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 = tabl01, tabl02, etc.

-->

<!ELEMENT tables (img | table)>

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

<!--

Definition list

Recommended id = ddis01, ddis02, etc.

-->

<!ELEMENT dl (dt , dd)+>

<!ATTLIST dl tsize CDATA #IMPLIED  
compact (compact) #IMPLIED  
id ID #IMPLIED >

<!--

Term to be defined

Recommended id = dtrm01, dtrm02, etc.

-->

<!ELEMENT dt (#PCDATA | b | i | u | 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 = ulis01, ulis02, etc.
-->
<!ELEMENT ul (li+)>

<!ATTLIST ul id ID #IMPLIED
list-style (bullet | dash | none ) 'bullet'
compact (compact ) #IMPLIED >

<!--
List item

Recommended id = list01, list02, etc.
-->
<!ELEMENT li (#PCDATA | b | i | u | sup | sub | smallcaps | br | pre | patcit | n̄lcit | 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 = math01, math02, 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 = chem01, chem02, 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 = i01, i02, 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 compatilby 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 ) '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='f01'>figure<b>1</b></figref>..."
-->
<!ELEMENT figref (#PCDATA | b | i | u | 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 | 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 = biod01, biod02, 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](http://www.superjournal.ac.uk/sj)

Elsevier DTD

Medline DTD (NLM)

Attributes (recommended):

id - ncit1, ncit2, 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)>

<!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 = auth01, auth02, 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 >

<!--

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='pcit1' 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 - pcit01, pcit02, etc.

num - 001, 002, 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)\*>

```
<!ATTLIST u style (single | double | dash | dots ) '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 = docp01, docp02, etc.

-->

<!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 (#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>

<!--
  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+)>

<!--
  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?)+>

<!--  
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>

<!--  
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>

<!--
  Protection request for the designated office.
-->
<!ELEMENT protection-request (kind-of-protection , document-id?)>

<!--
  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 First Publication Gazette Number

-->

<!ELEMENT wo-pubnum (#PCDATA)>

<!--

WIPO publication information:

-->

<!ELEMENT wo-publication-info (wo-correction\* , wo-bio-material-after-pub? , isr-status\* , pct-pub-info\* , wo-pubnum?)>

<!--

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 | 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 | 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 | 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 | 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*))>

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

<!--

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 | line)\*>

<!--  
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 , date? , confno? , confplace? , confsponsor*))>
```

```
<!--  
  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? , issn? , isbn? , pubid? , vid? , ino? , cpyrt?)>

<!--
  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 dtex (#PCDATA)>
```

```
<!--  
  Descriptive text with br tag, language attribute  
-->  
<!ELEMENT wo-dtext (#PCDATA | br)*>  
<!ATTLIST wo-dtext lang          CDATA          #IMPLIED>
```

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

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

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

```
<!--  
  Email address  
-->  
<!ELEMENT email (#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, 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>

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

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

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

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

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

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

```
<!--
```

Small capitals

-->

<!ELEMENT smallcaps (#PCDATA | b | u | i)\*>

<!ELEMENT wo-ocr-text (wo-dtext)>

<!ATTLIST wo-ocr-text file CDATA #IMPLIED>

<!ELEMENT wo-xml-application (description , claims , abstract\* , wo-amended-claims? , amend-statement? , drawings?)>

<!ATTLIST wo-xml-application lang CDATA #REQUIRED  
status CDATA #IMPLIED>