ZC

中华人民共和国知识产权行业标准

ZC 0012.2—2006

专利数据元素标准

第 2 部分：关于用 XML 处理中国发明、实用新型专利文献数据的暂行办法

目　录

前　言

ZC 0012《专利数据元素标准》分为三个部分：

——第 1 部分：关于用 XML 处理复审请求审查决定、无效请求审查决定和司法判决文件的暂行办法；

——第 2 部分：关于用 XML 处理中国发明、实用新型专利文献数据的暂行办法；

——第 3 部分：关于用 XML 处理中国专利审批业务相关数据的暂行办法；

本部分为 ZC 0012 的第 2 部分。

本部分的附录为规范性附录。

本部分由中华人民共和国国家知识产权局批准。

本部分由中华人民共和国国家知识产权局标准化委员会提出并归口。

本部分起草单位：中华人民共和国国家知识产权局《专利数据元素标准》制订工作组。

本部分主要起草人：张宇、陆新年、严笑卫、朱仁秀、翟薇、吴大章、王占三、张微、赵军、冯晓玲、黄迎燕、那英、方克、赵盛。

引　言

　　为使用 XML 技术处理中国发明、实用新型专利文献数据，实现数据生成、维护、加工的电子化和数码化，进一步提高数据的质量，方便数据交换，ZC 0012 的本部分作出了针对中国发明、实用新型专利文献数据的 XML DTD 定义。

关于用 XML 处理中国发明、实用新型专利文献数据的暂行办法

1 范围

ZC 0012 的本部分 ZC 0012 的本部分规定了在使用 XML 技术对中国发明、实用新型专利文献数据加工、交换、处理时所应遵循的规则。

2 术语和定义

下列术语和定义适用于 ZC 0012 的本部分。除国家法律另有明确规定外，国家知识产权局对于 ZC 0012 的本部分中采用的术语和定义拥有最终解释权。

2.1 专利申请

ZC 0012 的本部分所称"专利申请"包括发明专利申请、实用新型专利申请。

2.2 公布

ZC 0012 的本部分所称"公布" 是指发明专利申请经初步审查合格后，自申请日（或优先权日）起 18 个月期满时的公布或根据申请人的请求提前进行的公布。

2.3 公告

ZC 0012 的本部分所称"公告" 是指对发明专利申请经实质审查没有发现驳回理由，授予发明专利权时的授权公告；对实用新型专利申请经初步审查没有发现驳回理由，授予实用新型专利权时的授权公告。

2.4 专利文献

ZC 0012 的本部分所称"专利文献" 是指国家知识产权局按照法定程序公布的发明、实用新型专利申请文件和公告的授权专利文件。

2.5 XML

ZC 0012 的本部分所称"XML"是 Extensible Markup Language 的缩写（意为可扩展的标记语言）。XML 是一套定义语义标记的规则，这些标记将文档分成许多部件并对这些部件加以标识。它也是元标记语言，即定义了用于定义其他于特定领域有关的、语义的、结构化的标记语言的句法语言。

3 XML 元素及其属性的定义和说明

ZC 0012 的本部分涉及的 DTD 定义见附录的 DTD 定义文件 cn-patent-document-06-10-27.dtd，该附录直接附在标准正文之后。在该文件中有所有元素及其属性的中、英注解。

4 参考文献

ZC 0012 的本部分主要参考了 WIPO ST.36[1]标准中公共元素（ICE，2005-02-20 版）的定义和其专利文献模板 DTD 定义（xx-patent-document-v1-0-20050220.dtd）。

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[1] WIPO 标准 ST.36 《用于 XML 处理专利信息的建议》（2005-02-20 版）

5   电子数据格式的基本要求

5.1   字符集

ZC 0012 的本部分的文档实例应当采用 UTF-8 字符集，即在每一个文档的第一行，应当出现

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

对于 UTF-8[2]中且 wipo.ent 中未定义的字符，应当通过 sipo.ent 进行定义。

5.2   属性

5.2.1   id

id 属性可以用来标识文档中的特定对象。对于不同类型的对象，建议使用不同的前缀和后缀进行区分。例如，段落的各个元素的属性可以考虑依次设置为"p0001", "p0002" … "p0101"等。

5.2.2   idref

可以通过 idref 属性来引用文档中的特定的具有 id 属性的对象，如权利要求 claim-ref、交叉引用 crossref、附图引用 figref 等。应保证 idref 仅作为文档中特定对象的引用使用，不应用作其他用途。

5.3   文档实例

5.3.1   有效性

文档实例应当是有效的，即格式符合 XML v1.1 标准的要求。

5.3.2   合法性

文档实例应当是合法的。文档实例中必须通过!DOCTYPE 指名文档的类型。如

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

<!DOCTYPE cn-patent-document SYSTEM "cn-patent-document.06-10-27.dtd">

并且文档实例应当符合 DTD 的要求。

5.3.3   版本标注

文档实例应当通过根元素的相关属性明确指出文档使用的 DTD 的版本。如

<cn-patent-document dtd-version="cn-patent-document   v1.0 2006-03-06">

5.3.4   元素内容

文档中的元素应当尽可能的避免不必要的空格和回车等字符。如应当使用

<postcode>20231</postcode>

而不要使用

<postcode>   20231   </postcode>.

5.4   外部实体

文档实例中可以引用符合以下规定的外部实体，包括 TIFF、JPEG、ST.33 定义的传真数据、ST.35 定义的混合模式数据、ST25 定义的序列表数据、PDF 等。

5.4.1   PDF 格式

所有的该格式的文件必须作为 XML 文件中的参照文件，并且满足以下要求：

　　　　和 Adobe Acrobat v1.4 兼容 。

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[2] UTF8 is a code page that uses a string of bytes to represent a 16-bit Unicode string where ASCII text (<=U+007F) remains unchanged as a single byte, U+0080-07FF (including Latin, Greek, Cyrillic, Hebrew, and Arabic) is converted to a 2-byte sequence, and U+0800-FFFF (Chinese, Japanese, Korean, and others) becomes a 3-byte sequence.

没有压缩的文本。

没有加密的文本。

没有数字签名。

没有嵌入的 OLE 对象。

所有的字体应该是内嵌的并且是许可发布的。

5.4.2　Tagged Image File Format（TIFF）格式

所有的该格式的文件必须作为 XML 文件中的参照文件，并且满足以下要求：

TIFF V6.0 版，使用 Group 4 压缩方式，单 strip 的,使用 Intel 编码方式。

分辨率 300------400DPI。

图像尺寸：建议使用 A4（210x297mm,） 或者 Letter 7 size（215.9x279.4mm），不要超过 170mm x 255mm。

5.4.3　JPEG File Interchange Format（JFIF）格式

所有的该格式的文件必须作为 XML 文件中的参照文件，并且满足以下要求：

分辨率 150------400DPI。

图像尺寸：建议使用 A4（210x297mm,） 或者 Letter 7 size（215.9x279.4mm），不要超过 170mm x 255mm。

5.4.4　WIPO ST.33 – Recommended Standard Format for Data Exchange of Facsimile Information of Patent Documents 专利文献传真信息数据交换的推荐格式标准

所有的该格式的文件必须作为 XML 文件中的参照文件，关于该格式的具体定义见：

http://www.wipo.int/scit/en/standards/standards.htm.

5.4.5　WIPO ST.35 – Recommended Standard Format for Data Exchange of Mixed-Mode Published Patent Document Information on Reel-To-Reel and IBM 3480/90 Cartridge Tapes 专利文献混合模式数据磁带存贮的推荐格式标准

所有的该格式的文件必须作为 XML 文件中的参照文件，关于该格式的具体定义见：

http://www.wipo.int/scit/en/standards/standards.htm.

5.4.6　WIPO ST.25 – Standard for The Presentation of Nucleotide and Amino Acid Sequence Listing in Patent Applications 专利申请中核甘酸和氨基酸序列表数据表示的推荐标准

所有的该格式的文件必须作为 XML 文件中的参照文件，关于该格式的具体定义见：

http://www.wipo.int/scit/en/standards/standards.htm.

5.4.7　chemML、CML 等 XML 格式

所有的该格式的文件必须作为 XML 文件中的参照文件，该格式的文件可以用来表示化学公式或者结构式数据。

5.4.8　符合 table-external DTD 的外部表格 XML 格式

所有的该格式的文件必须作为 XML 文件中的参照文件，该格式的文件可以用来表示外部表格数据，包括数量巨大的化学公式或者结构式、数学公式、计算机程序源代码、表格等数据。

table-external DTD 的具体定义见：

http://www.wipo.int/pct-safe/epct/SchemaDocs/1.3/SchemaDocs.htm

5.5 主要元素说明

元素	构成和说明	内容说明
cn-publication-reference	(document-id, gazette-reference?)	公布/公告数据(公布/公告号、日期、种类、卷期号等)
application-reference	(document-id)	专利申请数据（申请号、申请日、申请种类等）
correction	(document-corrected, type-of-correction?, gazette-reference?, text?)	更正数据
priority-claims	(priority-claim+)	优先权数据
classification-ipc	(ipc-version, main-classification, further-classification*, (additional-info | linked-indexing-code-group | unlinked-indexing-code)*, text?)该结构用于表示 8 版前的版本。	国际专利分类数据
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)	国际专利分类数据（该结构用于表示 8 版 IPC）
invention-title	(#PCDATA | b | i | u | sup | sub)* 该结构包括了上下角标。	标题
references-cited	(text | (citation+, date-search-completed?, date-search-report-mailed?, place-of-search?, search-report-publication?, searcher?))该结构比较宽泛，既包括了复杂的结构也包括了简单的文本。	引用文件数据
division	(relation)	分案原申请数据
cn-related-publication	(cn-publication-reference*)	同一申请有关的公告/公

		布数据
date-pct-article-22-39-fulfilled	(date)	进入国家阶段日期
pct-or-regional-filing-data	(document-id, us-371c124-date?)	PCT 国际申请申请数据
pct-or-regional-publishing-data	(document-id, gazette-reference?)	PCT 国际申请国际公布数据
cn-domestic-priority-claim	(substitution)	本国优先权数据
cn-applicants	(cn-applicant+)	申请人数据
cn-inventors	(cn-inventor)+	发明人数据
agents	(customer-number｜agent+)	专利代理数据
abstract	(doc-page+｜(abst-problem, abst-solution)｜p+)该结构比较宽泛，既可以是代码化的结构也可以是图象方式的文档页。	摘要
claims	(doc-page+｜claim+)该结构比较宽泛，既可以是代码化的结构也可以是图象方式的文档页。	权利要求
bio-deposit	(depositary, bio-accno, date?, term?, dtext?)	生物材料保藏数据
cn-patentee	(assignees)	专利权人数据
cn-related-documents	(division?, cn-domestic-priority-claims?)	和本申请有关的其他国内申请数据
application-body	(doc-page+｜(description, claims, abstract?, drawings?))该结构既可以是代码化的也可以是图象方式的。	专利申请体（专利申请的主体）

6 相关标准的参照

ZC 0012的本部分的制定及执行参照以下标准：

ZC 0007-2004 《专利文献号标准》（2004年1月版）

ZC 0008-2004 《专利文献种类标识代码标准》（2004年1月版）

ZC 0009-2006 《专利文献著录项目标准（试行）》（2006年11月版）

WIPO ST.2 《采用公历标示日期的标准方法》（1997年12月版）

WIPO ST.3 《用双字母代码表示国家、其他实体及政府间组织的推荐标准》（2004年12月版）

WIPO ST.9 《关于专利及补充保护证书的著录数据的建议》（2004年2月版）

WIPO ST.10/B 《著录项目数据的设计》（2003年6月版）

WIPO ST.14 《在专利文献中列入引证的参考文献的建议》（2005年1月版）

WIPO ST.18 《关于专利公报及其它专利公告期刊的建议》（1998年4月版）

WIPO ST.34 《用于著录项目数据交换的以电子形式记录申请号的建议》（1997年11月版）

WIPO ST.36 《用于XML处理专利信息的建议》（2005-02-20版）

WIPO ST.50 《与专利信息有关的修正、替换和增补文献出版指南》（1998年11月版）

ISO639：1988　语种名称代码

7　ZC 0012 的本部分的发布和实施

7.1　ZC 0012 的本部分的发布

ZC 0012 的本部分于 2006 年 12 月 22 日发布。

7.2　ZC 0012 的本部分的施行

ZC 0012 的本部分于 2007 年 1 月 1 日施行。

7.3　ZC 0012 的本部分的监督

国家知识产权局标准化委员会负责监督 ZC 0012 的本部分的施行。

7.4　ZC 0012 的本部分的改进

国家知识产权局标准化委员会对 ZC 0012 的本部分管理者提出的改进建议进行评审，如有必要，可以制定新标准代替 ZC 0012 的本部分。

附录
（规范性附录）
DTD 定义

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSPY v5 U (http://www.xmlspy.com) by et8 (et8) -->
<!--cn-patent-document v1.0 2006-03-06
    http://www.sipo.gov.cn/standards/xml/cn-patent-document.dtd
    这是一个用于描述中国发明、实用新型专利文献数据的 DTD 定义。
    本 DTD 是 WIPO ST36 的一个应用，依据的是 2005-09-22 的 ST36 的版本，使用的是 2005-02-20
的
    ICE 和 xx-patent-document 版本。
-->
<!--cn-patent-document v1.0 2006-03-06
    http://www.sipo.gov.cn/standards/xml/cn-patent-document.dtd
    DTD FOR PUBLISHED CHINA PATENT DATA
    This DTD is based on WIPO ST36(2005-09-22) and    ICE(2005-02-20) .
-->
<!--
    **********************************************************************
    * SECTION I - DECLARATION, ENT. REFs, ISO sets, etc                  *
    **********************************************************************
-->
<!--
    **********************************************************************
    * 节 I - 声明, 实体,   引用外部 DTD, 字符集等                          *
    **********************************************************************
-->
<!--关于引用 MATHML2_DTD 和 TABLE_DTD 的说明:
    要引用 mathml2.dtd   将 MATHML2_DTD 的值改成   "INCLUDE", 将
    MATH_PLACEHOLDER 值改成   "IGNORE", 对于 TABLE_DTD
    TABLE_PLACEHOLDER 以及 WIPO_ENT 和 SIPO_ENT 是同样的

    INCLUDE
    IGNORE
-->
<!--
    to include mathml2.dtd    change MATHML2_DTD value to "INCLUDE", change
    MATH_PLACEHOLDER value to "IGNORE", the same for the TABLE_DTD and
    TABLE_PLACEHOLDER

    INCLUDE
    IGNORE
```

```
-->
<!ENTITY % UNICODE_PLANE1D_ESCAPE "IGNORE">
<!ENTITY % WIPO_ENT "IGNORE">
<!ENTITY % SIPO_ENT "IGNORE">
<!ENTITY % MATHML2_DTD "IGNORE">
<!ENTITY % TABLE_DTD "IGNORE">
<!ENTITY % MATH_PLACEHOLDER "INCLUDE">
<!ENTITY % TABLE_PLACEHOLDER "INCLUDE">
<![%UNICODE_PLANE1D_ESCAPE; [
  <!ENTITY % plane1D    "&#38;#38;#xE">
]]>
<!--WIPO SIPO 定义的字符集实体．可以从以下网址下载:
http://pcteasy.wipo.int/efiling_standards/schemaDocs/wipo.ent
http://www.sipo.gov.cn/standards/xml/sipo.ent
-->
<!--   import character entity set.   Download from:
           http://pcteasy.wipo.int/efiling_standards/schemaDocs/wipo.ent
           http://www.sipo.gov.cn/standards/xml/sipo.ent
    Note that nsgmls-based parsers (SP, Near & Far Designer, etc.)
    may not be able to process this file for reasons described below
    in MathML comments.
  -->
<![%WIPO_ENT;[
<!ENTITY % wipo PUBLIC "-//WIPO//ENTITIES WIPO 1.0//EN" "wipo.ent">
%wipo;
]]>
<![%SIPO_ENT;[
<!ENTITY % sipo PUBLIC "-//SIPO//ENTITIES SIPO 1.0//ZH" "sipo.ent">
%sipo;
]]>
<!--引用 DTD MathML2,由 W3C 维护，从
        http://www.w3.org/TR/MathML2/DTD-MathML-20010221.zip 下载
  -->
<!--
    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 incoporate
the modifications mentioned above, but the high characters are replaced
by the equivalent mchar construct <mchar name="..." /> this allows the
DTD to be read and for MathML files to be validated using such sytems."

```
-->
<![%MATHML2_DTD; [
<!--
   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;
]]>
<!--引用 DTD OASIS Open XML Exchange Table Model ,由 OASIS 维护，从
       http://oasis-open.org/specs/soextblx.dtd 下载
-->
<!--
   DTD OASIS Open XML Exchange Table Model.
   Maintained by OASIS; download from:
      http://oasis-open.org/specs/soextblx.dtd
   Note that the FPI in soextblx.dtd refers to itself as 'calstblx'.
   That convention has been followed here.
-->
<![%TABLE_DTD; [

<!--
   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">
```

```
<!ENTITY % yesorno    "NMTOKEN" >
<!ENTITY % tbl.table.att   " pgwide      %yesorno;          #IMPLIED
                                 orient      (port | land)  #IMPLIED
                                 tabstyle    NMTOKEN            #IMPLIED" >
%calstblx;
]]>
<![%MATH_PLACEHOLDER; [
<!--
  (PLACEHOLDER:w3c math dtd)
-->
<!ELEMENT math (#PCDATA)>
]]>
<![%TABLE_PLACEHOLDER; [
<!--
  (PLACEHOLDER:cals table dtd)
-->
<!ELEMENT table (#PCDATA)>
]]>
<!--通用的名字结构实体-->
<!--general name entity -->
<!ENTITY % name_group "((name | (prefix? , (last-name | orgname) , first-name?
                              , middle-name? , suffix? , iid? , role? , orgname?
                              , department? , synonym*)) , registered-number?)">
<!--表示通用的地址结构实体-->
<!--general address    entity -->
<!ENTITY % address_group "((address-1? , address-2? , address-3? , mailcode?
                                , pobox? , room? , address-floor? , building?
                                , street? , city? , county? , state? , postcode?
                                , country) | text)">
<!--  表示公共属性的实体  -->
<!--   common attribute entity -->
<!-- 属性：
        id       标号
        lang     语言
        status   状态   -->
<!--attribute:
        id        id
        lang      language
        status    status-->
<!ENTITY % body_sections " id       CDATA   #IMPLIED
                              lang    CDATA   #IMPLIED
                              status CDATA   #IMPLIED">
<!--
  *****************************************************************************
```

```
    * SECTION II - cn-patent-document     v1.0 2006-03-06 定义                              *
    ******************************************************************
-->
<!--
    ******************************************************************
    * SECTION II - cn-patent-document     v1.0 2006-03-06 DIFINATION                        *
    ******************************************************************
-->
```

<!--中国专利文献-->

<!--chinese patent document-->

<!--属性:
    id   标号
    lang   专利文献使用的语言
    dtd-version   dtd 版本号
    country   公布/公告文献的国家
    file-reference-id 文献中涉及的文件的编码
    correction-code 修正码
    doc-number   文献号
    kind   文献种类
    date-produced 文献产生日期
    date-publ   文献公布/公告日期
    status   文献状态-->

<!--attribute:
    id   id
    lang   language
    dtd-version   dtd version
    country   patent document country
    file-reference-id referenced file id
    correction-code correction code
    doc-number   document number
    kind   kind of document
    date-produced produced date
    date-publ   publication date
    status   patent document status-->

<!ELEMENT cn-patent-document (doc-page+ | (cn-bibliographic-data, application-body?, sequence-list-doc?, table-external-doc*))>

<!ATTLIST cn-patent-document
  id ID #IMPLIED
  lang CDATA #REQUIRED
  dtd-version CDATA #IMPLIED
  file CDATA #IMPLIED
  country CDATA #REQUIRED
  file-reference-id CDATA #IMPLIED
  correction-code CDATA #IMPLIED

doc-number CDATA #IMPLIED

kind CDATA #IMPLIED

date-produced CDATA #IMPLIED

date-publ CDATA #IMPLIED

status CDATA #IMPLIED

>

<!--著录项目数据.-->

<!--Bibliographic data-->

<!--属性:

   id   标号

   lang   著录项目使用语言

   country 国别

   status   状态-->

<!--attribute:

   id   id

   lang   language

   country country

   status   stastus-->

<!ELEMENT cn-bibliographic-data (cn-publication-reference, correction?, application-reference, priority-claims?, classification-ipc?, classifications-ipcr?, invention-title+, assignees?, references-cited?, abstract?, figures?, cn-abstract-drawing?, cn-related-publication, cn-related-documents, cn-parties, date-pct-article-22-39-fulfilled?, pct-or-regional-filing-data?, pct-or-regional-publishing-data?, text*)>

<!ATTLIST cn-bibliographic-data

  id ID #IMPLIED

  lang CDATA #IMPLIED

  country CDATA #IMPLIED

  status CDATA #IMPLIED

>

<!--序列表文件-->

<!--Sequence list document n-->

<!--属性:

   id   标号号

   lang   语言

   status   状态-->

<!--attribute:

   id   id

   lang   language

   status   stastus-->

<!ELEMENT sequence-list-doc (#PCDATA | doc-page | sequence-list)*>

<!ATTLIST sequence-list-doc

  id ID #IMPLIED

  lang CDATA #IMPLIED

  status CDATA #IMPLIED

>

<!--符合 ST.25 标准的序列表文件-->
<!--
  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
-->
<!--属性:
    id   标号
    file   文件名
    lang   语言
    carriers   序列表载体（国内电子件/国外电子件/纸件）
    seq-file-type   序列表文件类型
    status   状态-->
<!--attribute:
    id   Sequence list   id
    file   sequence list   file
    lang   Sequence list   language
    carriers   sequence list carriers(internal-electronic/external-electronic/paper)
    seq-file-type   sequence list file type
    status   Sequence list   stastus-->
<!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
>
<!--INID 10 12 19 43 45 48 公布/公告信息(公布/公告号、日期、种类等)-->
<!--Publication reference information: publication number, date, etc-->
<!--属性：
    id   标号
    lang   语言

```
            status          状态
            country         国别-->
<!--attribute:
            id              id
            lang            language
            status          status
            country         country-->
<!ELEMENT cn-publication-reference (document-id, gazette-reference?)>
<!ATTLIST cn-publication-reference
    id CDATA #IMPLIED
    lang CDATA #IMPLIED
    status CDATA #IMPLIED
    country CDATA #IMPLIED
>
<!-- INID 21 22 专利申请有关信息，属性 appl-type 专利申请的种类 如发明专利、实用新型专利
-->
<!--Application reference information: application number, appliction-type
（ inventions and utility medels and designs）-->
<!--属性：
            appl-type    专利申请的种类, 如发明专利、实用新型专利-->
<!--attribute:
            appl-type    appliction-type: inventions/utility medels/designs-->
<!ELEMENT application-reference (document-id)>
<!ATTLIST application-reference
    appl-type CDATA #REQUIRED
>
<!--INID 15 48 有关更正（公告/公布)的信息-->
<!-- Correction information -->
<!ELEMENT correction (document-corrected, type-of-correction?, gazette-reference?, text?)>
<!--INID 30 优先权声明数据-->
<!--priority claims data-->
<!ELEMENT priority-claims (priority-claim+)>
<!--优先权声明项-->
<!--Priority claim-->
<!--属性：
        sequence     序号
        kind         优先权种类(本国优先权/部分优先权/外国优先权)-->
<!--attribute:
        sequence     sequence
        kind         priority claim kind(national/regional/international)-->
<!ELEMENT priority-claim (country, doc-number?, date, office-of-filing?, (priority-doc-requested |
priority-doc-attached)?)>
<!ATTLIST priority-claim
    sequence CDATA #REQUIRED
```

```
        kind (national | regional | international) #REQUIRED
>
<!--INID 51 国际专利分类数据 -->
<!--ipc data -->
<!ELEMENT classification-ipc (ipc-version, main-classification, further-classification*, (additional-info |
linked-indexing-code-group | unlinked-indexing-code)*, text?)>
<!--INID 51 国际专利分类数据 -->
<!--ipc data -->
<!--属性：
                id       标号-->
<!--attribute:
                id       id -->
<!ELEMENT classifications-ipcr (classification-ipcr+)>
<!ATTLIST classifications-ipcr
    id ID #IMPLIED
>
<!--国际专利分类号-->
<!--ipc-->
<!--属性;
            id        标号
            sequence  序号-->
<!--attribute:
            id        id
            sequence  sequence-->
<!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
>
<!--INID 54   标题-->
<!--title-->
<!--属性：
            id     标号
            lang   语言-->
<!--attribute:
            id       id
            lang     language-->
<!ELEMENT invention-title (#PCDATA | b | i | u | sup | sub)*>
<!ATTLIST invention-title
    id ID #IMPLIED
    lang CDATA #IMPLIED
>
```

<!--INID 56 引用文献 -->

<!--This tag and elements to be used primary to code data on the title page of

  patents under INID code (56).-->

<!ELEMENT references-cited (text | (citation+, date-search-completed?, date-search-report-mailed?,

place-of-search?, search-report-publication?, searcher?))>

<!--其他参考文献，包括专利文献或非专利文献-->

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

  or non-patent literature (nplcit) -->

<!--属性：

           id   文献 id 号建议取值'cit0001', 'cit0002'

           srep-phase   文献引用段落-->

<!--attribute:

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

           srep-phase   cited phase-->

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

classification-ipc?, classifications-ipcr?, classification-national?)>

<!ATTLIST citation

    id ID #IMPLIED

    srep-phase CDATA #IMPLIED

>

<!--INID 62 分案原申请的有关信息-->

<!--Earlier application from which the present document has been divided out.

    (INID 62, ST.32:B620)-->

<!ELEMENT division (relation)>

<!--INID 65 同一申请有关的公告/公布 -->

<!--Previously published document concerning same application.(INID 65)-->

<!ELEMENT cn-related-publication (cn-publication-reference*)>

<!-- 专利事务中的各方 -->

<!--related parties in patent affairs-->

<!ELEMENT cn-parties (cn-applicants, cn-inventors?, correspondence-address?, cn-agents?)>

<!--INID 85 进入国家阶段日期，仅针对 PCT 申请 -->

<!-- Date of PCT articles 22/39 fulfillment. (INID 85, ST.32:B850)-->

<!ELEMENT date-pct-article-22-39-fulfilled (date)>

<!--INID 86 PCT 国际申请有关信息 -->

<!-- PCT or regional filing information. (INID 86, ST.32:B860)-->

<!ELEMENT pct-or-regional-filing-data (document-id, us-371c124-date?)>

<!ELEMENT us-371c124-date (date)>

<!--INID 87 PCT 国际申请国际公布有关数据-->

<!-- PCT or regional publication information.(INID 87, ST.32:B870)-->

<!ELEMENT pct-or-regional-publishing-data (document-id, gazette-reference?)>

<!--附图信息-->

<!--附图信息-->

<!ELEMENT figures (number-of-drawing-sheets?, number-of-figures?, figure-to-publish?)>

<!--摘要附图-->

<!-- Figure of the drawings which should accompany the abstract-->

<!ELEMENT figure-to-publish (fig-number+)>

<!--摘要附图编号-->

<!--the number of the figure which should accompany the abstract.-->

<!ELEMENT fig-number (#PCDATA)>

<!--附图个数-->

<!--　Number of figures-->

<!ELEMENT number-of-figures (#PCDATA)>

<!--附图页数-->

<!--number of drawing sheets-->

<!ELEMENT number-of-drawing-sheets (#PCDATA)>

<!--更正类型　-->

<!-- type of correction -->

<!ELEMENT type-of-correction (#PCDATA)>

<!--　被更正的文献　-->

<!--　Document being corrected.-->

<!ELEMENT document-corrected (document-id)>

<!--　公报信息　-->

<!--　Information about an office's gazette or bulletin - paper, electronic, etc.
　　where, the details of the patent publication are also given.
　　Examples WIPO gazette and EPO Bulletin The date is mandatory. -->

<!--属性：

　　　　　　id　　　　　　标号

　　　　　　country　　　　国别

　　　　　　lang 语言-->

<!--attribute:

　　　　　　id　　　　　　id

　　　　　　country　　　　country

　　　　　　lang language-->

<!ELEMENT gazette-reference (gazette-num, date, text?)>

<!ATTLIST gazette-reference

　　id ID #IMPLIED

　　country CDATA #IMPLIED

　　lang CDATA #IMPLIED

>

<!--　公报卷期号　-->

<!--　gazette vol　-->

<!ELEMENT gazette-num (#PCDATA)>

<!--丛书引用数据：描述了整个卷期的信息　-->

<!--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?)>

<!--丛书名称-->

```
<!--Serial title-->
<!ELEMENT sertitle (#PCDATA)>
<!--丛书的副标题  如  BMJ = British Medical Journal -->
<!--Alternate title for serial; e.g. BMJ = British Medical Journal-->
<!ELEMENT alttitle (#PCDATA)>
<!--除作者外的其他责任者  如编辑、译者-->
<!--  Subordinate responsibility;   e.g., editor, translator, etc.-->
<!--属性：
          subname-type        除作者外的其他责任者的类型（编辑，译者，其他类型）默认"编辑"
-->
<!--attribute:
          subname-type        subname type(editor,translator,other subname type) default editor-->
<!ELEMENT subname (%name_group; | addressbook)>
<!ATTLIST subname
    subname-type (editor | translator | other-subname-type) "editor"
>
<!--  名称  可以是机构或者自然人的名称  -->
<!-- Name:
   If no distinction or detail can be given.
   Also to be used for: personal (natural person) and corporate (legal entity) names-->
<!--属性：
          name-type        名称类型（法人或自然人）-->
<!--attribute:
          name-type        name type(legal or natural)-->
<!ELEMENT name (#PCDATA)>
<!ATTLIST name
    name-type (legal | natural) #IMPLIED
>
<!--称谓  如  Mr., Mrs., Dr. etc -->
<!--Title: e.g., Mr., Mrs., Dr. etc-->
<!ELEMENT prefix (#PCDATA)>
<!--姓-->
<!--last name-->
<!ELEMENT last-name (#PCDATA)>
<!--组织机构名称或者公司名称-->
<!--Organisation name or company name-->
<!ELEMENT orgname (#PCDATA)>
<!--  名  -->
<!--First or given name(s), initial(s)-->
<!ELEMENT first-name (#PCDATA)>
<!--  中间名   -->
<!--  Middle name(s) or initial(s)-->
<!ELEMENT middle-name (#PCDATA)>
<!--名字中的后缀如   II, Jr., Dip., Ing., BA   -->
```

```
<!--Name suffix (e.g., II, Jr., Dip., Ing., BA, etc.)-->
<!ELEMENT suffix (#PCDATA)>
<!--个体代码-->
<!--Individual id-->
<!ELEMENT iid (#PCDATA)>
<!--职位或者角色如 总裁,主席等-->
<!--Role; e.g., President, Chairman, etc.-->
<!ELEMENT role (#PCDATA)>
<!-- 部门 -->
<!--Department, division, section, etc. name-->
<!ELEMENT department (#PCDATA)>
<!-- 别名 -->
<!--Synonym-->
<!ELEMENT synonym (#PCDATA)>
<!--注册号码-->
<!--Registered number-->
<!ELEMENT registered-number (#PCDATA)>
<!--用于联系个人或者组织的地址、名称等信息,     属性 lang  表示语言-->
<!--  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.-->
<!--属性：id       标号
          lang     语言-->
<!--attribute:
          id      addressbook id
          lang    language-->
<!ELEMENT addressbook ((%name_group;, address, phone*, fax*, email*, url*, ead*, dtext?) | text)>
<!ATTLIST addressbook
    id ID #IMPLIED
    lang CDATA #REQUIRED
>
<!--地址信息-->
<!--  Address components:
   Address formats differ from country to country
   If no structure possible use text-->
<!ELEMENT address (%address_group;)>
<!-- 地址（第一行）-->
<!--Address, first line-->
<!ELEMENT address-1 (#PCDATA)>
<!--地址（第二行）-->
<!--Address, second line-->
<!ELEMENT address-2 (#PCDATA)>
```

<!-- 地址（第三行）-->

<!--Address, third line-->

<!ELEMENT address-3 (#PCDATA)>

<!--组织的在邮局的编码-->

<!--Organizational mail code-->

<!ELEMENT mailcode (#PCDATA)>

<!-- 邮箱号码-->

<!--Post Office Box number-->

<!ELEMENT pobox (#PCDATA)>

<!--房间号码-->

<!--Address room; e.g., Room 55B-->

<!ELEMENT room (#PCDATA)>

<!--层数-->

<!--Address floor; e.g., 10th-->

<!ELEMENT address-floor (#PCDATA)>

<!--建筑物的信息 如 上海大厦-->

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

<!ELEMENT building (#PCDATA)>

<!--街道-->

<!--Street may contain house number or name-->

<!ELEMENT street (#PCDATA)>

<!--城、镇　-->

<!--City or town name-->

<!ELEMENT city (#PCDATA)>

<!--县-->

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

<!ELEMENT county (#PCDATA)>

<!--地区、州、省 -->

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

<!ELEMENT state (#PCDATA)>

<!--邮政编码-->

<!--Postal code or zip code-->

<!ELEMENT postcode (#PCDATA)>

<!--国别 使用 WIPO ST.3 国别代码, 如 DE, FR, GB, NL, 也包括 EP, WO 等组织代码-->

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

<!ELEMENT country (#PCDATA)>

<!--无结构文本 -->

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

<!ELEMENT text (#PCDATA)>

<!--电话号码-->

<!--Telephone number-->

<!ELEMENT phone (#PCDATA)>

<!--传真号码 -->

```
<!--Fax number-->
<!ELEMENT fax (#PCDATA)>
<!-- 电子邮箱地址 -->
<!--Email address-->
<!ELEMENT email (#PCDATA)>
<!--统一资源定位， URL 如 www.wipo.int -->
<!--Universal Resource Locator; e.g. www.wipo.int-->
<!ELEMENT url (#PCDATA)>
<!--非电子邮箱地址的电子地址-->
<!--Electronic address use for other than email-->
<!ELEMENT ead (#PCDATA)>
<!--说明性文本-->
<!--Descriptive text-->
<!ELEMENT dtext (#PCDATA)>
<!--发行有关信息 如 Annual, 1971-, 1890-1972-->
<!--Issue designation; e.g., Annual, 1971-, 1890-1972-->
<!ELEMENT issue (#PCDATA)>
<!-- 出版有关信息， 包括出版/初版时间、出版地点、出版商，通常期刊只使用出版日期-->
<!-- 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*))>
<!--非专利引用文献中的公布日期 -->
<!--Publication date used in npl citations-->
<!ELEMENT pubdate (#PCDATA | sdate | edate | time)*>
<!--在 pubdate 中的起始日-->
<!--Start date used in pubdate-->
<!ELEMENT sdate (#PCDATA)>
<!--在 pubdate 中的结束日-->
<!--End date used in pubdate-->
<!ELEMENT edate (#PCDATA)>
<!--时间 ，格式为 HHMM-->
<!--Time; format HHMM-->
<!ELEMENT time (#PCDATA)>
<!--出版介质的描述 - 专利引用文献中通常不用 -->
<!--Physical description - generally NOT used in citations in pats; e.g., v., 27cm-->
<!ELEMENT descrip (#PCDATA)>
<!--期刊的注释-->
<!-- Notes about the journal; e.g. Continues Journal of XYZ 1910-1998, published in
    French and English, etc.-->
<!ELEMENT notes (#PCDATA)>
<!--国际标准期刊号-->
<!--International Standard Serial Number-->
```

```
<!ELEMENT issn (#PCDATA)>
<!--国际标准图书号-->
<!--International Standard Book Number-->
<!ELEMENT isbn (#PCDATA)>
<!--出版商的唯一标识-->
<!--Publisher's unique id-->
<!ELEMENT pubid (#PCDATA)>
<!--卷号-->
<!--Volume id/number-->
<!ELEMENT vid (#PCDATA)>
<!--发行号-->
<!--Issue number-->
<!ELEMENT ino (#PCDATA)>
<!--版权信息-->
<!-- Copyright info.  Copyright of publisher of serial-->
<!ELEMENT cpyrt (#PCDATA)>
<!--文献标识. 见 WIPO ST.14-->
<!-- Document identification refers to patents (and patent applications) only.
  See WIPO ST.14 -->
<!--属性：
        lang  使用的语言-->
<!--attribute:
        lang      language-->
<!ELEMENT document-id (country, doc-number, kind?, name?, date?)>
<!ATTLIST document-id
    lang CDATA #IMPLIED
>
<!-- 文献号-->
<!--The number of the referenced patent (or application) document-->
<!ELEMENT doc-number (#PCDATA)>
<!--文献种类 如 发明专利公布-->
<!--Document kind code; e.g., A1(INID 13, ST.32:B130) -->
<!ELEMENT kind (#PCDATA)>
<!--日期 建议的格式为 YYYYMMDD-->
<!--Date: components of a date.  Format: YYYYMMDD-->
<!ELEMENT date (#PCDATA)>
<!--早期申请的提交局-->
<!-- 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)>
<!--地区、国家-->
<!-- The region for which protection or exclusion (depending upon context) is desired.-->
<!ELEMENT region (country)>
```

<!--要求接受局向国际局递交早期申请优先权证明和文件（用作标记的空元素）仅对 PCT 申请-->

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

<!ELEMENT priority-doc-requested EMPTY>

<!--优先权文件和申请一同递交（用作标记的空元素）-->

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

<!ELEMENT priority-doc-attached EMPTY>

<!--分类代码-->

<!-- Classification code; e.g., ipc, dewey etc. -->

<!ELEMENT class (#PCDATA)>

<!--国际专利分类数据-->

<!-- International Patent Classification (IPC) data;   (INID 51,   ST.32:B510)-->

<!ELEMENT classification-data-source (#PCDATA)>

<!--分类的状态：初始分类，二次分类，多种分类，删除的分类-->

<!--Possible status: original-classification, reclassified, various-classification,
   deleted-classification-->

<!ELEMENT classification-status (#PCDATA)>

<!--生成的局-->

<!--generated office   -->

<!ELEMENT generating-office (country)>

<!--有效日-->

<!--action date-->

<!ELEMENT action-date (date)>

<!--分类可能的值：发明，非发明-->

<!-- Possible values: invention, non-invention -->

<!ELEMENT classification-value (#PCDATA)>

<!--符号位置-->

<!--Possible positions: first-symbol-position, later-symbol-position.-->

<!ELEMENT symbol-position (#PCDATA)>

<!--小组-->

<!--subgroup-->

<!ELEMENT subgroup (#PCDATA)>

<!-- 主组-->

<!--main groupp-->

<!ELEMENT main-group (#PCDATA)>

<!--子类-->

<!--subclass-->

<!ELEMENT subclass (#PCDATA)>

<!-- 节-->

<!--section-->

<!ELEMENT section (#PCDATA)>

<!--分类级别-->

<!-- Levels: ipcr-advanced, ipcr-core   -->

<!ELEMENT classification-level (#PCDATA)>

```
<!--版本日期-->
<!--ipc version indicator date -->
<!ELEMENT ipc-version-indicator (date)>
<!--粗体文本-->
<!--Bold formatting for text-->
<!ELEMENT b (#PCDATA | i | u | smallcaps)*>
<!--斜体文本-->
<!--Italic formatting for text-->
<!ELEMENT i (#PCDATA | b | u | smallcaps)*>
<!--下划线-->
<!--   Underscore: style - single is default-->
<!--属性：
            式样    单线，双线，破折线，点线-->
<!--attribute:
            style   single，double，dash，dots-->
<!ELEMENT u (#PCDATA | b | i | smallcaps)*>
<!ATTLIST u
    style (single | double | dash | dots) "single"
>
<!--小体大写字母-->
<!--Small capitals-->
<!ELEMENT smallcaps (#PCDATA | b | u | i)*>
<!--上标 -->
<!--Superscripted text-->
<!ELEMENT sup (#PCDATA | b | u | i)*>
<!--下标-->
<!--Subscripted text-->
<!ELEMENT sub (#PCDATA | b | u | i)*>
<!--专利引用文献-->
<!--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-->
<!--属性：
            id              引用文献 id 号如 pcit0001, pcit0002,等
            num              引用文献编号.如 0001, 0002,等
            dnum             引用文献完整编号，如 "US5401234A";
            url             专利文献的网络连接
            file            引用文献的文件名
            dnum-type    文献编号类型（申请号，公告号等）-->
<!--Attributes (recommended):
            id              pcit0001, pcit0002, etc.
            num              0001, 0002, etc.
            dnum             use full number as one string, eg, "US5401234A";
            url              web lind to the patent citations
            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
      dnum CDATA #IMPLIED
      file CDATA #IMPLIED
      url CDATA #IMPLIED
      num CDATA #REQUIRED
      dnum-type CDATA #IMPLIED
>
<!--专利引用文献中相关的若干段落-->
<!--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?)+)>
<!--专利引用文献中的段-->
<!--Passage within the cited patent literature-->
<!ELEMENT passage (#PCDATA)>
<!--种类 -->
<!--Category    -->
<!ELEMENT category (#PCDATA)>
<!--相关的权利要求项-->
<!--Relevant claims-->
```

<!ELEMENT rel-claims (#PCDATA)>

<!--非专利引用文献

 注意：

 非专利文献的引用也可以全部用无结构的文本来描述，但是建议不要这样做，

 建议采用以下根据 ST.14 和 IDO690 标准定义的高度格式化的描述方式。

 这部分 DTD 使用了许多不同来源的元素名、DTD 结构和引用，包括：

 AACR2 / MARC ISO 12083 - 电子手稿标记 DTD

 美国出版联盟（Association of American Publishers —— AAP） Z39.59 DTD

 欧洲 SGML 工作组（European Working Group for SGML —— EWS） MAJOUR DTD

 SuperJournal 全文 DTD www.superjournal.ac.uk/sj

 Elsevier DTD

 （美）联机医学分析和检索系统 dtd Medline DTD (NLM)-->

<!--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) -->

<!--属性（建议）：

  id   引用非专利文献的 id 号如 ncit0001, ncit0002,

 num 非专利文献编号如 0001, 0002

 npl-type 非专利文献类型

  A - 不属于特殊类型的摘要引用

   B - 书籍引用

   I - 生物摘要引用

   C - 化学摘要引用

   E - 数据库引用

   D - 德文特引用

   P - 非专利文献中引用的专利

   J - 日本引用的专利摘要

   S - 期刊杂志引用

   W - 互联网检索引用

  medium 介质类型如 CD (CD-ROM), MT (磁带 Magnetic Tape), DISK, ONLINE

  file 本地系统中的文件名，如 EPO 中的 XP number

```
        url       连接到该文献的 URL-->
<!--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 - Bilogical 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 #REQUIRED
    npl-type CDATA #IMPLIED
    medium CDATA #IMPLIED
    file CDATA #IMPLIED
    url CDATA #IMPLIED
>
<!--论文-->
<!-- 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*))>
<!--    作者      -->
<!--    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-->
<!--属性：
        id      作者 id 号如：auth0001, auth0002 等-->
<!--attribute:
        id      auth0001, auth0002, etc-->
<!ELEMENT author (%name_group; | addressbook)>
<!ATTLIST author
    id ID #IMPLIED
>
<!-- 论文标题   -->
<!--Article title-->
<!ELEMENT atl (#PCDATA)>
<!-- 书籍的描述  -->
<!--    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*)))>

<!--　　书籍的标题　　-->

<!--The title of the cited book-->

<!ELEMENT book-title (#PCDATA)>

<!--　会议的有关信息　-->

<!--　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*))>

<!--会议名称-->

<!--Conference title-->

<!ELEMENT conftitle (#PCDATA)>

<!--会议代号-->

<!--Conference number-->

<!ELEMENT confno (#PCDATA)>

<!--会议地点-->

<!--Conference place-->

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

<!--会议发起者-->

<!--conference sponsor-->

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

<!--书籍的副标题-->

<!--Book subtitle-->

```
<!ELEMENT subtitle (#PCDATA)>
<!--编辑说明-->
<!--Edition statement-->
<!ELEMENT edition (#PCDATA)>
<!--丛书说明-->
<!--Series statement-->
<!ELEMENT series (text | (mst, msn?, issn?))>
<!--专题论文集名称-->
<!--Monographic series title-->
<!ELEMENT mst (#PCDATA)>
<!--专题论文集编号  -->
<!--Monographic series number-->
<!ELEMENT msn (#PCDATA)>
<!--摘要编号-->
<!--Abstract number-->
<!ELEMENT absno (#PCDATA)>
<!--引用文献中的位置描述-->
<!--Location within the cited work-->
<!ELEMENT location (text | (serpart?, sersect?, chapter?, pp?, column?, para?, line?))>
<!--连续的部分-->
<!--Part within a serial-->
<!ELEMENT serpart (#PCDATA)>
<!--连续的节-->
<!--Serial section-->
<!ELEMENT sersect (#PCDATA)>
<!--章-->
<!--Chapter; e.g., in a book.   Example: Chapter 2-->
<!ELEMENT chapter (#PCDATA)>
<!-- 页码（范围）-->
<!--Cited document page numbers-->
<!ELEMENT pp (#PCDATA | ppf | ppl)*>
<!--开始页-->
<!--Cited   document page , first-->
<!ELEMENT ppf (#PCDATA)>
<!--结束页-->
<!--Cited document page, last-->
<!ELEMENT ppl (#PCDATA)>
<!--栏-->
<!--Cited document column numbers-->
<!ELEMENT column (#PCDATA | colf | coll)*>
<!--开始栏-->
<!--Cited document column, first-->
<!ELEMENT colf (#PCDATA)>
<!--结束栏-->
```

```
<!--Cited document column, last-->
<!ELEMENT coll (#PCDATA)>
<!--文献内的段-->
<!--Referenced paragraph within cited work-->
<!ELEMENT para (#PCDATA | paraf | paral)*>
<!--开始段-->
<!--Cited paragraph, first-->
<!ELEMENT paraf (#PCDATA)>
<!--结束段  -->
<!--cited paragraph,last-->
<!ELEMENT paral (#PCDATA)>
<!--文献内的行（范围）-->
<!--Referenced line within cited work-->
<!ELEMENT line (#PCDATA | linef | linel)*>
<!--开始行-->
<!--Cited document line, first-->
<!ELEMENT linef (#PCDATA)>
<!--结束行-->
<!--Cited document line, last-->
<!ELEMENT linel (#PCDATA)>
<!--书号-->
<!--Book number-->
<!ELEMENT bookno (#PCDATA)>
<!--关键词-->
<!--Keyword; e.g., from a Thesaurus or class. scheme-->
<!ELEMENT keyword (#PCDATA)>
<!--一般参考编号  -->
<!--Reference number (general); for the EPO this is the XP number-->
<!--属性：
        id    id 号-->
<!--attribute:
        id      reference number id-->
<!ELEMENT refno (#PCDATA)>
<!ATTLIST refno
    id ID #IMPLIED
>
<!--论文出版者给论文的唯一编号-->
<!--Article unique ID - assigned by a publisher to an article-->
<!ELEMENT artid (#PCDATA)>
<!--网上电子文件有关信息-->
<!-- 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*))>
<!--电子资源标题-->
<!--The title of the electronic resource-->
<!ELEMENT online-title (#PCDATA)>
<!--数据库或者文档集标题 -->
<!--Title of the host document/database-->
<!ELEMENT hosttitle (#PCDATA)>
<!--论文的历史信息-->
<!--History of the article (not serial)-->
<!ELEMENT history (text | (received | accepted | revised | misc))>
<!--论文收到日-->
<!--Date article was received-->
<!ELEMENT received (date)>
<!--论文被采纳日-->
```

<!--Date article was accepted-->

<!ELEMENT accepted (date)>

<!--论文修订日-->

<!--Date article was revised-->

<!ELEMENT revised (date)>

<!--论文的其他历史信息-->

<!--Miscellaneous information relating to the history of the article; see ISO 12083-->

<!ELEMENT misc (#PCDATA | date)*>

<!--在文档集中的标号-->

<!--Numeration within host document-->

<!ELEMENT hostno (#PCDATA)>

<!--获取途径，需要使用 如 URL, 联机数据库, FTP 地址等,-->

<!-- 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)>

<!--引用日期-->

<!-- Date cited - date on which the citation was cited.

May be different from srchdate below-->

<!ELEMENT datecit (date)>

<!--检索项-->

<!--Search terms-->

<!ELEMENT srchterm (#PCDATA)>

<!--检索/查询日-->

<!--Date of search/retrieval YYYYMMDD-->

<!ELEMENT srchdate (date)>

<!--其他引用文献-->

<!--Other citations - free form-->

<!ELEMENT othercit (#PCDATA)>

<!--完成检索报告日期-->

<!--Date of completion of search report.-->

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

<!--寄出检索报告日-->

<!--Date of mailing of search report.-->

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

<!--检索地点-->

<!--Place of search - international search authority.-->

<!ELEMENT place-of-search (country)>

<!--检索报告公布信息-->

<!--search report publication information -->

<!ELEMENT search-report-publication (document-id+)>

<!--完成检索报告的审查员-->

<!--Search report examiner.-->

```
<!ELEMENT searcher (addressbook)>
<!--IPC 版本号-->
<!--ipc version-->
<!ELEMENT ipc-version (#PCDATA)>
<!--主分类-->
<!--Main classification.-->
<!ELEMENT main-classification (#PCDATA)>
<!--其他分类-->
<!--Further/secondary classification-->
<!ELEMENT further-classification (#PCDATA)>
<!--附加信息-->
<!--Additional information.-->
<!ELEMENT additional-info (#PCDATA)>
<!--引得码-->
<!--Linked indexing code.-->
<!ELEMENT linked-indexing-code-group (main-linked-indexing-code, sub-linked-indexing-code+)>
<!--主连接的引得码-->
<!--Main Linked Indexing Code.-->
<!ELEMENT main-linked-indexing-code (#PCDATA)>
<!--子连接的引得码-->
<!--sub/further linked indexing code-->
<!ELEMENT sub-linked-indexing-code (#PCDATA)>
<!--非连接的引得码-->
<!--Unlinked indexing code.-->
<!ELEMENT unlinked-indexing-code (#PCDATA)>
<!--专利相关文献-->
<!--Patent family and corresponding-docs-->
<!ELEMENT corresponding-docs (document-id | nplcit)*>
<!--国内国际分类-->
<!--Domestic or national classification.-->
<!ELEMENT   classification-national   (country,   edition?,   main-classification,   further-classification*,
(additional-info | linked-indexing-code-group | unlinked-indexing-code)*, text?)>
<!ATTLIST classification-national
     id ID #IMPLIED
>
<!--INID 66 SIPO 的国内优先权-->
<!--Document for which this is a substitute.   (INID 66)-->
<!ELEMENT substitution (relation)>
<!--INID 66 SIPO 的国内优先权声明-->
<!--SIPO domestic priority claim     (INID 66)-->
<!ELEMENT cn-domestic-priority-claim (substitution)>
<!--INID 66 SIPO 的国内优先权声明数据-->
<!--SIPO domestic priority claim data     (INID 66)-->
<!ELEMENT cn-domestic-priority-claims (cn-domestic-priority-claim+)>
```

```
<!--文献关系-->
<!--docoment relation-->
<!ELEMENT relation (parent-doc?, child-doc*)>
<!--父文献-->
<!--Describes parent document.-->
<!ELEMENT parent-doc (document-id, parent-status?, parent-grant-document?, parent-pct-document?)>
<!--父 PCT 文献-->
<!--parent pct document 文献-->
<!ELEMENT parent-pct-document (document-id)>
<!--父文献状态-->
<!--parent document status-->
<!ELEMENT parent-status (#PCDATA)>
<!--父文献的授权文献-->
<!--parent granted document-->
<!ELEMENT parent-grant-document (document-id)>
<!--子文献-->
<!--child document-->
<!ELEMENT child-doc (document-id)>
<!--INID 71  申请人数据  -->
<!--INID 71applicants information-->
<!--属性：
        cn-representative-is     代表人-->
<!--attribute:
        cn-representative-is     applicant's representative-->
<!ELEMENT cn-applicants (cn-applicant+)>
<!ATTLIST cn-applicants
    cn-representative-is CDATA #REQUIRED
>
<!-- INID 71    申请人  -->
<!--INID 71 applicant-->
<!-- 属性：
        sequence      申请人序号-->
<!-- attribute:
        sequence        applicant sequence-->
<!ELEMENT cn-applicant ( (%name_group; | addressbook+) , nationality?, residence? )>
<!ATTLIST cn-applicant
    sequence CDATA #REQUIRED
>
<!--国籍-->
<!--Country of nationality-->
<!ELEMENT nationality (country)>
<!--居住国-->
<!--Country of residence-->
<!ELEMENT residence (country)>
```

<!--INID 72　发明人数据-->

<!--INID 72 inventors information　-->

<!ELEMENT cn-inventors (cn-inventor)*>

<!--发明人-->

<!--inventor-->

<!-- 属性：

      sequence　　　发明人序号

      cn-not-to-be-published-request-by-inventor　发明人要求不公开其姓名-->

<!-- attribute:

      sequence　　　　inventor sequence

      cn-not-to-be-published-request-by-inventor not to be published request by inventor-->

<!ELEMENT cn-inventor (%name_group; | addressbook+) >

<!ATTLIST cn-inventor

    sequence CDATA #REQUIRED

    cn-not-to-be-published-request-by-inventor (yes | no) #REQUIRED

>

<!--联系人地址、名称　-->

<!--Address used for general correspondence-->

<!ELEMENT correspondence-address (customer-number? | addressbook+)>

<!--专利局赋予的代理机构代码-->

<!--Customer number for agents by office-->

<!ELEMENT customer-number (#PCDATA)>

<!--INID 74　专利代理有关信息-->

<!--INID 74 Information regarding Agents or common representatives-->

<!ELEMENT cn-agents (customer-number | cn-agent+)>

<!--代理人-->

<!--Agent or common representative -->

<!--属性：

      sequence　　序号

      rep-type　　类型　（代理人/律师/一般委托人）-->

<!--attribute:

      sequence　　　agent sequence

      rep-type　　　representative type(agent/attorney/common-representative)-->

<!ELEMENT cn-agent　(cn-agency , (%name_group; | addressbook+)) >

<!ATTLIST cn-agent

    sequence CDATA #REQUIRED

    rep-type (agent | attorney | common-representative) #REQUIRED

>

<!--专利代理机构-->

<!--agency-->

<!ELEMENT cn-agency　(%name_group; | addressbook+)>

<!--专利申请体（专利申请的主体）-->

<!--application body-->

<!--属性：

lang　　　　　　　　申请所使用的语言 - 使用 ISO639 语言代码

dtd-version　　　　　　dtd 版本号

file　　　　　　　整个申请的文件名

id　　　　　　　　该申请的唯一 id - 可以使用文件名

status　　　　　申请的状态（ 值 n 表示新申请）

country　　　　　　申请所在的国家 - 使用 WIPO ST.3 代码

file-reference-id　　　申请人或代理人对申请的编码　　-->

<!--attribute：

lang　　　　　application language

dtd-version　　　　dtd version

file　　　　application file name

id　　　　application id

status　　　　application status

country　　　　　application country-use　WIPO ST.3 code

file-reference-id　　file reference id-->

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

<!ATTLIST application-body

　　lang CDATA #REQUIRED

　　dtd-version CDATA #IMPLIED

　　file CDATA #IMPLIED

　　status CDATA #IMPLIED

　　id ID #IMPLIED

　　country CDATA #REQUIRED

　　file-reference-id CDATA #IMPLIED

>

<!--一幅图形/图像，它对于理解该申请是必须的。 -->

<!--A drawing (figure), necessary for the understanding of the invention-->

<!--属性：

id　　　　　　标号建议取值为 f01, f02 等

num　　　　　图形/图像图像编号

figure-labels 图像标签-->

<!--attribute:

id　　　　　　　figure id Recommended id = f0001, f0002, etc.

num　　　　　　　figure number

figure-labels 　figure labels-->

<!ELEMENT figure (img)>

<!ATTLIST figure

　　id ID #IMPLIED

　　num CDATA #REQUIRED

　　figure-labels CDATA #IMPLIED

>

<!--摘要中"该发明针对的问题的解决方案"部分-->

<!--The solution to the alleged problem that the invention　purports to solve.-->

<!--属性：

```
        id          标号建议取值为"abss"    -->
<!--attribute:
        id          Recommended id = 'abss'-->
<!ELEMENT abst-solution (p+)>
<!ATTLIST abst-solution
    id ID #IMPLIED
>
<!--摘要中"该发明针对的问题"部分-->
<!--The alleged problem that the invention purports to solve-->
<!--  属性:
        id      发明针对问题 id 号建议取值为"absp"    -->
<!--attribute:
        id          Recommended id = 'absp'-->
<!ELEMENT abst-problem (p+)>
<!ATTLIST abst-problem
    id ID #IMPLIED
>
<!--一个权利要求-->
<!--Defines the matter for which protection is sought
  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. -->
<!--属性:
        id              标号,建议取值为 c01, c02 等
        num             权利要求编号,建议取值为 001, 002 等
    claim-tpye   权利要求类型-->
<!--attribute:
        id              id
        num             claim number
        claim-type    claim type    -->
<!ELEMENT claim (claim-text+)>
<!ATTLIST claim
    id ID #IMPLIED
    num CDATA #REQUIRED
    claim-type CDATA #IMPLIED
>
```

```
<!--   对一个权项的引用   -->
<!--Reference to a claim-->
<!--属性：
          idref      引用的权项的标号-->
<!--attribute:
          idref      reference id-->
<!ELEMENT claim-ref (#PCDATA)>
<!ATTLIST claim-ref
    idref IDREFS #REQUIRED
>
<!--   符合 ST.25 标准的文本形式的序列表，   属性 id  建议取值为'seqt'   -->
<!--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'
-->
<!--属性:
        id      标号建议取值为'seqt'    -->
<!--attribute:
        id      Recommended id = 'seqt'-->
<!ELEMENT sequence-list-text (heading*, p+)+>
<!ATTLIST sequence-list-text
    id ID #IMPLIED
>
<!--   说明书中"工业实用性"的部分，   属性 id  建议取值为"inap"          -->
<!--   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'
-->
<!--属性:
        id      标号建议取值为"inap"    -->
<!--attribute:
        id      Recommended id = 'inap'-->
<!ELEMENT industrial-applicability (heading*, p+)+>
<!ATTLIST industrial-applicability
    id ID #IMPLIED
```

>

<!-- 说明书中"发明的应用模式或应用方法"的部分, 属性 id 建议取值为"mode" -->

<!--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'-->

<!-- 属性:

        id   标号建议取值为"mode"

        mode-num 模式编号 -->

<!--attribute:

        id   Recommended id = 'mode'

        mode-num mode number-->

<!ELEMENT mode-for-invention (heading*, p+)+>

<!ATTLIST mode-for-invention

    id ID #IMPLIED

    mode-num CDATA #IMPLIED

>

<!-- 说明书中"发明的最佳应用模式或应用方法"的部分, 属性 id 建议取值为"bmod" -->

<!-- The best mode contemplated by the applicant for carrying out the invention

claimed.

Recommended id = 'bmod'-->

<!--属性:

        id   标号建议取值为"bmod" -->

<!--attribute:

        id   Recommended id = 'bmod'-->

<!ELEMENT best-mode (heading*, p+)+>

<!ATTLIST best-mode

    id ID #IMPLIED

>

<!--说明书中"发明的详细说明"部分，通常应当包括下列主题：发明针对的技术问题,发明提出的解决方案,发明的先进性 -->

<!--Disclosure of the invention with sub-headings:

    technical problem;

    technical solution;

    advantageous effects (of the invention);

    Recommended id = 'disc' -->

<!--属性:

        id   标号建议取值为 "disc" -->

<!--attribute:

        id   Recommended id = 'disc'-->

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

<!ATTLIST disclosure

    id ID #IMPLIED

```
>
<!--发明的先进性， 属性 id 建议取值为"adve" -->
<!--  advantageous effects of the invention (PCT Rule 5.1(a)(iii)
  Recommended id = 'adve'-->
<!--属性:
      id          标号建议取值为"adve" -->
<!--attribute:
      id            Recommended id = 'adve'-->
<!ELEMENT advantageous-effects (heading*, p+)+>
<!ATTLIST advantageous-effects
     id ID #IMPLIED
>
<!--发明的技术解决方案-->
<!--
  The solution to the problem that the invention purports to solve.   -->
<!--属性：
        id          标号-->
<!--attribute：
        id          technology solution id-->
<!ELEMENT tech-solution (heading*, p+)+>
<!ATTLIST tech-solution
     id ID #IMPLIED
>
<!-- 发明针对的技术问题   -->
<!--The problem the invention purports to solve -->
<!--属性：
        id          标号-->
<!--attribute：
        id          technology problem id-->
<!ELEMENT tech-problem (heading*, p+)+>
<!ATTLIST tech-problem
     id ID #IMPLIED
>
<!--说明书中"图像的简要说明"部分， -->
<!--Brief description of the drawings
  Recommended id = 'desd'-->
<!--属性：
        id          标号建议取值为"desd" -->
<!--attribute：
        id          Recommended id = 'desd'-->
<!ELEMENT description-of-drawings (heading*, p+)+>
<!ATTLIST description-of-drawings
     id ID #IMPLIED
>
```

```
<!--说明书中"发明的背景技术"部分，属性 id 建议取值为"bart" -->
<!-- Background art, background of the invention.
    Recommended id = 'bart'-->
<!--属性：
        id      标号建议取值为"bart" -->
<!--attribute：
        id      Recommended id = 'bart'-->
<!ELEMENT background-art (heading*, p+)+>
<!ATTLIST background-art
    id ID #IMPLIED
>
<!--说明书中"发明的技术领域"部分 -->
<!--    The description shall first state the title of the invention as appearing
        in the request and shall:
        specify the technical field to which the invention relates-->
<!--属性：
        id      标号 -->
<!--attribute：
        id      technical field id-->
<!ELEMENT technical-field (heading*, p+)+>
<!ATTLIST technical-field
    id ID #IMPLIED
>
<!--保持原有格式，属性 listing-type 表示了该结构的内容是什么数据 -->
<!--    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)-->
<!--属性：
        id              标号
        xml
        listing-type    表示了该结构的内容是什么数据-->
<!--attribute：
        id              preservation id
        xml
        listing-type    -->
<!ELEMENT pre (#PCDATA)>
<!ATTLIST pre
    id ID #IMPLIED
    xml:space (preserve | default) #FIXED "preserve"
    listing-type (sequence | program-listing | other) #REQUIRED
>
<!--段落 -->
<!--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. -->

<!--属性：

id　　　标号建议取值为 p01, p02 等

num　　　建议取值为 001, 002 等-->

<!--attribute：

id　　　Recommended id　= p0001, p0002, etc.

num　　　Recommended num = 0001, 0002, etc.-->

<!ELEMENT p (#PCDATA | b | i | u | sup | sub | smallcaps | br | dl | ul | ol | figref | patcit | nplcit | crossref |

img | chemistry | maths | tables | table-external-doc | pre | bio-deposit)*>

<!ATTLIST p

　　id ID #IMPLIED

　　num CDATA #REQUIRED

>

<!--对符合 table-external DTD 外部独立表格的 XML 文件的引用-->

<!--References a stand-alone table authored with the table-external DTD.-->

<!--属性：

id　　　　　　标号

file　　　　引用的文件名

lang　　　　　使用的语言

external-type 外部表格的类型

status　　　外部表格的状态

carriers　　载体类型-->

<!--attribute：

id　　　　　　table external document id

file　　　　file name

lang　　　　　language

external-type table external document type

status　　　　table external document status

carriers　　　table external document carriers-->

<!ELEMENT table-external-doc (#PCDATA)>

<!ATTLIST table-external-doc

　　id ID #IMPLIED

　　file CDATA #REQUIRED

　　lang CDATA #IMPLIED

　　external-type (math | chemistry | program-listing | other) #IMPLIED

　　status CDATA #IMPLIED

　　carriers (internal-electronic | external-electronic | paper) #IMPLIED

>

<!--表格，可以是图像数据，也可以是根据 OASIS Exchange model 编制的表格 -->

<!--TABLES

This is image data or coded according to OASIS Exchange model with modified cell

'entry' content.

    Recommended id = tabl0001, tabl0002, etc.-->

<!--属性:

       id   标号建议取值为 tabl01, tabl02 等

       num   表格编号   -->

<!--attribute:

       id   Recommended id = tabl0001, tabl0002, etc.

       num   table number-->

<!ELEMENT tables (img | table)>

<!ATTLIST tables

    id ID #IMPLIED

    num CDATA #REQUIRED

>

<!--对一幅图形/图像的引用 -->

<!--A reference to a figure;

  e.g., "...as shown in <figref idref='f0001'>figure1</figref>..."-->

<!--属性:

       id   引用的图形/图像的标号

       num   编号 -->

<!--attribute:

       id   figure reference id

       num   figure number-->

<!ELEMENT figref (#PCDATA | b | i | u | sup | sub | smallcaps)*>

<!ATTLIST figref

    idref IDREFS #IMPLIED

    num CDATA #IMPLIED

>

<!--定义（术语）列表, 建议 id 取值为 dlis01, dlis02 等 -->

<!-- Definition list

  Recommended id = dlis0001, dlis0002, etc.-->

<!--属性:

    tsize

    compact

    id   标号建议取值为 dlis01, dlis02 等-->

<!--attribute:

    tsize

    compact

    id   Recommended id = dlis0001, dlis0002, etc.-->

<!ELEMENT dl (dt, dd)+>

<!ATTLIST dl

    tsize NMTOKEN #IMPLIED

    compact (compact) #IMPLIED

    id ID #IMPLIED

>

```
<!--被定义的术语，  属性 id 建议取值为 dtrm01, dtrm02 等   -->
<!--
    Term to be defined
    Recommended id = dtrm0001, dtrm0002, etc.   -->
<!--属性:
        id          标号建议取值为 dtrm01, dtrm02 等-->
<!--attribute:
        id              Recommended id = dtrm0001, dtrm0002, etc.-->
<!ELEMENT dt (#PCDATA | b | i | u | sup | sub | smallcaps)*>
<!ATTLIST dt
    id ID #IMPLIED
>
<!-- 无序列表  -->
<!-- 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.   -->
<!--属性:
        id              标号建议取值为 ulis01, ulis02 等
        list-style    列–表类型可￣以为空，缺省为'bullets'
        compact          -->
<!--attribute：
        id              Recommended id = ulis0001, ulis0002, etc.
        list-style    list-style may be empty for lists with no bullet or other symbol default
                         list-style is 'bullets'
        compact          -->
<!ELEMENT ul (li+)>
<!ATTLIST ul
    id ID #IMPLIED
    list-style (bullet | dash | none) "bullet"
    compact (compact) #IMPLIED
>
<!-- 列表表项，  属性 id 建议取值为 list01, list02 等   -->
<!--List item
    Recommended id = list0001, list0002, etc.          -->
<!--属性:
        id              标号建议取值为 list01, list02 等-->
<!--attribute:
        id              Recommended id = list0001, list0002, etc.-->
<!ELEMENT li (#PCDATA | b | i | u | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref |
figref | img | dl | ul | ol | chemistry | maths)*>
<!ATTLIST li
    id ID #IMPLIED
>
```

<!--数学公式 可以使用图像数据表示，也可以使用根据 mathml 的 XML 结构数据 -->
<!--

  MATHEMATICS

  This is image data or coded according to mathml, version 2

  Recommended id = math0001, math0002, etc.   -->
<!-- 属性:

        id   标号建议取值为 math01, math02 等

        num   数学公式编号 -->
<!--attribute:

        id   Recommended id = math0001, math0002, etc.

        num   mathematics number-->
<!ELEMENT maths (img | (math, img?))>
<!ATTLIST maths

    id ID #IMPLIED

    num CDATA #REQUIRED

>

<!--化学公式、方程式、结构式等,可以作为图像数据处理,也可以使用外部独立化学式(使用 chemML、CML 等 XML 结构）-->
<!-- 属性 id 建议取值为 chem01, chem02 等   -->
<!--   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

-->
<!--属性:

        id   标号建议取值为 chem01, chem02 等

        num   化学式编号-->
<!--attribute:

        id   Recommended id = chem0001, chem0002, etc

        num   chemistry number-->
<!ELEMENT chemistry (img | (chem, img?))>
<!ATTLIST chemistry

    id ID #IMPLIED

    num CDATA #REQUIRED

>
<!--外部化学式 xml 文件 ， 可以使用 CML 等-->
<!--   This is a pointer to an external xml file for chemical markup - to be determined.

  For EPO probably CML; http://www.xml-cml.org/-->
<!--属性：

        id   标记

        file   文件名称

        chem-type   类型-->
<!--attribute:

```
        id              id
        file            file
        chem-type       type
-->
<!ELEMENT chem EMPTY>
<!ATTLIST chem
    id ID #IMPLIED
    file CDATA #REQUIRED
    chem-type CDATA #IMPLIED
>
```

<!--有序列表: -->

<!-- Ordered Lists: -->

```
<!--属性:
        id              标号
        compact
        'ol-style' -  建议值及含义如下:
                1    阿拉伯数字        1, 2, 3, ...
                a    小写字母          a, b, c, ...
                A    大写字母          A, B, C, ...
                i    小写罗马字母      i, ii, iii, ...
                I    大写罗马字母      I, II, III, ...-->
```

```
<!--attribute:
        id              有序列表 id 号
        compact
        'ol-style'      Recommded use:
                1    arablic 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
>
```

<!-- 图像数据,图像数据可以是绘画、图形或者复杂的元素（数学式、表格、化学式）等-->

```
<!--
   Image data
   Image is used for any kind of image: art work, figures,    complex work units
   (math, tables, chemistry), etc.-->
<!-- 属性:
        id                      标号建议取值  i01, i02 等
        he, wi                  建议取值  "11" - 以毫米为单位 - 高，宽;
```

file	文件名和位置;
alt	图像不显示时的替代文字
img-content	缺省为 drawing;
img-format	图像格式，通常为 tiff、st33 或 st35
orientation	图像的方向 (portrait | landscape). 缺省为 portrait
inline = (yes | no).	图像是否为行内图. 缺省为 no -->

<!--attribute:

id   Recommended i0001, i0002, etc.

he, wi   Recommended "11" - milimeters - height, width;

file   file name,location;

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 NMTOKEN #REQUIRED
    wi NMTOKEN #REQUIRED
    file CDATA #REQUIRED
    alt CDATA #IMPLIED
    img-content (drawing \| photograph \| character \| dna \| undefined) "drawing"
    img-format (jpg \| tif \| st33 \| st35) #REQUIRED
    orientation (portrait \| landscape) "portrait"
    inline (yes \| no) "no"
>
<!--对任何具有 id 属性的其他元素的引用   -->
<!--Cross reference to any other element with an identifier (id)-->
<!--属性：
        idref   被引用的 id 号-->
<!--attribute :
        idref   reference id-->
<!ELEMENT crossref (#PCDATA)>
<!ATTLIST crossref
    idref CDATA #REQUIRED
>
<!--   标题; 建议 id 取值为 h01, h02 等   ,   属性 level 表示 标题的层次   -->
<!--Heading text; Recommended id = h0001, h0002, etc.-->
<!--属性:

```
            id          建议取值为 h01, h02 等
            level     表示 标题的层次   -->
<!--attribute:
            id            Recommended id = h0001, h0002, etc.
            level    heading level-->
<!ELEMENT heading (#PCDATA | b | i | u | sup | sub | smallcaps)*>
<!ATTLIST heading
      level (1 | 2 | 3) #IMPLIED
      id ID #IMPLIED
>
<!--  文档页，主要使用在所有或者大部分的数据都是以图像格式或是诸如 PDF 等格式存储的情况
下。
      "img"也可以是整个文档页，如附图。-->
<!-- 建议属性 id 取值为 docp01, docp02 等。    -->
<!--
   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.-->
<!-- 属性:
            id                    建议取值  docp01, docp02 等。
            he, wi               高，宽;
            type                 文档类型（jpg,pdf,tif）
            alt                  图像不显示时的替代文字
            pp                    页码范围;
            ppf                  起始页
            ppl                  结束页
            file                 文件名
            ocr
            color                颜色
            orientation          图像的方向 (portrait | landscape).   缺省为 portrait -->
<!--attribute:
            id                    Recommended id = docp0001, docp0002, etc.
            he, wi               height width
            type                  document type(jpg,pdf,tif）
            alt                  alternate text if image not shown
            pp                     page range;
```

```
        ppf                          first page
        ppl                          last page
        file                         file name
        ocr
        color                        color
        orientation                  orientation of the image (portrait | landscape).
                                        Default is portrait-->
<!ELEMENT doc-page EMPTY>
<!ATTLIST doc-page
    id ID #IMPLIED
    he NMTOKEN #REQUIRED
    wi NMTOKEN #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"
>
<!-- 附图， 建议标号 id 取值为'draw' -->
<!--
    Drawings shall be required when they are necessary for the understanding of the
    invention.
    Recommended id = 'draw'-->
<!ELEMENT drawings (doc-page+ | figure+)>
<!ATTLIST drawings
    %body_sections;
>
<!-- 摘要附图 -->
<!-- abstract drawing-->
<!ELEMENT cn-abstract-drawing (doc-page | figure)>
<!ATTLIST cn-abstract-drawing
    %body_sections;
>
<!-- INID 57 摘要， 建议标号 id 取值为'abst'  -->
<!-- INID 57 A concise summary of the disclosure.
    Recommended id = 'abst' or 'abst0001' for multiple abstracts-->
<!ELEMENT abstract (doc-page+ | (abst-problem, abst-solution) | p+)>
<!ATTLIST abstract
    %body_sections;
>
```

<!--权利要求，建议 id 取值为'claim' -->

<!--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

%body_sections;

>

<!-- 一个权利要求项的文本 -->

<!--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)*>

<!--一个段落中的换行 -->

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

<!ELEMENT br EMPTY>

<!-- 说明书， 属性 id 建议取值为'desc' -->

<!--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 | industrial-applicability | sequence-list-text | (heading*, p+)+)+))>

<!ATTLIST description

%body_sections;

>

<!--定义的内容（定义列表中使用） -->

<!--Definition description-->

<!ELEMENT dd (#PCDATA | b | i | u | sup | sub | smallcaps | br | pre | patcit | nplcit | bio-deposit | crossref | figref | img | ul | ol | chemistry | maths)*>

<!--微生物样本保藏有关信息 -->

<!-- (INID 83, ST.32:B830)

Recommended id = biod0001, biod0002, etc.-->

<!ELEMENT bio-deposit (depositary, bio-accno, date?, term?, dtext?)>

<!ATTLIST bio-deposit

id ID #IMPLIED

num CDATA #REQUIRED

url CDATA #IMPLIED

dnum CDATA #IMPLIED

>

<!--微生物样本保藏地点的信息-->

<!-- Information regarding the facility storing the biological deposit.-->

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

<!--微生物样本保藏编号-->

<!--   Biological accession number:

   The identification assigned to the biological material by the depository-->

<!ELEMENT bio-accno (#PCDATA)>

<!--Identifies the period of time during which the depository must be able to furnish

   samples of the biological material.-->

<!--微生物样本保藏期限   -->

<!ELEMENT term (#PCDATA)>

<!--和本申请有关的其他国内申请 -->

<!--   References to other legally or procedurally related domestic patent documents.-->

<!ELEMENT cn-related-documents (division?, cn-domestic-priority-claims?)>

<!--INID 73 被授予专利权人/专利权受让人信息.-->

<!--INID 73 Grantee/assignee information.-->

<!ELEMENT assignees (assignee+)>

<!--INID 73 Grantee/assignee information.-->

<!--INID 73 Grantee/assignee information.-->

<!ELEMENT assignee (%name_group; | addressbook)>