(2012/02)

Enhancements to Classification Searching and Coverage in INPADOCDB and INPAFAMDB

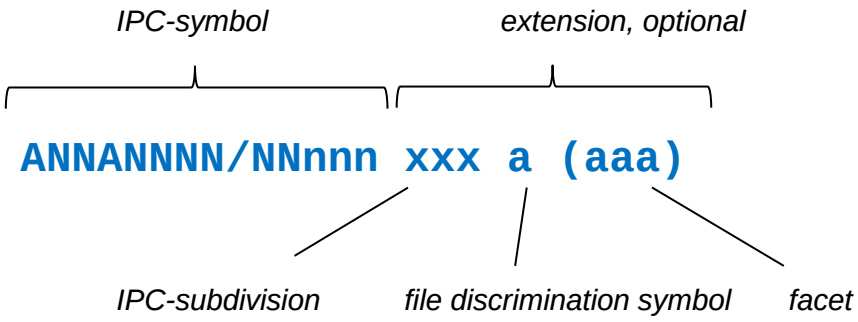
Content

1 Japanese Patent Classifications (F-Terms, FI-Terms) available

The Japanese Patent Office (JPO) applies two completely independent national classification systems to classify Japanese patents and utility models: the IPC-based FI classification and the F-term classification. At the end of January 2012 the Japanese patent classifications became available in INPADOC on STN (INPADOCDB, INPAFAMDB), providing an extremely useful tool to access Japanese patent literature. The Japanese patent classifications are available for 15 million Japanese patents and utility models back to 1965.

The File Index Codes (FI Codes)

The file index classification is based on version 4 of the International Patent Classification and is applied to all Japanese patents and utility models. It was developed by the JPO to subdivide the IPC symbols into narrower technical fields for more efficient retrieval. The file index classification system comprises more than 190.000 codes compared to 70.000 of the IPC. FI-terms consist of an IPC-symbol and further subdivisions called IPC-subdivision symbols. Optionally, a file discrimination symbol can be added and FI specific facets may be available for defined ranges of FI codes. FI codes consist of an IPC symbol plus optional extensions and have this format:



FI codes can be searched and displayed in the field FCL (=JPC). They are included in the predefined display formats IND, STD, ALL, MAX, BRIEF and also in the family display formats FFAM, MFAM, IFAM.

FI code searches can be run with or without extensions, and also at IPC-main group or subclass level. Facets may be combined with an FI code using the (T)-operator, see search example below.

How to search for FI codes

```
=> S A61P0043-00 111/FCL
=> S G01N0033-15 Z/FCL
=> S A01G0031-00 601 A/FCL
=> S A01G0031-00/FCL
=> S A01G0031/FCL
=> S A01G/FCL
```

Search example: facets may be combined with an FI-code using the (T)-operator

```
=> FIL INPAFAMDB

=> S (G01N0031-00(T)GAA)/FCL
L1          377 (G01N0031-00(T)GAA)/FCL
```

```
=> S (G01N0031-00 N(T)GAA)/FCL
L2          41 (G01N0031-00 N(T)GAA)/FC

=> D BRIEF

L2    ANSWER 1 OF 41      INPAFAMDB COPYRIGHT 2012 EPO/FIZ KA on STN

AN    27133752 INPAFAMDB
TI    METHOD FOR EXAMINING CLEANLINESS DEGREE OF LIQUID CONTACT PART OF
      AUTOMATIC SOFT DRINK VENDING MACHINE.
INS   SADO NAOHIKO
PAS   FUJI ELECTRIC CO LTD
PI    JP 63030763          A  19880209
AI    JP 1986-174089       A  19860724
PRAI  JP 1986-174089       A  19860724  (JPA, Y)
IPCR  G01N0031-00    [I,A]; G01N0030-02    [I,A]; G01N0030-46    [I,A];
      G01N0030-64    [I,A]; G01N0030-88    [I,A]; G07F0013-00    [I,A]
FCL   G01N0030-02 B; G01N0030-02 E; G01N0030-46 A; G01N0030-64 A; G01N0030-88
      H; G01N0031-00 N; G01N0031-00 N (GAA); G07F0013-00 B
FTRM  2G042/AA01; 2G042/BB16; 2G042/CB06; 2G042/EA01; 2G042/EA02; 2G042/FA20;
      2G042/FB05; 3E047/AA01; 3E047/AA02; 3E047/BA01; 3E047/BA02; 3E047/BA04;
      3E047/DA01; 3E047/DB03; 3E047/DC08; 3E047/EA10; 3E047/GA06
AB    (JP 63030763 A)
      PURPOSE:To rapidly examine the cleanliness degree of a liquid contract
      part, by a method wherein tap water is made to flow to the liquid contact
      part of the stirrer in a cup type automatic soft drink vending machine
      and the phosphate ion in tap water is analyzed. CONSTITUTION:An instant
      coffee powder, a juice powder, cream and sugar etc., are received in a
      cup 21 and hot water or water is injected in the cup 21 from an emitting
      port 22 and a stirring blade 26 is lowered to prepare coffee or juice
      under stirring and subsequently drawn up. After the cup 21 is taken out,
      tap water is made to flow to the liquid contact part of the stirring
      blade 26 and the phosphate ion present in the tap water is analyzed by
      ion chromatography. Since the phosphate ion is contained in a raw
      material of soft drink but not contained in tap water at this time, the
      soft drink adhered to the stirring blade 26 can be detected by analyzing
      the phosphate ion. Therefore, the cleanliness degree of the liquid
      contact part can be examined rapidly and easily.

 1 priority, 1 application, 1 publication
```

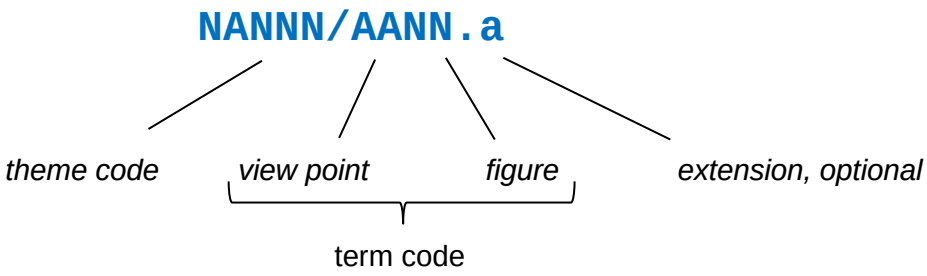
G01N0031-00: investigating or analysing non-biological material by the use of chemical means
N (file discrimination symbol): related to phosphor
GAA (facet): detection of inorganic substances

The FI-code thesaurus in the Derwent World Patents Index provides a very good support to identify relevant codes. The definition of the codes and the extensions could also be found at:
http://www5.ipdl.inpit.go.jp/pmgs1/pmgs1/pmgs_E.

The File Forming Terms (F-terms)

The F-term classification system was introduced by JPO in 1987 for in-depth classification of a subset of FI-classified documents. F-terms are used to classify multiple technical aspects of an invention, including aspects from the disclosure. While all technical fields of the IPC are divided into 2.800 themes, 1.800 of

these themes are subdivided into over 350.000 terms. F-terms comprise theme codes and term codes and have this format:



F-terms are searched and displayed in the field FTRM (=FTERM, FTCLA, JPCLA). They are included in the predefined display formats IND, STD, ALL, MAX, BRIEF and also in the family display formats FFAM, MFAM, IFAM.

How to search for F-terms

```
=> S 4F100/DC11.A/FTRM
=> S 4F100/DC11/FTRM
=> S 4F100/FTRM
=> S DC11/FTRM
```

Search example: Searching theme codes and term codes with (T)-proximity

theme codes can be linked with multiple term codes using the (T)-proximity operator

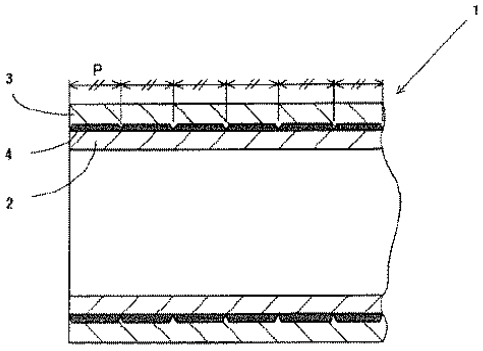
```
=> FIL INPAFAMDB

=> S (4F100(T)(DC11 or DC12 or DC13))/FTRM
L1          8938 (4F100(T)(DC11 OR DC12 OR DC13) )/FTRM

=> D BRIEFG

L1    ANSWER 100 OF 8938       INPAFAMDB COPYRIGHT 2

AN    32589326 INPAFAMDB
TI    COMPOSITE TUBE FOR PIPING.
INS   NISHIKATA NOBUHIRO; NIBU HITOSHI; KUGO TSUYOSH
PAS   HITACHI METALS LTD
PI    JP 2006077970         A  20060323
AI    JP 2004-324465        A  20041109
PRAI  JP 2004-233034        A  20040810  (JPA, Y)
      JP 2004-324465        A  20041109  (JPA, Y)
IPCI  F16L0009-12    [I,A]; B32B0001-08    [I,A]; B3
FCL   B32B0001-08; B32B0003-30; F16L0009-12
FTRM  3H111/BA03; 3H111/BA15; 3H111/CB04; 3H111/CB10; 3H111/CB14; 3H111/CB24;
      3H111/CC01; 3H111/DA26; 4F100/AB04.B; 4F100/AK01.A; 4F100/AK01.C;
      4F100/AK03.A; 4F100/AK03.C; 4F100/AK05.A; 4F100/AK05.C; 4F100/BA03;
      4F100/BA07; 4F100/BA10.A; 4F100/BA10.C; 4F100/DA11; 4F100/DC11.B;
      4F100/DC13.B; 4F100/DC16.B; 4F100/JB16.A; 4F100/JB16.C; 4F100/JK01.B;
      4F100/JK03.B; 4F100/JK05
AB     (JP 2006077970 A)
       PROBLEM TO BE SOLVED: To provide a composite tube for piping capable of
       preventing cracking even in occurring of large displacement, and being
       manufactured at a low cost. oooooo
```



2 Enhancements to the US National Patent Classification

The coverage of the US national patent classification in INPADOC has been extended to include the current US classification codes for 9,3 million US applications. These codes are available for the complete backfile of US patent documents back to 1836, complementing the set of issued US classification codes.

The current US classification codes now populate the field NCL which was previously filled with the issued US classification codes. The latter codes have been shifted to the field INCL. Both fields, NCL and INCL, have a thesaurus attached.

Search and select fields for US classification codes

NCL	current US classification
NCLM	current US classification, main
NCLS	current US classification, secondary
INCL	issued US classification
INCLM	issued US classification, main
INCLS	issued US classification, secondary

The custom display formats NCL and INCL are included in the predefined display formats IND, STD, ALL, MAX, BRIEF and also in the family display formats FFAM, MFAM, IFAM.

The US classification codes have a specific 9-digit format: the first three digits represent the class and the following six digits the sublass. Searches can be run at class or subclass level.

How to search for current US classification codes

```
=> S 455/411.000/NCL
=> S 455411000/NCL
=> S 455/NCL
=> S 455/411.000/NCLM
=> S 455411000/NCLS
```

The European Patent Office provides the current and issued US patent classification codes in two different data streams. When a new US patent document becomes available in INPADOC, the issued codes are provided in the field INCL. Later revisions of the codes enter the field NCL. For more comprehensive US classification searching it is recommended to use both fields, NCL and INCL.

Search Example: Searching with US patent classification codes

Which US patents of BASF use enzymes for optical resolution processes?

```
=> FIL INPAFAMDB

=> E RESOLUTION+KT/NCL
E#     FILE            FREQUENCY  T
--     ----            ---------  -
E1     INPAFAMDB             0   -->  resolution/NCL
E2     INPAFAMDB             0    KT   Address resolution (e.g., ARP, NHRP)/NCL
E3     INPAFAMDB             0    KT   Contention resolution for output/NCL
E4     INPAFAMDB             0    KT   Controller automatically senses monitor
                                       resolution/NCL
E5     INPAFAMDB             0    KT   Defined resolution (e.g.EGA,VGA)(345/132)/NCL
E6     INPAFAMDB             0    KT   Detection transients attacks for
```

use the NCL thesaurus to identify appropriate US classification codes for “optical resolution”; display a list of all code titles with “resolution” using the relationship code **+KT**

```
                                        time/frequency resolution switching
                                        (EPO)/NCL
E7      INPAFAMDB           0    KT     Including priority resolution/NCL
E8      INPAFAMDB           0    KT     Increasing converter resolution (e.g.,
                                        dithering)/NCL
E9      INPAFAMDB           0    KT     Involving spatial subsampling
                                        upsampling; Alteration picture size
                                        resolution (EPO)/NCL
E10     INPAFAMDB           0    KT     MONITORING CONFLICT RESOLUTION/NCL
E11     INPAFAMDB           0    KT     Motion correction plus resolution
                                        enhancement/NCL
E12     INPAFAMDB           0    KT     Physical resolution/NCL
E13     INPAFAMDB           0    KT     Process specially adapted improve
                                        resolution mask (EPO)/NCL
E14     INPAFAMDB           0    KT     Process specially adapted improve the
                                        resolution the mask (EPO)/NCL
E15     INPAFAMDB           0    KT     Racemization optical resolution/NCL
E16     INPAFAMDB           0    KT     Racemization per se resolution optical
                                        isomers/NCL
E17     INPAFAMDB           0    KT     Racemization, resolution, inversion
                                        configuration processes for optically
                                        active compounds/NCL
E18     INPAFAMDB           0    KT     Raising lowering the image resolution
                                        (e.g., subpixel accuracy)/NCL
E19     INPAFAMDB           0    KT     Resolution feed into more than two
                                        different components/NCL
E20     INPAFAMDB           0    KT     Resolution optical isomers purification
                                        organic compounds or composition
                                        containing same/NCL
E21     INPAFAMDB           0    KT     Resolution per se optical isomers/NCL
E22     INPAFAMDB           0    KT     Size, resolution, scale control/NCL
E23     INPAFAMDB           0    KT     converting spatial resolution/NCL
E24     INPAFAMDB           0    KT     different resolution/NCL
E25     INPAFAMDB           0    KT     for improving resolution/NCL
E26     INPAFAMDB           0    KT     i.e., resolution/NCL
E27     INPAFAMDB           0    KT     increased resolution, i.e., higher than
                                        half a chip (EPO)/NCL
E28     INPAFAMDB           0    KT     priority resolution/NCL
E29     INPAFAMDB           0    KT     resolution conversion/NCL
E30     INPAFAMDB           0    KT     resolution quality/NCL
E31     INPAFAMDB           0    KT     spatial temporal resolution/NCL
********** END **********
```

look up the US classification code with the relationship code **+CODE**

```
=> E E20+CODE
E#      FILE            FREQUENCY  TERM
--      ----            ---------  ----
E1      INPAFAMDB            0   -->  Resolution optical isomers purification
                                      organic compounds or composition
                                      containing same/NCL
E2      INPAFAMDB          634        435280000/NCL
********** END **********
```

display the complete hierarchy of the relevant classification code with **+ALL**

```
=> E 435280000+ALL/NCL
E#      FILE            FREQUENCY  TERM
--      ----            ---------  ----
E1      INPAFAMDB       127295   BT2  435/NCL
```

```
                                   DEF  CHEMISTRY: MOLECULAR BIOLOGY AND
                                        MICROBIOLOGY
E2      INPAFAMDB          812      BT1  435262000/NCL
                                    DEF  PROCESS OF UTILIZING AN ENZYME OR
                                         MICRO-ORGANISM TO DESTROY HAZARDOUS OR
                                         TOXIC WASTE, LIBERATE, SEPARATE, OR
                                         PURIFY A PREEXISTING COMPOUND OR
                                         COMPOSITION THEREFORE; CLEANING OBJECTS
                                         OR TEXTILES
E3      INPAFAMDB          634       --> 435280000/NCL
                                     DEF  Resolution of optical isomers or
                                          purification of organic compounds or
                                          composition containing same
********** END **********
```

=> S BASF/PASS AND 435280000/NCL,INCL

L1 24 BASF/PASS AND 435280000/NCL,INCL

use /**NCL** and /**INCL** for searching US classification codes

=> D BRIEF 2

```
L1    ANSWER 2 OF 24      INPAFAMDB COPYRIGHT 2012 EPO/FIZ KA on STN
AN    35934783 INPAFAMDB EDF 20070920 EWF 200738 UPFB 20110825 UWF 201134
TI    Process for the preparation of optically active 5-substituted
      2-oxazolidinones from racemic epoxides and cyanate employing a halohydrin
      dehalogenase.
INS   HAUER BERNHARD, DE; MAJERIC ELENKOV MAJA, HR; JANSSEN DIRK BAREND, NL
    - BERNHARD HAUER, DE; MAJA MAJERIC ELENKOV, DE; BAREND JANSSEN DIRK, DE
    - ELENKOV MAJA MAJERIC, HR
PAS   BASF SE, DE
    - BASF SE
    - BASF AG, DE; HAUER BERNHARD, DE
PI    AT 437954T           T  20090815
      CN 101437955         A  20090520
      DE 602007001794      D1 20090910
      EP 1994162           A1 20081126
      EP 1994162           B1 20090729
      ES 2328183           T3 20091110
      JP 2009528039        A  20090806
      US 20090042261       A1 20090212
      US 7993904           B2 20110809
      WO 2007099107        A1 20070907
oooooooo
IPCI  C12P0017-14  [I,A]; C12P0041-00  [I,A]; C07D0263-22  [I,A]; C12N0015-09  [N,A]
EPC   C12P0017-14; C12P0041-00D
NCL   NCLM  435/120.000
INCL  INCLM 435/120.000; 435/280.000
      INCLS 435/120.000
AB    (US 20090042261 A1)
      A process for the production of an optically enriched oxazolidinone of
      the formula (2a) or (2b), by reacting an epoxide of the formula (1) with
      cyanate in the presence of halo-hydrin dehalogenase.

 3 priorities, 8 applications, 10 publications
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3 New Legal Status Codes for German Patents and Utility Models

Since June 2011 the German Patent and Trademark Office applies a new set of more than 70 legal status codes to patents and utility models. The enhanced set of codes has considerable advantages:

- legal status information is now available for utility models
- coverage of legal status codes has been extended to new events, e.g. DER006 – appeal filed
- legal effect dates are now available for selected events, e.g. for DER120 – application withdrawn

The European Patent Office published a concordance list of old and new codes at:
http://www.epo.org/service-support/updates/2011/20110811b.html

For legal status searching it is recommended to use the new and corresponding old codes in one search strategy, e.g. DER120 – new code "application withdrawn"
DE8130 – old code "application withdrawn"

Search example for using old and new German legal status codes in one search query

Search for DE-published applications of Henkel which have been withdrawn, using the legal status codes DER120 (new) and DE8130 (old)

```
=> FIL INPADOCDB

=> S HENKEL/PASS AND (DER120 OR DE8130)/LSC
L24         685 HENKEL/PASS AND (DER120 OR DE8130)/LSC

=> D BIB HIT

L24   ANSWER 1 OF 685     INPADOCDB COPYRIGHT 2012 EPO/FIZ KA on STN

AN    59950834 INPADOCDB ED 20091217 EW 200951 UP 20100902 UW 201035
FN    38700789
TI    Toilet bowl comprises a first water soluble base body with surfactant,
      perfume and/or a dye and an outer layer, which partially covers the base body.
      Beschichtete Toilettensteine.
IN    HOLDERBAUM, THOMAS; LUEKEN, MATTHIAS; SUNDER, MATTHIAS; BUTTER-JENTSCH, RALPH
INS   HOLDERBAUM THOMAS, DE; LUEKEN MATTHIAS, DE; SUNDER MATTHIAS, DE;.......
PA    HENKEL AG & CO. KGAA
PAS   HENKEL AG & CO KGAA, DE
PI    DE 102008028138      A1 20091217
PIT   DEA1 DOC. LAID OPEN (FIRST PUBLICATION)
STA   PRE-GRANT PUBLICATION
AI    DE 2008-102008028138 A  20080613
AIT   DEA Patent application
PRAI  DE 2008-102008028138 A  20080613  (DEA, 20091217, Y)
PRAIT DEA Patent application
REC   2. THERE ARE 2 CITED REFERENCES (0 PATENT, 2 NON PATENT) AVAILABLE FOR
      THIS RECORD. ALL CITATIONS ARE AVAILABLE IN THE RE FORMAT.
PA    HENKEL AG & CO. KGAA
PAS   HENKEL AG & CO KGAA, DE

LEGAL STATUS  HIT
AN    59950834 INPADOCDB
20100318 DE8130   - WITHDRAWAL
                  NIF Lapses, Expiries, Withdrawals, Refusals
                      .....................................20100319
```

DER001 REFUSAL DECISION IN PRELIMINARY PROCEEDINGS
DER002 REFUSAL DECISION IN EXAMINATION/REGISTRATION PROCEEDINGS
DER003 REFUSAL DECISION NOW FINAL
DER005 APPLICATION DEEMED WITHDRAWN DUE TO FAILURE TO REQUEST EXAMINATION
DER006 APPEAL FILED
DER007 DECISION RECTIFIED ON APPEAL
DER008 CASE PENDING AT FEDERAL PATENTS COURT (FPC)
DER010 APPEAL PROCEEDINGS SETTLED BY WITHDRAWAL OF APPEAL(S) OR IN SOME OTHER WAY
DER012 REQUEST FOR EXAMINATION VALIDLY FILED
DER016 RESPONSE TO EXAMINATION COMMUNICATION
DER018 GRANT DECISION BY EXAMINATION SECTION/EXAMINING DIVISION
DER019 GRANT DECISION BY FPC
DER020 PATENT GRANT NOW FINAL
DER021 SEARCH REQUEST VALIDLY FILED
DER026 OPPOSITION FILED AGAINST PATENT
DER039 REVOCATION ACTION FILED
DER043 PATENT'S REVOCATION IN PART NOW FINAL
DER046 LIMITATION REQUEST VALIDLY FILED
DER059 REVOCATION REQUEST WITHDRAWN
DER064 EPO'S REVOCATION DECISION NOW FINAL
DER065 REQUEST FOR GRANT OF SUPPLEMENTARY PROTECTION CERTIFICATE VALIDLY FILED
DER071 EXPIRY OF RIGHT
DER073 RE-ESTABLISHMENT REQUESTED
DER074 RE-ESTABLISHMENT ALLOWED
DER079 AMENDMENT OF IPC MAIN CLASS
DER081 CHANGE OF APPLICANT/PATENTEE
DER082 CHANGE OF REPRESENTATIVE
DER083 AMENDMENT OF/ADDITIONS TO INVENTOR(S)
DER084 DECLARATION OF WILLINGNESS TO LICENSE
DER085 WILLINGNESS TO LICENSE WITHDRAWN
DER086 NON-BINDING DECLARATION OF LICENSING INTEREST
DER087 NON-BINDING LICENSING INTEREST WITHDRAWN
DER088 EXCLUSIVE LICENCE REGISTERED
DER096 DPMA PUBLICATION OF MENTIONED EP PATENT GRANT
DER097 NO OPPOSITION FILED AGAINST GRANTED PATENT, OR EPO OPPOSITION PROCEEDINGS CONCLUDED WITHOUT DECISION
DER102 EPO DECISION MAINTAINING PATENT IN AMENDED FORM NOW FINAL
DER108 DE NO LONGER DESIGNATED STATE
DER118 APPLICATION DEEMED WITHDRAWN DUE TO CLAIM FOR DOMESTIC PRIORITY
DER119 APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE
DER120 APPLICATION WITHDRAWN OR IP RIGHT ABANDONED
DER123 APPLICATION DEEMED WITHDRAWN DUE TO NON-PAYMENT OF FILING FEE
DER125 REQUEST FOR FURTHER PROCESSING FILED
DER131 DECLARATION OF DIVISION DEEMED NOT MADE
DER138 DERIVATION OF UTILITY MODEL
DER140 APPLICATION OF ADDITION NOW INDEPENDENT
DER142 LAPSE OF PATENT OF ADDITION DUE TO NON-PAYMENT OF RENEWAL FEES FOR PARENT PATENT
DER150 TERM OF PROTECTION EXTENDED TO 6 YEARS
DER151 TERM OF PROTECTION EXTENDED TO 8 YEARS
DER152 TERM OF PROTECTION EXTENDED TO 10 YEAR
DER153 EXTENSION OF TERM OF PROTECTION RESCINDED
DER156 LAPSE OF IP RIGHT AFTER 3 YEARS
DER157 LAPSE OF IP RIGHT AFTER 6 YEARS

DER158 LAPSE OF IP RIGHT AFTER 8 YEARS
DER163 IDENTIFIED PUBLICATIONS NOTIFIED
DER165 REQUEST FOR CANCELLATION OR RULING FILED
DER167 CANCELLATION PROCEEDINGS CONCLUDED WITHOUT DECISION ON MERITS
DER168 UTILITY MODEL CANCELED
DER171 DIVIDED OUT TO:
DER172 DIVIDED OUT OF (SUPPLEMENT):
DER173 REQUEST FOR CANCELLATION OF UTILITY MODEL WITHDRAWN
DER176 THE APPLICATION CAUSED THE SUSPENSE OF APPLICATION NO:
DER197 NEW SUBSEQUENTLY FILED CLAIMS ON IP DOSSIER
DER206 AMENDED PATENT SPECIFICATION
DER207 UTILITY MODEL SPECIFICATION
DER210 TRANSLATION OF EP CLAIMS
DER225 PUBLICATION OF MENTION OF WO PUBLICATION
DER230 REQUEST FOR EARLY PUBLICATION
DER231 PATENT ABANDONED FOR DE
DER276 THE APPLICATION CAUSED THE SUSPENSE OF APPLICATION NO:
DER420 REQUEST FOR TERM EXTENSIONS (CHILDREN'S MEDICINES)
DER422 DECISION ON REQUEST FOR TERM EXTENSION (CHILDREN'S MEDICINES) NOW FINAL
DER424 NUMBER OF THE APPLICATION DELETED
DER434 REQUEST FOR TERM CORRECTION WITHDRAWN

4 Legal Status Data from Cuba and Argentina available

The European Patent Office extended the legal status coverage of Latin American countries to Cuba and Argentina.

Legal status coverage for Argentine patent publications starts in 2004 including five legal status codes. PCT-entry into national phase data are currently not available for Argentina.

Legal Status Codes available for Argentina

ARFA ABANDONMENT OR WITHDRAWAL
ARFB SUSPENSION OF GRANTING PROCEDURE
ARFC REFUSAL
ARFD APPLICATION DECLARED VOID OR LAPSED, E.G DUE TO NON-PAYMENT OF FEE
ARFG GRANT; REGISTRATION

In June 2011 legal status information for Cuban patent publications was loaded into INPADOC including three legal status events. The coverage goes back to 2009. PCT-entry into national phase data are currently not available for Cuba.

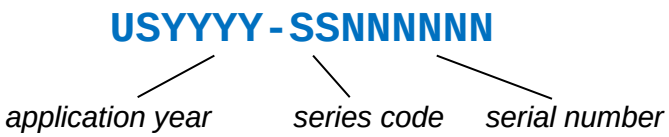
Legal Status Codes available for Cuba

CUFD LAPSE (FOR NOT PAYING FEES)
CUFG GRANT OF PATENT
CUMK EXPIRY

5 New Numbering Format for US-Application Numbers

With the start of the series 13, the EPO enhanced the numbering format for US application numbers and now provides these numbers with series code. This new numbering format includes filing year and series code and makes the new US-application numbers unique.

The new US-application number format in INPADOC is:



The new format is used for different types of US-application numbers:

- US patent applications from series 13
- US provisionals from series 61 and filing date as of 17th December 2010
- US design applications from series 29 and filing date as of 17th December 2010

Example of recent US published application with application number in new numbering format

```
=> FIL INPADOCDB

=> D BIB

L2    ANSWER 1 OF 3345    INPADOCDB COPYRIGHT 2012 EPO/FIZ KA on STN

AN    68011500 INPADOCDB ED 20120112 EW 201202 UP 20120112 UW 201202
FN    8587923 UPFC 20091001
TI    Nucleotide Sequences Mediating Male Fertility and Method of Using Same.
TL    English
IN    ALBERTSEN MARC C.; FOX TIM; HUFFMAN GARY; TRIMNELL MARY
INS   ALBERTSEN MARC C, US; FOX TIM, US; HUFFMAN GARY, US; TRIMNELL MARY, US
PA    PIONEER HI-BRED INTERNATIONAL, INC.
PAS   PIONEER HI BRED INT, US
DT    Patent
PI    US 20120005792       A1 20120105  English
PIT   USA1 FIRST PUBLISHED PATENT APPLICATION [FROM 2001 ONWARDS]
DAV   20120105  unexamined-printed-without-grant
STA   PRE-GRANT PUBLICATION
AI    US 2011-13189631     A  20110725
AIT   USA Patent application
PRAI  US 2011-13189631     A  20110725  (USA, 20120112, N)
      US 2010-966606       A  20101213  (USA1, 20110519, N)
      US 2009-400578       A  20090309  (USA1, 20090730, N)
      US 2006-471202       A  20060620  (USA3, 20081016, N)
      US 2005-166609       A  20050624  (USA2, 20070505, Y)
      US 2003-412000       A  20030411  (USA2, 20080619, Y)
      US 2000-670153       A  20000926  (USAB, 20070628, Y)
```

6 New Citation Category introduced from European Patent Office

All search reports produced by the European Patent Office have relevancy indicators assigned to each patent citation. One letter symbols represent the type of citation category which is searchable in INPADOC on STN using the search field /CAT.

So far, the category “X” has been assigned to citations of major relevance. From now on, patent examiners can internally distinguish between two types of X documents:

- X: particularly relevant if taken alone, prejudicing novelty
- I: particularly relevant if taken alone, prejudicing inventive step

The new citation category “I” is used for references cited by publications with a publication date from April 2011 onwards; it is not available in the offical search report. See also: EPO Patent Information News 4/2011.

Citation Category (/CAT)	Citation Category Definition
A	technological background
D	document cited in the application
E	earlier patent document, but published on, or after the filing date
I	**particularly relevant if taken alone, prejudicing inventive step**
L	document cited for other reasons
O	non-written disclosure
P	intermediate document
T	theory or principle underlying the invention
X	**particularly relevant if taken alone, prejudicing novelty**
Y	particularly relevant if combined with another document of the same category

Search example: Which inventions cite patent publications of Evonik as highly relevant documents (X or I category)?

1. Search for Evonik patents using enterobacter species for biosynthesis

```
=> FIL INPAFAMDB

=> S (EVONIK OR DEGUSSA)/PASS AND C12N/IPC,EPC AND ENTEROBACT?
L1          61 (EVONIK OR DEGUSSA)/PASS AND C12N/IPC,EPC AND ENTEROBACT?
```

2. Select patent numbers

```
=> SEL PN
E1 THROUGH E549 ASSIGNED
```

3. Search selected numbers as cited patent numbers in /PN.D and link to the categories X or I with (S)-proximity

```
=> S E1-549/PN.D(S)(X OR I)/CAT
L2          28 (EP1382685/PN.D OR ......... OR EP1448778/PI

=> S L2 NOT (EVONIK OR DEGUSSA)/PASS
L3          24 L2 NOT (EVONIK OR DEGUSSA)/PASS
```

4. Exclude self citations of Evonik

```
=> D BRIEF PIRE

L3    ANSWER 1 OF 24      INPAFAMDB COPYRIGHT 2012 EPO/FIZ KA on STN

AN    41966661 INPAFAMDB EDF 20110428 EWF 201117 UPFB 20110728 UWF 201136
TI    A METHOD FOR PRODUCING AN L-CYSTEINE, L-CYSTINE, A DERIVATIVE OR
      PRECURSOR THEREOF OR A MIXTURE THEREOF USING A BACTERIUM OF
```

```
      Enterobacteriaceae FAMILY.
INS   ZIYATDINOV MIKHAIL KHARISOVICH, RU; SAMSONOV VIKTOR VASILIEVICH, RU;
      GUSYATINER MIKHAIL MARKOVICH, RU
PAS   AJINOMOTO KK, JP; ZIYATDINOV MIKHAIL KHARISOVICH, RU; SAMSONOV VIKTOR
      VASILIEVICH, RU; GUSYATINER MIKHAIL MARKOVICH, RU
PI    RU 2009136544        A  20110410
      WO 2011043485        A1 20110414
AI    RU 2009-136544       A  20091005
      WO 2010-JP67816      W  20101005
PRAI  RU 2009-136544       A  20091005  (RUA, 20110428, Y)
IPCI  C12N0001-20    [I,A]; C12P0013-12    [I,A]
EPC   C12N0009-12B7B; C12N0009-12B1B; C12N0009-16; C12P0013-12
AB    (WO 2011043485 A1)
      The present invention provides a method for producing L-cysteine,
      L-cystine, a derivative or precursor thereof or a mixture thereof using a
      bacterium of Enterobacteriaceae family which has been modified to have
      enhanced expression of the genes involved in the process of sulphur
      assimilation.

 1 priority, 2 applications, 2 publications

PI    RU 2009136544        A  20110410

PI    WO 2011043485        A1 20110414
REP   WO 2003006666        A2 20030123 (SEA, pat, Cat: X)
         DEGUSSA, DE; SIEBELT NICOLE, DE; WIDAWKA PETRA, DE; FARWICK MIKE, DE
      WO 2007012078        A1 20070125 (SEA, pat, Cat: X)
         BASF AG, DE; ZELDER OSKAR, DE; HAEFNER STEFAN, DE; KLOPPROGGE CORINNA,
         DE; SCHRODER HARTWIG, DE; HEROLD ANDREA, DE; PATTERSON THOMAS A, US;
         HERMANN THERON, US; YOCUM ROGERS R, US; WILLIAMS MARK K, US; PERO
         JANICE G, US
      WO 2007077041        A1 20070712 (SEA, pat, Cat: X)
         METABOLIC EXPLORER SA, FR; FIGGE RAINER, FR; LUX FABIEN, FR; RAYNAUD
         CELINE, FR; CHATEAU MICHEL, FR; SOUCAILLE PHILIPPE, FR
      WO 2008127240        A1 20081023 (SEA, pat, Cat: X)
         CARGILL INC, US; CJ CORP, KR; BRAZEAU BRIAN, US; CHANG JIN-SOOK, KR;
         CHO KWANG MYUNG, KR; CHO YOUNG WOOK, KR; DESOUZA MERVYN, US; JESSEN
         HOLLY J, US; KIM SO-YOUNG, KR; NIU WEI, US; SANCHEZ-RIERA FERNANDO A,
         US; SHIN YONG-UK, KR; UM HYEWON, KR
REC   4. THERE ARE 4 CITED REFERENCES (4 PATENT, 0 NON PATENT) AVAILABLE FOR
      THIS RECORD.
```

5. Use PIRE to display cited patent information in INPAFAMDB per family member

7 Enhanced Display Formats in INPAFAMDB

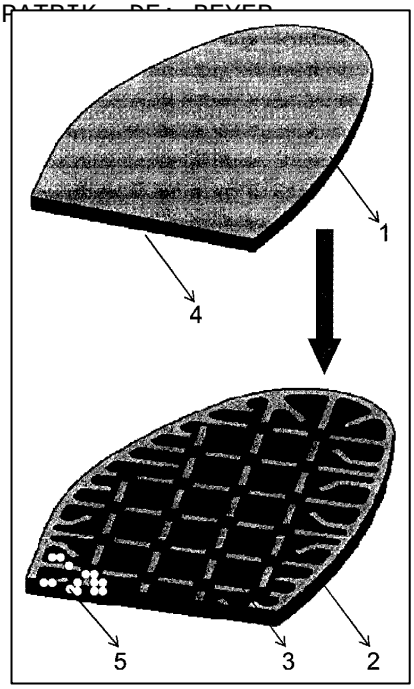
The INPADOC family database INPAFAMDB is the ideal file to run technology oriented patent searches with patent classifications or perform company or inventor searches. Search results based on such queries are very well supported by the default display format BRIEF. This format summmarizes important information for each invention.

The BRIEF-display format has been enhanced to better fit into the suite of family display formats in INPAFAMDB.

- All patent related numbers (publication, application, priority numbers) are now consecutively displayed like in other related formats (e.g. ALL, STD). The BRIEF-format can now be used with the table tool of the STN Express postprocessing package (see example below).
- The display of titles is now restricted to English titles, to make the display for large INPADOC families more convenient.
- The BRIEF-format typically includes standardized inventor and patent assignee names. When these standardized names are not available, the new BRIEF provides the original patent assignee and inventor names instead.

Example of the enhanced BRIEF display format

```
=> D BRIEFG
L1    ANSWER 1 OF 869    INPAFAMDB COPYRIGHT 2012 EPO/FIZ KA on STN
AN    38765843 INPAFAMDB EDF 20100114 EWF 201002 UPFB 20111215 UWF 201150
TI    PERSPIRATION-ABSORBING SHOE INSOLE WITH IMPROVED ABSORPTION OF PERSPIRATION.
    - Sweat-absorbing shoe sole inserts having improved sweat absorption.
INS   TSCHERNJAEW JURI, DD; KRAPFL MAYA, DD; STENNER PATRIK, DD; BEYER MICHAEL,....
    - JURI TSCHERNJAEW; MAYA DIMITROVA; PATRIK STENNER; MICHAEL BEYER; HARALD....
PAS   EVONIK DEGUSSA GMBH, DD
    - EVONIK DEGUSSA GMBH
    - EVONIK DEGUSSA GMBH, DE
    - TSCHERNJAEW JURI, DE; DIMITROVA MAYA, DE; STENNER PATRIK, DE; BEYER
      MICHAEL, DE; HAEGER HARALD, DE; HEINRICH DIRK, DE;
PI    CA 2729877           A1 20100114
      CN 102088880         A  20110608
      DE 102008040264      A1 20100114
      EP 2323513           A1 20110525
      JP 2011527206        A  20111027
      KR 2011043584        A  20110427
      TW 2010023779        A  20100701
      US 20110078920       A1 20110407
      WO 2010003789        A1 20100114
AI    CA 2009-2729877      A  20090617
      CN 2009-80126429     A  20090617
      DE 2008-102008040264 A  20080709
      EP 2009-779808       A  20090617
      JP 2011-517063       A  20090617
      KR 2011-7000432      A  20090617
      TW 2009-122652       A  20090703
      US 2009-996539       A  20090617
      WO 2009-EP57516      W  20090617
PRAI  DE 2008-102008040264 A  20080709  (DEA, 20100114, Y)
      WO 2009-EP57516      W  20090617  (WOWW, 20110303, N)
IPCI  A43B0017-10    [I,A]; A43B0005-00    [I,A]; A43B0017-00    [I,A];
      C01B0033-12    [I,A]; A43B0013-38    [I,A]; A01N0025-12    [I,A];
```



```
      C08L0027-06    [I,A]
IPCR  A43B0017-10    [I,A]
EPC   A43B0017-10A; A43B0007-14A30D
INCL  INCLM 360/440.000
      INCLS 514/770.000; 524/567.000; 423/335.000
AB    (US 20110078920 A1)
      A method of improving perspiration absorbency in a shoe or boot using
      particulate amorphous silica as an absorbent in insoles for shoes and/or
      boots, as well as a shoe insole containing an absorbent which contains
      particulate amorphous silica, and footware containing the insole.

 2 priorities, 9 applications, 9 publications
```

Example: Table produced from BRIEF-format in INPAFAMDB with STN Express table tool

Title	Patent Assignee (st.)	Patent Number		Pub. Date	Application Number	Appl. Date	Priority Information
Method for preparing S type cyclopentenone by sol-gel embedding immobilized enzyme.	UNIV ZHEJIANG, CN	CN 101418291	A	20090429	CN 2008-10162998	20081211	CN 2008-10162998 A 20081211
PROCESS FOR PREPARING CLOPIDOGREL ISOMERS USING NEW INTERMEDIATE.	DAE HE CHEMICAL CO LTD, KR	KR 848936	B1	20080729	KR 2007-47907	20070517	KR 2007-47907 A 20070517
ENANTIOSELECTIVE HYDROLYSIS USING BIOCATALYTIC ENZYME.	DAE HE CHEMICAL CO LTD, KR	KR 848935	B1	20080729	KR 2007-47746	20070516	KR 2007-47746 A 20070516
Saccharomycete with stereoselectivity lipase liveness and application in producing S- type betaxolol hydrochloride with biological split method thereof.	UNIV ZHENGZHOU, CN - UNIV ZHENGZHOU	CN 101220336 CN 101220336	A B	20080716 20101103	CN 2007-10300064	20071225	CN 2007-10300064 A 20071225
PROCESS FOR PREPARATION OF OPTICALLY ACTIVE CYCLOPENENONE AND CYCLOPENTENONE PREPARED BY THE PROCESS.	CHIROGATE INTERNATL INC - CHIROGATE INT INC, TW	JP 2007224018 KR 2007076549	A A	20070906 20070724	JP 2007-9402 KR 2007-5848	20070118 20070118	TW 2006-101970 A 20060118
RESOLUTION PROCESS.	SZEGEDI TUDOMANYEGYETEM, HU - FORRO ENIKOE, HU; FUELOEP FERENC, HU	HU 2007000472 HU 2007000472 HU 227663 WO 2009007759	D0 A2 B1 A1	20070828 20090302 20111028 20090115	HU 2007-472 WO 2008-HU76	20070709 20080623	HU 2007-472 A 20070709
ESTERASES AND RELATED NUCLEIC ACIDS AND METHODS.	VERENIUM CORP, US - DIVERSA CORP, US; MATHUR ERIC J, US; CALLEN WALTER, US; FIELDING RODERICK, US	EP 1987142 EP 1987142 EP 2216403 EP 2216403 US 20090324574 WO 2007092314 WO 2007092314	A2 A4 A2 A3 A1 A2 A3	20081105 20090715 20100811 20101124 20091231 20070816 20080313	EP 2007-763087 EP 2010-1560 US 2007-278108 WO 2007-US2904	20070202 20070202 20070202 20070202	WO 2007-US2904 W 20070202 US 2006-764486P P 20060202 EP 2007-763087 A 20070202 US 2007-278108 A 20070202
SYNTHESIS OF INTERMEDIATES FOR THE PREPARATION OF PRAMIPEXOL.	DIPHARMA FRANCIS SRL, IT - DIPHARMA SPA - DIPHARMA FRANCIS SRL	CA 2573040 EP 1808492 IT 2006MI0044 JP 2007185190 US 20070166814 US 7662610	A1 A1 A1 A A1 B2	20070713 20070718 20070714 20070726 20070719 20100216	CA 2007-2573040 EP 2007-277 IT 2006-MI44 JP 2007-2980 US 2007-622259	20070108 20070108 20060113 20070111 20070111	IT 2006-MI44 A 20060113
Method for producing (R) - and (S)-4-(1-ammoniumethyl)benzoic acid methylester-sulphate from racemic 4-(1-aminoethyl)benzoic acid methylester by lipase catalysed enantoselective acylation and subseque. - PROCESS FOR THE PREPARATION OF	BASF SE, DE - BASF AG, DE - DITRICH KLAUS; WINSEL HARALD; MOULIN DOMINIQUE - DITRICH KLAUS, DE; WINSEL HARALD, DE; MOULIN DOMINIQUE,	AT 425258T CN 101321875 DE 102005062966 DE 102006001160 DE 502006003145 EP 1969129 EP 1969129 JP 2009522230 US 20080305530	T A A1 A1 D1 A1 B1 A A1	20090315 20081210 20070705 20070712 20090423 20080917 20090311 20090611 20081211	AT 2006-830713 CN 2006-80045789 DE 2005-102005062966 DE 2006-102006001160 DE 2006-502006003145 EP 2006-830713 JP 2008-547944 US 2006-159283 WO 2006-EP69890	20061219 20061219 20051228 20060106 20061219 20061219 20061219 20061219 20061219	DE 2005-102005062966 A 20051228 DE 2006-102006001160 A 20060106 WO 2006-EP69890 W 20061219

8 Enhanced Display Formats in INPADOCDB

INPADOCDB is the INPADOC database on STN which merges all patent data of all publications of a national family into a single database record. This file is preferred for legal status related searches and all search requests related to single applications.

Bibliographic information of the different publication stages of an INPADOCDB record can be quite different. Therefor we have introduced two enhancements to simplify the display of national families:

- the deduplicated display format BRIEF summarizes important bibliographic data for all publications of the national family
- all custom diplay formats now provide deduplicated information of all publication stages

Display example for the new BRIEF-format in INPADOCDB

```
=> D BRIEF

L1    ANSWER 101 OF 16138 INPADOCDB COPYRIGHT 2012 EPO/FIZ KA on STN
AN    64740525 INPADOCDB  FN 42001438  EDP 20110512
TI    Electric lifting stator inner cavity cyclometer.
INS   WENFENG XU; XIAOMING ZENG
PAS   HANGZHOU FROMO ELECTROMECHANICAL TECHNOLOGY CO LTD
PI    CN 102042792         A  20110504
PI    CN 102042792         B  20111207
AI    CN 2009-10310020     A  20091120
AIT   CNA Patent application
PRAI  CN 2009-10310020     A  20091120  (CNA, 20110512, Y)
IPCI  G01B0005-20    [I,A]
AB    The invention relates to an electric lifting stator inner cavity
      cyclometer, which provides a stator inner cavity cyclometer with the
      advantages of convenience for operation and use and high measuring
      efficiency and accuracy, wherein a measuring arm of the stator inner
      cavity cyclometer can freely rotate along a center post, ooooooooo
```

Display example for the new deduplicated custom display formats in INPADOCDB

```
=> D TI PI PA

L4    ANSWER 1 OF 257     INPADOCDB COPYRIGHT 2012 EPO/FIZ KA on STN
TI    Sol-Gel-Prozess zur Herstellung von Schutzfolien fuer Polymersubstrate.
      Sol gel process for producing protective films for polymeric substrates.
      Procede de gel de sol pour produire des films de protection pour des
      substrats polymeres.
PI    EP 1935929           A1 20080625
PI    EP 1935929           B1 20111130
PA    DEGUSSA NOVARA TECHNOLOGY S.P.A.
PA    EVONIK DEGUSSA GMBH
```