Getting to Know the Family with FFAM - The INPADOC Display Format Explained

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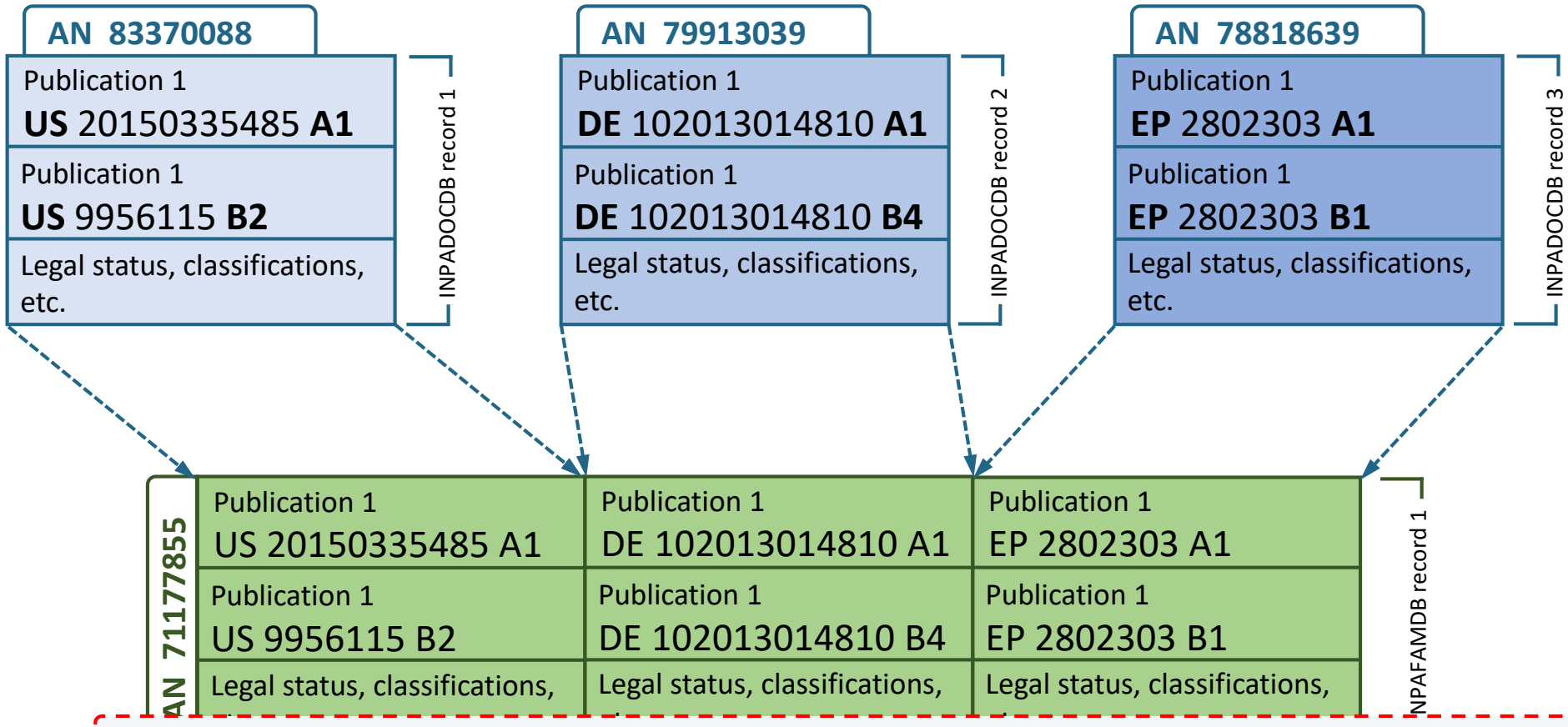
FIZ Karlsruhe
Leibniz Institute for Information Infrastructure

CAS®
A DIVISION OF THE
AMERICAN CHEMICAL SOCIETY

Agenda

- INPADOCDB / INPAFAMDB on STNext
- A tour through a FFAM display and selected details highlighted
- How FFAM can help to interpret patent families

Two implementations: INPADOCDB vs. INPAFAMDB



INPADOCDB provides various display formats for the efficient display of patent family information without the need to transfer the data to INPAFAMDB.

Two implementations: INPAFAMDB and INPADOCDB

- Companion files with different compilation of patent publications
- All publication levels of a patent authority for one application form one record in INPADOCDB
- All patent publications of one patent family (invention) form one record in INPAFAMDB:

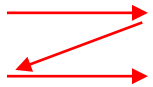
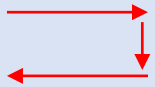
  - The accession number AN (INPAFAMDB) is based on the family number FN of INPADOCDB
  - The document number DN (INPAFAMDB) is the Accession Number AN from INPADOCDB

INPAFAMDB **AN** ⇔ **FN** INPADOCDB

INPAFAMDB **DN** ⇔ **AN** INPADOCDB

INPADOCDB provides various display formats for the efficient display of patent family information without the need to transfer the data to INPAFAMDB.

Patent family display formats

Use this format	To display …..
CFAM	A simple table of publication numbers only
CFAM2	Condensed table with PI, AI and PRAI details
SFAM	CFAM2, with EPO simple patent family identifiers used as header information to form separate patent family tables
FAM 	A table of priority, application and publication numbers (connected by application number)
FAM2 	A table of priority, application and publication numbers (connected by publication number)
DFAM	Delimited Family format, table of priority, application and publication information delimited for post-processing (SET LINE 110)
EFAM	FAM, with priority numbers used as header information to form separate patent family tables
FFAM	Full Family format with full bibliography, classifications and legal status information for each authority

Test different display formats to find the format that best suits your projects.

Summary display formats

Full family format. Further full formats: See database summary sheets

Schematic representation of FFAM

```
----------
MEMBER 1
       BR 112015020935  A2
         Bibliography (BIB)
         Classifications (IND)
         Legal Status (LS)
-----------
-----------
MEMBER 2
       CA 2901564  A1
         Bibliography (BIB)
         Classifications (IND)
       CA 2901564  C
         Bibliography (BIB)
         Classifications (IND)
       Legal Status (LS)
-----------
-----------
MEMBER 3
       CN 105026648  A
         Bibliography (BIB)
         Classifications (IND)
       CN 105026648  B
         Bibliography (BIB)
         Classifications (IND)
       Legal Status (LS)
-----------
```

```
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MEMBER 4
       EP 2961886  A1
         Bibliography (BIB)
         Classifications (IND)
       EP 2961886  A4
         Bibliography (BIB)
         Classifications (IND)
       EP 2961886  B1
         Bibliography (BIB)
         Classifications (IND)
       Legal Status (LS)
----------
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MEMBER 5
       ES 2691843  T3
         Bibliography (BIB)
         Classifications (IND)
         Legal Status (LS)
----------
----------
MEMBER 6
       JP 2016508551  A
         Bibliography (BIB)
         Classifications (IND)
         Legal Status (LS)
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MEMBER 7
       US 20160010282  A1
         Bibliography (BIB)
         Classifications (IND)
       US 9708771  B2
         Bibliography (BIB)
         Classifications (IND)
         Legal Status (LS)
----------
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MEMBER 8
       WO 2014132175  A1
         Bibliography (BIB)
         Classifications (IND)
         Legal Status (LS)
----------
FSTAT
```

- FFAM displays the **bibliography** and **classifications** for each publication and the **legal status** information for each member.
- Members are publication series originating from one application.
- Members are sorted according to patent numbers (patent country).

A tour through a FFAM display (1/5)

```
-----------
MEMBER 4
-----------

AN     77064820 INPADOCDB ED 20160107 EW 201601 UP 20200326 UW 202008 Full-text
FN     46771716
TIDE   WAeSSRIGE EMULSION AUS EINEM SCHLICHTUNGSMITTEL.
TL     German
TIEN   AQUEOUS EMULSION OF A SIZING AGENT.
TL     English
TIFR   EMULSION AQUEUSE D'UN AGENT DE COLLAGE.
TL     French
IN     HAUFE, INGRID; MOeLLER, KLAUS; KURUCZ, ATTILA
INS    HAUFE INGRID, DE; MOeLLER KLAUS, DE; KURUCZ ATTILA, AT
PA     BASF SE
PAS    BASF SE, DE
DT     Patent
PI     EP 2961886           A1 20160106  English
DS     R:            AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT
                     LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
       XS:           BA ME
PIT    EPA1 APPLICATION PUBLISHED WITH SEARCH REPORT
DAV    20160106 examined-printed-without-grant
STA    PRE-GRANT PUBLICATION
XPD    20340224
AI     EP 2014-757478       A  20140224  EPA Patent application
PRAI   US 2013-61771099     P  20130301  USP Provisional application (N,20141023)
       EP 2013-157373       A  20130301  EPA Patent application (Y,20141023)
       WO 2014-IB59202      W  20140224  WOWW Additional PCT application (N,
       20150924)
```

Dates referring to publication below:
- Entry Date (ED)
- Entry Week (EW)
- Update Date (UP)
- Update Week (UW)

Document type (/DT):

Design patents	*1119668*
Patents	*100772551*
Utility models	*20570993*

EP extension states are a subfield of DS (currently BA Bosnia and Herzegovina and ME Montenegro)

A tour through a FFAM display (2/5)

```
...
PI     EP 2961886            A1 20160106  English
DS     R:            AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR
                     LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK
       XS:           BA ME
PIT    EPA1 APPLICATION PUBLISHED WITH SEARCH REPORT
DAV    20160106 examined-printed-without-grant
STA    PRE-GRANT PUBLICATION
XPD    20340224
AI     EP 2014-757478        A  20140224  EPA Patent application
PRAI   US 2013-61771099      P  20130301  USP Provisional application
       EP 2013-157373        A  20130301  EPA Patent application (Y,20
       WO 2014-IB59202       W  20140224  WOWW Additional PCT applicat
       20150924)
       EP 2014-757478        A  20140224  EPA Patent application (N,20
IPCI   D21H0017-56; D21H0021-16; D21H0017-00; D21H0017-07; D21H0017-1
       D21H0017-16; D21H0017-17; D21H0017-34; D21H0017-37; D21H0017-55
CPC    D21H0017-34; D21H0017-37; D21H0017-37; D21H0017-55; D21H0017-55;
       D21H0017-56; D21H0017-56; D21H0017-72; D21H0021-16; D21H0021-16;
       D21H0017-07; D21H0017-07; D21H0017-15; D21H0017-16; D21H0017-16;
       D21H0017-17; D21H0017-17
FA     CPC; DAV; DS; DT; IN; INS; INO; IPCI; LA; LSDF; LSFT; LSIC; LSOP; LSPA;
       LSPI; LSPMY; PA; PAS; PI; TIEN; TIFR; TIDE; XPD

AN     77064820 INPADOCDB ED 20161020 EW 201642 UP 20200326 UW 202008 Full-text
FN     46771716
TIDE   WAeSSRIGE EMULSION AUS EINEM SCHLICHTUNGSMITTEL.
TL     German
TIEN   AQUEOUS EMULSION OF A SIZING AGENT.
TL     English
```

Patent Information Publication Type (PIT): Kind Code with text

Data availability (DAV): Publication types are classified into 13 classes. (HELP DAV)

Status of publication

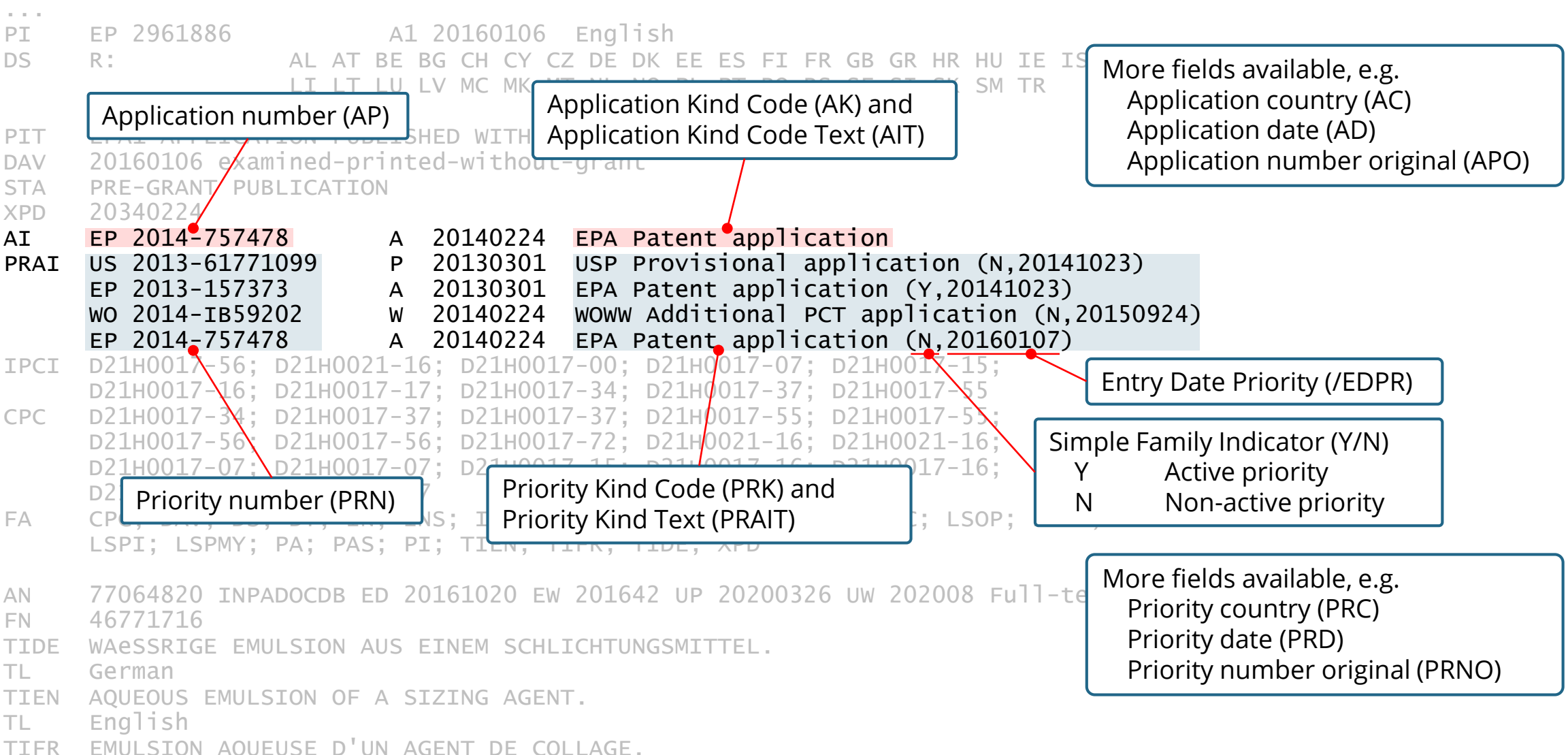
60881590 GRANTED/STA

62460823 PRE-GRANT PUBLICATION/STA

75752 UNKNOWN/STA

Calculated expiration date (XPD)
More information with HELP XPD

A tour through a FFAM display (3/5)



Application number (AP)

Application Kind Code (AK) and
Application Kind Code Text (AIT)

More fields available, e.g.
- Application country (AC)
- Application date (AD)
- Application number original (APO)

Entry Date Priority (/EDPR)

Simple Family Indicator (Y/N)
- Y Active priority
- N Non-active priority

Priority number (PRN)

Priority Kind Code (PRK) and
Priority Kind Text (PRAIT)

More fields available, e.g.
- Priority country (PRC)
- Priority date (PRD)
- Priority number original (PRNO)

A tour through a FFAM display (4/5)

```
...    EP 2014-757478        A  20140224  EPA Patent application (N,20160107)
IPCI   D21H0017-56; D21H0021-16; D21H0017-00; D21H0017-07; D21H0017-15;
       D21H0017-16; D21H0017-17; D21H0017-34; D21H0017-37; D21H0017-55
CPC    D21H0017-34; D21H0017-37; D21H0017-37; D21H0017-55; D21H0017-55;
       D21H0017-56; D21H0017-56; D21H0017-72; D21H0021-16; D21H0021-16;
       D21H0017-07; D21H0017-07; D21H0017-15; D21H0017-16; D21H0017-16;
       D21H0017-17; D21H0017-17
FA     CPC; DAV; DS; DT; IN; INS; INO; IPCI; LA; LSDF; LSFT; LSIC; LSOP; LSPA;
       LSPI; LSPMY; PA; PAS; PI; TIEN; TIFR; TIDE; XPD

AN     77064820 INPADOCDB ED 20161020 EW 201642 UP 20200326 UW 202008
FN     46771716
TIDE   WAeSSRIGE EMULSION AUS EINEM SCHLICHTUNGSMITTEL.
TL     German
TIEN   AQUEOUS EMULSION OF A SIZING AGENT.
TL     English
TIFR   EMULSION AQUEUSE D'UN AGENT DE COLLAGE.
TL     French
IN     HAUFE, INGRID; MOeLLER, KLAUS; KURUCZ, ATTILA
INS    HAUFE INGRID, DE; MOeLLER KLAUS, DE; KURUCZ ATTILA, AT
PA     BASF SE
PAS    BASF SE, DE
DT     Patent
PI     EP 2961886           A4 20161019  English
DS     R:            AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT
                     LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
PIT    EPA4 SUPPLEMENTARY SEARCH REPORT
DAV    20161019 supplemental-srep-reference
STA    PRE-GRANT PUBLICATION
XPD    20340224
```

Classifications

Field Availability (FA), e.g.
S L1 AND CPC/FA
S L1 AND TIFR/FA

Next publication belonging to the same member, here EPA4 of member 4.

A tour through a FFAM display

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-----------
MEMBER 4
-----------

AN    77064820 INPADOCD
FN    46771716
TIDE  WAeSSRIGE EMULSIO
TL    German
TIEN  AQUEOUS EMULSION
TL    English
TIFR  EMULSION AQUEUSE
TL    French
IN    HAUFE, INGRID; MO
INS   HAUFE INGRID, DE;
PA    BASF SE
PAS   BASF SE, DE
DT    Patent
PI    EP 2961886
DS    R:              AL
                      LI
      XS:             BA
PIT   EPA1 APPLICATION
DAV   20160106 examined
STA   PRE-GRANT PUBLICA
XPD   20340224
AI    EP 2014-757478
PRAI  US 2013-61771099
      EP 2013-157373
      WO 2014-IB59202
      20150924)
```

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AN    77064820 INPADOCDB ED 20161020 EW 201642 UP 20200326 UW 202008 Full-text
FN    46771716
TIDE  WAeSSRIGE EMULSI
TL    German
TIEN  AQUEOUS EMULSION
TL    English
TIFR  EMULSION AQUEUSE
TL    French
IN    HAUFE, INGRID; M
INS   HAUFE INGRID, DE
PA    BASF SE
PAS   BASF SE, DE
DT    Patent
PI    EP 2961886
DS    R:              AL
                      LI
PIT   EPA4 SUPPLEMENTA
DAV   20161019 supplem
STA   PRE-GRANT PUBLIC
XPD   20340224
AI    EP 2014-757478
PRAI  US 2013-61771099
      EP 2013-157373
      WO 2014-IB59202
      EP 2014-757478
IPCI  D21H0017-56; D21
      D21H0017-16; D21
```

```
AN    77064820 INPADOCDB ED 20180719 EW 201829 UP 20200326 UW 202008
FN    46771716
TIDE  WAeSSRIGE EMULSION AUS EINEM SCHLICHTUNGSMITTEL.
TL    German
TIEN  AQUEOUS EMULSION OF A SIZING AGENT.
TL    English
TIFR  EMULSION AQUEUSE D'UN AGENT DE COLLAGE.
TL    French
IN    HAUFE, Ingrid; MOeLLER, Klaus; KURUCZ, Attila
INS   HAUFE INGRID, DE; MOeLLER KLAUS, DE; KURUCZ ATTILA, AT
PA    BASF SE
PAS   BASF SE, DE
DT    Patent
PI    EP 2961886          B1 20180718  English
DS    R:            AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR
                    LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK
PIT   EPB1 PATENT SPECIFICATION
DAV   20180718 printed-with-grant
STA   GRANTED
XPD   20340224
AI    EP 2014-757478      A  20140224  EPA Patent application
PRAI  US 2013-61771099    P  20130301  USP Provisional application
      EP 2013-157373      A  20130301  EPA Patent application (Y,20
      WO 2014-IB59202     W  20140224  WOWW Additional PCT applicat
      20150924)
```

A tour through a FFAM display (5/5)

```
...
LEGAL STATUS
AN    77064820 INPADOCDB Full-text
20160106 EPAX       + REQUEST FOR EXTENSION OF THE EUROPEAN PATENT
                      BA ME
                MIS Miscellaneous or Ambiguous
                    ......................................20161006
20160106 EPAK       + DESIGNATED CONTRACTING STATES
                      EP                    A1
                      AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS
                      IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
                MIS Miscellaneous or Ambiguous
                    ......................................20161006
20160106 EP17P      + REQUEST FOR EXAMINATION FILED
                      20151001
                EXA Examination, Search Report
                    ......................................20161006
20160608 EPDAX      - REQUEST FOR EXTENSION OF THE EUROPEAN PATENT (DELETED)
                MIS Miscellaneous or Ambiguous
                    ......................................20161006
20161019 EPRIC1       INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT
                      D21H0021/16
                CLA Change, Removal or Addition of Classifications
                    ......................................20161027
20161019 EPA4       + SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED
                      20160916
                EXA Examination, Search Report
                    ......................................20161027
20161019 EPRIC1       INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT
                      D21H0017/17
```

Temporal sequence

FFAM displays the LS for each member

One unit describes one legal event

Legal Status codes are gathered in legal status code categories (/LSC2) to simplify legal status retrieval.

Search tip 1: Combine FFAM with a summary format

```
=> D CFAM FFAM

L1    ANSWER 1 OF 1       INPADOCDB COPYRIGHT 2021 EPO/FIZ KA on STN

PATENT FAMILY INFORMATION
 AN   87743928 INPADOCDB
 +--------------PI--------------+
 BR 112015020935      A2 20170718
 CA 2901564           A1 20140904
 CA 2901564           C  20180220
 CN 105026648         A  20151104
 CN 105026648         B  20171208
 EP 2961886           A1 20160106
 EP 2961886           A4 20161019
 EP 2961886           B1 20180718
 ES 2691843           T3 20181128
 JP 2016508551        A  20160322
 US 20160010282       A1 20160114
 US 9708771           B2 20170718
 WO 2014132175        A1 20140904

FSTAT 5 priorities, 8 applications, 13 publications  (1 EPO simple family)
      8 countries, 131 legal status events

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MEMBER 1
-----------

AN    87743928 INPADOCDB ED 20180412 EW 201815 UP 20200312 UW 202008 Full-text
FN    46771716
TIOL  metodo para preparacao de uma emulsao aquosa de um agente de encolamento
```

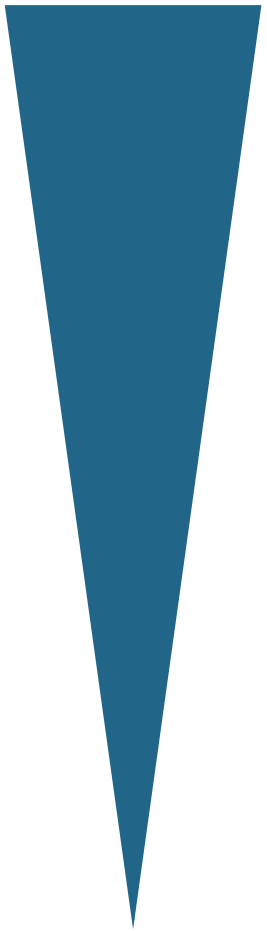
Combine FFAM with a summary format, e.g. FAM, FAM2, **CFAM2**, etc.

Selecting several family display formats in one display command incurs only one display-fee.

1. CFAM gives you a concise view of the patent family.

2. FFAM provides the detailed information for each member…

Search tip 2: Information on publication types

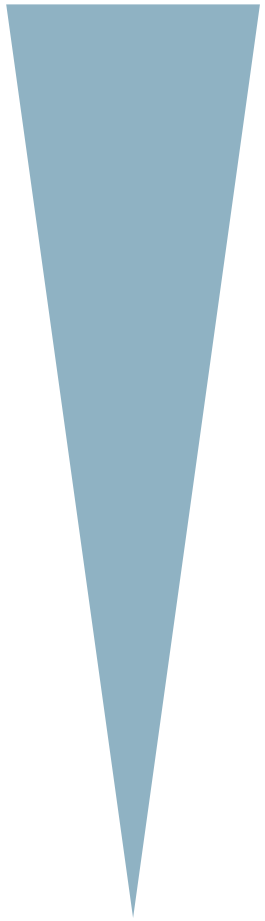


1000 **publication types** (Kind Code information) are listed in the PIT-field (*Patent Information Publication Types*)

13 **publication categories** in the DAV-field (*Data Availability*)

2 **status categories** in the STA-field (*Patent Status,* coming: *Patent Stage*)
GRANTED and PRE-GRANT PUBLICATION (and UNKNOWN)

Search tip 2: Information on publication types



1000 **publication types** (Kind Code information) are listed in the PIT-field (*Patent Information Publication Types*)

Around 1000 patent kind codes are listed in INPADOC. Use EXPAND or HELP KIND to list the definitions for the kind codes.
The field PIT includes the description of the kind code, whereas the field PK (Patent Kind Code) only lists the code.

13 **publication categories** in the DAV-field (*Data Availability*)

The 13 category names are based on publication types, **independent of PIT**, and can be used to interpret (uncommon) patent kind codes.
The category name is listed beside the publication date.
See explanations for the 13 categories with HELP DAV.

2 **status categories** in the STA-field (*Patent Status,* coming: *Patent Stage*) GRANTED and PRE-GRANT PUBLICATION (and UNKNOWN)

The STA field (GRANTED / PRE-GRANT PUBLICATION / UNKNOWN) offers a convenient possibility to limit answer sets or alerts, for example to granted patents, e.g.
S BOEHRINGER/PA AND GB/PC AND GRANTED/STA

Search tip 2: Use information about publication types

```
AN     99919284 INPADOCDB ED 20200409 EW 202015 UP 20200409 UW 20
FN     54505648
TIEN   DEVELOPMENT OF LEAD ION TESTING PAPER WITH NAKED-EYE OBSER
       FOR TEN MIN ON-SITE DETECTION.
TL     English
DT     Patent
PI     HK 1224889              A2 20170825  English
PIT    HKA2 GRANTED SHORT-TERM PATENT [FROM 19980501 ONWARDS]
DAV    20170825 printed-with-grant
STA    GRANTED
XPD    20241012
AI     HK 2016-111758          A  20161012  HKA Patent application
PRAI   US 2016-15294041        A  20161014  USA Patent application (
       US 2015-62240502        P  20151012  USP Provisional applicat
```

This is an A2 publication from Hong Kong.

PIT defines A2 as GRANTED SHORT-TERM PATENT. See also XPD.

Date of publication by printing or similar process of document on which grant has taken place on or before the said date.

HKA2 is granted.

Search tip 2: Use information about publication types

```
AN    99919284 INPADOCDB ED 20200409 EW 202015 UP 20200409 UW 202015 Full-text
FN    54505648
TIEN  DEVELOPMENT OF LEAD ION TESTING PAPER WITH NAKED-EYE OBSERVABLE READOUT
      FOR TEN MIN ON-SITE DETECTION.
TL    English
DT    Patent
PI    HK 1224889           A2 20170825  English
PIT   HKA2 GRANTED SHORT-TERM PATENT [FROM 19980501 ONWARDS]
DAV   20170825 printed-with-grant
STA   GRANTED
XPD   20241012
AI    HK 2016-111758       A  20161012  HKA Patent application
PRAI  US 2016-15294041     A  20161014  USA Patent application (N,20180426)
      US 2015-62240502     P  20151012  USP Provisional application (Y,20170427
```

```
AN    92235949 INPADOCDB ED 20181206 EW 201849 UP 20200326 UW 202008 Full-text
TIEN  Polymer and Composition Including Same, and Adhesive Composition.
PAS   NISSAN CHEMICAL IND LTD, JP
DT    Patent
PI    MY 168166            A  20181011  English
PIT   MYA UK PATENTS REGISTERED [UNTIL 19860930] or LAID OPEN APPLICATION FOR
      PATENT OF INVENTION / UTILITY MODEL [FROM 19861001 ONWARDS] or GRANTED
      PATENT / UTILITY MODEL [FROM 19900901]
DAV   20181011 not-printed-with-grant
STA   GRANTED
```

Information in the fields PIT, DAV and STA allow efficiently reviewing uncommon publication types

Search tip 3: Countries covered with EP (1/3)

```
PATENT FAMILY INFORMATION
 AN   86178961 INPADOCDB
 +--------------PI--------------+
 EP 3257923           A1 20171220
 EP 3257923           B1 20200408
 JP 2018028056        A  20180222
 JP 2019214738        A  20191219
 US 20170362538       A1 20171221
 US 10214707          B2 20190226

FSTAT 1 priority, 4 applications, 6 publications  (1 EPO simple family)
      3 countries, 58 legal status events
```

In which countries is the EP patent valid?

Search tip 3: Countries covered with EP (2/3)

```
=> D FFAM.EP

AN    86178961 INPADOCDB ED 20200409 EW 202015 UP 20200409 UW 202016 Full-text
FN    56742304
TIDE  SPUeLMITTELZUSAMMENSETZUNG FUeR AUTOMATISCHES GESCHIRRSPUeLEN.
TL    German
TIEN  AUTOMATIC DISHWASHING DETERGENT COMPOSITION.
TL    English
TIFR  COMPOSITION DE DETERGENT DE LAVE-VAISSELLE AUTOMATIQUE.
TL    French
IN    BEWICK, Lindsay Suzanne; BROOKER, Alan Thomas; SOUTER, Philip Frank
INS   BEWICK LINDSAY SUZANNE, GB; BROOKER ALAN THOMAS, GB; SOUTER PHILIP FRANK,
      GB
PA    The Procter & Gamble Company
PAS   PROCTER & GAMBLE, US
DT    Patent
PI    EP 3257923           B1 20200408  English
DS    R:            AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT
                    LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
PIT   EPB1 PATENT SPECIFICATION
DAV   20200408 printed-with-grant
STA   GRANTED
XPD   20360617
AI    EP 2016-175139       A  20160617  EPA Patent application
PRAI  EP 2016-175139       A  20160617  EPA Patent application (Y,20171221)
IPCI  C11D0001-72; C11D0001-74; C11D0001-825; C11D0003-00; C11D0003-20;
      C11D0017-04
CPC   C11D0001-74; C11D0001-825; C11D0003-0047; C11D0003-2086; C11D0003-361;
      C11D0003-3715; C11D0003-378; C11D0003-386; C11D0003-395; C11D0017-042;
```

Display only selected authorities,
e.g. FFAM.WO
FFAM.US
…

Designated states are listed in DS.

Search tip 3: Countries covered with EP (3/3)

```
20200415 EPREG        REFERENCE TO A NATIONAL CODE
         ATREF      + AT: REFERENCE TO AT NUMBER (EP PATENT ENTERS AUSTRIAN
                      NATIONAL PHASE)
                    AT 1254387           T
                    20200415
                ENP Entry into National Phase
                    .....................................20200423
20200415 EPREG        REFERENCE TO A NATIONAL CODE
         CHEP       + CH: EUROPEAN PATENT TAKES EFFECT AS A NATIONAL PATENT IN
                      CH/LI
                ENP Entry into National Phase
                    .....................................20200423
20200430 EPREG        REFERENCE TO A NATIONAL CODE
         DER096     + DE: DPMA PUBLICATION OF MENTIONED EP PATENT GRANT
                    DE 602016033390
                PUB New or Withdrawn Publication
                    .....................................20200507
...
20201030 EPPG25     - LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT
                      INFORMATION FROM NATIONAL OFFICE TO EPO]
                    LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE
                    DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED
                    TIME-LIMIT
                    GR: 20200709
                LAP Lapse (Non-Payment of Fees)
                    .....................................20201112
20201030 EPPG25     - LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT
                      INFORMATION FROM NATIONAL OFFICE TO EPO]
                    LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE
```

Use the legal status information of the FFAM display format to analyze the protection covered with the EP document

Optional: Restrict answer set to specific legal status codes and/or categories, e.g.

S L1 AND (EP/LSCC (L) ENP/LSC2)
D KWIC
or ... (**CH**/LSCC (L) ENP/LSC2)

Search tip 4: PCT entering national phase

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PATENT FAMILY INFORMATION
 AN   93518853 INPADOCDB
 +--------------PI--------------+
 AU 2017288933          A1 20190214
 BR 112018077095        A2 20190402
 CN 109844819           A  20190604
 EP 3475923             A1 20190501
 EP 3475923             A4 20200101
 JP 2019526847          A  20190919
 JP 6813600B            B2 20210113
 KR 2019014105          A  20190211
 US 20170372510         A1 20171228
 US 10706613            B2 20200707
 WO 2018005359          A1 20180104

FSTAT 3 priorities, 8 applications, 11 publications  (1 EPO simple family)
      8 countries, 69 legal status events
```

Which publications are based on the PCT application?

Search tip 4: PCT entering national phase

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=> D FFAM

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MEMBER 1
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AN    93518853 INPADOCDB ED 20190228 EW 201909 UP 20210121 UW 202103 Full-text
FN    56941447
TIEN  Systems and methods for dynamic occlusion handling.
TL    English
IN    Ye, Mao; Chen, Yen-Lin; Ren, Liu; Do, Chao
INS   YE MAO; CHEN YEN-LIN; REN LIU; DO CHAO
PA    ROBERT BOSCH GMBH
PAS   BOSCH GMBH ROBERT, DE
DT    Patent
PI    AU 2017288933        A1 20190214  English
PIT   AUA1 OPEN TO PUBLIC INSPECTION [FROM 20010524 ONWARDS]
DAV   20190214 unexamined-not-printed-without-grant
STA   PRE-GRANT PUBLICATION
XPD   20370626
AI    AU 2017-288933       A  20170626  AUA Patent application
PRAI  US 2016-62354891     P  20160627  USP Provisional application (Y,20180111)
      WO 2017-US39278      W  20170626  WOWW Additional PCT application (N,201902
IPCI  G06T0019-00
CPC   G06T2200-04; G06T2207-10024; G06T2207-10028; G06T0007-55; G06T0005-50;
      G06T0015-205; G06T0015-40; G06T0019-006; G06T2207-10024; G06T2207-10028;
      G06T0005-50; G06T0015-405; G06T0019-006
```

The FFAM display lists all members, including application numbers and priorities, and the legal status for the PCT application (at the end).

(1) The PCT application has been filed in US and has the same filing date as the AU application.

Search tip 4: PCT entering national phase

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LEGAL STATUS
AN    86546480 INPADOCDB
20181128 WO121        EP: THE EPO HAS BEEN INFORMED BY WIPO THAT EP WAS
                      DESIGNATED IN THIS APPLICATION
                      EP 17821009          A1
                 ENP  Entry into National Phase
                      .....................................20181206
20181226 WOENP        ENTRY INTO THE NATIONAL PHASE
                      JP 2018567839        A
                      JP
                 ENP  Entry into National Phase
                      .....................................20190516
20181228 WONENP       NON-ENTRY INTO THE NATIONAL PHASE
                      DE
                 NEN  Non-Entry into National Phase (WO)
                      .....................................20190207
20190122 WOREG        REFERENCE TO NATIONAL CODE
         BRB01A       BR: PCT PUBLICATION - REQUEST FOR ENTRY INTO THE NATIONAL
                        PHASE
                      BR 112018077095
                 ENP  Entry into National Phase
                      .....................................20190131
...
20190214 WOENP        ENTRY INTO THE NATIONAL PHASE
                      AU 2017288933        A  20170626
                      AU
                 ENP  Entry into National Phase
                      .....................................20190221
20190402 WOENP        ENTRY INTO THE NATIONAL PHASE
                      BR 112018077095      A2
```

(2) The legal status information provides entry (and non-entry) information of PCT applications.

The legal events therefore are listed with the PCT application.

Optional: Restrict answer set to specific legal status codes and/or categories, e.g.
S L1 AND (AU/LSC**Y** (L) ENP/LSC2)

Key takeaways

- FFAM provides relevant information for patent family analysis in a highly structured manner:
  - Full bibliography for each publication
  - An application and the associated publications are summarized as members, e.g. MEMBER 1, …
  - Legal status information for each publication series (member)
- Relevant information for publication types is listed together:
  - The definition of patent kind codes is provided in PIT
  - Publication types are grouped into 13 categories in DAV
  - Patent status categories: GRANTED and PRE-GRANT PUBLICATION (and UNKNOWN)
- FFAM enables
  - to efficiently understand (uncommon) publication types
  - to efficiently analyze the countries protected by EP patents
  - to efficiently get an overview on global patent applications originating from PCT applications

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Supplement: Anatomy of a legal status entry