INPAFAMDB –
Easy recipes for relevant results
Robert Austin – FIZ Karlsruhe
Agenda

- What is INPAFAMDB?
- Finding patent families
- Inventor and assignee searching
- Prior art searching
- Citation searching
- Legal status searching
- Alerts (SDIs)

See also: Introduction to Derwent World Patents Index®:
http://www.stn-international.com/DWPI_2010_eSeminar.html
INPAFAMDB is the International Patent Family Database on STN®

- More than 38 million patent family records, representing over 70 million patent publications
- Bibliographic and patent family information for more than 90 authorities from the mid-1800’s
- 26 million abstracts for more than 50 authorities
- Cited references from 23 authorities
- Patent classification codes
  - Including: IPC, ECLA and U.S. NCL
- Legal status for 58 patent authorities from 1978
Key features and benefits of INPAFAMDB

- A family-based file design ideal for prior art searches with CAplus™ and Derwent World Patents Index®
- FIZ Karlsruhe editorial corrections for accurate and comprehensive patent families
- Flexible family and bibliographic display options facilitate the study and analysis of patent families
- Comprehensive inventor and assignee searches combining all bibliographic and legal status data
- FIZ Karlsruhe Legal Status Categories (LSC2) provide simplified one-step legal status searching
- Stay up-to-date with focused and customizable alerts, including weekly and monthly monitoring
The present invention relates to a method and an apparatus for controlling message traffic licenses. The method includes:

controlling message traffic through an ordinary license; . . . .

A sample record in ALL format.

A de-duplicated list of original applicant titles (TI).

INPAFAMDB patent family (PI).

Applicant abstract(s) (AB).

1 priority, 4 applications, 4 publications
Agenda

• What is INPAFAMDB?
• Finding patent families
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• Prior art searching
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• Legal status searching
• Alerts (SDIs)
## Finding patent families

<table>
<thead>
<tr>
<th>Step</th>
<th>INPAFAMDB</th>
<th>DWPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter</td>
<td>FILE INPAFAMDB</td>
<td>FILE WPINDEX</td>
</tr>
<tr>
<td>Search for the publication number</td>
<td>S DE2350035/PN</td>
<td>FSEARCH DE2350035/PN</td>
</tr>
<tr>
<td>Display the answer*</td>
<td>D BIB</td>
<td>Display the answer(s)</td>
</tr>
</tbody>
</table>
<pre><code>                            |                    | =&gt; D BIB 1-          |
</code></pre>

**Note**: country coverage differs by database. For details, see: http://www.stn-international.com/pkcodes_us.html
## Patent family for DE2350035 – INPAFAMDB

| L1 | ANSWER 1 OF 1 INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN |
| AN | 3559037 INPAFAMDB UPFB 20090402 UWF 200912 |
| DN | 10369334 |
| TI | VERFAHREN ZUR HERSTELLUNG VON DIATETISCHEN NAHRUNGSMITTELN. |
|   | - DIETETIC FOOD COMPOSITIONS |
| INS | RENNHAARD HANS HEINRICH, US |
|   | - HEINRICH RENNHAARD HANS, US |
| PAS | PFIZER, US |
|   | - PFIZER |
| PI | AT 7308560 A 19750615 |
|   | AT 328618 B 19760325 |
|   | AU 7360833 A 19750410 |
|   | AU 477557 B2 19750410 |
|   | DE 2350035 A1 19750410 |
|   | DE 2350035 C2 19860710 |
|   | FI 7303094 A 19750405 |
|   | IE 38284 L 19750325 |
|   | IE 38284 B1 19780201 |
|   | IN 138477 A1 19760207 |
|   | IT 1011013 B 19770120 |
|   | NO 7303761 A 19750421 |
|   | PH 10970 A 19771018 |
|   | ZA 7307862 A 19740925 |

Publications in **blue** are uniquely included in the INPAFAMDB family.

**Note:** This is truncated at the end of the PI field.
### Patent family for DE2350035 – WPINDEX

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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<tbody>
<tr>
<td>L2</td>
<td>ANSWER 1 OF 1 WPINDEX COPYRIGHT 2010</td>
</tr>
<tr>
<td>AN</td>
<td>1975-26107W [16] WPINDEX</td>
</tr>
<tr>
<td>TI</td>
<td>Dietetic foods containing water-soluble branched polyglucose-containing ester gps. and replacing fat triglycerides and or carbohydrates</td>
</tr>
<tr>
<td>DC</td>
<td>D13PA (PFIZ-C) PFIZER INC</td>
</tr>
<tr>
<td>PA</td>
<td>12</td>
</tr>
<tr>
<td>PI</td>
<td>DE 2350035 A 19750410 (197516)* DE NL 7313850 A 19750411 (197517)# NL SE 7312995 A 19750421 (197520)# SV NO 7303761 A 19750421 (197521)# NO AT 7308560 A 19750615 (197527) DE FI 7303094 A 19750602 (197528)# FI FR 2246276 A 19750606 (197528) FR JP 50064444 A 19750531 (197530)# JA GB 1418544 A 19751224 (197552) EN IL 43334 A 19760730 (197634)# EN CH 583000 A 19761230 (197702)# DE CA 1016006 A 19770823 (197736)# EN JP 58036945 B 19830812 (198336)# JA DE 2350035 C 19860710 (198628) DE NL 181898 B 19870701 (198730)# NL</td>
</tr>
</tbody>
</table>

- **Note**: This is truncated at the end of the PI field.

- **Publications in blue** are uniquely included in the WPINDEX family.

- **“#”** indicates DWPI non-conventional equivalents.
<table>
<thead>
<tr>
<th>Use this format</th>
<th>To display in INPAFAMDB…</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFAM</td>
<td>A simple table of publication numbers only</td>
</tr>
<tr>
<td>FAM</td>
<td>A table of priority, application and publication numbers (connected by <em>application</em> number)</td>
</tr>
<tr>
<td>FAM2</td>
<td>A table of priority, application and publication numbers (connected by <em>publication</em> number)</td>
</tr>
<tr>
<td>FFAM</td>
<td>Full bibliographic detail and legal status</td>
</tr>
<tr>
<td>LFAM</td>
<td>Short version of FFAM with publication numbers and Legal Status ONLY</td>
</tr>
<tr>
<td><strong>FFAM</strong>&lt;sup&gt;PC&lt;/sup&gt;</td>
<td>FFAM for a single publication authority, e.g. FFAM.US for the USPTO</td>
</tr>
</tbody>
</table>
| MFAM            | FFAM **plus 1)** all available author abstracts  
|                 | **2)** cited references |
| **IFAM**        | **A COMBINATION** of indented FAM and MFAM |
FIZ Karlsruhe editorial corrections provide more accurate INPADOC patent families

• Accurate patent families rely on accurate publication, application and priority numbers
• Quality control and correction process
  – all numbers which do not meet the standardized number formats are filtered out and corrected manually
  – serial corrections are processed automatically
  – app. 2,200 standards are maintained for quality checks
• Errors reported by users are corrected intellectually
• Error corrections are typically online one week after the error has been detected
Example: An error in an original document

Example: There is an incorrect related application number in this document.

Incorrect

Correct
False patent families are separated due to FIZ Karlsruhe priority number corrections

**Ion exchange material production**
*Lanxess GmbH*

- DE 10327112 A1
- EP 1495800 A2
- EP 1495800 A3
- US 20050038130 A1
- US 20060264521 A1
- US 20080059287 A1

**Method and system for music recommendation**
*Music Intelligence Solut.*

- US 20040107821 A1
- US 7081579 B2
- US 20060254411 A1
- US 20080021851 A1
- US 20080059287 A1

**Correction of US-priority number of US20080021851:**
US2006-492395 => US2006-492355
Separate patent families are merged due to FIZ Karlsruhe priority number corrections

Correction of Chinese priority number of US20090083750:
CN2007-11017879 => CN2007-10178796
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• Alerts (SDIs)
Inventor and assignee searching

• Bibliographic fields
  – Inventors (IN), standardized (INS)
  – Patent assignees (PA), standardized (PAS)

• Legal Status fields
  – Patent Assignee (LSPA), Opponent (LSOP)
  – Inventor (LSIN)
  – Free Text (LSFT) (unfielded names)
  – LSBI: LSIN, LSPA, LSOP + LSFT

• Super Search fields
  – Inventors: INSS includes /IN, /INS and /LSIN
  – Assignees: PASS includes /PA, /PAS and /LSPA
Use the Super Search fields

=> FIL INPAFAMDB

=> S (SCHNEIDER(S)WOLFGANG) / INSS, PASS

25384 SCHNEIDER/IN
25323 SCHNEIDER/INS
  755 SCHNEIDER/LSIN
25472 SCHNEIDER/INSS
  (SCHNEIDER/IN, INS, LSIN)
18247 SCHNEIDER/PA
17544 SCHNEIDER/PAS
2267 SCHNEIDER/LSPA
19928 SCHNEIDER/PASS
  (SCHNEIDER/PA, PAS, LSPA)
101070 WOLFGANG/IN
100291 WOLFGANG/INS
  3892 WOLFGANG/LSIN
101386 WOLFGANG/INSS
  (WOLFGANG/IN, INS, LSIN)
34445 WOLFGANG/PA
31528 WOLFGANG/PAS
1236 WOLFGANG/LSPA
36290 WOLFGANG/PASS
  (WOLFGANG/PA, PAS, LSPA)
L1 539 (WOLFGANG(S) SCHNEIDER) / INSS, PASS

TIP: Inventors may be listed as inventors or assignees.

Using a broader (S) search finds additional answers with middle names and/or initials.
Display an answer

=> D IN INS PA PAS HIT 1-

INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN

LEGAL STATUS HIT displays only the relevant part of the LS information.

UDERSTADT, WOLFGANG SCHNEIDER, GEB. STERNBERG, GER

CHG Change of Owner, Inventor, Applicant

1 priority, 1 application, 1 publication
Patent assignee search: Qiagen

For a standard INPAFAMDB assignee search use both PA and PAS.

Use the BRIEF-format to display the inventions of Qiagen.

<table>
<thead>
<tr>
<th>AN</th>
<th>39560094 INPAFAMDB EDF 20100701 EWF 201026 UPFB 20100812 UWF 201032</th>
</tr>
</thead>
<tbody>
<tr>
<td>TI</td>
<td>Praeparation und Amplifikation von Nukleinsaeuren mittels ......</td>
</tr>
<tr>
<td></td>
<td>- PREPARATION AND AMPLIFICATION OF NUCLEIC ACIDS BY MEANS OF MAGNETIC PARTICLES.</td>
</tr>
<tr>
<td>INS</td>
<td>HIMMELREICH RALF, DE; ROTHMANN THOMAS, DE; FABIS ROLAND, DE....</td>
</tr>
<tr>
<td>PAS</td>
<td>QIAGEN GMBH, DE</td>
</tr>
<tr>
<td></td>
<td>- HIMMELREICH RALF, DE; ROTHMANN THOMAS, DE; FABIS ROLAND, DE; ERBACHER CHRISTOPH, DE</td>
</tr>
<tr>
<td>IPCI</td>
<td>C12Q0001-68 [I,A ]; C12M0001-38 [I,A ]; C12N0015-10 [I,A</td>
</tr>
<tr>
<td>AB</td>
<td>(WO 2010072822 A2)</td>
</tr>
</tbody>
</table>

The invention relates to the preparation of a biological sample for performing verifications and examinations, wherein the aim . . .
Patent assignee search: Qiagen

The legal status field LSPA retrieves 68 additional patent family records (L3).

Use BRIEF HIT to display additional inventions of Qiagen.

LSPA applicant reassignment field includes:
- corrections or new company names
- transfer of ownership

These additional Qiagen records are important for statistical analysis and due diligence studies.
Additional tips for name searches

• Allow for misspellings due to typos or transliteration
• Inventor names may be: Surname, Initial(s) (no full first name given)
• Non alpha-numeric characters are replaced with an (S) operator by STN
  – Use quotation marks to retain special characters
    => S “FISCHER & PORTER”/PA
  – Use truncation to retrieve names in which the query phrase is embedded
    => S “FISCHER & PORTER”?/PA
Agenda

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Prior art search options

• Applicant title (/TI)
  – Over 29 million records (78%) have applicant titles

• Applicant abstract (/AB)
  – Over 19 million records have applicant abstracts
  – 26 million abstracts from over 50 patent authorities

• Classifications
  – IPCs available for over 32 million records (/IPC)
  – ECLA available for over 14 million records (/EPC)

Note: The Basic Index (/BI) comprises Title (TI) and Abstract (AB).
Find terms in other languages using titles

=> S WIND (2A) TURBIN? OR WIND (W) (POWER OR ENERGY) (W) (PLANT? OR SYSTEM OR GENERAT? OR INSTALL?)
L1 11393 WIND (2A) TURBIN? OR WIND (W) (POWER OR ENERGY) (W) (PLANT? OR SYSTEM OR GENERAT? OR INSTALL?)

=> S L1 AND EP/PC
L2 1926 L1 AND EP/PC

=> FOCUS L2
L3 1926 FOCUS L3 1-

=> D TI 1-10
L3 ANSWER .. OF 1926 INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI - SCHALLREDUZIERUNG EINES ROTORBLATTES FUr EINE WINDTURBINE.
- Reduction in the noise produced by a rotor blade of a wind turbine.
- DIMINUTION DU BRUIT PRODUIT PAR UNE PALE DE ROTOR DESTINEE AUNE TURBINE EOLIENNE.
- Rotorblatt fuer eine Windenergieanlage...

L3 ANSWER .. OF 1926 INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI Method for the erection of a wind energy plant and wind energy plant.
- PROCEDE D'INSTALLATION D'UN DISPOSITIF EOLIEN ET DISPOSITIF EOLIEN.

Option: also review abstracts for additional terms, e.g.: => D TI ABS
Identify relevant IPC classifications

```plaintext
=> ANALYZE L1 1- IPC EPC
L4 ANALYZE L1 1- IPC EPC : 5571 TERMS

=> D TOP 10 IPC
L4 ANALYZE L1 1- IPC EPC : 5571 TERMS

TERM #   # OCC  # DOC   % DOC  IPC EPC
------ ------- ------ ----- ---------------
1   13337   2466   32.40 F03D0011-00
2   11483   2408   31.64 F03D0009-00
3    7926   1901   24.98 F03D0001-00
4    6925   1837   24.14 F03D0007-00
5    4535   1649   21.67 F03D0003-00
6    4276    984   12.93 F03D0001-06
7    4002    741    9.74 F03D0007-02
8    3994   1123   14.76 F03D0011-04
9    3920    843   11.08 F03D0007-04
10   2862    471   6.19 H02P0009-00
```

L1 is the result of the broad text search (previous slide).

The top IPCs are all in the same subclass, F03D.

Tip: SET ICFORMAT ON PERM to ensure that pre-reform IPC codes are the same length as modern IPC Reform codes, providing consistent analysis throughout the backfile.
Review IPC descriptions using the online IPC thesaurus

<table>
<thead>
<tr>
<th>Code</th>
<th>Number</th>
<th>Relationship</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>26859</td>
<td>F03D/IPC</td>
<td>WIND MOTORS</td>
</tr>
<tr>
<td>E2</td>
<td>6267</td>
<td>F03D0001-00/IPC</td>
<td>Wind motors with rotation axis substantially in wind direction (controlling F03D0007-00)</td>
</tr>
<tr>
<td>E3</td>
<td>918</td>
<td>F03D0001-02/IPC</td>
<td>having a plurality of rotors</td>
</tr>
<tr>
<td>E5</td>
<td>2942</td>
<td>F03D0001-06/IPC</td>
<td>Rotors</td>
</tr>
</tbody>
</table>

**Tip:** Type HELP RCODES to review all of the thesaurus relationship codes.

Narrower and broader terms are clearly indicated.
Identify relevant ECLA (EPC) classifications

<table>
<thead>
<tr>
<th>TERM #</th>
<th># OCC</th>
<th># DOC</th>
<th>% DOC</th>
<th>IPC</th>
<th>EPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>2478</td>
<td>422</td>
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<tr>
<td>13</td>
<td>1705</td>
<td>468</td>
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<td>F03D0011-04</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1589</td>
<td>277</td>
<td>3.64</td>
<td>F03D0007-02D</td>
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<tr>
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<tr>
<td>24</td>
<td>978</td>
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<td>2.79</td>
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<tr>
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<td>2.18</td>
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<td>2.22</td>
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<td>32</td>
<td>721</td>
<td>113</td>
<td>1.48</td>
<td>F03D0009-00C2</td>
<td></td>
</tr>
</tbody>
</table>

L4 is the analysis of the broad text search (L1) on slide 25.

The top 10 ECLAs are also in subclass F03D, but is the definition the same?

Tip: Simultaneous analysis of IPC and EPC incurs only one ANALYZE fee.
Links to the current month’s version of ECLA (/EPC) are available in the file entry banner.
Search for terms or ECLA symbols.
Surely IPC is enough?

=> S F03D/IPC,EPC
L1 27281 F03D/IPC,EPC

=> S F03D/EPC NOT F03D/IPC
L2 420 F03D/EPC NOT F03D/IPC

=> D BIB IPC EPC

L2 ANSWER 1 OF 420 INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
AN 38640561 INPAFAMDB EDF 20091203 EWF 200949 UPFB 20100701 UWF 201026
DN 59846694
TI Faired tether for wind power generation systems.
- CABLE D'ATTACHE CARENE POUR SYSTEMES DE PRODUCTION D'ENERGIE EOLIENNE.
INS GRIFFITH SAUL, US; LYNN PETER, US; MONTAGUE DON, US; . . . .
PAS MAKANI POWER INC
- MAKANI POWER INC, US
PI US 20090289148 A1 20091126
WO 2009142762 A1 20091126
AI US 2008-154685 A 20080523
WO 2009-US3179 W 20090521
PRAI US 2008-154685 A 20080523 (USA, 20091203, Y)
. . . .
IPCI B64C0031-06 [I,A ]; A63H0027-08 [I,A ]; B64C0031-00 [I,C*]; A63H0027-00 [I,C*]
EPC F03D0005-00; B63H0009-06E; B63H0009-08; D07B0005-00C

Maybe not...?

Definitely not... and notice there isn’t even an EP member!
Searching for wind turbine inventions with a priority application before 1970

=> S F03D/IPC,EPC
L1  27281  F03D/IPC,EPC

=> S WIND#(2A)TURBIN? OR WIND(W) (POWER OR ENERGY) (W) (PLANT# OR SYSTEM OR GENERAT? OR INSTALL?)
L2  11393 WIND#(2A)TURBIN? OR WIND(W) (POWER OR ENERGY) (W) (PLANT# OR SYSTEM OR GENERAT? OR INSTALL?)

=> S ?WINDENERGIEANLAG? OR ?WINDTURBIN? OR (EOLIEN? OR VENT#)(2A)TURBIN?
L3  2282 ?WINDENERGIEANLAG? OR ?WINDTURBIN? OR (EOLIEN? OR VENT#)(2A)TURBIN?

=> S L1-L3 AND PRY<1970
L4  2025 (L1 OR L2 OR L3) AND PRY<1970

=> FOCUS L4
PROCESSING COMPLETED FOR L4
L5  2025 FOCUS L4 1-

=> D TI ABS
L5  ANSWER 1 OF 2025

InpaFamDb COPYRIGHT 2010 Epo/Fiz Ka on STN

TI Improvements in wind power plants . . . .
Searching for wind turbine inventions with a priority application before 1970 (cont.)

=> D BRIEF

Display relevant answers in display format BRIEF.

L5    ANSWER 1 OF 2025
AN    7872335 INPAFAMDB
TI    Improvements in wind-power plant with a centrifugal governor.
INS   HUTTER ULRICH
PAS   ALLGAIER WERKZEUGBAU G M B H
IPCR  F03D0007-02 [I,A ]; F03D0007-00
EPC   F03D0007-02D
AB    (GB 722978 A)

722,978. Wind-motors. ALLGAIER WERKZEUGBAU GES. Dec. 3, 1952, Number 30631/52. Class 110 (3). A wind-power plant comprises an electric generator n driven by a vane wheel through suitable speed-raising transmission gearing f, g, h, i, k interposed there between . . .

IPC backfile reclassification provides simplified retrieval of older patent publications.

PATENT FAMILY INFORMATION INPAFAMDB

+-------- PUBLICATIONS --------+ +-------- APPLICATIONS --------+
GB 722978 A 19550202 GB 1952-30631 A 19521203

+-------- PRIORITIES --------+
GB 1952-30631 A 19521203

1 priority, 1 application, 1 publication
Adding INPAFAMDB to a multi-file prior art search with DWPI is quite simple

=> FILE WPINDEX

=> S (LIGHT EMITTING DIODE# OR LED#) AND (HEAD(W) (LIGHT# OR LAMP#) OR HEADLIGHT# OR HEADLAMP#)

L1 2697 (LIGHT EMITTING DIODE#/BI,BIEX OR LED#/BI,BIEX) AND (HEAD/BI,BIEX(W) (LIGHT#/BI,BIEX OR LAMP#/BI,BIEX) OR HEADLIGHT#/BI,BIEX OR HEADLAMP#/BI,BIEX)

=> D SCAN

L1 2697 ANSWERS WPINDEX COPYRIGHT 2010 THOMSON REUTERS on STN

TI Light emitting diode (LED) electric light bulb used as headlight of vehicle includes reflective mirror that is arranged so that duplication radiation of radiated light in same direction can be made possible

D SCAN provides a free-of-charge relevance check in WPINDEX.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L1 2697 ANSWERS WPINDEX COPYRIGHT 2010 THOMSON REUTERS on STN

TI Ceramic package for LED used in e.g. headlight of vehicle, has fillet including high concentration of pure silver deposited over metal layer formed at LED-mounting cavity, to reflect light from LED
Adding INPAFAMDB to a multi-file prior art search with DWPI is quite simple (cont.)

=> FILE INPAFAMDB

=> TRANSFER L1 PN APPS
L2 TRANSFER L1 1- PN APPS:
L3 2656 L2

=> S (LIGHT EMITTING DIODE# OR LED#) AND (HEAD(W) (LIGHT# OR LAMP#) OR HEADLIGHT# OR HEADLAMP#)
L4 1011 (LIGHT EMITTING DIODE# OR LED#) AND (LIGHT# OR LAMP#) OR HEADLIGHT# OR HEADLAMP#)

=> S L4 NOT L3
L5 236 L4 NOT L3

=> D TI ABS 1-20

. . . .

L5 ANSWER 12 OF 236 INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI Light emitting diode lamp cap structure.
AB The utility model relates to a light emitting diode lamp cap structure, which comprises a metal outer tube, a radiating rod, a light emitting diode module, a convex lens, a front cover and a metal rear cover, wherein a plurality of radiating grooves and a . . .
The utility model relates to a light emitting diode lamp cap structure, which comprises a metal outer tube, a radiating rod, a light emitting diode module, a convex lens, a front cover and a metal rear cover, wherein a plurality of radiating grooves and a plurality of assembling . . . . The light emitting diode lamp cap structure is widely applied to lamps for indoor and outdoor illumination such as desk lamps, recessed lamps, clip lamps, landscape lamps and lamps for auxiliary illumination such as bicycle head lamps and warning lamps.
Agenda

- What is INPAFAMDB?
- Finding patent families
- Inventor and patent assignee searching
- Prior art searching
- **Citation searching**
- Legal status searching
- Alerts (SDIs)
INPAFAMDB patent citations

- Patent citations in about 8 million patent families
- Cited references from 23 patent authorities including both patent and non-patent literature citations
- In addition to citation information created by the EPO, INPAFAMDB includes citation data from:
  - Trilateral exchange with the JPO and USPTO
  - International search reports supplied by WIPO and the International Search Authorities (ISAs)
    AT, AU, CA, CN, ES, FI, KR, RU, SE
  - Search reports from national patent offices
    AT, AU, BE, CH, DE, FR, GB, NL, TR
Common citation searches

• Competitive intelligence
  – “Who is becoming active in my technology area?”
  – Identify key patents of particular area of technology

• Prior art searches
  – One more tool to find additional references

• Validity searches
  – Especially if any of the citations are category “X”
Example: competitive intelligence searching

=> S QIAGEN/PASS
L1 340 QIAGEN/PASS

=> TRANSFER L1 1- PN /RPN
L2 TRANSFER L1 1- PN : 2268 TERMS
L3 1669 L2/RPN

=> S L3 NOT QIAGEN/PASS
L4 1524 L3 NOT QIAGEN/PASS

=> D TI PAS PI REP
L4 ANSWER 1 OF 1524 INPAFAMDB COPYRIGH
TI DELIVERY OF NUCLEIC ACIDS USING CELL-PENETRATING PEPTIDES.
- INTRODUCTION D'ACIDES NUCLEIQUES A L'AIDE DE PEPTIDES PENETRANT DANS LES CELLULES.
PAS TROJAN TECHNOLOGIES LTD, GB
- EPENETOS AGAMEMNON, GB; KOUSPAROU CHRISTINA
PI US 20100190691 A1 20100729
WO 2010086597 A1 20100805
REP WO 2006053683 A2 20060526 (SEA, pat, Cat: X)
- WO 2003008628 A2 20030130 (SEA, pat, Cat: X)
- DE 10338464 A1 20050331 (SEA, pat, Cat: X)
- KR 2008041037 A 20080509 (SEA, pat, Cat: X)
- WO 2004007721 A1 20040122 (SEA, pat, Cat: Y)
- WO 2002020544 A1 20020314 (SEA, pat, Cat: A)

Which patent families of Qiagen have been cited?

1. Search for Qiagen (L1).
2. TRANSFER publication numbers (PN) to the referenced publication number field (RPN).

Use the REP field to display referenced (cited) patents.

The cited Qiagen patent publication.
Competitive intelligence searching (cont.)

=> S L3(S)X/CAT NOT QIAGEN/PASS
L5 342 L3(S)X/CAT NOT QIAGEN/PASS

=> D TI PAS PI REP 2
L5  ANSWER 2 OF 342  INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI  SENSOR SYSTEM FOR DETERMINING CONCENTRATION OF CHEMICAL AND BIOLOGICAL ANALYTES.
   - SYSTEME DE CAPTEUR POUR LA DETERMINATION D'ANALYTES CHIMIQUES ET BIOLOGIQUES.
PAS  XIAO CAIBIN; SHRIKHANDE PRASHANT VISHWANATH
   - GEN ELECTRIC, US; XIAO CAIBIN, US; SHRIKH
PI  US 20100167412 A1 201000701
    WO 2010077605 A1 201000708
REP  EP 1054250 A1 20001122 (SEA, pat, Cat: X)
    - WO 2004083082 A2 20040930 (SEA, pat, Cat: X)
    - WO 9832002 A1 19980723 (SEA, pat, Cat: X)
    - US 20080192255 A1 20080814 (SEA, pat, Cat: A)
    - US 5437979 A 19950801 (SEA, pat, Cat: A)
    - DE 102004046366 A1 20060209 (SEA, pat, Cat: A)
    - WO 2003004164 A1 20030116 (SEA, pat, Cat: A)

Which patent publications of Qiagen have been cited as “x-documents”?

Use (S) proximity to link Qiagen cited publication numbers (/RPN) with search report category (/CAT).

Cited patent references are conveniently de-duplicated between family members in the standard REP display.

The hit Qiagen publication is a high relevance X category citation.
Which assignees/applicants cite patents of Qiagen?

ANALYZE the standardized patent assignee name **PAS**.

Display the ANALYZE result by document (DOC) count.

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<th># DOC</th>
<th>% DOC</th>
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Search report category definitions /CAT

A  technological background
D  document cited in the application
E  earlier application or patent but published on or after the international filing date
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
Y  particularly relevant if combined with another document of the same category
Search Report Type definitions /SRT

SEA  citation from search report
APP  cited by applicant
EXA* revealed during examination
OPP* revealed during opposition
115* observation by third parties
ISR** international search report
SUP** supplementary search report
CH2** internat. prelimin. search report (chp. II)

* EP-publications, ** PCT-publications
Agenda

• What is INPAFAMDB?
• Finding patent families
• Inventor and patent assignee searching
• Prior art searching
• Citation searching
• Legal status searching
• Alerts (SDIs)
INPAFAMDB legal status provides more than 2600 different types of legal status event.

<table>
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**LEGAL STATUS**

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**Legal status codes (/LSC).**

- DEOP8: Examination, Search Report
- DE8364: + NO OPPOSITION DURING TERM OF OPPOSITION
- DE8327: CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER
- DE8339: - CEASED/NON-PAYMENT OF THE ANNUAL FEE

**Legal status update date (/UPLS).**

- 20090219
- 20091015
- 20100506
- 20100624
FIZ Karlsruhe assigned legal status categories simplify legal status searches

- Not-in-force
- Licensing
- Reinstatement
- SPCs
- Change of owner
- Examination
- Opposition
FIZ Karlsruhe assigned legal status categories (/LSC2)

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<td>SPC</td>
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Summary information on INPAFAMDB SPC coverage is provided at: [http://www.epo.org/patents/patent-information/raw-data/inpadoc-faq.html](http://www.epo.org/patents/patent-information/raw-data/inpadoc-faq.html)
Example: Lapse, expiry, withdrawal, or refusal (NIF) of Syngenta inventions

=> S SYNGENTA/PASS AND NIF/LSC2
L1 2050 SYNGENTA/PASS AND NIF/LSC2

=> D TI HIT L1

L1 ANSWER ... OF 2050 INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI Novel protein, gene encoding the same and method of using the same.
PA JAPAN TOBACCO INC.; SYNGENTA LIMITED
PAS JAPAN TOBACCO INC; SYNGENTA LTD

LEGAL STATUS HIT
AN 35842884 INPAFAMDB UPFL 20080424
20080320 AUMK1 - APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD [AU2007203494A]

NIF Lapses, Expiries, Withdrawals, Refusals
200817.................................20080424

1 priority, 1 application, 1 publication

The category NIF includes lapses, withdrawals, expiries, and/or refusals.

Option: Display just the HIT legal status using D HIT.
Example: Henkel inventions with EP applications which have been withdrawn in 2010

=> S HENKEL/PASS AND EP/LSCC(L)WITHDRAWN/LSTX(L)2010/UPLS
L1       64 HENKEL/PASS AND EP/LSCC(L)WITHDRAWN/LSTX(L)2010/UPLS
=> D BIB HIT 2
L7    ANSWER 2 OF 64      INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
AN 38083532 INPAFAMDB EDF 20090625 EWF 200926 UPFB 20100729 UWF 201030
DN 58863840
TI Spuelwasseraufbereitung mit vollstaendiger Rueckfuehrung von VE-Wasser in das Spuelwassersystem.
- Washing water preparation in dip painting with complete return of used water into the washing water system.
- Preparation d'eau de nettoyage dans le vernissage au trempe avec recuperation complete de l'eau usee dans le systeme d'eau de rincage.
INS PEIROW IRADJ, DE
PAS HENKEL AG & CO KGAA, DE
PI DE 102007061504 A1 20090625
EP 2072473 A1 20090624
AI DE 2007-102007061504 A 20071218
EP 2008-19889 A 20081114
PRAI DE 2007-102007061504 A 20071218 (DEA, 20090625, Y)

/LSCC: legal status country (authority) codes
/LSTX: text definition of legal status codes.
/UPLS: update date, legal status.
(L)-proximity: precisely confines the search elements to be within one legal status entry.
Example: Henkel inventions with EP applications which have been withdrawn in 2010 (cont.)

REC 1. THERE IS 1 CITED REFERENCE (1 PATENT, 0 NON PATENT) AVAILABLE FOR THIS RECORD. ALL CITATIONS ARE AVAILABLE IN THE PIRE FORMAT.
- 6. THERE ARE 6 CITED REFERENCES (5 PATENT, 1 NON PATENT) AVAILABLE FOR THIS RECORD. ALL CITATIONS ARE AVAILABLE IN THE PIRE FORMAT.

1 priority, 2 applications, 2 publications

PA HENKEL AG & CO. KGAA
PAS HENKEL AG & CO KGAA, DE
PA HENKEL AG & CO. KGAA
PAS HENKEL AG & CO KGAA, DE

LEGAL STATUS HIT
AN 38083532 INPAFAMDB UPFL 20100729
20100728 EP18D - DEEMED TO BE WITHDRAWN
[EP 2008-19889 A 20081114]
20100126
NIF Lapses, Expiries, Withdrawals, Refusals
............................20100729

1 priority, 2 applications, 2 publications
Agenda

• What is INPAFAMDB?
• Finding patent families
• Inventor and patent assignee searching
• Prior art searching
• Citation searching
• Legal status searching
• Alerts (SDIs)
INPAFAMDB offers focused, customizable weekly and monthly alert options

• Options for patent family monitoring
  – all new family members
  – family members from particular countries only
  – granted patents only
  – specific publication types only, e.g. EP A1, EP A2

• Options for legal status monitoring
  – all legal status changes for a particular publication
  – all legal status changes for all family members
  – specific legal status events only
  – specific events can be excluded from legal status SDI

See also: INPAFAMDB User Documentation:
http://www.stn-international.com/stn_inpadoc_famdb.html
**INPAFAMDB update code options**

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<tr>
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<td>New publication</td>
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<td>Update to bibliography</td>
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<td>New publication or LS</td>
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Specialized update codes for patent family and legal status monitoring.

See the INPAFAMDB database summary sheet at: [http://www.stn-international.com/inpafamdb.html](http://www.stn-international.com/inpafamdb.html)
Example: monitor key ExxonMobil patents each month for any new family members or legal status

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=> QUE (US5358792/PN OR US5741563/PN OR US5747430/PN OR US6391467/PN OR US6428901/PN OR US6455150/PN OR US6500563/PN OR US6790405/PN OR US7026040/PN OR US7244787/PN)/PN
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=> SDI
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ENTER QUERY L# FOR SDI REQUEST OR (END): L1

ENTER UPDATE FIELD CODE (UP), UPFA, UPM, UPFL, . . . OR ?: UPFE

. . . .

ENTER SDI REQUEST NAME, (AA007/S), OR END: EXXONPPF3/S
ENTER TITLE (NONE): EXXONMOBIL PROPYLENE FILM PATENTS
ENTER METHOD OF DELIVERY (EMAIL), OFFLINE, OR ONLINE: EMAIL
ENTER EMAIL ID (4209K): ROBERT.AUSTIN@FIZ-KARLSRUHE.DE

. . . .

ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN? Y/(N): N
ENTER PRINT FORMAT (BIB.M) OR ?: CFAM FFAMED4

. . . .

ENTER SDI RUN FREQUENCY - (WEEKLY), MONTHLY, OR ?: MONTHLY
ENTER SDI EXPIRATION DATE 'YYYYMMDD' OR (NONE): NONE
QUERY L1 HAS BEEN SAVED AS SDI REQUEST 'EXXONPPF3/S'

The UPFE update code and FFAMED4 display, are a typical choice for monthly SDIs tracking the latest family members and Legal Status updates.
Example: ExxonMobil SDI email.

Results may be viewed in several formats, e.g. HTML (shown here).
**Example: ExxonMobil SDI result**

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This SDI regularly delivers a list of publication numbers (CFAM), details of new publications, and/or legal status changes from the previous month of updates (FFAMED4).

Over the previous month of updates, **EP 854890 B1** has lapsed in the Netherlands (NL).
Key features and benefits of INPAFAMDB

• A family-based file design ideal for prior art searches with CAplus and Derwent World Patents Index
• FIZ Karlsruhe editorial corrections for accurate and comprehensive patent families
• Flexible family and bibliographic display options facilitate the study and analysis of patent families
• Comprehensive inventor and assignee searches combining all bibliographic and legal status data
• FIZ Karlsruhe Legal Status Categories (LSC2) provide simplified one-step legal status searching
• Stay up-to-date with focused and customizable alerts, including weekly and monthly monitoring
FAQ: INPAFAMDB or INPADOCDB?

1. Which version should I use for classification and/or text prior-art searching? **INPAFAMDB**

2. Which version is best for displaying the legal status for a specific application? **INPADOCDB**

3. Which version is best for inventor and assignee searches? **INPAFAMDB**

4. Which version should I use to analyze patent applications by authority? **INPADOCDB**

5. Which version should I use for multi-file searching with CAplus or DWPI? **INPAFAMDB**
Resources

• INPAFAMDB User Documentation
  http://www.stn-international.com/stn_inpadoc_famdb.html
    – Latest news on content and features
    – Patent Kind code and Priority Kind code lists
    – Summary of features and content
    – Handbook in English and German
    – “The Art of ECLA” search tips and case study

• INPAFAMDB database summary sheet
  http://www.stn-international.com/inpafamdb.html