

STN[®]

Patent Family Information on STN

Martine MICHEL

CAPADOC

Décembre 2009

Agenda

- Why do we need patent family information?
- What is a patent family?
- Simple patent family in multiple databases
- Patent family definitions
- Extended patent family in multiple databases
- Retrieving comprehensive family information
- Timeliness of patent family databases
- Comparison with Internet sources

Why do we need patent family information?

- Protect a companies patent portfolio, e.g.
 - through oppositions against competitor patents in EP
- Identify English-language family members
- Commercialise patents and technologies through licensing deals
- Determine commercial value of patent portfolio in due diligence assessments
- In which countries is my competitor active?
- In which countries do we have freedom-to-operate to develop a certain technology?

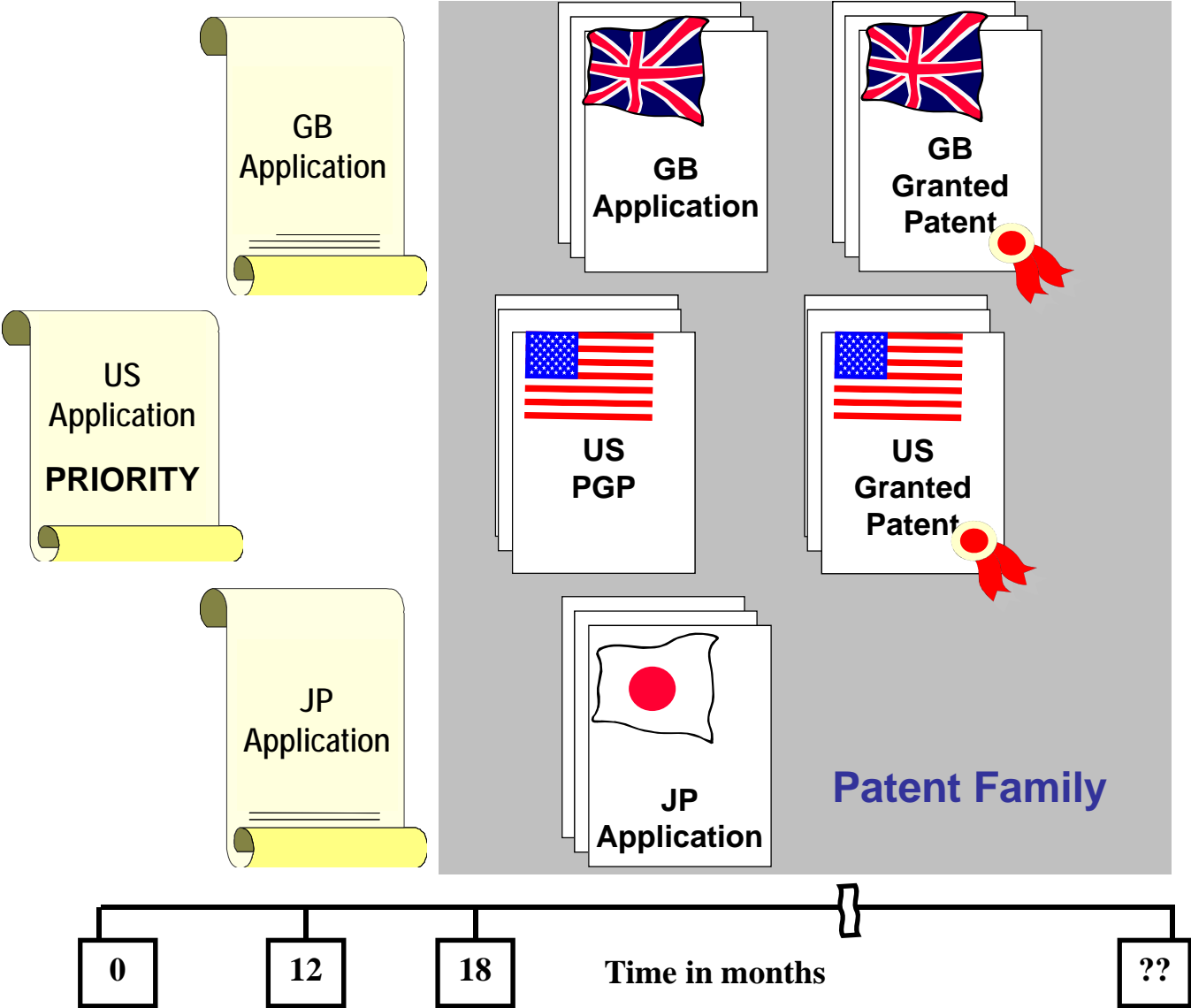
What is a patent family?

- A list of the patent publications from around the world describing the same invention
- A list of patent publications which quote a common priority application number and date
- A method of summarizing the global legal protection being sought by a patent applicant
- A time saving convenience for both patent searchers and patent database producers

What is a patent family?

- Paris convention for the protection of industrial property signed in 1883
 - established the priority right
- Complex relationships between patent family members can exist
 - multiple priorities resulting from continuations, CIP, divisional applications
- Database producers create varying numbers of database records to describe “one family”

Patent Family Timeline



Patent Family Databases on STN

- INPAFAMDB and INPADOCDB
- Derwent World Patents Index
- CAPLUS

INPAFAMDB/INPADOCDB

- Bibliographic and patent family information for more than **90 patent authorities**
- more accurate patent families via FIZ Karlsruhe' quality control and editorial corrections
- Applicant abstracts for 43 patent authorities
- Classification codes : IPC, ECLA, ICO, NCL and IDT
- Legal status for 58 patent authorities from 1978
- Cited references from 21 patent authorities

Derwent World Patents Index®

- High quality bibliographic information of 41 patent authorities
- Enhanced Derwent title and abstract
- Derwent classifications and special indexing in the chemical and engineering field
- Classification codes : IPC, ECLA, ICO and F-terms/FI-terms from 1963
- Patent assignee codes (PACO)
- Good coverage of non-convention equivalents
- 1963 to date

CAPLUS

- Coverage of patent- and non-patent literature from all areas of chemistry and related sciences
- Bibliography of **60 patent authorities**
- Journals, technology disclosures, conference proceedings and other sources
- Chemical Indexing, controlled vocabulary
- Classification codes : IPC, US, ECLA and F-terms
- 1907 to date

Understanding patent family databases on STN

- A simple comparative example
- Patent family definitions
- An extended family example
- Special features in DWPI and INPAFAMDB
 - “non-convention equivalents” in DWPI
 - FIZ-Karlsruhe editorial corrections in INPAFAMDB

A simple patent family in WPINDEX

ACCESSION NUMBER: 2001-458217 [50] WPINDEX
DOC. NO. CPI: C2001-138705 [50]
TITLE: Production of a molded article and coating a substrate,
used particularly for furniture or a vehicle body,
comprises curing by radiation with light whilst using a
protective gas that is heavier than air
DERWENT CLASS: A14; A82; G02; P42
INVENTOR: BECK E; DEIS O; ENENKEL P; SCHROF W
PATENT ASSIGNEE: (BADI-C) BASF AG; (BADI-C) BASF SE
COUNTRY COUNT: 22
PATENT INFO ABBR.:

IBIB-display format

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
DE 19957900	A1	20010607	(200150)*	DE	5[0]	
WO 2001039897	A2	20010607	(200150)	DE		
EP 1235652	A2	20020904	(200266)	DE		
JP 2003515445	W	20030507	(200331)	JA	18	
US 20060115602	A1	20060601	(200637)	EN		
US 7105206	B1	20060912	(200660)	EN		
EP 1235652	B1	20090401	(200924)	DE		
EP 2047916	A2	20090415	(200926)	DE		
EP 2047916	A3	20090429	(200929)	EN		
DE 50015609	G	20090514	(200933)	DE		
ES 2321799	T3	20090612	(200943)	ES		

The asterisk * indicates the *Derwent Basic* patent.

Family members are in *Derwent update* order.

A simple patent family in WPINDEX

APPLICATION DETAILS:

PATENT NO	KIND	AI
-----	-----	-----
DE 19957900	A1	DE 2000-50015609 20001121
DE 50015609	G	EP 2000-981286 20001121
EP 1235652	A2	EP 2000-981286 20001121
EP 1235652	B1	EP 2000-981286 20001121
EP 2047916	A2 Div Ex	EP 2000-981286 20001121
EP 2047916	A3 Div Ex	EP 2000-981286 20001121
DE 50015609	G	EP 2000-981286 20001121
WO 2001039897	A2	WO 2000-EP11589 20001121
EP 1235652	A2	WO 2000-EP11589 20001121
JP 2003515445	W	WO 2000-EP11589 20001121
US 20060115602	A1 Div Ex	WO 2000-EP11589 20001121
US 7105206	B1	WO 2000-EP11589 20001121
EP 1235652	B1 PCT Application	WO 2000-EP11589 20001121
DE 50015609	G PCT Application	WO 2000-EP11589 20001121
JP 2003515445	W	JP 2001-541622 20001121
US 20060115602	A1 Div Ex	US 2002-130599 20020521
US 7105206	B1	US 2002-130599 20020521
US 20060115602	A1	US 2006-324559 20060104
EP 2047916	A2	EP 2009-151021 20001121
EP 2047916	A3	EP 2009-151021 20001121
EP 1235652	B1 Related to	EP 2009-151021 20090121
ES 2321799	T3	EP 2000-981286 20001121

Application details help clarify the relationships between family members.

A simple patent family in WPINDEX

Filing Details provide details on regional and international filing routes

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
EP 2047916	A2	Div Ex	EP 1235652	A
EP 2047916	A3	Div Ex	EP 1235652	A
DE 50015609	G	Based on	EP 1235652	A
EP 1235652	A2	Based on	WO 2001039897	A
JP 2003515445	W	Based on	WO 2001039897	A
US 7105206	B1	Based on	WO 2001039897	A
EP 1235652	B1	Based on	WO 2001039897	A
DE 50015609	G	Based on	WO 2001039897	A
ES 2321799	T3	Based on	EP 1235652	A

PRIORITY APPLN. INFO: DE 1999-19957900 19991201

Each patent family member quotes the same German priority number.

A simple patent family in CAPLUS

ACCESSION NUMBER: 2001:416421 CAPLUS
DOCUMENT NUMBER: 135:34397
TITLE: Production of moldings and coatings with photocuring under inert gas
INVENTOR(S): Beck, Erich; Deis, Oliver; Enenkel, Peter; Schrof, Wolfgang
PATENT ASSIGNEE(S): BASF A.-G., Germany
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

IBIB-display format

Family members are in *application date order* after the basic patent.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19957900	A1	20010607	DE 1999-19957900	19991201
WO 2001039897	A2	20010607	WO 2000-EP11589	20001121
WO 2001039897	A3	20020314		
JP 2003515445	T	20030507	JP 2001-541622	20001121
EP 1235652	B1	20090401	EP 2000-981286	20001121
AT 427167	T	20090415	AT 2000-981286	20001121
EP 2047916	A2	20090415	EP 2009-151021	20001121
EP 2047916	A3	20090429		
ES 2321799	T3	20090612	ES 2000-981286	20001121
US 7105206	B1	20060912	US 2002-130599	20020521
US 20060115602	A1	20060601	US 2006-324559	20060104

PRIORITY APPLN. INFO.:

DE 1999-19957900	A	19991201
EP 2000-981286	A3	20001121
WO 2000-EP11589	W	20001121
US 2002-130599	A3	20020521

A simple patent family in INPAFAMDB

PATENT FAMILY INFORMATION

AN 11473084 INPAFAMDB

CFAM2 - tabular display format

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+----- Publications -----+
AT 427167T          T  20090415
DE 19957900        A1 20010607
DE 50015609        D1 20090514
EP 1235652         A2 20020904
EP 1235652         B1 20090401
EP 2047916         A2 20090415
EP 2047916         A3 20090429
ES 2321799         T3 20090612
JP 2003515445      T  20030507
US 7105206         B1 20060912
US 20060115602     A1 20060601
WO 2001039897     A2 20010607
WO 2001039897     A3 20020314
```

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+----- Priorities -----+
DE 1999-19957900  A  19991201
EP 2000-981286    A  20001121
WO 2000-EP11589   W  20001121
US 2002-130599    A  20020521
US 2006-324559    A  20060104
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+----- Applications -----+
AT 2000-981286    T  20001121
DE 1999-19957900 A  19991201
DE 2000-50015609 A  20001121
EP 2000-981286    A  20001121
EP 2009-151021    A  20001121
ES 2000-981286    T  20001121
JP 2001-541622    T  20001121
US 2002-130599    A  20020521
US 2006-324559    A  20060104
WO 2000-EP11589   W  20001121
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10 *patent applications* represent
13 separate publications.

5 priorities, 10 applications, 13 publications

Patent Family Definitions

- Patent families are defined differently within different databases
 - **closely related families** → simple priority relationships
 - **extended families** → more complex priority relationships with multiple priority application numbers
 - Division
 - created when applicant tries to claim more than one invention in the same application
 - Continuation
 - moves information from the same specification to the claims and vice-versa to overcome the examiner's rejection
 - Continuation-in-part
 - adds new matter to the previously filed application

Patent Family Definitions

- **Broad definition:**

Patent publications directly or indirectly linked via priority numbers (INPADOCDB/INPAFAMDB)

- **Middle definition:**

all patent publications whose priorities are in common with the *Basic Patent* (DWPI/CAPLUS)

- **Narrow definition:**

“EPO simple family” – all patent publications have the same active priorities

DWPI and CAPLUS patent families

- Both databases define families as documents with priorities in common with a basic patent
- Both databases cross-reference extended families by Accession Number (WPI CR & CAplus FAN)
- However, WPI and CAplus do not always use the same “basic patent” for indexing/abstracting
- CAplus indexes multiple basic patents which may have slightly different priority information
- CAplus families are also reassembled to take any new priority relationships into account
- This means equivalents can be found in multiple CAPLUS records if complex relationships exist

EPO simple family in INPAFAMDB

- The EPO simple family is based on active priorities:
All patent publications claiming the same active priorities establish one EPO simple family
- all priorities of a first filing are active
- continuation in parts and US provisionals receive new active priorities and start a new family
- continuations or divisions add non-active priorities, they join existing families

Theoretical Example

<i>FAMILIE P1</i>			
publication D1	priority P1		
publication D2	priority P1	priority P2	
publication D3	priority P1	priority P2	
publication D4		priority P2	priority P3
publication D5			priority P3



INPADOC

DWPI

CAPlus

Extended patent family in WPINDEX (1)

CROSS REFERENCE: indicates that there is another related DWPI record

L1 ANSWER 1 OF 1 WPINDEX COPY

ACCESSION NUMBER: 1998-388121 [33] WPINDEX

CROSS REFERENCE: 1998-388120

DOC. NO. CPI: C1998-117527 [33]

TITLE: New fragments of genes from *Ashbya gossypi* - useful for, e.g. preparing recombinant organisms with

DERWENT CLASS: B02; B04; D16

INVENTOR: PHILIPPSSEN P; POMPEJUS M; SEULBERGER H

PATENT ASSIGNEE: (BADI-C) BASF AG

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9829539	A2	19980709	(199833)*	DE	13[0]	
AU 9857643	A	19980731	(199849)	EN		
EP 951538	A2	19991027	(199950)	DE		
JP 2001508289	W	20010626	(200140)	JA	17	

APPLICATION DETAILS:

.....

FILING DETAILS:

.....

PRIORITY APPLN. INFO: CH 1997-16 19961231

Extended patent family in WPINDEX (2)

WO9829539 is cross-referenced back via the accession number (CR)

L1 ANSWER 1 OF 1 WPINDEX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 1998-388120 [33] WPINDEX
CROSS REFERENCE: 1998-388121
DOC. NO. CPI: C1998-117526 [33]
TITLE: New gene for adenylate cyclase from *Ashbya gossypii*
useful for generating recombinant microorganisms
DERWENT CLASS: B04; D16
INVENTOR: ALTHOEFER H; ALTHOFER H; ALTMANN-JOEHL R;
PATENT ASSIGNEE: (BADI-C) BASF AG; (NOVS-C) NOVARTIS AG;
PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9829538	A2	19980709	(199833)*	DE	33[3]	
EP 866129	A2	19980923	(199842)	EN		
AU 9862916	A	19980731	(199849)	EN		
JP 11225770	A	19990824	(199944)	JA		
EP 953044	A2	19991103	(199951)	DE		
US 6239264	B1	20010529	(200132)#	EN		
JP 2001509012	W	20010710	(200144)	JA	38	
US 6489147	B1	20021203	(200301)	EN		

US6239264 is a non-convention equivalent (#) identified by Derwent.

.....

PRIORITY APPLN. INFO: CH 1997-16 19961231
US 1997-998416 19971224

“Non-convention equivalents” in DWPI

- Documents filed outside the terms of the Paris Convention, e.g. after the 12 month priority deadline
- Documents filed in non-signatory countries
- Documents without priority information which are equivalent to existing DWPI Basic patents
- Intellectually identified by Thomson Reuters Scientific and added to DWPI - marked “ # ” online

“Non-convention equivalents” in DWPI

ACCESSION NUMBER: 2002-116041 [16] WPINDEX
 DOC. NO. CPI: C2002-035715 [16]
 TITLE: Food supplement useful to stimulate the generation of energy by organ
 INVENTOR: ADAMS P
 PATENT ASSIGNEE: (ADAM-I) ADAMS P; (WORL-N) WORLD PHARMA TECH LTD

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
EP 1161884	A1	20011212	(200216)*	EN	7[0]	
US 20020009482	A1	20020124	(200216)	EN		
BR 2001000541	A	20020305	(200225)	PT		
US 6500451	B2	20021231	(200305)#	EN		
SK 2001001122	A3	20030204	(200318)#	SK		
NO 314332	B1	20030310	(200321)#	NO		
NO 2001003730	A	20030131	(200322)#	NO		
EP 1161884	B1	20030326	(200323)	EN		
CZ 2001002749	A3	20030312	(200324)#	CS		
DE 60001814	E	20030430	(200336)	DE		
IT 1318565	B	20030827	(200374)	IT		
ES 2195826	T3	20031216	(200413)	ES		

Family of **EP1161884** includes **5** non-convention equivalents

Non-convention equivalents have their application numbers posted to the Priority Application field.

PRIORITY APPLN. INFO: IT 2000-MI1285 2000
 US 2001-767239 2001
 CZ 2001-2749 20010730
 NO 2001-3730 20010730
 SK 2001-1122 20010803

Patent family of EP1161884 on STN

	WPINDEX	INPAFAMDB	CAPLUS
AT 235168T T	-	X	X
BR 2001000541 A	X	X	X
CZ 2001002749 A3 #	X	-	-
DE 60001814 D1	X	X	-
DE 60001814 T2	-	X	-
EP 1161884 A1	X	X	X
EP 1161884 B1	X	X	X
ES 2195826 T3	X	X	X
IT 2000MI1285 D0	-	X	-
IT 2000MI1285 A1	-	X	X
IT 1318565 B1	X	X	X
NO2001003730 A #	X	-	-
NO314332 B1 #	X	-	-
PT 1161884 E	-	X	X
SK 2001001122 A3 #	X	-	-
US 20020009482 A1	X	X	X
US 6500451 B2 #	X	X	X

4 non-convention equivalents (#) are unique to WPINDEX

Extended patent family in CAPLUS (1)

Family Accession Number Count is 2, i.e. there are 2 CAPLUS records for this family

L1 ANSWER 1 OF 1 CAPLUS COP
ACCESSION NUMBER: 1998:485167 CAPLUS
DOCUMENT NUMBER: 129:106485
TITLE: Partial sequences of genes of purine biosynthesis genes of Ashbya gossipii and their use in the fermentation of riboflavin
INVENTOR(S): Philippsen, Peter; Pompejus, Markus; Seulberger...
PATENT ASSIGNEE(S): BASF A.-G., Germany

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 9829539	A2	19980709	WO 1997-EP7312	19971229
WO 9829539	A3	19981112		
EP 866129	A2	19980923	EP 1997-811020	19971224
CA 2276093	A1	19980709	CA 1997-2276093	19971229
AU 9857643	A	19980731	AU 1998-57643	19971229
EP 951538	A2	19991027	EP 1997-953928	19971229
JP 2001508289	T	20010626	JP 1998-529618	19971229

PRIORITY APPLN. INFO.:

CH 1997-16	A	19961231
WO 1997-EP7312	W	19971229

Extended patent family in CAPLUS (2)

this is the second record of the WO9829539-family

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:485166 CAPLUS
DOCUMENT NUMBER: 129:106484
TITLE: The gene for an adenylate cyclase of *Ashbya gossipii* and its use in the modulation of

INVENTOR(S): Altmann-Johl, Regula; Philippsen, Peter; Althofer.

PATENT ASSIGNEE(S): BASF A.-G., Germany

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9829538	A2	19980709	WO 1997-EP7309	19971229
WO 9829538	A3	19981210		
EP 866129	A2	19980923	EP 1997-811020	19971224
CA 2276110	A1	19980709	CA 1997-2276110	19971229
AU 9862916	A	19980731	AU 1998-62916	19971229
EP 953044	A2	19991103	EP 1997-954977	19971229
JP 2001509012	T			
US 6489147	B1			

neither CAPLUS record includes the Derwent non-convention equivalent

PRIORITY APPLN. INFO.:

CH 1997-16 A 19961231
WO 1997-EP7309 W 19971229

EP866129 is present in both CAPLUS records

Extended patent family in INPAFAMDB (1)

L1 ANSWER 1 OF 1
PATENT FAMILY INFORMATION
AN 7656040 INPAFAMDB

CFAM2 FFAM – combined display format including a tabular format and detailed bibliographic and legal status data for all family members

+----- Publications -----+			+----- Applications -----+		
AU 9857643	A	19980731	AU 1998-57643	A	19971229
AU 9862916	A	19980731	AU 1998-62916	A	19971229
CA 2276093	A1	19980709	CA 1997-2276093	A	19971229
CA 2276110	A1	19980709	CA 1997-2276110	A	19971229
EP 866129	A2	19980923	EP 1997-811020	A	19971224
EP 951538	A2	19991027	EP 1997-953928	A	19971229
EP 953044	A2	19991103	EP 1997-954977	A	19971229
JP 2001509012	T	20010710	JP 1998-529616	T	19971229
JP 2001508289	T	20010626	JP 1998-529618	T	19971229
JP 11225770	A	19990824	JP 1998-76818	A	19980105
US 6239264	B1	20010529	US 1997-998416	A	19971224
US 6489147	B1	20021203	US 1999-331403	A	19990621
WO 9829538	A2	19980709	WO 1997-EP7309	W	19971229
WO 9829538	A3	19981210			
WO 9829539	A2	19980709	WO 1997-EP7312	W	19971229
WO 9829539	A3	19981112			

+----- Priorities -----+

CH 1997-16	A	19961231
EP 1997-811020	A	19971224
WO 1997-EP7309	W	19971229
WO 1997-EP7312	W	19971229
US 1997-998416	A	19971224

5 priorities, 14 applications, 16 publications

CFAM2 provides all publication, application and priority numbers in a tabular format

Extended patent family in INPAFAMDB (2)

MEMBER 6

FFAM provides a MEMBER display for each application which includes full bibliographic details and legal status data

AN 7656040 INPAFAMDB UP 20090709 UW 200928
DN 23642812
TI TEILSEQUENZEN VON GENEN DER PURINBIOSYNTHESE AUS -i(ASHBYA GOSSYPII)
UND DEREN VERWENDUNG IN DER MIKROBIELLEN RIBOFLAVINSYNTHESE.....
IN PHILIPPSSEN, PETER; POMPEJUS, MARK
INS PHILIPPSSEN PETER, CH; POMPEJUS MA
PA BASF AKTIENGESELLSCHAFT
PAS BASF AG, DE
PI EP 951538 A2 19991027 German
PIT EPA2 APPLICATION PUBLISHED WITHOUT SEARCH REPORT
STA PRE-GRANT PUBLICATION ←
AI EP 1997-953928 A 19971229
AIT EPA Patent application
PRAI CH 1997-16 A 19961231 (CHA, Y) ←
WO 1997-EP7312 W 19971229 (WOWW, N) ←
PRAIT CHA Patent application ←
WOWW Additional PCT application ←
IC.V 6
ICM C12N015-00
IPCR C12N0015-09 [I,A]; C07K0014-37 [I,A]; C12N0001-15 [I,A].....
EPC C07K0014-37; C12N0009-04; C12N0009-10D2; C12N0009-88; C12P0025-00
ICO M12N0207:00

MEMBER 6 includes bibliography and legal status data of EP951538

Extended patent family in INPAFAMDB (3)

legal status of EP951538

LEGAL STATUS

AN 7656040 INPAFAMDB

19991027 EPAK + DESIGNATED CONTRACTING STATES:

EP A2

AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE

19991027 EP17P + REQUEST FOR EXAMINATION FILED

19990615

EXA Examination, Search Report

20000726 EPRTI1

TITLE (CORRECTION)

PARTIAL SEQUENCES OF PURINE BIOSYNTHESIS GENES FROM
ASHBYA GOSSYPII AND THEIR USE IN THE MICROBIAL
RIBOFLAVIN SYNTHESIS

20030730 EP17Q + FIRST EXAMINATION REPORT

20030617

EXA Examination, Search Report

20040623 EP18D

- DEEMED TO BE WITHDRAWN

20031128

NIF Lapses, Expiries, Withdrawals, Refusals

7 legal status categories simplify legal status
searching (/LSC2), e.g. **NIF**

Display of the "EPO simple family": SFAM

L1 ANSWER 1 OF 1 INPAFAMDB COPYRIGHT 2009 EPO/FIZ KA on STN

PATENT FAMILY INFORMATION

AN 7656040 INPAFAMDB

WO9829539 includes one
EPO simple family

=====
EPO simple family (SFN): 4177492
=====

+----- Publications -----+

AU 9857643	A	19980731
AU 9862916	A	19980731
CA 2276093	A1	19980709
CA 2276110	A1	19980709
EP 866129	A2	19980923
EP 951538	A2	19991027
EP 953044	A2	19991103
JP 2001509012	T	20010710
JP 2001508289	T	20010626
JP 11225770	A	19990824
US 6239264	B1	20010529
US 6489147	B1	20021203
WO 9829538	A2	19980709
WO 9829539	A2	19980709

+----- Applications -----+

AU 1998-57643	A	19971229
AU 1998-62916	A	19971229
CA 1997-2276093	A	19971229
CA 1997-2276110	A	19971229
EP 1997-811020	A	19971224
EP 1997-953928	A	19971229
EP 1997-954977	A	19971229
JP 1998-529616	T	19971229
JP 1998-529618	T	19971229
JP 1998-76818	A	19980105
US 1997-998416	A	19971224
US 1999-331403	A	19990621
WO 1997-EP7309	W	19971229
WO 1997-EP7312	W	19971229

+----- Priorities -----+

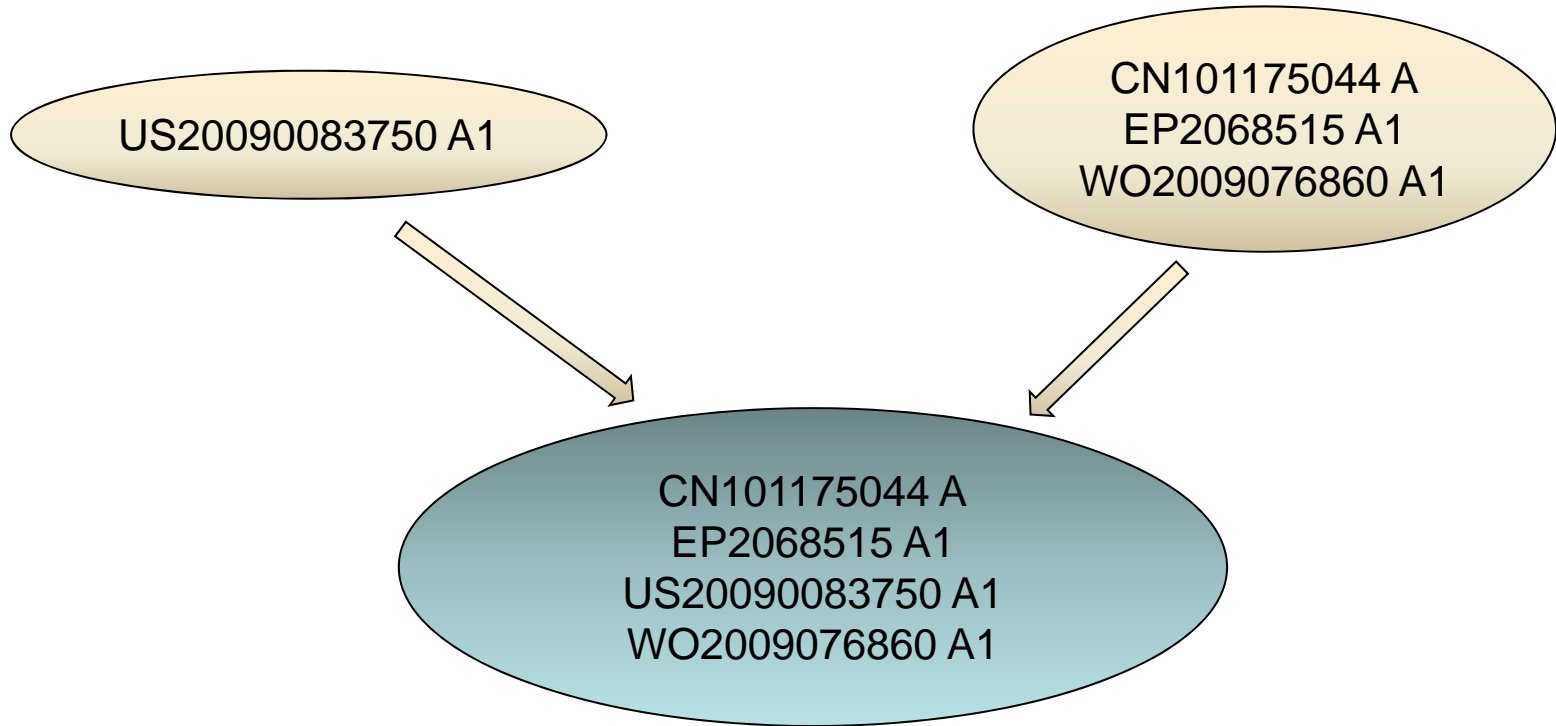
CH 1997-16	A	19961231	(CHA, Y)
WO 1997-EP7312	W	19971229	(WOWW, N)
WO 1997-EP7309	W	19971229	(WOWW, N)
EP 1997-811020	A	19971224	(EPA, N)
US 1997-998416	A	19971224	(USA, N)

Y = active priority
N = non-active priority

FIZ Karlsruhe editorial corrections account for more accurate INPADOC patent families

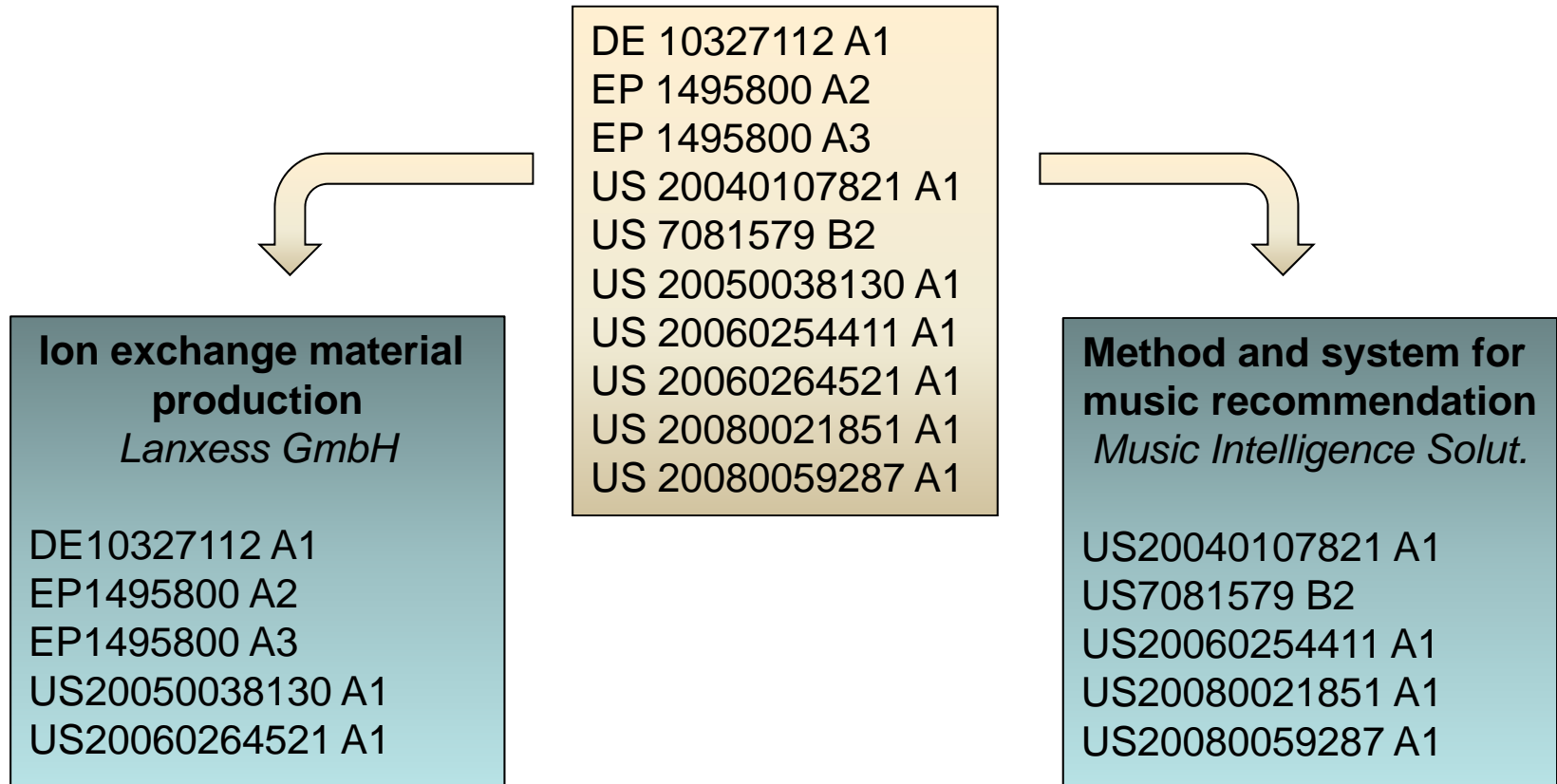
- Accurate patent families rely on accurate publication, application and priority numbers
- Quality control and correction process
 - all numbers which do not meet the standardized number formats are filtered out and corrected manually
 - serial corrections are processed automatically
 - app. 2.200 standards 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

Separate patent families are merged due to priority number corrections of FIZ-Karlsruhe



correction of Chinese priority number of US20090083750:
CN2007-~~1~~1017879 => CN2007-10178796

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



correction of US-priority number of US20080021851:

US2006-4923~~9~~5 => US2006-492355

A comprehensive patent family search for US6503867 from Akzo Nobel

1) INPAFAMDB

- patent number search with **SEARCH**
- combined family display: table + detailed format

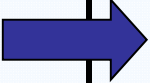
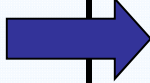

2) WPINDEX

- patent number search with **FSEARCH**
- display all records with BIB

3) HCAPLUS

- patent number search with **FSEARCH**
- display all records with BIB

Patent family display formats

	Family Format	Format Description
WPINDEX	BIB (IBIB)	Family information is included for the single record
CAPLUS	BIB (IBIB)	Family information is included for the single record
INPAFAMDB*	 FAM, FBIB	Family information is included for multiple records , if family accession number count is FAN.CNT > 1
	 FAM, CFAM2	Table of priority, application and publication numbers for all family members
	 FFAM	Full bibliographic details of all family members and legal status if available

* INPAFAMDB provides various family display formats: HELP FAMILY

Patent family search - INPAFAMDB

=> FILE INPADOODB

=> S US6503867/PN

L1 1 US6503867/PN

=> D BIB CFAM

L1 ANSWER 1 OF 1 INPADOODB COPYRIGHT 2009 EPO/FIZ KA on STN
AN 48859768 INPADOODB [Full-text](#)
FN 8979966
TI Quasi-crystalline boehmites containing additives.
TL English
IN STAMIREs DENNIS; O'CONNOR PAUL; PEARSON GREGORY; JONES WILLIAM
INS STAMIREs DENNIS, US; O'CONNOR PAUL, NL; PEARSON GREGORY, US; JONES
WILLIAM, GB
PA AKZO NOBEL N.V.
PAS AKZO NOBEL NV, US
DT Patent
PI **US 6503867** B1 20030107
PIT USB1 REEXAM. CERTIF., N-ND REEXAM. or GRANTED PATENT AS FIRST
PUBLICATION [FROM 2001 ONWARDS]
DAV 20030107 printed-with-grant
STA GRANTED
AI US 2000-636690 A 20000811
AIT USA Patent application
PRAI **US 2000-636690 A 20000811 (USA, 20070505, N)**
US 1999-372558 A 19990811 (USAC, 20070505, Y)

BIB format

Patent family search - INPAFAMDB

PATENT FAMILY INFORMATION

AN 48859768 INPADOCDB

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+-----PI-----+
AT 280737T          T  20041115
BR 2000013136      A  20020430
CA 2381410         A1 20010222
CA 2381410         C  20090127
CN 1368937         A  20020911
CN 1247460C        C  20060329
DE 60015352        D1 20041202
DE 60015352        T2 20051020
DK 1204596         T3 20050307
EP 1204596         A2 20020515
EP 1204596         B1 20041027
EP 1491500         A2 20041229
ES 2232499         T3 20050601
JP 2003507296      T  20030225
PT 1204596         E  20050331
US 6503867         B1 20030107
US 20060096891    A1 20060511
US 7208446        B2 20070424
WO 2001012551     A2 20010222
WO 2001012551     A3 20010830
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CFAM: Condensed Family

5 priorities, 14 applications, 20 publications

Patent family search - WPINDEX

=> FILE WPINDEX

=> S US6503867/PN

L2 1 US6503867/PN

=> D

L1 ANSWER 1 OF 1 WPINDEX COPYRIGHT 2009 THOMSON REUTERS on STN
AN 2003-310617 [30] WPINDEX

CR 2001-211177; 2007-300080

CR : Cross-Reference records

DNC C2003-081312 [30]

TI Transition alumina composition, used in e.g. catalyst fillers in composites, comprises quasi-crystalline boehmite and additive in homogeneously dispersed state

DC J04; L02

IN JONES W; O'CONNOR P; PEARSON G; STAMIREN D

PA (ALKU-C) AKZO NOBEL NV

CYC 1

PI **US 6503867** B1 20030107 (200330)* EN 10[7] <--

ADT US 6503867 B1 CIP of US 1999-372558 19990811; US 6503867 B1 US 2000-636690 20000811

PRAI US 2000-636690 20000811

US 1999-372558 19990811



FSEARCH locates all database records of an extended patent family

- Use FSEARCH in DWPI and HCAPLUS to retrieve extended family members
- FSEARCH iteratively selects and searches AP, PRN and PNs to find all related records
- All records of an extended family are linked via common priority number(s)
- FSEARCH is not required for INPAFAMDB

Patent family search - WPINDEX

=> **FSE US6503867/PN**

SEA US6503867/PN

L3 1 US6503867/PN

FSE

***** ITERATION 1 *****

SEL L3 1- PN,APPS

L4 SEL L3 1- PN APPS :

3 TERMS

SEA L4

L5 3 L4

***** ITERATION 2 *****

SEL L5 1- PN,APPS

L4 SEL L3 1- PN APPS :

29 TERMS

SEA L4

L5 3 L4

FSORT L5

L6 3 FSO L5

1 Multi-record Family Answers 1-3

0 Individual records

0 Non-patent Records

FSEARCH retrieves 3
database records



Patent family search - WPINDEX

=> D TI PA PN PRAI TOT L5

L5 ANSWER 1 OF 3 WPINDEX COPYRIGHT 2009 THOMSON REUTERS on STN
TI Composition useful as Fischer Tropsch catalyst composition comprises
quasi-crystalline boehmite and specified additive(s) in a
homogeneously dispersed state
PA (ALBL-C) ALBEMARLE NETHERLANDS BV; (JONE-I) JONES W; (OCON-I)
OCONNOR P; (PEAR-I) PEARSON G; (STAM-I) STAMIREN D
PI US 20060096891 A1 20060511 (200729)* EN 25[7]
US 7208446 B2 20070424 (200729) EN
PRAI US 2002-298734 20021118
US 1999-372558 19990811
US 2000-636690 20000811

L5 ANSWER 2 OF 3 WPINDEX COPYRIGHT 2009 THOMSON REUTERS on STN
TI Transition alumina composition, used in e.g. catalyst fillers in
composites, comprises quasi-crystalline boehmite and additive in
homogeneously dispersed state
PA (ALKU-C) AKZO NOBEL NV
PI US 6503867 B1 20030107 (200330)* EN 10[7]
PRAI US 2000-636690 20000811
US 1999-372558 19990811

Patent family search - WPINDEX

L5 ANSWER 3 OF 3 WPINDEX COPYRIGHT 2009 THOMSON REUTERS on STN
TI Quasi-crystalline boehmite for use as starting material for, e.g.
catalyst composition, has additive in homogeneously dispersed state
PA (ALKU-C) AKZO NOBEL NV; (ALBL-C) ALBEMARLE NETHERLANDS BV; (ALBL-C)
ALBEMARLE CORP
PI WO 2001012551 A2 20010222 (200121)* EN 24[7]
BR 2000013136 A 20020430 (200237) PT
EP 1204596 A2 20020515 (200239) EN
KR 2002026363 A 20020409 (200267) KO
CN 1368937 A 20020911 (200282) ZH
JP 2003507296 W 20030225 (200317) JA 25
EP 1204596 B1 20041027 (200471) EN
DE 60015352 E 20041202 (200479) DE
EP 1491500 A2 20041229 (200502) EN
ES 2232499 T3 20050601 (200538) ES
DE 60015352 T2 20051020 (200569) DE
CN 1247460 C 20060329 (200713) ZH
IN 2002CN00212 P4 20071123 (200812) EN
KR 711321 B1 20070427 (200832) KO
CA 2381410 C 20090127 (200922) EN
PRAI **US 1999-372558** 19990811

The priority number US 1999-372558 is
the link between these 3 records.

Patent family search - HCAPLUS

=> FILE HCAPLUS

=> S US6503867/PN

L8 2 US6503867/PN

Use FSEARCH only
in HCAPLUS

=> D TOT

L8 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2006:445892 HCAPLUS [Full-text](#)

DN 144:452723

TI Synthesis and properties of quasicrystalline metal-incorporated and modified boehmites

IN Stamires, Dennis; O'Connor, Paul; Pearson, Gregory; Jones, William

PA Albemarle Netherlands B. V., Neth.

SO U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. Ser. No. 636,690.

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 20060096891	A1	20060511	US 2002-298734	20021118
	US 7208446	B2	20070424		
	US 6503867	B1	20030107	US 2000-636690	20000811
	EP 1491500	A2	20041229	EP 2004-77631	20000811
PRAI	US 1999-372558	B2	19990811		
	US 2000-636690	A2	20000811		
	EP 2000-964010	A3	20000811		



Patent family search - HCAPLUS

L8 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:17792 HCAPLUS [Full-text](#)
DN 138:75595
TI Quasi-crystalline boehmites with homogeneously dispersed metal additives
IN Stamires, Dennis; O'Connor, Paul; Pearson, Gregory; Jones, William
PA Akzo Nobel N.V., Neth.
SO U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 372,558, abandoned.
CODEN: USXXAM

DT Patent
LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 6503867	B1	20030107	US 2000-636690	20000811
	EP 1491500	A2	20041229	EP 2004-77631	20000811
	ES 2232499	T3	20050601	ES 2000-964010	20000811
	CN 1247460	C	20060329	CN 2000-811389	20000811
	US 20060096891	A1	20060511	US 2002-298734	20021118
	US 7208446	B2	20070424		
PRAI	US 1999-372558	B2	19990811		
	EP 2000-964010	A3	20000811		
	US 2000-636690	A2	20000811		

Patent family search - HCAPLUS

=> FSE US6503867/PN

SEA US6503867/PN

L9 2 US6503867/PN

FSE

*** ITERATION 1 ***

SEL L9 1- PN,APPS

L10 SEL L9 1- PN APPS : 13 TERMS

SEA L10

L11 3 L10

*** ITERATION 2 ***

SEL L11 1- PN,APPS

L10 SEL L9 1- PN APPS : 24 TERMS

SEA L10

L11 3 L10

FSORT L11

L12 3 FSO L11

1 Multi-record Family Answers 1-3

0 Individual Records

0 Non-patent Records

Patent family search - HCAPLUS

=> D TI PA PN PRAI TOT L12

- o
- o

L12 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2009 ACS on STN FAMILY 1

TI Quasi-crystalline boehmites containing additives

PA Akzo Nobel N.V., Neth.

	PATENT NO.	KIND	DATE
	-----	----	-----
PI	WO 2001012551	A2	20010222
	WO 2001012551	A3	20010830
	CA 2381410	A1	20010222
	CA 2381410	C	20090127
	BR 2000013136	A	20020430
	EP 1204596	A2	20020515
	EP 1204596	B1	20041027
	JP 2003507296	T	20030225
	AT 280737	T	20041115
	EP 1491500	A2	20041229
	ES 2232499	T3	20050601
	CN 1247460	C	20060329
PRAI	US 1999-372558	A	19990811
	EP 2000-964010	A3	20000811
	WO 2000-EP7794	W	20000811

Patent Family of US6503867

	INPADOCDB	WPINDEX	HCAPLUS
AT 280737 T	X		
BR 2000013136 A	X	X	X
CA 2381410 A1	X		X
CA 2381410 C	X	X	X
CN 1368937 A	X	X	
CN 1247460C C	X	X	X
DE 60015352 D1	X	X	
DE 60015352 T2	X	X	
DK 1204596 T3	X		
EP 1204596 A2	X	X	X
EP 1204596 B1	X	X	X
ES 2232499	X	X	X

Patent Family of US6503867

	INPADOCDB	WPINDEX	HCAPLUS
IN2002CN00212 P4	X	X	
JP 2003507296 T	X	X	X
KR 2002026363 A		X	
PT 1204596 E	X		
US 6503867 B1	X	X	X
US 20060096891 A1	X	X	X
US 7208446 B2	X	X	X
WO 2001012551 A2	X	X	X
WO 2001012551 A3	X		X

Comprehensive patent family information requires all three family files on STN

- Each database is unique with respect to
 - patent authority coverage
 - document type coverage
 - historical coverage
 - subject coverage
 - timeliness depending on publication authority
- INPAFAMDB has an extensive patent authority coverage
- WPINDEX has a good coverage of “non convention equivalents”

Timeliness: CAPLUS

- CAS core patent authorities
 - US, WO, EP, DE, JP, GB, FR, CA, and RU
 - Preview bibliography online within 2 days
 - Fully abstracted and indexed within 27 days
- Timeliness of non-core authorities varies
 - KR - 14 days from publication
 - Links to original publications through KIPRIS
 - CN – 14 days from publication
 - Fully indexed within 49 days
 - Links to original publications through SIPO

Timeliness: DWPI

- DWPI basic patent records are posted online after value-added is completed
- Basic patent timeliness therefore varies greatly, e.g. Chem/Pharma PCTs at approx 30 days
- Preview bibliography is available in DWPI First View, typically within a few days of publication
- Equivalent patents from major authorities appear in DWPI within 7 days of publication

Timeliness: INPAFAMDB

- Records are typically in the file 1-4 weeks after publication, e.g. EP 2 days, US/WO 2 weeks
- Generally more timely than Derwent WPI for Derwent Basic Patents
- Generally less timely than Derwent WPI for Derwent equivalent patents
- INPAFAMDB retains some timeliness benefits over CAplus for non-core authorities, e.g. ZA

Patent Family of WO2002/17905 on STN Treatment of Burns, Novartis Consumer Health

AR30522 A1
AT504040 A1
AT504040 B1
AU2001287706B2
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BE1014352 A5
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DE10196483 T0
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ES2201941 B1
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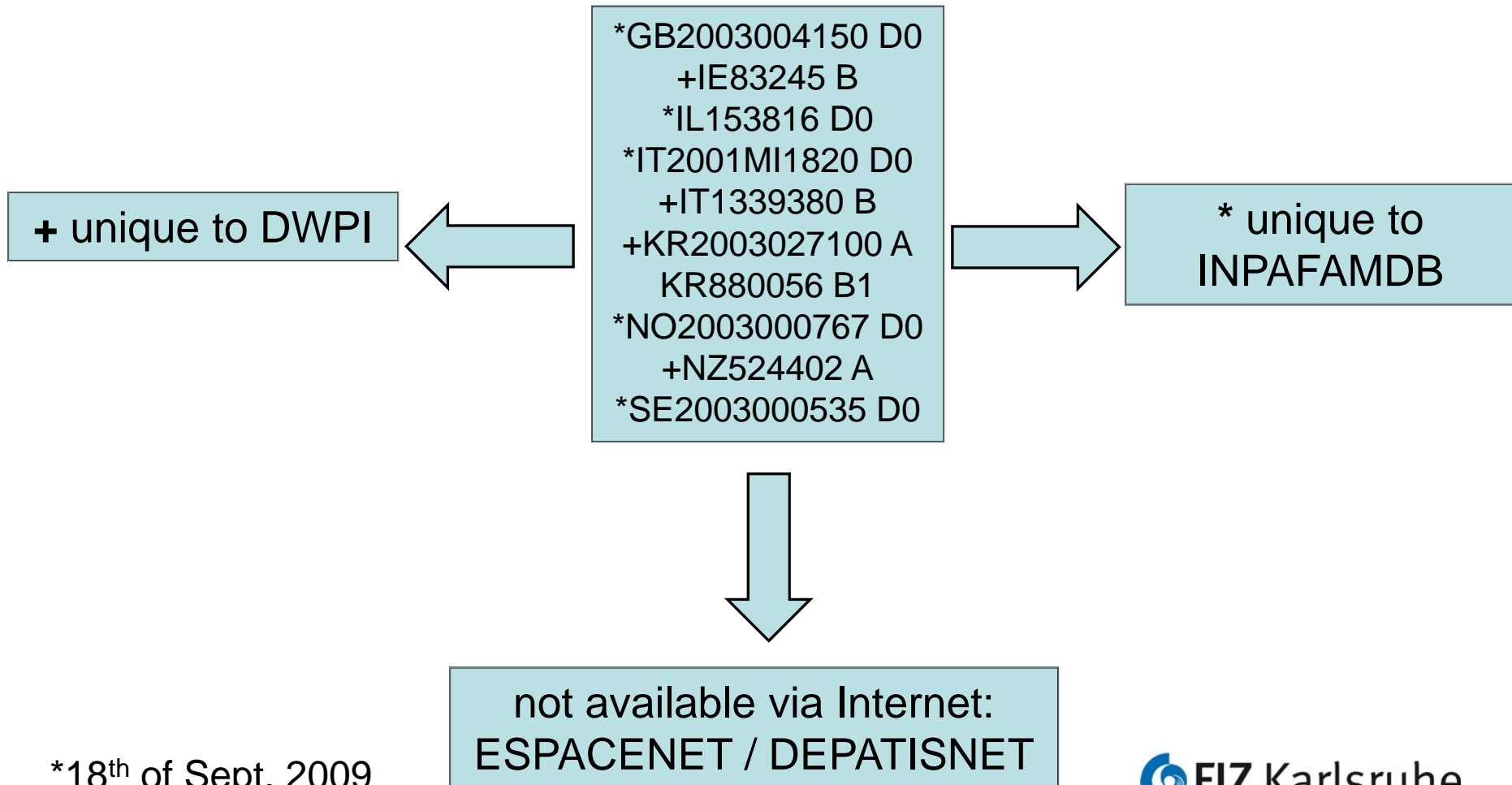
GB2003004150 D0
IE83245 B
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IT2001MI1820 D0
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KR880056 B1
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HU2003000876 A3
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IT2001MI1820 A1
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SE527137 C2
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WO2002017905 A2
WO2002017905 A3
ZA2003000284 A

Patent Family* of WO2002/17905 on STN Treatment of Burns, Novartis Consumer Health



*18th of Sept. 2009

Summary

- Patent family information on STN meets the high quality standard of EPO/FIZ, Thomson Reuters and CAS
- INPADOC family data from EPO are enhanced by FIZ Karlsruhe through an editorial process
- STN family databases are complementary with respect to patent authority, document type and historical coverage
- Patent families mean different things to different database producers
- To be comprehensive it is necessary to check CAPLUS, INPAFAMDB and DWPI

STN[®]

Martine MICHEL

martine.michel@capadoc.fr

www.capadoc.fr

www.stn-international.com