

FAMPAT

Comprehensive Worldwide Patent Family Database

■ Contents:

The FamPat database provides comprehensive family coverage of worldwide patent publications published from more than 85 patent authorities. In FamPat, a single family record combines together all publication stages of the family. Searches for Assignee, Inventor or Classes are conducted on all family equivalents. Boolean searching is available across all family abstracts.

Questel has developed a family definition which incorporates the EPO's strict family rule with additional rules to include: Applications falling outside the 12 month filing limit; Links between EP and PCT publications; Combining US Provisionals that share the same priority with US Published Applications. FamPat's family definitions also incorporate different patenting authorities' definitions of an invention, particularly useful with Japanese publication searching.

- Coverage starting dates vary by country. 1920's and earlier for US, DE, FR, and GB publications. See the complete country coverage listing on page 2.
- English, French, German and other language abstracts. Select documents have multi-language titles and abstracts. English language machine translated titles; assignee and inventor names and abstracts are added from 2008 forward: DEA1, DEB3 & DEU1, FRA, JPA & JPU3, CNA & CNY, TWA (future) and KRA & KRU (no abstracts). This machine-translated data is replaced by the official English data when available.
- Full text summaries of EP, PCT, and US patents. The summaries contain: Objective (OBJ), Advantages and Previous Drawbacks (ADB), and Independent Claims (ICLM) and are currently available as follows:
 - EP Published Applications 1980 to date
 - PCT Published Applications Mid 2001 to date
 - US Granted Patents 1971 to 2000
 - US Published Applications
- Patent Classifications include: EPO Classification (ECLA, Dutch and Berlin Classifications), FI and F-Terms (Japanese Classifications) International Patent Classification (IPC), and USPTO Classification
- Search reports, patent and bibliographic cited references are available for numerous patent authorities.
- Relevancy Indicators as used by the EPO in their search reports are searchable.

- **Number of records:** More than 37,754 million records
- **Updating:** Weekly
- **Language of records:** Majority of titles and abstracts are in English
English, French, German and other language abstracts
Select documents have multi-language abstracts

- **SDI Profiles:** Weekly
Monthly

- **Producer:** Questel
<http://www.questel.com>
Paris
4, rue des Colonnes
75082 Paris Cedex 02
France
Phone: +33 (0) 1 55 04 52 00
Fax: +33 (0) 1 55 04 51 00
Email: clients@questel.fr

Washington DC
1725 Duke Street
Suite 625
Alexandria, VA
USA
Phone: +1 800 456 7248
Fax: +1 888 362 3657
E-mail: help@questel.com

Country Coverage

(Year indicates the year of earliest documents)

| Country | Country Code | Coverage from: |
|----------------------------------|--------------|------------------------|
| Argentina | AR | 1973-1991 |
| Algeria | DZ | 2002 |
| ARIPO | AP | 1984 |
| Australia | AU | 1966 |
| Austria Utility Models | AT | 1969 1994 |
| Belgium (1926) | BE | 1964 |
| Bosnia and Herzegovina | BA | 1998 |
| Brazil Utility Models | BR | 1973 1975 |
| Bulgaria Utility Models | BG | 1973 1994 |
| Canada | CA | 1973 |
| Chile | CL | 2005 |
| China Utility Models | CN | 1986 1989 |
| Costa Rica | CR | 2007 |
| Croatia | HR | 1994 |
| Cuba | CU | 1974-1995 |
| Cyprus | CY | 1975 |
| Czech Republic Utility Models | CZ | 1993 1999 |
| Czechoslovakia | CS | 1973-1994 |
| Denmark Utility Models | DK | 1968 1996 |
| Ecuador | EC | 2005 |
| Estonia | EE | 1995 |
| Egypt | EG | 1976 |
| El Salvador | SV | 2000 |
| Eurasian Patents | EA | 1997 |
| European Patents | EP | 1978 |
| Finland Utility Models | FI | 1968 1992 |
| France (1902) | FR | 1920 |
| Germany (1877) Utility Models | DE | 1968 1968 |
| Germany, D R Utility Models | DD | 1973-1992 1973-1992 |
| Great Britain (1909) | GB | 1963 |
| Guatemala | GT | 1966-2007 |
| Gulf Council | GC | 2002 |
| Greece Utility Models | GR | 1977 1990 |
| Hong Kong | HK | 1976 |
| Hungary Utility Models | HU | 1994 1992 |
| Iceland | IS | 1926 |
| India | IN | 1975 |
| Indonesia | ID | 1988 |
| Ireland | IE | 1973 |
| Israel | IL | 1968 |
| Italy Utility Models | IT | 1973 1987 |
| Japan Utility Models | JP | 1973 1993 |
| Kenya | KE | 1975-1989 |

| Country | Country Code | Coverage from: |
|------------------------------------|--------------|------------------------|
| Korea Utility Models | KR | 1978-2000 1978 |
| Latvia | LV | 1994 |
| Lithuania | LT | 1994 |
| Luxembourg (1946) | LU | 1960 |
| Malawi | MW | 1973-1994 |
| Malaysia | MY | 1971-1989 |
| Malta | MT | 1968-1992 |
| Mexico | MX | 1981-1995 |
| Moldova Utility Models | MD | 1994 1994 |
| Monaco | MC | 1958 |
| Mongolia | MN | 1972 |
| Morocco | MA | 1979 |
| Netherlands (1912) | NL | 1964 |
| Nicaragua | NI | 2003 |
| Norway | NO | 1968 |
| OAPI | OA | 1966-1996 |
| Panama | PA | 1996 |
| Peru | PE | 1992 |
| Philippines Utility Models | PH | 1975-1996 1981-1996 |
| Poland Utility Models | PL | 1973 1996 |
| Portugal Utility Models | PT | 1976 1976 |
| Romania | RO | 1973 |
| Russian Federation | RU | 1993 |
| Singapore | SG | 1983 |
| Slovakia | SK | 1993 |
| Slovenia | SI | 1993 |
| South Africa | ZA | 1971 |
| Soviet Union | SU | 1972-1994 |
| Spain Utility Models | ES | 1968 1993 |
| Sweden | SE | 1968 |
| Switzerland (1920) | CH | 1969 |
| Tajikistan Utility Models | TJ | 1998 1998 |
| Taiwan Utility Models | TW | 2000 2000 |
| Trinidad & Tobago | TT | 1994 |
| Turkey Utility Models | TR | 1973-1998 1996-1998 |
| Ukraine (1987) Utility Models | UA | 2003 2005 |
| United States (1920) Designs | US | 1968 1916 (1977) |
| Uruguay Industrial Design Apps. | UY | 2007 2007 |
| Vietnam Utility Models | CN | 1984-1998 1989-1998 |
| WIPO (PCT) Applications | WO | 1978 |
| Yugoslavia | YU | 1973-1992 |
| Zambia | ZM | 1969-1994 |
| Zimbabwe | ZW | 1980-1995 |

Sample Record

1/1-FAMPAT-@Questel- image

Family Accession Nbr:

20090121357759

Patent Number:

GB0608349 D0 20060607 [GB200608349]
 STG: Patent application filed
 AP : 2006GB-0008349 20060427

CA2544866 A1 20061029 [CA2544866]
 STG: Application laid open
 AP : 2006CA-2544866 20060425

NO20061817 A 20061030 [NO200601817]
 STG: Patent application made available to the public
 AP : 2006NO-0001817 20060425

US2006243033 A1 20061102 [US20060243033]
 STG: First published patent application
 AP : 2005US-0908161 20050429

US2006243047 A1 20061102 [US20060243047]
 STG: First published patent application
 AP : 2005US-0203932 20050815

DE102006019813 A1 20061102 [DE102006019813]
 STG: Doc. laid open (First publication)
 AP : 2006DE-10019813 20060428

FR2885166 A1 20061103 [FR2885166]
 STG: Application for patent of invention, (first publ.)
 AP : 2006FR-0003697 20060421

GB2425794 A 20061108 [GB2425794]
 STG: Published patent application

WO2006117604 A1 20061109 [WO2006117604]
 STG: International publication with international search report
 AP : 2006WO-IB00919 20060419

CA2605830 A1 20061109 [CA2605830]
 STG: Application laid open
 AP : 2006CA-2605830 20060419

CN1912341 A 20070214 [CN1912341]
 STG: Unexamined application for a patent for inv.
 AP : 2006CN-0089814 20060429

MXPA06004693 A 20070424 [MX2006PA004693]
 STG: Patent application
 AP : 2006MX-PA04693 20060427

GB2425794 B 20070704 [GB2425794]
 STG: Patent specification

RU2006114647 A 20071120 [RU2006114647]
 STG: Application for invention
 AP : 2006RU-0114647 20060428

NO20075593 B 20071123 [NO20075593]
 STG: Document laid open for public inspection
 AP : 2007NO-0005593 20071105

EP1877646 A1 20080116 [EP1877646]
 STG: Application published with search report
 AP : 2006EP-0744517 20060419

MX2007013221 A 20080116 [MX2007013221]
 STG: Patent application
 AP : 1920MX-7013221 20071023

CN101189409 A 20080528 [CN101189409]
 STG: Unexamined application for a patent for inv.
 AP : 2006CN-80019958 20060419

US7458252 B2 20081202 [US7458252]
STG: Granted patent as second publication
FD : Previous Publication: US20060243033 A1 20061102

US7461547 B2 20081209 [US7461547]
STG: Granted patent as second publication
FD : CIP of: US10908161 20050429 [2005US-0908161]
FD : Previous Publication: US20060243047 A1 20061102

Title:

METHODS AND APPARATUS OF DOWNHOLE FLUID ANALYSIS

Patent Assignee:

PETROLEUM RES & DEV NV
SCHLUMBERGER CA LTD
SCHLUMBERGER HOLDINGS
SCHLUMBERGER SERVICES PETROL
SCHLUMBERGER TECHNOLOGY BV
SCHLUMBERGER TECHNOLOGY CORP

Orig. Patent Assignee:

Schlumberger Technology B.V.; Parkstraat 83-89; 2514 JG The Hague (NL) (for : BG CZ DE DK GR HU
IE IT LT PL RO SI SK TR)
Services Pétroliers Schlumberger; 42, rue Saint Dominique; 75007 Paris (FR) (for : FR)
Petroleum Research and Development N.V.; De Ruyterkade 62; Willemstad, Curacao (AN) (for : AT BE
CH CY EE ES FI IS LI LU LV MC PT SE)
SCHLUMBERGER HOLDINGS LIMITED; Craigmuir Chambers Road Town; Tortola (VG) (for : GB NL)

Inventor(s) :

TERABAYASHI TORU; CHIKENJI AKIHITO; YAMATE TSUTOMU; MULLINS OLIVER C; KURKJIAN ANDREW L

Application Nbr:

2005US-0908161 20050429
2005US-0203932 20050815
2006CN-80019958 20060419
2006CA-2605830 20060419
2006EP-0744517 20060419
2006WO-IB00919 20060419
2006FR-0003697 20060421
2006NO-0001817 20060425
2006CA-2544866 20060425
2006MX-PA04693 20060427
2006GB-0008349 20060427
2006RU-0114647 20060428
2006DE-10019813 20060428
2006CN-0089814 20060429
1920MX-7013221 20071023
2007NO-0005593 20071105

PCT Patent:

(EP1877646)
WO2006117604 - 20061109 [WO2006117604]

PCT Patent:

(CN101189409)
WO2006/117604 20061109 [WO2006117604]

PCT Appli.:

WOIB2006000919 20060419 [2006WO-IB00919]

PCT Appli.:

WOIB2006000919 20060419 [2006WO-IB00919]

PCT Appli.:

WOIB2006000919 20060419 [2006WO-IB00919]

PCT Appli.:

WOIB2006000919 20060419 [2006WO-IB00919]

PCT Appli.:

PCT/IB2006/000919 20060419 [2006WO-IB00919]

Filing Details:

(US20060243033)
Previous Publication: US20060243033 A1 20061102

Filing Details:

(US20060243047)
CIP of: US10908161 20050429 [2005US-0908161]
Previous Publication: US20060243047 A1 20061102

Priority Details:

2005US-0203932 20050815
2005US-0908161 20050429
2006WO-IB00919 20060419

IPC:

E21B-047/00
E21B-047/06
E21B-047/08
E21B-049/00
E21B-049/08
E21B-049/10
G01N-007/00
G01V-008/10

IPC Advanced All:

E21B-049/10 [2006-01 A F I B H EP]
G01N-007/00 [2006-01 A L I B H EP]

IPC Core All:

E21B-049/00 [2006 C F I B H EP]
G01N-007/00 [2006 C L I B H EP]

ECLA:

E21B-049/10
G01N-009/36

ICO Code:

S01N-011/00S

US Class:

ORIGINAL (O) : 073064450

Designated States:

(EP1877646)
DE FR GB

Designated States:

(WO2006117604)
AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD
GE GH GM HR HU ID IL IN IS JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX
MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC
VN YU ZA ZM ZW
ARIPO patent : BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
Eurasian patent : AM AZ BY KG KZ MD RU TJ TM
European patent : AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT LU LV MC NL PL PT RO
SE SI SK TR
OAPI patent : BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

Citations:

(US20060243033)
Search Report [Examiner]
US5934374(A) [US5934374]
US6964301(B2) [US6964301]
US7100689(B2) [US7100689]
Applicant citations
US3954006(A) [US3954006]
US4782695(A) [US4782695]
US4860581(A) [US4860581]
US4936139(A) [US4936139]
US4994671(A) [US4994671]
US5329811(A) [US5329811]
US5859430(A) [US5859430]
US6178815(B1) [US6178815]
US6274865(B1) [US6274865]
US6301959(B1) [US6301959]
US6343507(B1) [US6343507]
US6467544(B1) [US6467544]
US6474152(B1) [US6474152]
US6476384(B1) [US6476384]
US6585045(B2) [US6585045]
US6609568(B2) [US6609568]
US6659177(B2) [US6659177]
US6688390(B2) [US6688390]
US6719049(B2) [US6719049]
US6755086(B2) [US6755086]
US6768105(B2) [US6768105]
US6842700(B2) [US6842700]
US6850317(B2) [US6850317]
US6854341(B2) [US6854341]
US6898963(B2) [US6898963]
US2003033866(A1) [US2003033866]
US2004000433(A1) [US2004000433]
US2004045706(A1) [US2004045706]
US2006070426(A1) [US2006070426]
GB2362960(A) [GB2362960]
GB2397382(A) [GB2397382]
WO0231476(A2) [WO200231476]

Citations:

(US20060243047)
Search Report [Examiner]
US4860581 (A) [US4860581]
US4936139 (A) [US4936139]
US6102673 (A) [US6102673]
US6148912 (A) [US6148912]
US6189612 (B1) [US6189612]
US6230824 (B1) [US6230824]
US6296056 (B1) [US6296056]
US6325159 (B1) [US6325159]
US6467544 (B1) [US6467544]
US6659177 (B2) [US6659177]
US6688390 (B2) [US6688390]
US6755086 (B2) [US6755086]
US6775996 (B2) [US6775996]
US7178591 (B2) [US7178591]
Applicant citations
US3780575 (A) [US3780575]
US3859851 (A) [US3859851]
US3954006 (A) [US3954006]
US4782695 (A) [US4782695]
US4994671 (A) [US4994671]
US5167149 (A) [US5167149]
US5201220 (A) [US5201220]
US5233866 (A) [US5233866]
US5266800 (A) [US5266800]
US5331156 (A) [US5331156]
US5549159 (A) [US5549159]
US5622223 (A) [US5622223]
US5859430 (A) [US5859430]
US5939717 (A) [US5939717]
US6128949 (A) [US6128949]
US6178815 (B1) [US6178815]
US6274865 (B1) [US6274865]
US6301959 (B1) [US6301959]
US6343507 (B1) [US6343507]
US6474152 (B1) [US6474152]
US6476384 (B1) [US6476384]
US6585045 (B2) [US6585045]
US6609568 (B2) [US6609568]
US6719049 (B2) [US6719049]
US6758090 (B2) [US6758090]
US6768105 (B2) [US6768105]
US6842700 (B2) [US6842700]
US6850317 (B2) [US6850317]
US6854341 (B2) [US6854341]
US6898963 (B2) [US6898963]
US2002112854 (A1) [US20020112854]
US2002194906 (A1) [US20020194906]
US2002194907 (A1) [US20020194907]
US2003033866 (A1) [US20030033866]
US2004000433 (A1) [US20040000433]
US2004000636 (A1) [US20040000636]
US2004045706 (A1) [US20040045706]
GB2362960 (A) [GB2362960]
GB2397382 (A) [GB2397382]
WO0231476 (A2) [WO200231476]

Citations:

(WO2006117604)
Search Report [Examiner]
US5549159 (A) (Cat. X) [US5549159]
US5622223 (A) (Cat. X) [US5622223]
US2002194907 (A1) (Cat. X, D) [US20020194907]
US5233866 (A) (Cat. A) [US5233866]
US2002112854 (A1) (Cat. A) [US20020112854]
US6128949 (A) (Cat. A) [US6128949]

Citations:

(GB200608349)
Search Report [Examiner]
GB2362960 (A) [GB2362960]
GB2397382 (A) [GB2397382]
US4782695 (A) [US4782695]

CT ref.:

(US20060243033)
Applicant references
-Walker, I.R., "Circulation Pump for High Purity Gases at High Pressure and a Novel Linear Motor Positioning System," Rev. Sc. Instrum. 67 (2), Feb. 1996, pp. 564-578.

- Sterner, Charles J., "Electromagnetic Pump for Circulating Gases at Low Flow Rates," Rev. Sc. Instruments, Oct. 1960, vol. 31, Issue 10, pp. 1159-1160.
- Canfield, F.B. et al., "Electromagnetic Gas Pump for Low Temperature Service," Rev. Sci. Instrum. 34, 1431 (1963), pp. 1431-1433.
- Erdman, K.L. et al., "Simple Gas Circulation Pump," Rev. Sci. Instrum. 35, 241 (1964), p. 241.
- Lloyd, R.V. et al., "EPR Cavity for Oriented Single Crystals in Sealed Tubes," Rev. Sci. Instrum. 40, 514 (1969), pp. 514-515.
- Mohamed, W.M. et al., "Simple High-Speed Circulating Pump for Gases," Rev. Sci. Instrum. 60 (7), Jul. 1989, pp. 1349-1350.
- Duncan, S. et al., "A Double-Acting All-Glass Gas Circulating Pump," J. Sci. Instrum., 1967, vol. 44, p. 388.
- Ellis, T. et al., "A Demountable Glass Circulating Pump," J. Sci. Instrum., 1962, vol. 39, pp. 234-235.
- Kallo, D. et al., "Circulating Pump and Flowmeter for Kinetic Reaction Apparatus," J. Sci. Instrum., 1964, vol. 41, pp. 338-340.

CT ref.:

(US20060243047)

Applicant references

- Joshi, et al., "Asphallene Precipitation from Live Crude Oil," Energy & Fuels. 2001, vol. 15., pp. 979-986, American Chemical Soc.
- Walker, I.R., "Circulation Pump for High Purity Gases at High Pressure and a Novel Linear Motor Positioning System," Rev. Sc. Instrum. 67 (2), Feb. 1996, pp. 564-578.
- Sterner, Charles J., "Electromagnetic Pump for Circulating Gases at Low Flow Rates," Rev. Sc. Instruments, Oct. 1960, vol. 31, Issue 10, pp. 1159-1160.
- Canfield, F.B. et al., "Electromagnetic Gas Pump for Low Temperature Service," Rev. Sci. Instrum. 34, 1431 (1963), pp. 1431-1433.
- Erdman, K.L. et al., "Simple Gas Circulation Pump," Rev. Sci. Instrum. 35, 241 (1964), p. 241.
- Lloyd, R.V. et al., "EPR Cavity for Oriented Single Crystals in Sealed Tubes," Rev. Sci. Instrum. 40, 514 (1969), pp. 514-515.
- Mohamed, W.M. et al., "Simple High-Speed Circulating Pump for Gases," Rev. Sci. Instrum. 60 (7), Jul. 1989, pp. 1349-1350.
- Duncan, S. et al., "A Double-Acting All-Glass Gas Circulating Pump," J. Sci. Instrum., 1967, vol. 44, p. 388.
- Ellis, T. et al., "A Demountable Glass Circulating Pump," J. Sci. Instrum., 1962, vol. 39, pp. 234-235.
- Kallo, D. et al., "Circulating Pump and Flowmeter for Kinetic Reaction Apparatus," J. Sci. Instrum., 1964, Vol. 41, pp. 338-340.

Abstract:

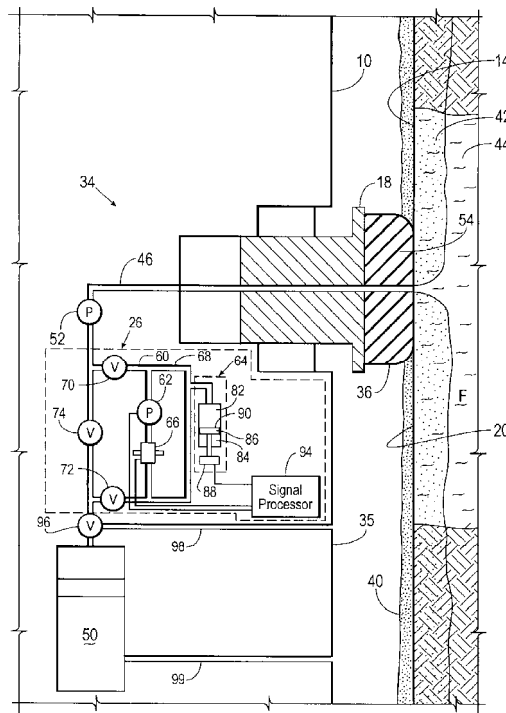
(EP1877646)

Methods and apparatus for downhole analysis of formation fluids by isolating the fluids from the formation and/or borehole in a pressure and volume control unit that is integrated with a flowline of a fluid analysis module and determining fluid characteristics of the isolated fluids. Parameters of interest may be derived for formation fluids in a static state and undesirable formation fluids may be drained and replaced with formation fluids that are suitable for downhole characterization or surface sample extraction. Isolated formation fluids may be circulated in a loop of the flowline for phase behavior characterization. Real-time analysis of the fluids may be performed at or near downhole conditions.

(From US2006243047 A1)

Update New docs:

2006-46



Searching

Basic Index includes TI, FTI, GTI, OTI, AB, FAB, GAB, OAB, MTAB and IT

| Search by | Index | Search Hints | Examples |
|----------------------------|------------------|---|--|
| Terms from the Basic Index | /BI (default) | The Basic Index incorporates: Title (TI), French Title (FT), German Title (GT) Original Title (OTI), Abstract (AB), French Abstract (FAB), German Abstract (GAB) Original language abstracts (OAB) and Index Terms (IT) for Select French Patents Only All Basic Index terms may be searched without field qualifiers. For all these indexes, search by: Single terms using Boolean or proximity operators; Phrases using implied adjacency. Use truncation. Left-hand truncation is available. | SYNTHETIC AND AQUEOUS HYDROPHOB+ POLYMER? +SPHERE+ |
| Title | /TI | It is important to note that qualifying to /TI will search ONLY English Language Titles. Search English language title by: Single terms using Boolean or proximity operators. Phrases using implied adjacency. Use truncation. Left-hand truncation is available. | /TI OSTEOGENIC PROTEIN? /TI +LITOGRA+ |
| Title - French | /FT | Search French language title by: Single terms using Boolean or proximity operators. Phrases using implied adjacency. Use truncation. Left-hand truncation is available | /FT ROTATIF? |
| Title - German | /GT | Search German language title by: Single terms using Boolean or proximity operators. Phrases using implied adjacency. Use truncation. Left-hand truncation is available | /GT ELEKTRISCH+ |
| Original Title | /OTI | Search non-English language title: Single terms using Boolean or proximity operators. Phrases using implied adjacency. Use truncation. Left-hand truncation is available. | /OTI OPTIQUE AND MULTIPLEXEUR /OTI FOTOINICIADORES FUNCIONALIZADOS |
| Abstract (English) | /AB | All Abstracts are searched using: Single terms using Boolean or proximity operators. Phrases using implied adjacency. Use truncation. Left-hand truncation is available. Note: qualifying to /AB will search ONLY <u>official</u> English Language Abstracts, NOT Machine Translated Abstracts – see MTAB English abstracts are available for 99 % of minimum PCT documents (EP, FR, DE, CH, GB, US, WO, JP and RU/SU). The other English abstracts are mainly from the CN, IT, FI, DK, NL, ES, SE, AT and PT publications. | /AB +ISOMER? /AB DNA AND VIRUS |

Basic Index (cont'd.)

| Search by | Index | Search Hints | Examples |
|--|-------|---|--|
| Abstract (French) | /FAB | French abstracts are provided for WO, EP, FR, CA and BE publications from 1978. It is possible to specify French language titles and abstracts as the default for displaying FamPat titles and abstracts. This is controlled by the POP or OP option MFAM. Example: POP MFAM FR The Title and Abstract for the FR member will be displayed first in the record. If there is not a FR family member, then the default display is used. | /FAB TRANSMISSION 3d METRIQUE |
| Abstract (German) | /GAB | German abstracts are provided for DE from 1989, EP from 1978 and WO from 1995. It is possible to specify German language titles and abstracts as the default for displaying FamPat titles and abstracts. This is controlled by the POP or OP option MFAM. Example: POP MFAM DE The Title and Abstract for the DE member will be displayed first in the record. If there is not a DE family member, then the default display is used. | /GAB UBERTRAGUNGS PRIORITAT |
| Abstract (Other) Country of origin language abstracts are available for a small percentage of the records | /OAB | Use to search primarily for abstracts for following patent offices: - Spanish (ES, MX, AR, CR, PA, PE, NI, SV, UY) - Portuguese (BR) - Italian (IT) - Hungarian (HU) | /OAB PLURALIDAD S TRAYECTORIA |
| Abstract (English machine translated) | /MTAB | This abstract (MTAB) is replaced by the official English abstract (AB) when available. Available currently for new JP, CN, DE and FR. | /MTAB GOLF |
| All Abstracts | /ABS | All abstracts may be searched in tandem with /AB /FAB/GAB/MTAB or by using the super-index ABS | /ABS KEVLAR |
| No Machine Translated Abstracts | /NOMT | MTAB is included in the basic index, but may be excluded from the search, by using the field qualifier /NOMT (No Machine Translations) | /NOMT KEVLAR |
| Index Terms | /IT | English Language Index Terms for select French Patent Records. Search using: Single terms using Boolean, proximity operators and/or truncation. Phrases using implied adjacency and/or truncation. **Please note: Left hand truncation is not supported. | /IT DISTANCE /IT ROBOT+ /IT DISTANCE MEASUREMENT |

Basic Index - OBJ, ADB and ICLM

Currently available for the following:

- EP published applications: 1980 to date
- PCT published applications: Mid 2001 to date
- US Granted Patents: 1971 to 2000
- US Published applications: March, 15, 2001 onwards

| Search by | Index | Search Hints | Examples |
|--|-------|---|--|
| Objective: | /OBJ | Search statements of objectives by: - Single terms using Boolean or proximity operators. - Phrases using implied adjacency. Use truncation. Left-hand truncation is available. | /OBJ NETWORK? 2D SECURITY /OBJ DISEASE RESISTANCE /OBJ +ASSAY+ |
| Advantages & Drawbacks | /ADB | Search advantages and previous drawbacks text : - Single terms using Boolean or proximity operators. - Phrases using implied adjacency. Use truncation. Left-hand truncation is available. | /ADB SLOW+ DOWN /ADB INCREAS+ 2D CONCENTRATION /ADB +VIRAL |
| Independent Claims: Including Main or First Claim | /ICLM | Search independent claims using: - Single terms using Boolean or proximity operators. - Phrases using implied adjacency. Use truncation. Left-hand truncation is available. | /ICLM COLLAPS+ S KEYBOARD? /ICLM "3D" DATA /ICLM +VINYL P COATING? |
| Objective, Advantages & Drawbacks and Independent Claims | /SA | This super-index groups together the contents of the OBJ (Objective), ADB (Advantages & Drawbacks) and ICLM (Independent Claims) fields. You are thus able to search without necessarily knowing in what area the terms are found in the publication. Search by single terms or phrases. Proximity operators, boolean operators and truncation may also be used | /SA FILTRATION MEMBRANE? |

Searching:

As US, WO, and EP publications may be part of the same FamPat family, a FamPat record may contain multiple OBJ, ADB and ICLM fields. These are all searchable in the Basic Index.

Displaying:

- To display **only one set** of OBJ, ADB and ICLM fields per record, see formats: MAX, MAXL, FU FUL, FULL, FAB and FABL
- Display **all** OBJ, ADB and ICLM fields per record: see formats: ALL, ALLL, TAB and TABL

Publication Data

| Search by | Index | Search Hints | Examples |
|--|---------------------------|--|---|
| Publication number | /PN (/PC, /PUB, KD) | <ul style="list-style-type: none"> ● Search all the patent publication stages using the patent/publication number in the format: <ol style="list-style-type: none"> 1) if patent authority uses a continuous series: CC-NNNNNN (if number is <7 digits, fill with a hyphen (-) after the country code) 2) if patent authority restarts number series each year: pre Y2K: CCYYNNNNN (if number is <5 digit, fill with 0 (zeros) after the series year CCYY) post Y2K: CCYYYYNNNNN CCYYYYNNNNNN ● Search for all publications by ISO country code CC= ISO country code NNNNNNN= publication number ● Search by publication country and kind code information: CCKK ● Search by publication date: YYYYMMDD YYYYMM YYYY | /PN EP-982976 /PN EP--84665 /PN WO8909788 /PN WO9916958 /PN WO200016958 /PN JP2000077507 /PN US20010000001 /PN US /PN DE19743500 JPB2/PN EPA/PN EPB#/PN 19950625/PN 199506/PN 1995/PN |
| Related/Original PCT Publication number (present for following documents : EP, DE, US, CN, JP and KR) | /PPN | Search in Questel Standardized format: pre Y2K: CCYYNNNNN post Y2K: CCYYYYNNNNN | WO9900001/PPN WO2004000006/PPN PPN=YES and JP/PN |
| Publication date | /PD | First original publication date (incl D0 date Search in the format: YYYY-MM-DD YYYY-MM YYYY Use numeric operators: =, <, >, <=, >= | PD=1985-10-19 PD=1997-04-01:1997-04-15 PD>=1997 |
| Published application Date | /PDA | Publication date for disclosure of application (does not retrieve D0 date – date of announcement of application). | PDA>=2000 AND GB/PN |
| Granted Patent date | /PDG | Patent or grant date | PDG=2008 AND EP/PN |
| Other publication date | /OPD | Primarily relates to following dates: - coming into force for Utility Models - U.S.C. 371 National stage Date (US) | OPD=2007:2008 AND DEU1/pn |
| Internal Publication Kind (Kind of Document) | /IKD | Searchable CCKK where CC is the country code and KK is the kind code. Use IKD with NBR, MEM, MEMS and GET. | /IKD JPB2 /IKD EPB# |
| Standardized Patent Number | /XPN | To facilitate searching across patent databases, Questel has created a standardized patent number field. Use MEM /XPN to extract standardized patent numbers. Use *MEM /XPN to search the standardized patent numbers. To search as cited references. | MEM /XPN *MEM /XPN *MEM /XCT |

Application Data

| Search by | Index | Search Hints | Examples |
|---|------------------|--|---|
| Application number | /AP | <ul style="list-style-type: none"> Search application number using the number in the format: YYYYCC-NNNNNNN <p>YYYY= 4-digit application year CC= ISO country code NNNNNNN= 7 digit application number (fill with 0 zero(s) if number contains less than 7 digits)</p> <ul style="list-style-type: none"> Search by application date in the format: YYYYMMDD YYYYMM YYYY | <p>/AP 1978EP-0100811</p> <p>/AP 1989WO-US01505 /AP 1999US-0353402</p> <p>19980615/AP 199806/AP 1998/AP</p> |
| Related /Original PCT Application Number Provides the original PCT filing number for member patent office documents filed via the PCT. | /PAP | <p>Search application number using the number in the format: YYYYWO-CCNNNNN</p> <p>YYYY= 4-digit application year CC= ISO country code WONNNNN= 5 digit application number (fill with 0 zero(s) if number contains less than 5 digits)</p> | <p>2007WO-JP59325/PAP 2007WO-CN01245/PAP</p> <p>PAP=YES AND KR/PN</p> |
| Application country | /APC (or /AP) | Search by ISO country code. | /APC WO /APC DE |
| Application date | /APD | <p>Search in the format: YYYY-MM-DD YYYY-MM YYYY</p> <p>Use numeric operators: =, <, >, <=, >=.</p> | <p>APD=1999-03-09 APD=1999-01:1999-06</p> <p>APD>=1996</p> |
| Standardized Application Number | /XAP | <p>To facilitate crossfile searching with other patent databases, Questel has created a standardized application number field: YYYYCC-NNNNNNN.</p> <p>Use MEM /XAP to extract standardized application numbers. Use *MEM /XAP to search the standardized application numbers.</p> | <p>MEM /XAP</p> <p>*MEM /XAP</p> |

Priority Data

| Search by | Index | Search Hints | Examples |
|------------------------------|------------------|--|---|
| Priority number | /PR | <ul style="list-style-type: none"> Search the priority number using the number in the format: YYYYCC-NNNNNNN YYYY= 4-digit application year CC= ISO country code NNNNNNN= 7 digit application number (fill with leading 0 zero(s) if number contains less than 7 digits) <ul style="list-style-type: none"> Search by priority date in the format: YYYYMMDD YYYYMM YYYY | /PR 1995DE-1020801 /PR 1998US-0179680 19970919/PR 199709/PR 1997/PR |
| Number of priorities | /NPR | Use numeric operators: =, <, >, <=, >=. | NPR=3 NPR>1 |
| Priority country | /PRC (or /PR) | Search by ISO country code. | /PRC CA /PRC NL |
| Priority date | /PRD | Search in the format: YYYY-MM-DD YYYY-MM YYYY Use numeric operators: =, <, >, <=, >=. Note: Priority date ranging is available for all priorities. | PRD=1998-04-07 PRD=1999-01:1999-06 PRD>=1998 |
| First Priority Date | /PRD1 | The first priority date in the family | PRD1=2000:2004 |
| Standardized Priority Number | /XPR | To facilitate crossfile searching with other patent databases, Questel has created a standardized priority number field: YYYYCC-NNNNNNN. Use MEM /XPR to extract standardized priority numbers. Use *MEM /XPR to search the extracted priority numbers. | MEM /XPR *MEM /XPR |

Classification Data

| | | | |
|---|--|--|---|
| <p>EPO Classification (ECLA)</p> <p>Note: ECLA codes are revised monthly and retrospectively applied</p> | /EC | <p>Search the ECLA codes in the following formats:</p> <p>SubClass: ANNA Group: ANNA-NNN</p> <p>SubGroup: ANNA-NNN/NN</p> <p>Subdivision: ANNA-NNN/NNN ANNA-NNN/NNA ANNA-NNN/NNAN ANNA-NNN/NNANA ANNA-NNN/NNANAN</p> <p>The generic levels are separately searchable without truncation.</p> <p>Use double quotes to search the complementary chemical codes that contain colon [:] separators.</p> <p>Note: To search the range of ECLA codes, use colon [:] between the first and last item specified in the range of codes. Auto posting of the subclasses may cause false hits, please use this feature with care.</p> | <p>/EC A63F /EC E21B-001 /EC E21B-00? /EC E21B-003/02</p> <p>/EC C21D-001/773 /EC C21D-006/00K /EC B25G-001/06S1 /EC B25F-005/02B2B /EC C12Q-001/68D2E1</p> <p>/EC A63F /EC E21B-001</p> <p>/EC "C07C-025:08" /EC "C07C-025:125"</p> <p>/EC A63F-001/00:A63F-001/16</p> |
| <p>EPO Classification ICO (In Computer Only) Classification</p> <p>Note: Applied by the EPO examiners</p> | /ICO | <p>ICO classification is based on the ECLA classification system. The ICO codes are used in the following cases:</p> <ul style="list-style-type: none"> - non-inventive aspects; - when one group takes precedence over another group; - for additional characteristics (if there is no specific group). <p>ICO symbols are derived from classification symbols, with a different 1st letter: instead of A,B,C,D,E,F,G,H the letters K,L,M,N,P,R,S,T are used.</p> <p>The ICO codes maybe either entirely or partially derived from the ECLA codes (there are also codes that are not derived from an existing code).</p> | <p>/ICO K61M /ICO K61M-016 /ICO K61M-016/00M8</p> <p>/ICO L65D-019/00Y4B1 /ICO L65G-812/02F4D2D4B</p> |
| <p>International Patent Classification (IPC v 8)</p> <p>Note: Not all attributes will be available for all codes. Questel Orbit will output what is delivered to us by the patent offices</p> | <p>/IC</p> <p>/ICAA /ICAI /ICAN</p> <p>/ICCA /ICCI /ICCN</p> <p>/ICM /ICA /ICS</p> | <p>IPC All IPC v8 and historical</p> <p>IPC Advanced All IPC Advanced Inventive IPC Advanced Non-Inventive</p> <p>IPC Core All IPC Core Inventive IPC Core non-Inventive</p> <p>IPC codes can be searched at different levels :</p> <p>full code (ANNA-NNN/NNNN) group (ANNA-NNN) sub-class (ANNA) class (ANN+ – use unlimited truncation)</p> <p>ICM: Main IPC (from 1995 onwards) ICA: Additional IPC ICS: Secondary IPC</p> | <p>/IC A43B-005/04 /IC1 A43B-005 /IC2 A43B /IC A43+ /ICM A63B-043 /ICA B25B-001 /ICS F01B</p> |

Classification Data (cont'd)

| | | | |
|---|--------------------------|---|--|
| <p>FI and F-terms : Developed by Japanese Patent Office</p> | | <p>*See IPDL and PATOLIS websites for more info and FI / F-term lookup JP documents from 1980 onwards(not complete for JPU and JPT docs) http://www.ipdl.ncipi.go.jp/homepg_e.ipdl ** Note: FI terms are displayed and searched in the JPO format facilitating lookups in the online thesauri, FI IPC class format (no padding zeros) is different to the standard IC QO format (padding zeros)</p> | |
| <p>FI (File Index)</p> | <p>/FI</p> | <p>Classification derived from the IPC 6th edition.** It is an extension of the IPC (similar to ECLA classification). The classifications are cascaded with discrimination section and then subdivision ,but without intervening spaces between the original IPC Searching with the spaces allows retrieval of exactly what the office indexed, searching without the spaces retrieves more broadly.</p> <p>Format of FI classes is as follows :</p> <ul style="list-style-type: none"> - an IPC class: ANNA[N]N/NN[N] - an IPC code followed by a file discrimination symbol (1 letter) :ANNA[N]N/NN[N] A - an IPC code followed by a subdivision symbol (3 chars) :ANNA[N]N/NN[N] NNN - an IPC code followed by both subdivision and file discrimination symbols : ANNA[N]N/NN[N] NNNA - an IPC code with facet (3 letters) ANNA[N]N/NN[N] ZNN | <p>JP/PN and (FI=YES)</p> |
| <p>F-term (File Forming Term)</p> | <p>/FTM</p> | <p>Classification based on different technical viewpoints. Format :</p> <ul style="list-style-type: none"> Theme code (5 digits) NANNN Theme code and technical viewpoint indicator (2 letters) NANNN AA+ Theme code, technical viewpoint and "figure" indicator (2 digits) NANNN AANN | <p>/FI A01B1/16 /FI G10L9/20 A /FI G11B11/105 506 /FI G11B11/105 506A /FI G11B11/08 ZNM /FTM 4C206 /FTM 4C206 CB+ /FTM 4C206 CB23</p> |
| <p>USPTO Classification (PCL)</p> <p>Note: US Classes are revised quarterly and retrospectively applied</p> | <p>/PCL</p> <p>/PCLO</p> | <p>Search the Main (Primary) and Cross Reference (Secondary) classes simultaneously Search the original US classification with 9 or 12 characters in the format: MMSSDDDDAAA. - MMM= three digit main class - SSS= three digit subclass or DIG for digest - DDD= three digits - AAA= 1-3 alpha characters To search the PCL by: - the class (3 characters), - the "digest" including the DIG notice, - the full code (ending with 3 digits (DDD) and 3 alphanumeric characters (AAA)). Search the Main US Class</p> | <p>/PCL 714777000 /PCL 714 /PCL 714005 /PCLO 714</p> |
| <p>EPO Classification (Dutch)</p> | <p>/IDT</p> | <p>Search the old EPO Dutch classification</p> | <p>/IDT 124PA2F4B3B /IDT 42K18C</p> |
| <p>EPO Classification (Berlin)</p> | <p>/BC</p> | <p>Search the old EPO Berlin Classification</p> | <p>/BC F02C-007/264 /BC B41J-021/02</p> |

Applicant and Inventor Data

| Search by | Index | Search Hints | Examples |
|--------------------------|---|---|--|
| Patent Assignee | /PA /PA0 /PAN /PANA | Search by: - single terms using search operators and truncation - full name using implied adjacency /PA0 searches additional Patent Assignee Information for US, JP, FR, EP and WO records. Terms in the /PA0 field will be retrieved by qualifying to the /PA field or by displaying and selecting from the /PAN index. **Please Note: Address information within the PA0 field is not searchable. /PAN index searches the patent assignee's name only for the 1 st publication stage. /PANA searches Patent Assignee name in all publication stages as a bound phrase. With the NBR, use /PANA index. With MEM and MEMS commands, use The /PAN index. | /PA MAX AND PLANCK /PA MAX PLANCK /PA0 GENERAL ELECTRIC NBR /PANA MAX PLANCK |
| Patent Assignee -Country | /PAC | Search by patent assignee country using the two letter country code or country name. Note: not all the records include the PAC field. | /PAC JP /PAC JAPAN /PAC NL /PAC FR |
| Inventor | /IN /IN0 /INN, /INNA | Search by: - Single terms or groups of words from the inventor name. - Full name using implied adjacency. Use the D proximity operator to combine the Family Name and First Name. JP Records Only IN0 searches additional Inventor information for JP records. The /IN0 field provides transliteration free data for Inventor names. Terms in the /IN0 field will be retrieved by qualifying to the /IN field or by displaying and selecting from the /INN index. **Please Note: Address information within the IN0 field is not searchable /INN index searches the inventor's name only for the 1 st publication stage. Use /INNA to search full Inventor Name in all publication stages as a bound phrase. With NBR, use /INNA index. Note: First names or may appear as initials only, so try both. Multiple initials may be separated by spaces, e.g. GUNTHER C J | /IN THOMPSON DARWIN /IN OPPERMANN D H /IN0 SMITH JOHN /INN NAGANUMA KATSUYOSHI NBR /INNA GUNTHER C J |
| Inventor Country | /INC | Search by ISO country code or country name Note: not all the records include the PAC field. | /INC US /INC JAPAN |

Citations (cont'd.)

| Search by | Index | Search Hints | Examples |
|---|-------|--|--|
| <p>Cited Bibliographic References/Non Patent References Citations/Search Report (used by applicant and examiner)</p> <p>may include :</p> <ul style="list-style-type: none"> - Search Report references (Examiner) - Applicant references <p>US Patents:</p> <ul style="list-style-type: none"> - Examiner references - Applicant references - (unspecified) <p>JP patents:</p> <ul style="list-style-type: none"> - Search Report Examiner | /REF | <p>Includes bibliographic for AP, AU, BE, CH, CZ, DE, DK, EP, ES, FI, FR, GB, GR, IT, JP, JP, LU, NL, PCT, SG, TR & US documents.</p> <p><u>Search bibliographic citations using:</u> Keywords:</p> <ul style="list-style-type: none"> - Single terms using Boolean or proximity operators; - Phrases using implied adjacency. <p>- Use truncation (Left-hand truncation not available).</p> <p>Article XP reference number</p> <p>Cut and paste into REF field titles from other sources (INSPEC, PASCAL, MEDLINE, etc.) - allow for some flexibility</p> <p>For the most part references will be part of the Search Report provided by Examiner.</p> <p>For those patent offices including Applicant references, (US, EP, DE, FR, WO, etc.) one may search specifically with the header applicant references and keywords combined with the P operator</p> | <p>/REF VIRTUAL 3D CHEM+</p> <p>/REF IBM</p> <p>/REF XP002058560</p> <p>/REF APPLICANT REFERENCES P LASER?</p> |

Other Indexes

| Search by | Index | Search Hints | Examples |
|---|-------|--|--|
| Designated states for European Patents (EP) and PCT applications (WO) | /DS | Search by ISO country code using the two letter format CC. The EP designated states are from the last EP publication stage. | /DS AT /DS GB AND FR |
| Filing Details | /FD | <p>Available for US Records ONLY Provides information such as whether one patent is based upon another or is a division of another. Search using: Standardized Questel Orbit format: YYYYCC-NNNNNNN Please Note: The USPTO Series Code is not used, infill with zeroes as necessary.) The exception is provisional applications beginning with series code 60. Replace 60 with P.</p> <p>Search by the US publication number using format USNNNNNNNN</p> <p>Search by the presence of the field.</p> | <p>/FD 2000US-0730246</p> <p>/FD 2001US-P132684</p> <p>/FD US5105599</p> <p>FD=YES</p> |

Other Indexes (cont'd.)

| Search by | Index | Search Hints | Examples |
|--|--|---|---|
| Original language | /LA | Language is provided for EP and WO documents and in all other cases where the language is not the sole official language of the country. Search LA using the ISO three letter language code: CHI Chinese CZE Czech DAN Danish DUT Dutch ENG English FIN Finnish FRE French GER German ICE Icelandic ITA Italian JPN Japanese KOR Korean NOR Norwegian POR Portuguese RUS Russian SER Serbian SLV Slovenian SPA Spanish SWE Swedish | /LA ENG ENGLISH/LA /LA GER OR FRE |
| Update codes | /QW /QM /UA /UAA4 /UAB /UAB4 /UABA /UCL /UCT /UE /UE4 /UMT4 /UMTA /UP /UP4 | Search latest update for new publications (1) Monthly update new publications (3) Update Amendments (1) Monthly Update All Abstracts – Human (4) Abstract Update (1) Monthly Abstracts (4) All Abstracts – Human & Machine Translated (2) Class Code Update (1) Citations Update (1) Update Equivalent /Stages (1) Monthly Equivalent/Stages (4) Monthly Update – Human & MT Abstracts (4) Update Abstracts – Human & Machine Translated (2) Standard Update Code (1) Standard Monthly Update(3) Use the relevant update code in the following format: YYYY-WW 1) Update periods from August 2000 only 2) Update periods from January 2009 only 3) Monthly periods from Feb. 2000 only 4) Monthly periods from January 2009 only | /QW 2000-08 /QM 2000-02 /UA 2002-03 /UAA4 2009-01 /UAB 2008-52 /UAB4 2009-02 /UABA 2009-01 /UCL 2002-36 /UCT 2002-35 /UE 2001-33 /UE4 2009-01 /UMT4 2009-02 UMTA 2009-01 /UP 2000-08 /UP4 2001-03 |
| Family Accession Number Previous Family Accession Number | /FAN /PFAN | Producer number assigned to a record. If a family has been recomposed, the previous producer number assigned a record | /FAN/PFAN 20042802935754 |

Statistical Analysis

The following patent information in the FAMPAT database can be statistically analyzed:

| Publication Info | | Application / Priority Info | | Classifications | |
|-------------------------|-------------------|-----------------------------|-------------------|-----------------------|----------|
| Patent Assignee | GET PA GET PAN | Priority Country | GET PRC | IPC Intl Patent Class | GET IPC |
| Inventor | GET IN GET INN | Priority Date (year) | GET PR GET PRD | Main IPC | GET MIPC |
| Publication Country | GET PC | Application Country | GET APC | ECLA European Class | GET EC |
| Publication Date (year) | GET PD | Application Date (year) | GET AP GET APD | US Classes | GET PCL |
| Publication Year | GET PY | | | US Main Class | GET PCLO |

Note: GET PA (GET PAN), GET IN (GET INN) are analyzing the first stage publication information only

General Syntax: GET <field>

Options:

EMAIL GET <field> EMAIL To receive statistical analysis results via email
 TOP n GET <field> TOP N EMAIL To specify TOP N entries in the analyzed listing
 TOSEL <listname> GET <field> TOSEL <listname> TOP N
 STORE GET <field> TOSEL <listname> STORE

Syntax: GET ss N <field> TOSEL <listname> SAVE/STORE [TOP N, GT M]

Example: GET PA TOP 20 EMAIL

Current Awareness – SDI Profiles

It is possible to setup SDI (Current Awareness) profiles in the FAMPAT database by using the SDI command after the search strategy has been created in the database. The created SDI profiles will be automatically run against each new update to the database or you may choose to receive the results on a monthly basis and the results will be sent either via postal mail or email (if specified).

General Syntax: SDI <SDIname>

SDI <SDIname> <EMAIL>;SURV <update code>;PR <format>;<options>

Specific Update Syntax: SDI <SDIname>;SURV <update code field>

SURV QW Survey only new documents, or documents receiving an Abstract or ECLA for the 1st time. May contain recomposed families due to changes in priority numbers.
 SURV UP Survey all documents in latest update. Will contain recomposed families due to changes on priority numbers. May contain older publications recently added to the EPO collection
 SURV UE Survey equivalent documents
 SURV UAB Survey documents amended with abstracts
 SURV UEC Survey documents amended with ECLAs
 SURV QM Survey new documents monthly, or documents receiving Abstract or ECLA for the 1st time
 SURV UP4 Survey monthly all documents added. May contain recomposed families due to changes in priority numbers. Will contain recomposed families due to changes on priority numbers. May contain older publications recently added to the EPO collection

For further SDI SURV options, see update codes on Page 19 above – (UA not available as SDI SURV). Some new update codes are not currently available for SDIs. Please contact helpdesks for more details.

Note: to survey both new and equivalent document updates:

SDI <SDIname>; SURV UP UE or SDI <SDIname> SURV QW UE

Parameters:

EMAIL SDI <SDIname> EMAIL To receive SDI results via email
 RTF SDI <SDIname> EMAIL RTF To include special characters, accents etc.
 XML SDI <SDIname> EMAIL XML;PR STDL To specify record display format

Document Display

The Inventors, Titles, Classifications and Abstracts are controlled by the MFAM option. The MFAM default is set as EP, US, WO, so in the case where a FamPat family contains family members from all three, the EP abstract would be displayed. For details on how to change your MFAM setting please see page 28.

It is possible to specify French language titles and abstracts as the default for displaying FamPat titles and abstracts. This is controlled by the POP or OP option MFAM.

Example: POP MFAM FR

The Title and Abstract for the FR member will be displayed first in the record. If there is not a FR family member, then the default display is used.

It is possible to specify German language titles and abstracts as the default for displaying FamPat titles and abstracts. This is controlled by the POP or OP option MFAM.

Example: POP MFAM DE

The Title and Abstract for the DE member will be displayed first in the record. If there is not a DE family member, then the default display is used.

Field/Index catalogues

| | | | | | | | | | | | | |
|-------------|-----------|-------------|------------|------------|------------|--|--|--|--|--|--|--|
| ABS | AB | MTAB | FAB | GAB | OAB | | | | | | | |
| NOMT | AB | FAB | GAB | OAB | | | | | | | | |

FORMAT

FIELDS

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|-----|-----|-----|------|------|--|
| ZOOM | <--- | FAN | TI | | | | | | | | | |
| SC | <--- | FAN | TI | | | | | | | | | |
| SCAN | <--- | FAN | TI | | | | | | | | | |
| TEST | <--- | FAN | TI | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM | |
| | | IDT | BC | | | | | | | | | |
| TR | <--- | FAN | TI | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM | |
| | | IDT | BC | | | | | | | | | |
| VDTX | <--- | FAN | PN | TI | IN | IN0 | PA | PA0 | AP | FD | PR | |
| | | IC | ICAA | ICCA | DS | | | | | | | |
| STDR | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | PPN | PAP | |
| | | FD | PR | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM | |
| | | IDT | BC | DS | UP | | | | | | | |
| BRF | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | FD | PR | |
| | | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM | IDT | BC | |
| | | DS | | | | | | | | | | |
| STD | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | PR | IC | ICAA | |
| | | ICCA | EC | ICO | PCL | FI | FTM | IDT | BC | DS | UP | |
| BRFL | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | PR | IC | ICAA | |
| | | ICCA | EC | ICO | PCL | FI | FTM | IDT | BC | DS | | |
| BIB | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | FD | PR | |
| | | CT | | | | | | | | | | |
| BIBL | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | PR | CT | REF | |
| ABST | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | PPN | PAP | |
| | | FD | PR | CT | REF | AB | UP | | | | | |
| MAX | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | PPN | PAP | |
| | | FD | PR | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM | |
| | | IDT | BC | DS | CT | REF | AB | OBJ | ADB | ICLM | UP | |
| FULL | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | PPN | PAP | |
| | | FD | PR | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM | |
| | | IDT | BC | DS | CT | REF | AB | OBJ | ADB | ICLM | UP | |
| FU | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | PPN | PAP | |
| | | FD | PR | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM | |
| | | IDT | BC | DS | CT | REF | AB | OBJ | ADB | ICLM | UP | |
| STGS | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | PPN | PAP | |
| | | FD | PR | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM | |
| | | IDT | BC | DS | CT | REF | AB | UP | | | | |
| ALL | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | PPN | PAP | |
| | | FD | PR | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM | |
| | | IDT | BC | DS | CT | REF | AB | OBJ | ADB | ICLM | UP | |
| ABSL | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | PR | CT | REF | |
| | | AB | UP | | | | | | | | | |
| MAXL | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | PR | IC | ICAA | |
| | | ICCA | EC | ICO | PCL | FI | FTM | IDT | BC | DS | CT | |
| | | REF | AB | OBJ | ADB | ICLM | UP | | | | | |
| FUL | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | PR | IC | ICAA | |
| | | ICCA | EC | ICO | PCL | FI | FTM | IDT | BC | DS | CT | |
| | | REF | AB | OBJ | ADB | ICLM | UP | | | | | |

Document Display (cont'd)

| FORMAT | FIELDS | | | | | | | | | | |
|--------|--------|------|------|------|------|------|------|------|------|------|------|
| ALLL | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | PR | IC | ICAA |
| | | ICCA | EC | ICO | PCL | FI | FTM | IDT | BC | DS | CT |
| | | REF | AB | OBJ | ADB | ICLM | UP | | | | |
| DOCF | <--- | PN | TI | OTI | IT | FAB | DS | AP | PPN | PAP | FD |
| | | PR | IN | IN0 | PA | PA0 | | | | | |
| BIBP | <--- | PN | TI | PA | PA0 | IN | IN0 | AP | PPN | PAP | FD |
| | | PR | CT | REF | | | | | | | |
| DOC | <--- | PN | TI | OTI | IT | AB | DS | AP | PPN | PAP | FD |
| | | PR | IN | IN0 | PA | PA0 | | | | | |
| DOCL | <--- | FAN | PN | TI | OTI | IT | AB | DS | PPN | PAP | FD |
| | | PR | IN | IN0 | PA | PA0 | | | | | |
| FUF | <--- | PN | TI | OTI | IT | LA | PA | PA0 | IN | IN0 | AP |
| | | PPN | PAP | FD | PR | IC | ICAA | ICCA | EC | ICO | PCL |
| | | FI | FTM | IDT | BC | DS | CT | REF | FAB | UP | |
| HITL | <--- | PN | AB | MTAB | FAB | GAB | OAB | TI | FT | GT | OTI |
| | | PA | | | | | | | | | |
| PDFR | <--- | PN | TI | IN | PA | AP | PPN | PAP | FD | PR | DS |
| | | PCL | FI | FTM | IC | ICAA | ICCA | AB | | | |
| ANAC | <--- | PN | PD | TI | PA | PA0 | PAC | IN | INC | AP | APD |
| | | PR | PRD | IC | EC | PCL | PCLO | FI | FTM | CT | REF |
| | | AB | XPN | XAP | XPR | FPR | | | | | |
| FBB | <--- | FAN | PN | TI | PA | PA0 | IN | AP | PR | IC | ICAA |
| | | ICCA | EC | PCL | FI | FTM | AB | OBJ | ADB | ICLM | UP |
| FABL | <--- | FAN | PN | TI | PA | PA0 | IN | PR | IC | ICAA | ICCA |
| | | EC | PCL | FI | FTM | AB | OBJ | ADB | ICLM | UP | |
| TAB | <--- | FAN | PN | TI | PA | PA0 | IN | AP | PR | IC | ICAA |
| | | ICCA | EC | PCL | FI | FTM | AB | OBJ | ADB | ICLM | UP |
| TABL | <--- | FAN | PN | TI | PA | PA0 | IN | PR | IC | ICAA | ICCA |
| | | EC | PCL | FI | FTM | AB | OBJ | ADB | ICLM | UP | |
| PDFL | <--- | TI | PA | IN | IC | ICAA | ICCA | EC | PCL | FI | FTM |
| | | PN | PR | AB | DS | | | | | | |
| MABL | <--- | TI | PA | IN | IC | ICAA | ICCA | EC | PCL | FI | FTM |
| | | PN | PR | AB | DS | | | | | | |
| FAML | <--- | PN | | | | | | | | | |
| CLSL | <--- | PN | TI | PA | PCL | FI | FTM | IC | ICAA | ICCA | EC |
| PAGE | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | PPN | PAP |
| | | FD | PR | IC | ICAA | ICCA | EC | ICO | PCL | FI | FTM |
| | | IDT | BC | DS | CT | REF | AB | UP | | | |
| PAGL | <--- | FAN | PN | TI | PA | PA0 | IN | IN0 | AP | PR | IC |
| | | ICAA | ICCA | EC | ICO | PCL | FI | FTM | IDT | BC | DS |
| | | CT | REF | AB | UP | | | | | | |
| CLAS | <--- | PN | TI | PA | PCL | FI | FTM | IC | ICAA | ICCA | EC |

● "Standardized Number" (XPN, XAP, XPR), fields are not included predefined display formats. To display these items enter the field name with the PRT command:

Example: PRT XPR or PRT MAX PLUS XPR

User-defined formats

Create customized format for the records display: FOR <name> <field1>... <field10>...<field20> ...<field30> (format name up to 4 characters, include up to 30 fields)

General Syntax: FOR DISP PN TI OTI PA IN AP PR CT STG EC

Command Syntax: PRT DISP SET **or** PRT DISP SS 2 1-10

Additional Display Options

In addition to the patent family display in the FamPat, the following display features are available for FamPat records.

L Option:

Questel Orbit has added a number of new predefined print formats, such as STDL, BIBL, and MAXL. These displays will show the corresponding stage, application and filing detail information after each publication number in the family.

Example:

```
PRT STDL
1/1 FAMPAT - (C) QUESTEL
FAN - 20042011455647
PN - WO200012273 A2 20000309 [WO200012273]
      STG: Publ. Of int. Appl. W/out int. Search rep
      AP : 1999WO-EP05778 19990806
- AU5421799 A 20000321 [AU9954217]
      STG: Open to public inspection
      AP : 1999AU-0054217 19990806
- BR9906780 A 20000926 [BR9906780]
      STG: Patent Application
      AP : 1999BR-0006780 19990806
- WO200012273 A3 20010517 [WO200012273]
      STG: Subsqu. Publ. Of int. Search report
- EP1115539 A2 20010718 [EP1115539]
      STG: Pub. Of applic. Without search report
      AP : 1999EP-0940181 19990806
- US2001022026 A1 20010920 [US2001022026]
      STG: Utility Patent Application published on or
      after January 2, 2001
      AP : 1999US-0383288 19990825
- CN1314834 T 20010926 [CN1314834]
      STG: Translated document
      AP : 1999CN-0801985 19990806
- US6418622 B2 20020716 [US6418622]
      STG: U.S. Patent (with pre-grant pub.) after Jan.
      2, 2001
- JP2002523197 T 20020730 [JP2002523197]
      STG: Unexam. Pat. Appl. On foreign appl.
      AP : 2000JP-0567356 19990806
- CN1131768 B 20031224 [CN1131768B]
      STG: Patent
- EP1115539 B1 20040721 [EP1115539]
      STG: Patent
- AT271447 T 20040815 [ATE271447]
      STG: EP Patent valid in AT
      AP : 1999AT-0940181 19990806
- DE69918843 D1 20040826 [DE69918843]
      STG: Granted EP number in bulletin
      AP : 1999DE-6018843 19990806
TI - WET SHAVER WITH RETRACTILE ACTION
PA - KONINKL PHILIPS ELECTRONICS NV
PA0 - Koninklijke Philips Electronics N.V., Eindhoven [NL]
IN - DE LEEUW PETRUS H; GARENFELD ANDREAS J; LEFKI KARIM
IC - B26B-021/38
PR - 1998EP-0202895 19980831; 1999EP-0940181 19990806;
      1999WO-EP05778 19990806
EC - B26B-021/38
PCL - ORIGINAL (O) : 030043000; CROSS-REFERENCE (X) :
      030043920 030346510
DS - (EP1115539)
      AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
DS - (WO200012273)
      AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE
      DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
      KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ
      PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN
      YU ZA ZW ARIPO Patent (GH GM KE LS MW SD SL SZ UG ZW)
      Eurasian Patent (AM AZ BY KG KZ MD RU TJ TM) European
      Patent (AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL
      PT SE) OAPI Patent (BF BJ CF CG CI CM GA GN GW ML MR NE
      SN TD TG)
UP - 2000-44
```

Detail Option :

The DETAIL option gives you the ability to display the record contents of each family member. The records are grouped by patent family to keep the context, **with the first publication stage displayed**, and priced as a single family record, not individual records.

The DETAIL option gives you the ability to drill down to see the detail of each family member, including titles, assignees, inventors, classification and abstracts.

```
prt max detail set
<< Patent family      1 >>
1/1 FAMPAT - (C) QUESTEL
FAN - 20042801485899
PN - JP2004534152 T 20041111 [JP2004534152]
AP - JP2003512454T 20020617 [2003JP-0512454]
PR - EP01202639 20010709 [2001EP-0202639]
  - WOEP0206892 20020617 [2002WO-EP06892]
IC - (T) C22C-021/02 C22C-021/06 C22F-001/00 C22F-001/05
UP - 2002-38

1/1 FAMPAT - (C) QUESTEL
FAN - 20042801485899
PN - BR0210891 A 20040622 [BR200210891]
PA - (A) CORUS ALUMINIUM WALZPROD GMBH (DE)
IN - (A) HASZLER ALFRED JOHANN PETER; JOACHIM CHRISTIAN; WEBER GUIDO;
  BENEDICTUS RINZE
AP - BR0210891 20020617 [2002BR-0010891]
PR - EP01202639 20010709 [2001EP-0202639]
  - WOEP0206892 20020617 [2002WO-EP06892]
IC - (A) B32B-015/01 C22C-021/02 C22C-021/08 C22F-001/043
UP - 2002-38

1/1 FAMPAT - (C) QUESTEL
FAN - 20042801485899
PN - EP1407057 A1 20040414 [EP1407057]
TI - (A1) WELDABLE HIGH STRENGTH AL-MG-SI ALLOY
PA - (A1) CORUS ALUMINIUM WALZPROD GMBH (DE)
PA0 - Corus Aluminium Walzprodukte GmbH; Carl-Spaeter-Strasse 10; 56070
  Koblenz (DE)
IN - (A1) HASZLER ALFRED JOHANN PETER (DE); WEBER GUIDO (DE); KEIDEL
  CHRISTIAN JOACHIM (DE); BENEDICTUS RINZE (NL)
AP - EP02751058 20020617 [2002EP-0751058]
PR - EP02751058 20020617 [2002EP-0751058]
  - WOEP0206892 20020617 [2002WO-EP06892]
  - EP01202639 20010709 [2001EP-0202639]
IC - (A1) B32B-015/01 C22C-021/02 C22C-021/08 C22F-001/043
DS - AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
  - AL LT LV MK RO SI
CT - Cited in the search report
  - See references of WO 03006697A1
UP - 2002-38

1/1 FAMPAT - (C) QUESTEL
FAN - 20042801485899
PN - CA2450684 A1 20030123 [CA2450684]
TI - (A1) WELDABLE HIGH STRENGTH AL-MG-SI ALLOY
PA - (A1) CORUS ALUMINIUM WALZPROD GMBH (DE)
IN - (A1) HASZLER ALFRED JOHANN PETER (DE); WEBER GUIDO (DE); KEIDEL
  CHRISTIAN JOACHIM (DE); BENEDICTUS RINZE (NL)
AP - CA2450684 20020617 [2002CA-2450684]
PR - EP01202639 20010709 [2001EP-0202639]
  - WOEP0206892 20020617 [2002WO-EP06892]
IC - (A1) B32B-015/01 C22C-021/02 C22C-021/08 C22F-001/043
AB - The invention relates to a weldable, high-strength aluminium alloy
  rolled product containing the elements, in weight percent, Si 0.8 to
  1.3, Cu 0.2 to 0.45, Mn 0.5 to 1.1, Mg 0.45 to 1.0, Fe 0.01 to 0.3,
  Zr<0.25, Cr<0.25, Zn<0.35, Ti<0.25, V<0.25, others each<0.05 and total
  <0.15, balance aluminium, and further with the proviso that the
  weight percent of "available Si" is in the range of 0.86 to 1.15,
  preferably in the range of 0.86 to 1.05. The weight percentage
  ("wt.%") of "available Si" is calculated according to the equation:-
  w.% Si(available)=wt.%Si-(wt.% Fe+wt.% Mn)/6.f
UP - 2002-38

1/1 FAMPAT - (C) QUESTEL
FAN - 20042801485899
PN - US2003087122 A1 20030508 [US2003087122]
TI - (A1) Weldable high strength Al-Mg-Si alloy product
IN - (A1) PETER HASZLER ALFRED JOHANN (DE); WEBER GUIDO (DE); KEIDEL
  CHRISTIAN JOACHIM (DE); BENEDICTUS RINZE (NL)
AP - US18925202 20020705 [2002US-0189252]
PR - EP01202639 20010709 [2001EP-0202639]
```

IC - (A1) B32B-015/01 C22C-021/04
 EC - B32B-015/01E
 - C22C-021/02
 - C22C-021/08
 - C22F-001/043
 PCL - ORIGINAL (O) : 428654000; CROSS-REFERENCE (X) : 148694000 148417000
 420534000
 AB - The invention relates to a weldable, high-strength aluminum alloy
 rolled product containing the elements, in weight percent, Si 0.8 to
 1.3, Cu 0.2 to 0.45, Mn 0.5 to 1.1, Mg 0.45 to 1.0, Fe 0.01 to 0.3,
 Zr<0.25, Cr<0.25, Zn<0.35, Ti<0.25, V<0.25, others each <0.05 and
 total <0.15, balance aluminum, and further with the proviso that the
 weight percent of "available Si" is in the range of 0.86 to 1.15,
 preferably in the range of 0.86 to 1.05. The weight percentage ("wt.
 %") of "available Si" is calculated according to the equation:
 wt. % Si(available)=wt. % Si-(wt. % Fe+wt. % Mn)/6
 UP - 2002-38
 1/1 FAMPAT - (C) QUESTEL
 FAN - 20042801485899
 PN - WO03006697 Al 20030123 [WO200306697]
 TI - (A1) WELDABLE HIGH STRENGTH AL-MG-SI ALLOY
 PA - (A1) CORUS ALUMINIUM WALZPROD GMBH (DE); HASZLER ALFRED JOHANN PETER
 (DE); WEBER GUIDO (DE); KEIDEL CHRISTIAN JOACHIM (DE); BENEDICTUS
 RINZE (NL)
 PA0 - CORUS ALUMINIUM WALZPRODUKTE GMBH; Carl-Spaeter-Strasse 10, 56070
 Koblenz (DE) (except US)
 - HASZLER, Alfred, Johann, Peter; Auf'm Gräverich 31, 56179 Vallendar
 (DE) (only US)
 - KEIDEL, Christian, Joachim; Burgstrasse 9, 56410 Montabaur (DE) (only
 US)
 - BENEDICTUS, Rinze; Dr. Schaepmansstraat 5, NL-2612 PJ Delft (NL) (only
 US)
 - WEBER, Guido; Sandweg 17, 56626 Andernach (DE) (only US)
 IN - (A1) HASZLER ALFRED JOHANN PETER (DE); WEBER GUIDO (DE); KEIDEL
 CHRISTIAN JOACHIM (DE); BENEDICTUS RINZE (NL)
 AP - WOEP0206892 20020617 [2002WO-EP06892]
 PR - EP01202639 20010709 [2001EP-0202639]
 IC - (A1) B32B-015/01 C22C-021/02 C22C-021/08 C22F-001/043
 EC - B32B-015/01E
 - C22C-021/02
 - C22C-021/08
 - C22F-001/043
 DS - AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR;
 CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HU; ID;
 IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD;
 MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE; SG; SI;
 SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZM; ZW;
 European patent (AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT;
 LU; MC; NL; PT; SE; TR); OAPI patent (BF; BJ; CF; CG; CI; CM; GA; GN;
 GQ; GW; ML; MR; NE; SN; TD; TG); ARIPO patent (GH; GM; KE; LS; MW; MZ;
 SD; SL; SZ; TZ; UG; ZM; ZW); Eurasian patent (AM; AZ; BY; KG; KZ; MD;
 RU; TJ; TM)
 CT - Cited in the search report
 - EP173632(A1)(Cat. A,D);US5858134(A)(Cat. A,D);GB2027744(A)(Cat. A)
 - PATENT ABSTRACTS OF JAPAN vol. 2000, no. 05, 14 September 2000
 (2000-09-14) -& JP 2000 054049 A (MITSUBISHI ALUM CO LTD), 22 February
 2000 (2000-02-22)(Cat. A)
 AB - The invention relates to a weldable, high-strength aluminium alloy
 rolled product containing the elements, in weight percent, Si 0.8 to
 1.3, Cu 0.2 to 0.45, Mn 0.5 to 1.1, Mg 0.45 to 1.0, Fe 0.01 to 0.3,
 Zr<0.25, Cr<0.25, Zn<0.35, Ti<0.25, V<0.25, others each<0.05 and total
 <0.15, balance aluminium, and further with the proviso that the weight
 percent of "available Si" is in the range of 0.86 to 1.15, preferably
 in the range of 0.86 to 1.05. The weight percentage ("wt.%") of
 "available Si" is calculated according to the equation:-w.%
 Si(available)=wt.%Si-(wt.% Fe+wt.% Mn)/6.
 UP - 2002-38
 1/1 FAMPAT - (C) QUESTEL
 FAN - 20042801485899
 PN - DE10230710 Al 20030123 [DE10230710]
 PA - (A1) CORUS ALUMINIUM WALZPROD GMBH (DE)
 IN - (A1) HASZLER ALFRED JOHANN PETER (DE); WEBER GUIDO (DE); KEIDEL
 CHRISTIAN JOACHIM (DE); BENEDICTUS RINZE (NL)
 AP - DE10230710 20020708 [2002DE-1030710]
 PR - EP01202639 20010709 [2001EP-0202639]
 IC - (A1) B64C-001/00 C22C-021/08 C22C-021/14
 EC - B32B-015/01E
 - C22C-021/02
 - C22C-021/08
 - C22F-001/043

UP - 2002-38
 1/1 FAMPAT - (C) QUESTEL
 FAN - 20042801485899
 PN - FR2826979 A1 20030110 [FR2826979]
 TI - (A1) Weldable rolled product of high strength aluminum alloy for structural aircraft components contains silicon, copper, manganese, magnesium, iron, zirconium, chromium, zinc, titanium, vanadium and aluminum
 PA - (A1) CORUS ALUMINIUM WALZPROD GMBH (DE)
 PA0 - CORUS ALUMINIUM WALZPRODUKTE GMBH; CARL SPAETER STRASSE 10 D 56070 KOBLENZ
 IN - (A1) HASZLER ALFRED JOHANN PETER; WEBER GUIDO; BENEDICTUS RINZE; KEIDEL CHRISTIAN JOACHIM
 AP - FR0208618 20020709 [2002FR-0008618]
 PR - EP01202639 20010709 [2001EP-0202639]
 IC - (A1) B32B-015/01 C22C-021/02 C22C-021/08 C22F-001/043
 EC - B32B-015/01E
 - C22C-021/02
 - C22C-021/08
 - C22F-001/043
 CT - Cited in the search report
 - EP0173632 (A) (Cat. X,D);US5858134 (A) (Cat. A,D);GB2027744 (A) (Cat. A)
 - PATENT ABSTRACTS OF JAPAN vol. 2000, no. 05, 14 septembre 2000 (2000-09-14) -& JP 2000 054049 A (MITSUBISHI ALUM CO LTD), 22 février 2000 (2000-02-22) (Cat. A)
 AB - Weldable rolled product of high strength aluminum alloy contains specified amounts of silicon, copper, manganese, magnesium, iron, zirconium, chromium, zinc, titanium, vanadium and the remainder is aluminum and other elements. A weldable rolled product of high strength aluminium alloy has the following constituents by weight %: (a) silicon (Si) 0.8 - 1.3; (b) copper (Cu) 0.2 - 0.45; (c) manganese (Mn) 0.5 - 1.1; (d) magnesium (Mg) 0.45 - 1.0; (e) iron (Fe) 0.01 - 0.3; (f) zirconium (Zr) less than 0.25; (g) chromium (Cr) less than 0.25; (h) zinc (Zn) less than 0.35; (i) titanium (Ti) less than 0.25; (j) vanadium (V) less than 0.25; (k) the remainder being aluminium and other elements with each being less than 0.05% by wt. and with an overall content of less than 0.15% by wt. An Independent claim is also included for a method for the fabrication of a weldable rolled aluminium alloy product with this composition.
 UP - 2002-38
 1/1 FAMPAT - (C) QUESTEL
 FAN - 20042801485899
 PN - GB0215311 D0 20020814 [GB200215311]
 TI - (D0) Weldable high strength Al-Mg-Si Alloy
 PA - (D0) CORUS ALUMINIUM WALZPROD GMBH
 IN - (A) HASZLER ALFRED JOHANN PETER (DE); WEBER GUIDO (DE); KEIDEL CHRISTIAN JOACHIM (DE); BENEDICTUS RINZE (NL)
 AP - GB0215311 20020703 [2002GB-0015311]
 PR - EP01202639 20010709 [2001EP-0202639]
 IC - (A) C22C-021/00 C22C-021/02 C22C-021/08
 EC - B32B-015/01E
 - C22C-021/02
 - C22C-021/08
 - C22F-001/043
 CT - Cited in the search report
 - EP173632(A1);EP1104815(A1);JP6264171(A);JP10259464(A);JP2000178673(A);US4637842(A);WO9907906(A1)
 AB - The invention relates to a weldable, high-strength aluminium alloy rolled product containing the elements, in weight percent, Si 0.8 to 1.3, Cu 0.2 to 0.45, Mn 0.5 to 1.1, Mg 0.45 to 1.0, Fe 0.01 to 0.3, Zr ≤ 0.25, Cr ≤ 0.25, Zn ≤ 0.35, Ti ≤ 0.25, V ≤ 0.25, others each ≤ 0.05 and total ≤ 0.15, balance aluminium, and further with the proviso that the weight percent of "available Si" is in the range of 0.86 to 1.15, preferably in the range of 0.86 to 1.05. The weight percentage ("wt.%") of "available Si" is calculated according to the equation:
$$\text{wt.\% Si(available)} = \text{wt.\% Si} - (\text{wt.\% Fe} + \text{wt.\% Mn})/6$$
 The alloy may be processed by homogenising, hot rolling, optionally cold rolling, solution heat treating and quenching, followed by either natural or artificial ageing.+DBPH+ The alloy may have a single or multiple cladding layer thereon, e.g. 1xxx, 4xxx, 6xxx or 7xxx or series alloys.
 UP - 2002-38

Family Identifier Simple Family

The Family Identifier allows identification of the simple family - (ESP@CENET family)

The Simple Patent Family

All documents having exactly the same priority or combination of priorities belong to one patent family.

In this case below, document D1 is the only document in family P1,
D2 and D3 belong to family P1-P2,
D4 belongs to family P2-P3, and
D5 to family P3.

| | | | | |
|-------------|-------------|-------------|-------------|---------------|
| Document D1 | Priority P1 | | | FAMILY P1 |
| Document D2 | Priority P1 | Priority P2 | | FAMILY P1-P2 |
| Document D3 | Priority P1 | Priority P2 | | FAMILY P1-P2 |
| Document D4 | | Priority P2 | Priority P3 | FAMILY P2- P3 |
| Document D5 | | | Priority P3 | FAMILY P3 |

If all the priorities of two documents are the same, they are referred to as "equivalents". This definition is used in esp@cenet for listing the documents under "also published as" on the bibliographic data view.

Note: The Simple Family, Extended or INPADOC Family and FAMPAT family are different family definitions and may provide different results (sometimes a search for Simple, Extended and FamPat families may provide the same results at some point in time but may well provide different results over time).

- The Simple Family, use MEM SFM /*MEM SFM (see below)
- Extended or INPADOC family, use FAM or FAM SS command
- FAMPAT family, use FamPat database

FID Family Identification Number

This field contains the unique family identification number attributed by the EPO.
Format : NNNNNNNN and the designation of rep

Note: Not all documents have a FID number and SFM numbers. Among the documents without these numbers are: US designs, very recent documents and back file documents added uniquely by Questel (no DocDB record yet).

SFM Simple Family Member

This field contains the simple family member numbers attributed by the EPO – format of number is based on patent numbers with a kind code. (Note: not exactly the same as patent number format).

Searching with the FID and SFM:

| | |
|---------------|--|
| MEM /FID RK 1 | To select the FID number from relevant document |
| *MEM /FID | To search for all simple family member documents with this FID numbers |
| MEM /SFM | To select all the Simple Family Member numbers from relevant document |
| *MEM /SFM | To search for all simple family member documents by the SFM numbers |

Extended Family Searching

In FamPat, the FAM or Family command should be used to find the extensive family. Additionally, you must use FAM in order to display Merged Family Formats or use the MFAMSTAT or FAMCITE display options.

Building MFAM record:

- **Patent number** data is taken from all family member records.
- **Title, Assignee, and Inventor** data elements are selected from a specific patent country / authority (see default order below)
- **Abstract** data may be provided from one preferred patent country /authority *or from all family member records with abstracts.*
- **Cited references** will be displayed for all EP, WO, FR, GB and US family members, where available
- **Designated States** will appear for every EP and PCT publication. The EP designated states are from the last EP publication stage.
- **Classification Codes:** ECLA, US, PCL, IPC, and ICO

All the classification codes will be displayed for all members of the family.

Basis for Selecting Title, Assignee, Inventor and (first-listed) Abstract data:

The Patent authority default is set as the PCT minimum documentation collection with the order as follows:

EP, US, WO, GB, FR, DE, CH, BE, JP, SU/RU

This means that title, Assignee, Inventor, and Abstract data will be selected from the EP record as a basis for building the record. If there is no EP record in the family, title, assignee, inventor and abstract data will be selected from the US record. If there is no US record in the family, data from the WO record will be used.

Selecting MFAM Patent Country /Authority Preference

A specific Patent Country or Authority may be selected as the basis for the building the merged record.

This is controlled by the POP or OP options.

Example: POP MFAM US

In this example, the Title, Assignee, Inventor, and Abstract for the US member will be used for creating the records and the US numbers will appear first in the merged record. If there is not a US family member, then the default display will be used.

- To set POP/OP to the default, use POP MFAM EP

Order for Patent Country / Authority Publication Numbers in a merged record:

POP/OP MFAM preference then Publication stages in alpha order, e.g.: AT , AU - ZW

FAM SS (Search Set)

1. Extended Family Search based on the set of documents

To create an **extended** patent family on a set of documents, use the **FAM** command followed by the search set number. (SS N, where N is the number of the search set). Use HIS command to determine the search set number.

Command Syntax: FAM SS N (where N is a search set number in a strategy)

Note: family search based on the SS number is limited to 1000 documents in the search set.

Example: FAM SS 1 (perform family search based on the results of search set number 1)

After performing a family search, by using a number or a search statement, Questel will respond by showing the total number of patent groups and the total number of FAMPAT records in the search statement.

After the extended family result set has been created, use the **ID** command. Records from the **FAMed** set of results can then be arranged and displayed as patent groups. Patent groups are records from a set that are grouped together because they belong to the same extended family. Groups can contain related records. Related records are those which share related priority information but contain additional patent number information.

After the **ID** command, display the Patent Groups using the **PRT <format> GR <n-n>** display command.

```
Selected file: FAMPAT
water safety
** SS 1: Results 96
fam ss 1
  91 Patent Groups
** SS 2: Results 105
id
** SS 203 : Results      105
```

```

++ Grouping Documents - Patent Groups ++
105 Documents
  91 Patent Groups
    0 Duplicate Patent Records
    87 Single Patent Groups
    0 Non-ordered Documents
Search statement 3
prt stdl gr 11 12

++ Patent Group - GR 11 ++

21/105 FAMPAT - (C) QUESTEL
FAN - 20042801408988
PN - GB0114380      D0 20010808  [GB200114380]
      STG: Application for patent
      AP : 2001GB-0014380 20010613
- GB0200627      D0 20020227  [GB200200627]
      STG: Application for patent
      AP : 2002GB-0000627 20020111
- GB2376553      A 20021218  [GB2376553]
      STG: Application published
- ZA200301203    A 20040329  [ZA200301203]
      STG: Patent specification
      AP : 2003ZA-0001203 20020610
- GB2376553      B 20040609  [GB2376553]
      STG: Patent granted
TI - Swimming pool and pond alarm utilizing piezo electric technology
PA - HATHERELL ROBIN C; WALKER DEBORAH L; XLTRONIX LTD
IN - HATHERELL ROBIN CHRISTOPHER; WALKER DEBORAH LOUISE
PR - 2001GB-0014380 20010613
IC - G08B-021/08
EC - G08B-021/08
UP - 2002-12

22/105 FAMPAT - (C) QUESTEL
FAN - 20042801408989
PN - WO02101678    A1 20021219  [WO2002101678]
      STG: Publ. Of int. Appl. With int. Search rep
      AP : 2002WO-GB02619 20020610
- EP1402493      A1 20040331  [EP1402493]
      STG: Public. Of applic. With search report
      AP : 2002EP-0738358 20020610
TI - SAFETY DEVICE
PA - HATHERELL ROBIN CHRISTOPHER; WALKER DEBORAH LOUISE; XLTRONIX LTD
PA0 - Xltronix Limited; Bronwydd Centre, Pontneddfechan; Glynneath, Powys
      SA11 5UR (GB)
IN - HATHERELL ROBIN CHRISTOPHER; WALKER DEBORAH LOUISE
PR - 2001GB-0014380 20010613; 2002GB-0000627 20020111; 2002WO-GB02619
      20020610
IC - G08B-021/00
DS - (EP1402493)
      AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
      - AL LT LV MK RO SI
DS - (WO2002101678)
      AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM
      DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
      LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD
      SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW European
      patent (AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR) OAPI
      patent (BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG) ARIPO patent
      (GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW) Eurasian patent (AM AZ BY KG
      KZ MD RU TJ TM)
UP - 2004-14

++ Patent Group - GR 12 ++

23/105 FAMPAT - (C) QUESTEL
FAN - 20042801207839
PN - AUPR410001    D0 20010426  [AU200104100]
      STG: Filing Application
      AP : 2001AU-0004100 20010330
TI - Pool sentinel water safety device
PA - PARKMILLAN PTY LTD
PR - 2001AU-0004100 20010330
UP - 2001-34

```

Extended Family Searching Publication, Application & Priority Numbers

2. Extended Family search based on the patent

To create an **extended** patent family for a particular invention, use the **FAM** command with the known patent number. *Note:* the XPN, XAP, and XPR fields may also be used for family searching as long as the Questel standardized format is used.

Command Syntax:

| | |
|------------------------------|---------------------------------|
| FAM CCNNNNNNN/PN | using patent/publication number |
| FAM YYYYCC-NNNNNNN/AP | using application number |
| FAM YYYYCC-NNNNNNN/PR | using priority number |

Examples:

| | | |
|-----------------------|-----------------------|---------------------|
| - Publication number: | FAM EP---1234/PN | Standardized Format |
| - Application number: | FAM 1978EP-0100811/AP | Standardized Format |
| - Priority number: | FAM 1997DE-1020719/PR | Standardized Format |

Extended Family search results display options:

| | |
|-----------|--|
| FAMCITE | Citation Results, forward and backward, by Family, for EP, FR, GB, PCT & US citations |
| FAMSTAT | Results of the patent family search from FAMPAT file and the corresponding records from the LGST (Legal Status) database integrated into the display |
| FAMSTATE | Family search results with integrated Legal Status (English language action descriptions only), also FAMSTAT MAXE |
| FAMLIST | Family search results from FAMPAT file and all the corresponding records from the Legal Status database attached after the FAMPAT records |
| FAMLISTE | Same display as FAMLIST (English language action descriptions only) |
| FAMINPD | Family search results from FAMPAT file only (Legal Status records are not included) |
| MFAMSTAT | Same display as FAMSTAT integrated into one family record |
| MFAMSTATE | Same display as FAMSTATE integrated into one family record |

Family Feature Displays

The **FAM** search feature and the **Merged Family** display feature provide for the display of merged **extended** family records.

- FAM feature automatically retrieves all family member records for a set of results (1000 limit)
- MFAM feature integrates individual family member records into one merged family record

Displaying Family Records

After performing a family search, by using a number or a search statement, Questel will respond by showing the total number of FAMPAT records and the number of family records in the search statement.

1. Use the **L Option** to display the corresponding stage, application, and filing details information after each patent number in the family, for each family record.

```
File : FAMPAT

SS Results
  1          3 (1) ..FAM US20050010034/PN

prt fabl set

1/3 FAMPAT - (C) QUESTEL
FAN - 20050200009464
PN - US20050010034 A1 20050113 [US20050010034]
      STG: Utility Patent Application published on or after January 2,
      2001
      AP : 2004US-0914665 20040809
      FD : Cont. of: US 09308329 - 19990519 [1999US-0308329] GRANTED
      FD : Cont. of: US 6193008 - 0 [US6193008]
      FD : Cont. of: US 09336036 - 19990618 [1999US-0336036] GRANTED
      FD : Cont. of: US 6774218 - 0 [US6774218]
      FD : Provisional: US 60091864 - 19980706 [1998US-P091864]
TI - Mutants of streptococcal toxin C and methods of use
PA - Regents of the University of Minnesota
PA0 - Regents of the University of Minnesota; Minneapolis, MN [US]
```

IN - Gahr Pamala J; Mitchell David T; Ohlendorf Douglas; Schlievert Patrick
M

PR - 1997WO-US22125 19971205

IC - A61K-039/09 C07K-001/00 C07K-014/00 C07K-017/00

PCL - ORIGINAL (O) : 530350000

AB - (US20050010034])
This invention is directed to mutant SPE-C toxins or fragments thereof, vaccine and pharmaceutical compositions, and methods of using the vaccine and pharmaceutical compositions. The preferred SPE-C toxin has at least one amino acid change and is substantially non-lethal compared with the wild type SPE-C toxin. The mutant SPE-C toxins can form vaccine compositions useful to protect animals against the biological activities of wild type SPE-C toxin.

UP - 2005-02

2/3 FAMPAT - (C) QUESTEL

FAN - 20050200006957

PN - US20050010033 A1 20050113 [US20050010033]
STG: Utility Patent Application published on or after January 2, 2001
AP : 2004US-0914417 20040809
FD : Cont. of: US 09308229 - 19990520 [1999US-0308229] GRANTED
FD : Cont. of: US 6784917 - 0 [US6784917]
FD : Cont. of: US 09336036 - 19990618 [1999US-0336036] GRANTED
FD : Cont. of: US 6774218 - 0 [US6774218]
FD : Provisional: US 60091864 - 19980706 [1998US-P091864]
FD : Provisional: US 60033251 - 19961206 [1996US-P033251]

TI - Mutants of streptococcal toxin C and methods of use

PA - Regents of the University of Minnesota

PAO - Regents of the University of Minnesota; Minneapolis, MN [US]

IN - Gahr Pamala J; Mitchell David T; Ohlendorf Douglas; Schlievert Patrick
M

PR - 1997WO-US22125 19971205

IC - A61K-039/09 C07K-001/00 C07K-014/00 C07K-017/00

PCL - ORIGINAL (O) : 530350000

AB - (US20050010033])
This invention is directed to mutant SPE-C toxins or fragments thereof, vaccine and pharmaceutical compositions, and methods of using the vaccine and pharmaceutical compositions. The preferred SPE-C toxin has at least one amino acid change and is substantially non-lethal compared with the wild type SPE-C toxin. The mutant SPE-C toxins can form vaccine compositions useful to protect animals against the biological activities of wild type SPE-C toxin.

UP - 2005-02

3/3 FAMPAT - (C) QUESTEL- image

FAN - 20042782317692

PN - CA2273824 A1 19980611 [CA2273824]
STG: Application laid open
AP : 1997CA-2273824 19971205

- WO9824910 A2 19980611 [WO9824910]
STG: Publ. Of int. Appl. W/out int. Search rep
AP : 1997WO-US22125 19971205

- AU7625698 A 19980629 [AU9876256]
STG: Open to public inspection
AP : 1998AU-0076256 19971205

- WO9824910 A3 19980903 [WO9824910]
STG: Subsqu. Publ. Of int. Search report

- EP0946730 A2 19991006 [EP-946730]
STG: Pub. Of applic. Without search report
AP : 1997EP-0949733 19971205

- CN1240001 A 19991229 [CN1240001]
STG: Unexamined application
AP : 1997CN-0180372 19971205

- AU734597 B2 20010621 [AU-734597]
STG: Patent preceeded by A1

- BR9713679 A 20010717 [BR9713679]
STG: Patent Application
AP : 1997BR-0013679 19971205

- US2002018781 A1 20020214 [US20020018781]
STG: Utility Patent Application published on or after January 2, 2001
AP : 1999US-0336036 19990618

- US2002039585 A1 20020404 [US20020039585]
STG: Utility Patent Application published on or after January 2, 2001
AP : 1999US-0308829 19990714

- JP2002513278 T 20020508 [JP2002513278]
STG: Unexam. Pat. Appl. On foreign appl.
AP : 1998JP-0525766 19971205

- US6774218 B2 20040810 [US6774218]

```

STG: U.S. Patent (with pre-grant pub.) after Jan. 2, 2001
FD : Prov. AP US60091864 19980706 [1998US-P091864]
FD : Prov. AP US60033251 19961206 [1996US-P033251]
FD : C.I.P. of US09308829
FD : PCT/US97/22125 19971205 [1997WO-US22125]
- US6835818 B2 20041228 [US6835818]
STG: U.S. Patent (with pre-grant pub.) after Jan. 2, 2001
FD : Prov. AP US60033251 19961206 [1996US-P033251]
FD : PCT/US97/22125 19971205 [1997WO-US22125]
FD : WO98/24910 19980611 [WO9824910]
TI - MUTANTS OF STREPTOCOCCAL TOXIN C AND METHODS OF USE
PA - GAHR PAMALA J; MERCHANT & GOULD; MERCHANT AND GOULD; MITCHELL DAVID T;
OHLENDORF DOUGLAS; SCHLIEVERT PATRICK M; UNIV MINNESOTA
PA0 - Regents of the University of Minnesota, Minneapolis MN [US]
IN - SCHLIEVERT PATRICK M; OHLENDORF DOUGLAS; MITCHELL DAVID T; GAHR PAMALA
J
PR - 1996US-P033251 19961206; 1997WO-US22125 19971205; 1998US-P091864
19980706; 1999US-0308829 19990714; 1999US-0336036 19990618
IC - A61K-039/09 C07K-014/315 C12N-001/21 C12N-005/10 C12N-015/31
EC - C07K-014/315
PCL - ORIGINAL (O) : 530388400; CROSS-REFERENCE (X) : 424093440 424165100
424183100 424184100 424190100 435007340 435036000 435069300
435340000 930200000
AB - (US20020018781)
This invention is directed to mutant SPE-C toxins or fragments
thereof, vaccine and pharmaceutical compositions, and methods of using
the vaccine and pharmaceutical compositions. The preferred SPE-C toxin
has at least one amino acid change and is substantially non-lethal
compared with the wild type SPE-C toxin. The mutant SPE-C toxins can
form vaccine compositions useful to protect animals against the
biological activities of wild type SPE-C toxin.
UP - 2002-08

```

2. Use the new **DETAIL** option, which will allow you to drill-down into the family records, to display the individual bibliographic information for each patent authority record. After FAMing use the following syntax:

PRT <format> DETAIL SET

```

fam EP1276233/pn
1 Patent Groups
** SS 1: Results 1
Search statement 2
prt ful detail set
<< Patent family 1 >>
1/1 FAMPAT - (C) QUESTEL- image
FAN - 20042801501151
PN - GB0216065 D0 20020821 [GB200216065]
TI - (D0) Apparatus and method for controlling transmission power in a
mobile communication system
PA - (D0) SAMSUNG ELECTRONICS CO LTD
IN - (A) JO SUNG-KWON (KR); OH JEONG-TAE (KR); YANG SANG-HYUN (KR)
PR - KR2001042312 20010713 [2001KR-0042312]
IC - (A) H03G-003/20
EC - H04B-007/005B6
ICO - T04B-007/005B2Q
CT - Cited in the search report
- US5930299(A);US2001000456(A)
AB - An apparatus and method for maximizing the efficiency of a power
amplifier by reducing the PAPR of a BS in a mobile communication
system. A power controller between I and Q channel pulse shaping
filters and a frequency converter calculates cancellation signals for
signal pulses that increase the PAPR at each sampling period,
pulse-shape-filters cancellation signals at the highest levels among
the cancellation signals, and adds the filtered cancellation signals
to the original signals. Thus, spectral regrowth outside a signal
frequency band is suppressed. In the case of a system supporting
multiple frequency allocations, the PAPR is controlled for each FA
according to its service class. Therefore, minimum system performance
is ensured and power use efficiency is increased.
UP - 2003-28
1/1 FAMPAT - (C) QUESTEL
FAN - 20042801501151
PN - EP1276233 A2 20030115 [EP1276233]
TI - (A2) Apparatus and method for controlling transmission power in a
mobile communication system
PA - (A2) SAMSUNG ELECTRONICS CO LTD (KR)
IN - (A2) JO SUNG-KWON (KR); OH JEONG-TAE (KR); YANG SANG-HYUN (KR)
PR - KR2001042312 20010713 [2001KR-0042312]
IC - (A2) H03G-003/30
EC - H04B-007/005B6
ICO - T04B-007/005B2Q
DS - AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR
- AL LT LV MK RO SI
AB - Abstract in publication language
- An apparatus and method for maximizing the efficiency of a power
amplifier by reducing the PAPR of a BS in a mobile communication

```

system. A power controller between I and Q channel pulse shaping filters and a frequency converter calculates cancellation signals for signal pulses that increase the PAPR at each sampling period, pulse-shape-filters cancellation signals at the highest levels among the cancellation signals, and adds the filtered cancellation signals to the original signals. Thus, spectral regrowth outside a signal frequency band is suppressed. In the case of a system supporting multiple frequency allocations, the PAPR is controlled for each FA according to its service class. Therefore, minimum system performance is ensured and power use efficiency is increased.

UP - 2003-28

1/1 FAMPAT - (C) QUESTEL

FAN - 20042801501151

PN - FR2827445 A1 20030117 [FR2827445]

PA - (A1) SAMSUNG ELECTRONICS CO LTD (KR)

PAO - SAMSUNG ELECTRONICS CO LTD; 416 MAETAN DONG PALDAL KU SUWON CITY KYUNGKI DO COREE

IN - (A1) JO SUNG KWON; OH JEONG TAE; YANG SANG HYUN

PR - KR2001042312 20010713 [2001KR-0042312]

IC - (A1) H04B-007/005 H04Q-007/30

EC - H04B-007/005B6

ICO - T04B-007/005B2Q

AB - Publication abstract in french.

- Une unité de commande de puissance (2-8) intercalée entre des filtres de mise en forme d'impulsions de canal I et Q (2-3, 2-4) et un convertisseur de fréquence (2-5), calcule des signaux d'annulation pour des impulsions de signal qui augmentent le rapport entre la puissance de crête et la puissance moyenne à chaque période d'échantillonnage, applique un filtrage de mise en forme d'impulsions à des signaux d'annulation ayant les niveaux les plus élevés, et additionne aux signaux originaux les signaux d'annulation filtrés. Une croissance spectrale à l'extérieur d'une bande de fréquence de signal est ainsi atténuée. Dans le cas d'un système supportant de multiples allocations de fréquence, le rapport entre la puissance de crête et la puissance moyenne est commandé pour chaque allocation de fréquence conformément à sa classe de service. Ceci permet de garantir des performances de système minimales et d'augmenter l'efficacité d'utilisation de la puissance.

UP - 2003-28

1/1 FAMPAT - (C) QUESTEL

FAN - 20042801501151

PN - KR2003006512 A 20030123 [KR2003006512]

TI - (A) APPARATUS AND METHOD FOR CONTROLLING TRANSMISSION POWER IN MOBILE COMMUNICATION SYSTEM

PA - (A) SAMSUNG ELECTRONICS CO LTD (KR)

IN - (A) CHO SEONG GWON (KR); OH JEONG TAE (KR); YANG SANG HYEON (KR)

PR - KR2001042312 20010713 [2001KR-0042312]

IC - (A) H04B-007/26

UP - 2003-28

1/1 FAMPAT - (C) QUESTEL

FAN - 20042801501151

PN - CA2421235 A1 20030123 [CA2421235]

TI - (A1) APPARATUS AND METHOD FOR CONTROLLING TRANSMISSION POWER IN AMOBILE COMMUNICATION SYSTEM

PA - (A1) SAMSUNG ELECTRONICS CO LTD (KR)

IN - (A1) JO SUNG-KWON (KR); OH JEONG-TAE (KR); YANG SANG-HYUN (KR)

PR - KR2001042312 20010713 [2001KR-0042312]

- WOKR0201304 20020710 [2002WO-KR01304]

IC - (A1) H04B-007/216 H04B-007/26 H04L-027/34 H04Q-007/36

AB - An apparatus and method for maximizing the efficiency of a power amplifier by reducing the PAPR of a BS in a mobile communication system. A power controller between I and Q channel pulse shaping filters and a frequency converter calculates cancellation signals for signal pulses that increase the PAPR at each sampling period, pulse-shape-filters cancellation signals at the highest levels among the cancellation signals, and adds the filtered cancellation signals to the original signals. Thus, spectral regrowth outside a signal frequency band is suppressed. In the case of a system supporting multiple frequency allocations, the PAPR is controlled for each FA according to its service class. Therefore, minimum system performance is ensured and power use efficiency is increased.

UP - 2003-28

1/1 FAMPAT - (C) QUESTEL

FAN - 20042801501151

PN - DE20211598 U1 20030123 [DE20211598]

PA - (U1) SAMSUNG ELECTRONICS CO LTD (KR)

PR - KR2001042312 20010713 [2001KR-0042312]

IC - (U1) H04B-007/005

EC - H04B-007/005B6

ICO - T04B-007/005B2Q

UP - 2003-28

1/1 FAMPAT - (C) QUESTEL

FAN - 20042801501151

PN - WO03007507 A1 20030123 [WO200307507]

TI - (A1) APPARATUS AND METHOD FOR CONTROLLING TRANSMISSION POWER IN A MOBILE COMMUNICATION SYSTEM

PA - (A1) SAMSUNG ELECTRONICS CO LTD (KR)

PAO - SAMSUNG ELECTRONICS CO., LTD; 416, Maetan-dong, Paldal-gu, Suwon-shi, 442-370 Kyonggi-do (KR)

IN - (A1) JO SUNG-KWON; OH JEONG-TAE; YANG SANG-HYUN

PR - KR2001042312 20010713 [2001KR-0042312]

IC - (A1) H04B-007/26

EC - H04B-007/005B6

ICO - T04B-007/005B2Q

DS - AU; BR; CA; CN; IN; JP; RU

CT - Cited in the search report

US5302914 (A) (Cat. A);US5991262 (A) (Cat. A)

```

- "Multi-rate modulation scheme with controlled peak-to-average power
  ration using balanced incomplete block design", Harvatin, D.T.,
  Ziemer, R.E. (Univ. of Colorado), IEEE ICC 2001, Vol. 4, 11-14 June
  2001, Pages 1028-1032(Cat. A)
AB - An apparatus and method for maximizing the efficiency of a power
  amplifier by reducing the PAPR of a BS in a mobile communication
  system. A power controller between I and Q channel pulse shaping
  filters and a frequency converter calculates cancellation signals for
  signal pulses that increase the PAPR at each sampling period,
  pulse-shape-filters cancellation signals at the highest levels among
  the cancellation signals, and adds the filtered cancellation signals
  to the original signals. Thus, spectral regrowth outside a signal
  frequency band is suppressed. In the case of a system supporting
  multiple frequency allocations, the PAPR is controlled for each FA
  according to its service class. Therefore, minimum system performance
  is ensured and power use efficiency is increased.
UP - 2003-28

1/1 FAMPAT - (C) QUESTEL
FAN - 20042801501151
PN - US2003054851 A1 20030320 [US20030054851]
TI - (A1) Apparatus and method for controlling transmission power in a
  mobile communication system
PA - (A1) SAMSUNG ELECTRONICS CO LTD (KR)
PA0 - SAMSUNG ELECTRONICS CO., LTD.; KYUNGKI-DO, [KR]
IN - (A1) JO SUNG-KWON (KR); OH JEONG-TAE (KR); YANG SANG-HYUN (KR)
PR - KR2001042312 20010713 [2001KR-0042312]
IC - (A1) H04B-001/00
EC - H04B-007/005B6
ICO - T04B-007/005B2Q
PCL - ORIGINAL (O) : 455522000; CROSS-REFERENCE (X) : 455069000
AB - An apparatus and method for maximizing the efficiency of a power
  amplifier by reducing the PAPR of a BS in a mobile communication
  system. A power controller between I and Q channel pulse shaping
  filters and a frequency converter calculates cancellation signals for
  signal pulses that increase the PAPR at each sampling period,
  pulse-shape-filters cancellation signals at the highest levels among
  the cancellation signals, and adds the filtered cancellation signals
  to the original signals. Thus, spectral regrowth outside a signal
  frequency band is suppressed. In the case of a system supporting
  multiple frequency allocations, the PAPR is controlled for each FA
  according to its service class. Therefore, minimum system performance
  is ensured and power use efficiency is increased.
UP - 2003-28

1/1 FAMPAT - (C) QUESTEL
FAN - 20042801501151
PN - CN1466826 T 20040107 [CN1466826]
TI - (T) Apparatus and method for controlling transmission power in mobile
  communication system
PA - (T) SAMSUNG ELECTRONICS CO LTD (KR)
IN - (T) JEONG-TAE OH (KR); SANG-HYUN KANG (KR); SUNG-KWON JO (KR)
PR - KR2001042312 20010713 [2001KR-0042312]
IC - (T) H04B-007/26
UP - 2003-28

1/1 FAMPAT - (C) QUESTEL
FAN - 20042801501151
PN - JP2004522374 T 20040722 [JP2004522374]
PR - KR2001042312 20010713 [2001KR-0042312]
- WOKR0201304 20020710 [2002WO-KR01304]
IC - (T) H04B-001/707 H04B-007/26 H04L-027/36
UP - 2003-28

```

3. Family display formats are used with regular display syntax: PRT <SS N> <format> <set, m-n>

Examples: PRT MABS 1-5 PRT SS # MTST SET

```

MTST <--- TI    OTI    IC    ICAA    ICCA    EC    ICO    PCL    FI    FTM
(MSC)        IDT    BC
MINI <--- PN    TI    PA    PA0    IN    IN0    AP    PR
MMSS <--- PN    TI    OTI    PA    PA0    IN    IN0    AP    PR    DS
MSTD <--- PN    TI    OTI    PA    PA0    IN    IN0    AP    PR    IC
          ICAA    ICCA    EC    ICO    PCL    FI    FTM    IDT    BC    DS
MSTG <--- PN    STG    TI    OTI    PA    PA0    IN    IN0    AP    PR
          IC    ICAA    ICCA    EC    ICO    PCL    FI    FTM    IDT    BC    DS
MASE <--- PN    TI    PA    PA0    IN    IN0    AP    PR    AB
MSTE <--- PN    TI    PA    PA0    IN    IN0    AP    PR    IC    ICAA
          ICCA    EC    ICO    PCL    FI    FTM    IDT    BC    DS    AB
MSTA <--- PN    TI    OTI    PA    PA0    IN    IN0    AP    PR    IC
          ICAA    ICCA    EC    ICO    PCL    FI    FTM    IDT    BC    DS
          AB
MABS <--- PN    TI    OTI    PA    PA0    IN    IN0    AP    PR    IC
          ICAA    ICCA    EC    ICO    PCL    FI    FTM    IDT    BC    DS
          AB
MMAX <--- PN    TI    OTI    PA    PA0    IN    IN0    AP    PR    IC
          ICAA    ICCA    EC    ICO    PCL    FI    FTM    IDT    BC    DS
          CT    REF    AB
MCIT <--- PN    TI    OTI    PA    PA0    IN    IN0    AP    PR    CT
          REF    AB
MALL <--- PN    TI    OTI    PA    PA0    IN    IN0    AP    PR    IC

```

Other Display Options

1) **Legal Feature:** Display including corresponding Legal Status record(s):

PRT <SS N> <format> <set, m-n> <Legal Feature>

Example:

| | |
|-------------------------|--|
| PRT SS 3 MAXL 1-5 LEGAL | Display records 1 thru 5 in FULL format from the search set number 3 |
| PRT STDL 1-10 LEGALALL | Display records 1 thru 10 in STDR format from the last search set |
| PRT FUL SET LEGALALL | Display all the records in FULL format from the last search set |

Legal Feature Displays Legal Status Records from the following databases

| | |
|------------|--|
| LEGAL | LGST (Legal Status) |
| LEGAL MAXE | LGST (Legal Status) - English text only |
| LEGALEP | EPPATENT (European Patents) |
| LEGALIFI | CRXX (Claims Current Legal Status) |
| LEGALERT | LITA (LitAlert) |
| LEGALUS | CRXX (Claims Current Legal Status), LITA (LitAlert) |
| LEGALALL | LGST (Legal Status), CRXX (Claims Current Legal Status), and LITA (LitAlert) |

2) **Full-text Feature:** Display including corresponding Full-text record(s):

Record display commands issued within FAMPAT file will display bibliographic records with corresponding claims and descriptions from the US, EP or PCT full-text records.

PRT <SS N> <format> <set, m-n> <display feature>
 format - display format in bibliographic file
 set - complete set of records, m-n - record numbers

Example:

| | |
|----------------------|--|
| PRT FULL FULLTEXT | Displays both the record from the FAMPAT and a full-text record |
| PRT STDR FULLCLMS | Displays both the record from the FAMPAT and a text of the claims |
| PRT STGS FULLUS CLMS | Displays both the record from the FAMPAT and text of the claims from USPAT |

Display Feature Displays Full-Text Records from the following databases

| | |
|--------------|--------------------------------------|
| FULLTEXT | USPAT, EPAPAT, PCTFULL |
| FULLCLMS | (claims only) USPAT, EPAPAT, PCTFULL |
| FULLUS | USPAT |
| FULLUS CLMS | (claims only) USPAT |
| FULLEPO | EPAPAT |
| FULLEPO CLMS | (claims only) EPAPAT |
| FULLWO | PCTFULL |
| FULLWO CLMS | (claims only) PCTFULL |

Note: The Legal and Full-text display features cannot be used with the ID display commands.

For the complete listing of all available Legal and Full-text features please consult the appropriate Questel System Guides

Citation Searching

The CITF and CITB commands will find more patent results that are relevant to your search by using the citations that are included on patent publications.

The **CITF** command retrieves subsequent patents that are citing the patents in your initial set. The new result set contains both the original patents and the citing patents.

The **CITB** command retrieves the previously published patents cited by the patents in your initial set. The new set contains both the original patents and the cited patents.

The correct search syntax is to enter the command followed by your search set number, e.g., **CITF SS 1** or **CITB SS 1**. The maximum initial set size for both commands is 1,000 records.

CITF :

```
File : FAMPAT

MCGREW/IN AND WRIGLEY/PA
** SS 1: Results 45
citf ss 1
** SS 2: Results 285

Search statement 3
prt
1/285 FAMPAT - (C) QUESTEL
FAN - 20061440070578
PN - EP1657294 A1 20060517 [EP1657294]
- WO2006053839 A1 20060526 [WO2006053839]
TI - Anti-allergenic perfume compositions
PA - BERTRAM HEINZ-JÜRGEN; PANTEN JOHANNES; SYMRISE GMBH & CO KG
PA0 - Symrise GmbH & Co. KG; Mühlenfeldstrasse 1; 37603 Holzminden (DE)
IN - PANTEN JOHANNES DR; BERTRAM HEINZ-JUERGEN DR
AP - 2004EP-0027198 20041116; 2005WO-EP55768 20051104
PR - 2004EP-0027198 20041116
.{Display abbreviated}
```

CITB :

```
citb ss 1
** SS 3: Results 742
prt
1/742 FAMPAT - (C) QUESTEL- image
FAN - 20053130053400
PN - WO2005102066 A2 20051103 [WO2005102066]
- WO2005102066 A3 20060105 [WO2005102066]
TI - BREATH FRESHENING CONFECTIONERY PRODUCTS AND METHODS OF MAKING AND
USING SAME
PA - BREHM STEFAN JOHANNES; CLARK JAMES C; HASS MICHAEL S; MCGREW GORDON N;
MINDAK THOMAS M; PEREZ MIGUEL; SOUKUP PHILIP MARK; STAWSKI BARBARA Z;
THEURER INGO C; WRIGLEY W M JUN CO
PA0 - WM. WRIGLEY JR. COMPANY; 410 North Michigan Avenue, Chicago, IL 60611
(US) (except US)
- STAWSKI, Barbara, Z.; 501 Marengo Avenue, Forest Park, IL 60130 (US)
(only US)
- MINDAK, Thomas, M.; 721 N. Walnut Avenue, Itasca, IL 60143 (US) (only
US)
- SOUKUP, Philip, Mark; Ziegelmattestr. 1, 79117 Freiburg (DE) (only US)
- MCGREW, Gordon, N.; 2505 Ridge Avenue, Evanston, IL 60201 (US) (only
US)
- CLARK, James, C.; 3606 Andora Place, ST. Louis, MO 63125 (US) (only US)
- HASS, Michael, S.; 6S130 Park Meadow Drive, Naperville, IL 60540 (US)
(only US)
- PEREZ, Miguel; 6608 S. Knox Avenue, Chicago, IL 60629 (US) (only US)
- THEURER, Ingo, C.; Rumfordstr. 17, 80469 Munchen (DE) (only US)
- BREHM, Stefan, Johannes; Inselbachstrasse 2, 83059 Kolbermoor (DE)
(only US)
IN - STAWSKI BARBARA Z; MINDAK THOMAS M; SOUKUP PHILIP MARK; MCGREW GORDON
N; CLARK JAMES C; HASS MICHAEL S; PEREZ MIGUEL; THEURER INGO C; BREHM
STEFAN JOHANNES
AP - 2005WO-US13544 20050420
PR - 2004US-P564053 20040420; 2005US-P650785 20050207; 2005US-P650786
20050207
.{Display abbreviated}
```

Citation Searching (cont'd)

The **FAMCITE** command is available in the FAMPAT database, which has citations for EP, FR, GB, PCT and US patents. After conducting a family search for a single patent family, you can display a complete citation report with the FAMCITE command. The report display in three parts:

- The original source family
- The citing patent families (families with a patent citing a member of the source family)
- The cited patent families (families with a patent cited by a member of the source family)

The results in all three sections show complete families. These fields are included for each family in the citation report :

- PN Number and date of publication of all members
- TI English title of the first member
- OTI Non-English title of the first member
- PA Applicant of the first member
- IN Inventor of the first member
- AP Application numbers and dates of all members
- PR Priority numbers and dates of all members
- CT Citations of members EP, FR, GB, PCT, & US
- AB Summary of first member

You can also display clipped images by adding the parameter IMG. The complete command syntax is:
FAMCITE IMG.

The maximum initial set size for both commands is 1,000 records.

The FAMCITE command can not be used with the LEGAL or FULLTEXT display options.

FAMCITE :

```
File : FAMPAT
SS Results
1 1 (1) ..FAM US5898235/PN

fancite
<< Citation Report >>
<< Source Patent Family >>
1/1 FAMPAT - (C) QUESTEL- image
PN - US5898235 A 19990427 [US5898235]
- JP10214487 A 19980811 [JP10214487]
TI - Integrated circuit with power dissipation control
PA - ST MICROELECTRONICS INC
PA0 - STMicroelectronics, Inc., Carrollton TX [US]
IN - MCCLURE DAVID C
AP - 1996US-0775611 19961231; 1997JP-0354340 19971224
PR - 1996US-0775611 19961231
CT - (US5898235)
US4683382; US5167024; US5483464; US5513361
AB - (US5898235)
An integrated circuit device such as an SRAM operating in a battery
backup mode, or operating in a quiescent mode when deselected in the
operation of a portable electronic device, includes a power
dissipation control circuit that reduces the voltage on an internal
power supply node so that the memory array is powered at a minimum
level sufficient to retain the data stored therein intact.

<< Citing Patents: Subsequent Patents Citing Source Family >>
1/7 FAMPAT - (C) QUESTEL- image
PN - US2003057429 A1 20030327 [US20030057429]
- US6710424 B2 20040323 [US6710424]
TI - RF chipset architecture
PA - AIRIP
PA0 - AirIP, Palo Alto CA [US]
IN - SCHMIDT DOMINIK J
AP - 2001US-0962717 20010921
PR - 2001US-0962717 20010921
CT - (US20030057429)
Cited; US5898235; US6087198; US6125268; US6380835; US6400001;
US6407441; US6477606; US6484038; US6548942; US6627507; US6627992
AB - (US20030057429)
A set of radio frequency (RF) integrated circuits includes a transmit
chip having a power amplifier and a receive chip adapted to work with
the transmit chip. The receive chip has one or more low noise
amplifiers to receive RF signals, and a processor coupled to the low
```

noise amplifiers, the processor transmitting data through the transmit chip and receiving data from the on-chip low noise amplifiers.

2/7 FAMPAT - (C) QUESTEL- image

PN - US2002071330 A1 20020613 [US20020071330]
- US6560157 B2 20030506 [US6560157]
- JP2002176143 A 20020621 [JP2002176143]
TI - Semiconductor device
PA - MITSUBISHI ELECTRIC CORP
PA0 - Mitsubishi Denki Kabushiki Kaisha, Tokyo [JP]
IN - SUGITA MITSURU; HASHIMOTO HIROYUKI
AP - 2000JP-0373966 20001208; 2001US-0860429 20010521
PR - 2000JP-0373966 20001208
CT - (US20020071330)
US4683382; US5612920; US5898235; US6426908; JP11119844 A; JP11213667 A
AB - (US20020071330)

A semiconductor device of one chip has a first power supply terminal allowing connection with an external power supply IC, a second power supply terminal allowing connection with the external power supply IC, a main voltage dropping circuit connected with the first power supply terminal, a secondary voltage dropping circuit connected with the second power supply terminal, and an internal circuit connected with the main voltage dropping circuit and the secondary voltage dropping circuit. A high voltage of the external power supply IC is received in the main voltage dropping circuit through the first power supply terminal and is dropped. The high or low voltage of the external power supply IC is received in the secondary voltage dropping circuit through the second power supply terminal and is dropped. The internal circuit is operated by using the dropped voltage obtained in the main or secondary voltage dropping circuit.

3/7 FAMPAT - (C) QUESTEL- image

PN - US6651176 B1 20031118 [US6651176]
- US2005198538 A1 20050908 [US20050198538]
TI - Systems and methods for variable control of power dissipation in a pipelined processor
PA - HEWLETT PACKARD DEVELOPMENT CO
PA0 - Hewlett-Packard Development Company, L.P., Houston TX [US]
IN - COLON-BONET GLENN T; SOLTIS JR DONALD C
AP - 1999US-0457169 19991208; 2003US-0644184 20030820
PR - 1999US-0457169 19991208; 2003US-0644184 20030820
CT - (US6651176)

Cited; US4644466; US5559458; US5941991; US6122728; US6182232; US6195756; US6219723; US6275928; US6357016; US6367023; Cited; US5452215; US5521834; US5557531; US5666506; US5684422; US5751984; US5859999; US5860017; US5884061; US5898235; US5903768; US5938755

- Cited by applicant

Alexander Wolfe, "Patents shed light on Merced", Electronic Engineering Times, Feb. 15, 1999, pp. 43-44.

AB - (US6651176)

The invention controls maximum average power dissipation by stalling high power instructions through the pipeline of a pipelined processor. A power dissipation controller stalls the high power instructions in order to control the processor's maximum average power dissipation. Preferably, the controller is modeled after a capacitive system with a constant output rate and a throttled input rate: the output rate represents the steady state maximum average power dissipation; while the input rate is stalled based upon current capacity, representing thermal response time. At start-up, the capacity is initialized. Yet for each high power instruction, the capacity increases by a weighted value. Each clock capacity is also decreased by a variable output rate. In particular, a low power operation is inserted to the stage execution circuit where the stall is desired, creating a low power state for that circuit. This stall effectively creates a "hole" at that pipeline stage, thus temporarily reducing power dissipation. The invention takes advantage of the fact that the presence of an instruction at any stage execution circuit dissipates power and that the absence (i.e., a "hole") of an instruction at any stage dissipates less power. By controlling where and when a hole occurs within the pipeline, the maximum average power dissipation of the processor is controlled.

4/7 FAMPAT - (C) QUESTEL- image

PN - US6294404 B1 20010925 [US6294404]
- JP2001155487 A 20010608 [JP2001155487]
- TW527596 B 20030411 [TW-527596]
TI - Semiconductor integrated circuit having function of reducing a power consumption and semiconductor integrated circuit system comprising this semiconductor integrated circuit
PA - MITSUBISHI ELECTRIC CORP
PA0 - Mitsubishi Denki Kabushiki Kaisha, Tokyo [JP]
IN - SATO HIROTOSHI
AP - 1999JP-0339609 19991130; 2000US-0568058 20000510; 2000TW-0116902

20000821
PR - 1999JP-0339609 19991130
CT - (US6294404)
US5265060; US5543649; US5898235; US5955904; JP10-214487
AB - (US6294404)
A semiconductor integrated circuit according to the present invention comprises a synchronous SRAM, a signal generation circuit generating a chip selection signal, a clock signal etc. supplied to the synchronous SRAM, a voltage set circuit setting the voltage of a system power supply line and a controller controlling the signal generation circuit and the voltage set circuit. When setting the synchronous SRAM in a power down mode, the chip selection signal is set in a nonselective state and the power supply voltage of the system power supply line is stepped down to a standby potential. Thus, the synchronous SRAM enters a standby state having extremely low power consumption.

5/7 FAMPAT - (C) QUESTEL- image

PN - US2001028270 A1 20011011 [US20010028270]
- US6396336 B2 20020528 [US6396336]
- US6333671 B1 20011225 [US6333671]
TI - Sleep mode VDD detune for power reduction
PA - IBM
PA0 - INTERNATIONAL BUSINESS MACHINES CORPORATION; ARMONK, NY [US]
IN - ROBERTS ALAN L; WISTORT REID A
AP - 1999US-0433279 19991103; 2001US-0883048 20010615
PR - 1999US-0433279 19991103; 2001US-0883048 20010615
CT - (US20010028270)
US4130899; US4683382; US4691123; US4716463; US5077518; US5477279;
US5511026; US5530398; US5663919; US5747977; US5773966; US5898235;
US6049245; US6118267; JP6-175956

CT - (US6333671)
US4130899; US4683382; US4691123; US4716463; US5077518; US5477279;
US5511026; US5530398; US5663919; US5747977; US5773966; US5898235;
US6049245; US6118267; JP6-175956

- "Leakage Current Reduction/Minimization through Substrate and/or Well Bias Control Coupled with Clock Power Management", IBM Technical Disclosure Bulletin, vol. 41 No. 01, Jan. 1998, pp. 547-549.

AB - (US20010028270)
The leakage current on a semiconductor is reduced while the semiconductor is in a sleep mode. This is accomplished by (1) placing the semiconductor in the sleep mode; (2) providing the semiconductor an internal supply voltage derived from an external supply voltage applied to the semiconductor chip (where the internal supply voltage is less in quantity than the external supply voltage); and (3) reducing the internal supply voltage when the semiconductor enters the sleep mode from an activated mode and returning the internal supply voltage to an activated mode level when the semiconductor returns to the activated mode. The reducing step includes supplying the external supply voltage to a reference circuit which outputs therefrom a reference voltage; and supplying the reference voltage to a regulator, where the regulator attempts to match the reference voltage and outputs therefrom the internal supply voltage. The reference circuit reduces the reference voltage when the semiconductor enters the sleep mode from an activated mode and returns the reference voltage to the activated mode level when the semiconductor returns to the activated mode. The reducing step can be performed by reducing the current flow to one or more diodes in the reference circuit when the semiconductor enters the sleep mode from the activated mode, and increasing the current flow to the diodes when the semiconductor reenters the activated mode from the sleep mode.

6/7 FAMPAT - (C) QUESTEL- image

PN - JP2000163141 A 20000616 [JP2000163141]
TI - STEP-DOWN POWER SOURCE CIRCUIT
PA - NIPPON ELECTRIC CO
PA0 - (A) NEC CORP
IN - NARAHARA TETSUYA
AP - 1998JP-0335418 19981126
PR - 1998JP-0335418 19981126
CT - (JP2000163141)
[19] Citation as reason for refusal of an application
JP (A) 1993088765 [JP05088765]
JP (A) 1985039219 [JP60039219]
JP (A) 1998214487 [JP10214487]
JP (A) 1991214212 [JP03214212]

AB - (JP2000163141)
PROBLEM TO BE SOLVED: To reduce current consumption at the time of stand-by in a battery driving system.
- SOLUTION: This is a step-down power source circuit operated by an outside power source and provided with a regulator circuit for stepping-down an outside power supply voltage to an inside power supply voltage. A simple step-down circuit 7 is added between the

outside power source and an inside power source line, and the regulator circuit is stopped by an STOP signal when a system clock is stepped, and the outside power supply voltage is stepped-down to the inside power supply voltage by the simple step-down circuit 7. The simple step-down circuit 7 is constituted by serially connecting a transistor which is turned on when the system clock is stopped with plural diode-connected transistors.

- COPYRIGHT: (C)2000, JPO

7/7 FAMPAT - (C) QUESTEL- image

PN - US6377681 B1 20020423 [US6377681]

TI - Signal line driving circuit with self-controlled power dissipation

PA - NAT SEMICONDUCTOR CORP

PA0 - National Semiconductor Corporation, Santa Clara CA [US]

IN - BREMNER DUNCAN JAMES

AP - 1998US-0053110 19980401

PR - 1998US-0053110 19980401

CT - (US6377681)

US5138658; US5323461; US5428682; US5881129; US5898235; US5912513;

US6005934

AB - (US6377681)

A signal line driving circuit with power control for selectively reducing internal power dissipation when driving an external load. While driving the external load with a constant current the output voltage generated across such load is monitored. If the load impedance decreases sufficiently to cause the output voltage to fall below a predetermined threshold value and, therefore, cause the voltage across the signal line driving circuit to increase, the magnitude of the power supply voltage is automatically reduced, thereby reducing the voltage across the signal line driving circuit. Such a signal line driving circuit is particularly advantageous as a subscriber line interface circuit (SLIC). As the subscriber goes from an on-hook condition to an off-hook condition and if the subscriber loop is sufficiently short (or low in impedance), a lower power supply voltage is used to minimize the power dissipation of the SLIC while still maintaining the required subscriber loop current.

<< Cited Patents: Previous Patents Cited by Source Family >>

1/4 FAMPAT - (C) QUESTEL- image

PN - US5513361 A 19960430 [US5513361]

TI - Method and apparatus for reducing power consumption of a fan in a computer system

PA - INTEL CORP

PA0 - Intel Corporation, Santa Clara CA [US]

IN - YOUNG BRUCE A

AP - 1994US-0279544 19940725

PR - 1994US-0279544 19940725

CT - (US5513361)

US4151611; US4279020; US4293927; US4381552; US4615005; US4642441;

US4698748; US4712196; US4809163; US4842431; US4980836; US5247805

AB - (US5513361)

A circuit for controlling power consumption of a fan within a computer system having a central processing unit (CPU) is described. The circuit includes a filter circuit coupled to receive a periodical pulse signal for detecting duty cycle of the periodical pulse signal by converting the periodical pulse signal into an analog signal. The analog signal has a voltage level proportional to the duty cycle of the periodical pulse signal. The periodical pulse signal is generated to control the CPU to be operational between predetermined intervals when the CPU is in an inactive state. A comparator circuit is coupled to the filter circuit for comparing the voltage level of the analog signal with a predetermined voltage level. When the voltage level of the analog signal is below the predetermined voltage level, the comparator circuit generates a switching signal. A switching circuit is coupled to (1) a power supply, (2) the fan, and (3) the comparator circuit for disconnecting the power supply from the fan when the switching signal is generated by the comparator circuit so as to substantially reduce the power consumption of the fan in the computer system when the CPU is in the inactive state. A computer system having the circuit for controlling power consumption of a fan in the system and a method for controlling power consumption of a fan in a computer system are also described.

2/4 FAMPAT - (C) QUESTEL- image

PN - US5483464 A 19960109 [US5483464]

- KR9505216 B1 19950522 [KR9505216]

TI - Power saving apparatus for use in peripheral equipment of a computer

PA - SAMSUNG ELECTRONICS CO LTD

PA0 - SamSung Electronics Company, Ltd., Kyungki-do [KR]

IN - SONG MOON-JONG

AP - 1993KR-0005332 19930331; 1993US-0176450 19931230

PR - 1993KR-0005332 19930331

CT - (US5483464)
 US4365290; US4591914; US4593349; US4667289; US4674031; US4677566;
 US4747041; US5059961; US5163124; US5175845; US5214785; US5237692;
 US5249298; US5251320; US5293494; US5347167; US5375245; US5384721;
 US5408668

AB - (US5483464)
 An apparatus for use in the peripheral equipment of a computer reduces the needless consumption of power. Once it has been determined that the computer has not been used for a predetermined period of time, an operation control signal indicative of a specific control mode is supplied for controlling the supply of power to the computer's peripheral equipment and the computer's operating state. The operation of a power supply means for generating operating power to a computer's peripheral equipment is controlled in response to a detected control mode. Accordingly, energy is conserved by controlling the supply of power and the operating state of a computer's peripheral equipment according to the peripheral equipment's operational state.

3/4 FAMPAT - (C) QUESTEL- image

PN - US5167024 A 19921124 [US5167024]
 - AU6016890 A 19910314 [AU9060168]
 - AU629019 B2 19920924 [AU-629019]
 - CA2024552 A1 19910309 [CA2024552]
 - DE4028175 A1 19910321 [DE4028175]
 - GB9018259 D0 19901003 [GB9018259]
 - GB2235797 A 19910313 [GB2235797]
 - GB2235797 B 19930818 [GB2235797]
 - HK36394 A 19940429 [HK9400363]
 - JP3171317 A 19910724 [JP03171317]
 - SE9002838 D0 19900906 [SE9002838]
 - SE9002838 A 19910309 [SE9002838]
 - SG7294 G 19940610 [SG9400072]

TI - Power management for a laptop computer with slow and sleep modes
 OTI - ENERGIEMANAGEMENTANORDNUNG FUER EINEN TRAGBAREN COMPUTER
 PA - APPLE COMPUTER
 PA0 - Apple Computer, Inc., Cupertino CA [US]
 IN - SMITH R STEVEN; HANLON MIKE S; BAILEY ROBERT L
 IN0 - SMITH R STEVEN; HANLON MIKE S; BAILEY ROBERT L
 AP - 1990AU-0060168 19900803; 1990GB-0018259 19900820; 1990CA-2024552 19900904; 1990DE-4028175 19900905; 1990SE-0002838 19900906; 1990JP-0237294 19900910; 1992US-0845781 19920305; 1994SG-0000072 19940117; 1994HK-0000363 19940421
 PR - 1989US-0405637 19890908; 1992US-0845781 19920305; 1994SG-0000072 19940117

CT - (US5167024)
 US4019068; US4074351; US4151611; US4279020; US4293927; US4317181;
 US4381552; US4409665; US4611289; US4615005; US4698748; US4712196;
 US4747041; US4809163; US4851987; US4907150; US4980836; EP1723394

CT - (GB9018259)
 Cited in the search report
 - US4698748(A)

AB - (US5167024)
 A power manager within a portable laptop computer provides power and clocking control to various units within the computer in order to conserve battery power. Transistor switches controlled by the power manager control the distribution of power and/or clock signals to the various units within the computer. The power manager includes a software routine for continually monitoring the various units and when these units are either not needed and/or not currently in use, power and/or clock signals are removed from a given unit.

4/4 FAMPAT - (C) QUESTEL- image

PN - EP0157905 A2 19851016 [EP-157905]
 - EP0157905 A3 19870729 [EP-157905]
 - EP0157905 B1 19900411 [EP-157905]
 - DE3481957 D1 19900517 [DE3481957]
 - JP60176121 A 19850910 [JP60176121]
 - JP5047848 B 19930719 [JP93047848]
 - JP1838072 C 19940411 [JP1838072]
 - US4683382 A 19870728 [US4683382]

TI - Semiconductor device.
 OTI - Halbleiteranordnung.
 - Dispositif semi-conducteur.
 PA - TOKYO SHIBAURA ELECTRIC CO
 PA0 - Kabushiki Kaisha Toshiba, Kawasaki [JP]
 IN - IIZUKA TETSUYA C O PATENT DIVI; SAKURAI TAKAYASU C O PATENT DI
 AP - 1984JP-0032068 19840222; 1984DE-3481957 19841030; 1984EP-0113078 19841030; 1984US-0667417 19841101
 PR - 1984JP-0032068 19840222
 CT - (EP-157905)
 Cited in the search report
 - US4054830(A) (Cat. A); US4390833(A) (Cat. A); GB2034937(A) (Cat.

- A);EP63483(A2)(Cat. A)
- PATENT ABSTRACTS OF JAPAN, vol. 6, no. 34 (P-104)[912], 2nd March 1982; & JP-A-56 153 415 (SHINDENGEN KOGYO K.K.) 27-11-1981(Cat. X)
 - PATENT ABSTRACTS OF JAPAN, vol. 3, no. 156 , 21st December 1979, page 43 E 161; & JP-A-54 137 246 (OKI DENKI KOGYO K.K.) 24-10-1979(Cat. A)
 - MOTOROLA TECHNICAL DEVELOPMENTS, vol. 2, January 1982, page 30, Motorola, Schaumburg, Illinois, US; LAL SOOD: "Circuit for reducing standby power for a memory device"(Cat. A)
- CT - (US4683382)
US4580063; US4581551
- Mano et al., "Submission VLSI Memory Circuits," ISSCC Digest of Technical Papers, pp. 234-235, Feb. 1983.
- Itoh et al., "An Experimental IBM DRAW with On-Chip Voltage Limiter," ISSCC Digest of Technical Papers, pp. 282-283, Feb. 1983.
- AB - (EP-157905)
- Publication abstract :
- In a semiconductor device according to the invention, first and second voltage dropping circuits (100, 200) for generating voltages (Vin1, Vin2) respectively having smaller values than that of an external power supply voltage (Vext) are provided. The first voltage dropping circuit (100) which consumes relatively less power is always in an operative mode, and the second voltage dropping circuit (200) which consumes more power than that of the first voltage dropping circuit is operated during an interval other than a standby interval. The voltages (Vin1, Vin2) generated by the first and second voltage dropping circuits (100, 200) are supplied to an internal power supply line (12) in parallel with each other.

List of Fields

All these fields may be used with the PRT, LI, BR and =YES commands.

| | |
|------|--|
| AB | Abstract - (EAB) |
| ADB | Advantages and Drawbacks |
| AN | Accession Number |
| AP | Application Number (APC) |
| APD | Application Date (DDP) |
| BC | Berlin Class |
| CT | Citations |
| DEF | ECLA Definition |
| DS | Designated States |
| DT | Document Type |
| EC | ECLA Class (ECLA) |
| FAB | Abstract in French |
| FD | Filing Details - US Only |
| FI | FI-Terms |
| FID | Family ID |
| FPR | Family Priority |
| FT | French Title |
| FTM | F-Terms (File forming terms) - JP Only |
| GAB | Abstract in German |
| GT | German Title |
| IAB | Reference for Abstract |
| IC | Intl Patent Class |
| ICA | Additional IPC |
| ICAA | IPC Advanced All |
| ICAI | IPC Advanced Inventive |
| ICAN | IPC Advanced Non-inventive |
| ICCA | IPC Core All |
| ICCI | IPC Core Inventive |
| ICCN | IPC Core Non-inventive |
| ICLM | Independant Claim |
| ICM | Main IPC |
| ICO | In Computer Only Class |
| ICS | Secondary IPC |
| ICT | Reference for Citation |
| IDT | Dutch Class |
| IKD | Patent Kind Code |
| IN | Inventor(s) |
| IN0 | Inventor(s) |
| INC | Inventor Country |
| INN | Inventor Name |
| INN0 | Inventor Name |
| IT | Index Terms |
| IW | Index Words |
| LA | Language |
| MTAB | Machine Translated Abstract |
| NPR | Number of Priority Numbers |
| OAB | Other Abstracts |
| OBJ | Patent Object |
| OPD | Other Publication Dates |
| OTI | Other Title |

List of Fields (cont'd)

All these fields may be used with the PRT, LI, BR and =YES commands.

| | |
|------|---|
| PA | Patent Assignee |
| PA0 | Patent Assignee |
| PAC | Patent Assignee Country |
| PAN | Patent Assignee Name |
| PAN0 | Patent Assignee Name |
| PAP | PCT Application Number |
| PCL | US Class |
| PCLO | US Original PCL |
| PD | Patent Date |
| PDA | First Date of Publication |
| PDG | First Date of Issue |
| PDL | Patent Date Last |
| PN | Patent Number |
| PPN | PCT Patent Number |
| PR | Priority Details |
| PRD | Priority Date |
| PRI | Priority Indicator |
| QM | Questel Month |
| QW | Questel Week |
| REF | Non Patent Citation References |
| SFM | Simple Family |
| STG | Stage |
| TI | Title - English |
| UA | Update Amendments |
| UAA4 | Monthly UABA |
| UAB | Abstract Update |
| UAB4 | Monthly UAB |
| UABA | All Abstracts - Human |
| UCL | Classification Code Update |
| UCT | Citation Update |
| UE | Update Equivalents / Stages |
| UE4 | Monthly UE |
| UMT4 | Monthly UMTA |
| UMTA | MTAB Update |
| UP | Update Code |
| UP4 | Monthly Update |
| XAP | Standardized Application Number |
| XCT | Standardized Citation Number |
| XCTA | Cited Document Category from EP, WO Search Reports–Technology Background |
| XCTD | Cited Document Category from EP, WO Search Reports–Document Cited in Application |
| XCTE | Cited Document Category from EP, WO Search Reports–Earlier Patent, published on or after filing date |
| XCTL | Cited Document Category from EP, WO Search Reports– Document Cited for other reasons |
| XCTO | Cited Document Category from EP, WO Search Reports–Non-Written Disclosure |
| XCTP | Cited Document Category from EP, WO Search Reports–Intermediate Document |
| XCTT | Cited Document Category from EP, WO Search Reports –Theory/Principle Underlying the Invention |
| XCTX | Cited Document Category from EP, WO Search Reports-Particularly Relevant if taken alone |
| XCTY | Cited Document Category from EP, WO Search Reports–Particularly Relevant if combined with another document in the same family |
| XPN | Standardized Patent Number |
| XPR | Standardized Priority Number |
| XR | Basic – Cross Reference Number |