

PlusPat: FAM Commands and Family Displays

FAM commands and Family Displays enhance all types of searches in PlusPat!

The FAM command is useful for more than just conducting family searches. By using the FAM command in any type of search - subject, assignee, inventor etc. - you optimize search results and display options.

Introduction

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Searching & Displaying Patent Families

A.	When <u>Family Searching</u> is your specific goal - direct family searching.....	3
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If the purpose of your search is simply to find and display family members and you are:

- searching with known patent, priority or application numbers
- searching on a one-by one family search basis
- displaying individual family member records and corresponding legal status records
- displaying family and legal status as one display
- displaying merged family with citation report

... then all you need to do is follow these simple steps:

- FAM CCNNNNNNN/PN..... 3
- FAMSTAT/E, MFAMSTAT/E or FAMCITE 3

B.	When Comprehensive <u>Subject Searching</u> is your goal - indirect family searching.....	4
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If your purpose is to optimise your subject or applicant name search result by:

- searching for the family on search terms entered and combining family result sets
- displaying the comprehensive family in one integrated family record

... then all you need to do is follow these simple steps:

- FAM SS N..... 5
- PRT MSTD, MMAX, MINI or MFAMSTAT/E 6

C.	Easy Comparison Check of Display Options	7
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Do you need to check what type of display is best for you?

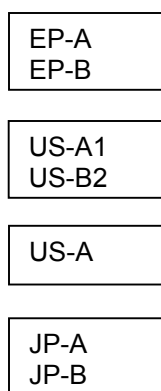
- FAMSTAT or MFAMSTAT
- **Individual** Family Member displays (regular) or **Family** displays (merged).....
- Sample Displays

I. Records in Family Files

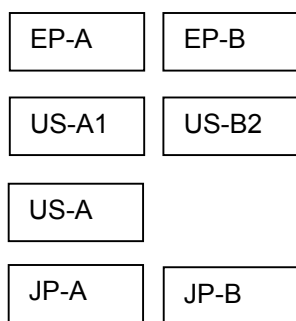
The different definitions of a record in the different family databases means that the building blocks for a complete family look different in each database:¹

Pluspat Record : One Patent Authority / Country with All Publication stages per invention
 Inpadoc Record : One Publication Stage for One Patent Authority / Country per invention
 DWPI Record : One Family Grouping of All Publication Stages for all Patent Authorities per invention ²

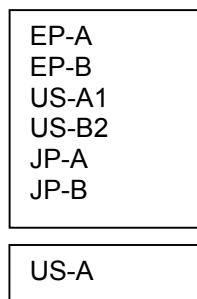
PLUSPAT



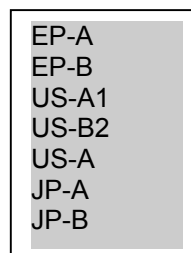
INPADOC



DWPI



PlusPat Extended Family Display 3



II. PlusPat records

A PlusPat record reflects all publication stage documents for ONE invention as provided by ONE patent authority / country. Simply this means that Application and Grant information for the same invention are 'pre-merged' into one Patent Authority / Country record for that invention. The Different Patent Authority / Country records relating to the same invention are not 'pre-merged'. They are separate records until a family search dynamically draws them together. In order to see all different Patent Authority / Country records relating to the same invention, one must use a family command and a family display command.

III. PlusPat Families

In PlusPat, all the documents which are directly or indirectly related by a priority are regarded as belonging to the same family. This PlusPat family may also be known as an extended or comprehensive family.

Family 1			
Document n° 1	Priority n° 1		
Document n° 2	Priority n° 1	Priority n° 2	
Document n° 3	Priority n° 1	Priority n° 2	
Document n° 4		Priority n° 2	Priority n° 3
Document n° 5			Priority n° 3

Family 1 : In this example, the FIVE documents belong to the same family. The documents n° 1 and 5 do not share the same priority but they are indirectly related by the priorities of documents 2, 3 and 4.

In contrast to the Extended Family, other database producers may use a Strict or Straight family where all family members have exactly the same priority data. In the above example, only document number 2 and document number 3 would be regarded as members of a strict family, i.e. they have exactly the same two priority numbers.

¹ Some single database records may look as though they already contain the complete family record . As Patent families are often distributed over two or more records, it is recommended that one uses a FAM command in ALL files that contain patent family information.

² Families may be distributed over more than one DWPI record, particularly in cases of divisions and continuations.

³ Family Display is a virtual record . Using FAM SS command with search terms creates a family based search context.

A. Family Searching & Display - Direct Family Searching

If the purpose of your search is simply to find and display family members and you are..

- searching with known patent priority or application numbers
- searching on a one-by one family search basis
- displaying individual family member records and corresponding legal status records
- displaying family and legal status as one display
- displaying merged family with citation report

STEP 1: Enter each number in the Questel•Orbit standardized format.

Patent/Publication number: FAM CCNNNNNNN/PN FAM EP---1234/PN
Application number: FAM YYYYCC-NNNNNNN/AP FAM 1978EP-0100811/AP
Priority number FAM YYYYCC-NNNNNNN/PR FAM 1997DE-1020719/PR

STEP 2: Select display from following options:

Individual Family Member & Legal Status Displays:

FAMSTAT Each Family member record followed by corresponding Legal Status record from the LGST (Legal Status) database : all languages in titles and legal actions display

FAMSTATE Each Family member record followed by corresponding Legal Status record from the LGST (Legal Status) database - English language actions only. (also FAMSTAT MAXE)

FAMLIST All Individual Family members from PLUSPAT file and then all the corresponding LGST records from the Legal Status database attached after the PLUSPAT records

FAMLISTE Same display as FAMLIST (English language action descriptions only)

FAMINPD Only Individual Family member records from PLUSPAT file (no Legal Status records)

Family & Legal Status as One Display (merged):

MFAMSTAT Same display as FAMSTAT integrated into one family record with ABSTRACT

MFAMSTATE Same display as FAMSTATE integrated into one family record with ABSTRACT

Automatic Search & Family Display of Citation Records:

The FAMCITE command is available in the PlusPat database, which has citations for US, EP, WO and FR patents. After conducting a family search for a single patent family, you can display a complete citation report with the FAMCITE command. The report displays 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)

FAMCITE Family Display of Citation Results, for records with EP, PCT, FR, US citations

B. Subject and Name Searching - Indirect family searching

Each family member may bring unique value to your search; some family members bring titles and abstracts with *different wording* (additional search terms) and some family members bring the value of *different kinds of classes*.

Consider the three individual PlusPat family members records with common priority US 1234:

<u>EP Record:</u>	<u>US Record:</u>	<u>JP Record:</u>
Title : X	Title : Y	Title : Z
Abstract : X	Abstract : Y	Abstract Z
EC Class	US PCL Class	IC Classes
PR : US1234	PR : US1234	PR : US1234

Your search terms may not co-occur in the same single family member record. If you enter search term "X", (retrieving EP record) and then run a FAM search on "X" results, priority "PR: US1234" introduces search terms "Y" (from US family member record) and "Z" (from JP family member record) into your result set. Now you are able to combine more search terms together, whether they are keywords, classes or PA / IN names.

```
File : PLUSPAT

1          2  ZOMBIE AND FILE?

1/2 PLUSPAT - (C) QUESTEL-ORBIT
PN - US2002083081 A1 20020627 [US20020083081]
TI - (A1) Manipulation of ***zombie*** ***files*** and evil-twin ***files***
PR - US64206600 20000818 [2000US-0642066]

2/2 PLUSPAT - (C) QUESTEL-ORBIT- image
PN - WO200219110 A2 20020307 [WO200219110]
TI - (A2) MANIPULATION OF ***ZOMBIE*** ***FILES*** AND EVIL-TWIN ***FILES***
PA - (A2) NETWORK APPLIANCE INC (US)
PR - US64206600 20000818 [2000US-0642066]

2          6  ZOMBIE
3          7  (4) ..FAM SS      2
4          3  3 AND FILE?
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Why did we retrieve this additional relevant JP record (below) with FAM?

Note this is not a member of Network Appliance Inc family above. It is additional prior art: Nippon Electric family

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1/1 PLUSPAT - (C) QUESTEL-ORBIT- image
PN - JP10198583 A 19980731 [JP10198583]
TI - (A) DETECTION/PROCESSING SYSTEM/METHOD FOR IDLE RUNNING PROCESS
PA - (A) NIPPON ELECTRIC CO
PR - JP1453897 19970110 [1997JP-0014538]
AB - ..the performance information storage device ***file*** of a system...
```

We retrieved an extra JP record because the FAM on Zombie introduced a GB record (below) with the term "Zombie" - which is related by priority to the JP record containing the term "file".

```
1/1 PLUSPAT - (C) QUESTEL-ORBIT
PN - GB9800209 D0 19980304 [GB9800209]
TI - (D0) System and method of detecting and handling **zombie** process
PA - (D0) NIPPON ELECTRIC CO
PR - JP1453897 19970110 [1997JP-0014538]
```

STEP 1: Enter search term X. Enter FAM SS n (search statement N for term X).

Subject Search:

zombie

** SS 1: Results 6

fam ss 1

4 Patent Groups
** SS 2: Results 7

2 and file?

** SS 3: Results 3

fam ss 3

2 Patent Groups
** SS 4: Results 5

1/2 PLUSPAT - (C) QUESTEL-ORBIT- image
PN - US2002083081 A1 20020627 [US20020083081]
WO200219110 A2 20020307 [WO200219110]
TI - (A1) Manipulation of zombie files and evil-twin files
PA - (A2) NETWORK APPLIANCE INC (US)

2/2 PLUSPAT - (C) QUESTEL-ORBIT- image
PN - GB9800209 D0 19980304 [GB9800209]
GB2323191 A 19980916 [GB2323191]
GB2323191 B 20011219 [GB2323191]
JP10198583 A 19980731 [JP10198583]
NZ329564 A 19980626 [NZ-329564]
TI - (D0) System and method of detecting and handling zombie process
PA - (D0) NIPPON ELECTRIC CO

Assignee Search:

/pa network appliance?

** SS 1: Results 72

fam ss 1

27 Patent Groups
** SS 2: Results 87

Note that the FAM command retrieves more individual records. What are the extra records? In this case, they are US Pre-grant and JP PCT transfer records which lack PA data. see bolded PNs below

PN - EP1058873 A1 20001213 [EP1058873]
CA2322320 A1 19990910 [CA2322320]
CN1299477 T 20010613 [CN1299477]
JP2002506248 T 20020226 [JP2002506248]
TW444154 B 20010701 [TW-444154]
US2001039622 A1 20011108 [US20010039622]
US2002019936 A1 20020214 [US20020019936]
WO9945456 A1 19990910 [WO9945456]
WO9945456 B1 19991111 [WO9945456]
TI - (A1) FILE ACCESS CONTROL IN A MULTI-PROTOCOL FILE SERVER
PA - (A1) NETWORK APPLIANCE INC (US)

STEP 2: Select from integrated Family display options:

Questel•Orbit provides new display formats which enable you to integrate all unique family member information into one record. These "virtual records" are dynamically created at the time of display.

All new family display formats are based on an integrated display of some elements from ALL family members (PN, AP, PR, EC) and some elements from a preferred patent authority (TI, PA, IN & AB). The default preferred patent authority is EP. To change preferred patent authority, enter the two letter authority / country code with MFAM Permanent option: POP MFAM <PC> e.g. POP MFAM US

- **Short Formats:** Title & Patent Class data

MSC (Merged Scan)	TI	OTI	IC	EC	ICO	PCL
MTST (Merged TEST)	TI	OTI	IC	EC	ICO	PCL

- **Medium Formats:** Biblio data included

MSTD (Merged STDR)	PN	TI	OTI	PA	IN	AP	PR	IC	EC
	ICO	PCL	DS						
MINI	PN	TI	PA	IN	AP	PR			
MMSS	PN	TI	OTI	PA	IN	AP	PR	DS	

- **Long Formats:** Abstract included

MABS (Merged ABST)	PN	TI	OTI	PA	IN	AP	PR	IC	EC
	ICO	PCL	DS	AB					
MMAX (Merged MAX)	PN	TI	OTI	PA	IN	AP	PR	IC	EC
	ICO	PCL	DS	CT	AB				
MASE	PN	TI	PA	IN	AP	PR	AB		
MSTE	PN	TI	PA	IN	AP	PR	IC	EC	
	ICO	PCL	DS	AB					
MSTA	PN	TI	OTI	PA	IN	AP	PR	IC	
	EC	ICO	PCL	DS	AB				

All available abstracts included

MALL (Merged ALL)	PN	TI	OTI	PA	IN	AP	PR	IC	EC
	ICO	PCL	DS	CT	AB (EP)	AB (US), etc..4			

Family Displays may also be used in combination with:

- **Legal Feature:** Family Display with all corresponding Legal Status record(s)
- **Fulltext / Clms Feature:** Family Display with all corresponding Full-text or Claims record(s)
- **Cited Feature:** Family Display with corresponding Cited record(s):
- **IMG Feature:** Family Display with Image
- **Plus Feature:** Family Display with Field or Format from specified database

⁴ English abstracts may also display for a small percentage of records for : DE, GB, FR, IT, ES, NL, KR, TW and RU.

C. Easy Comparison Display Checklist

FAMSTAT(E) or MFAMSTAT(E)?

	FAMSTAT(E)	MFAMSTAT(E)
Format	Separate family member records with corresponding individual Legstat records following each family member record.	Merged family record display (MSTA & MSTE formats) followed by seamless display of Legstat records
Content	- TI, PA, IN, IC, PCL for each fam member - YYYYMMDD format PR and AP dates	- one TI, PA, IN, IC , PCL field p/family -YYYY (Q.O PR & AP format) - abstract (one abstract per family display)
Capability	- displays only one family result at a time - record ranging not permitted - enter FAMSTAT(E) for each family display	- displays multiple family results - use record ranging with MFAMSTAT(E) e.g. MFAMSTATE 1 5-6 10-12
Suggested Use	- for display with QWEB Search Assist - for Tabular Family Display (QWEB) - for one at a time Family Display	- for multiple family displays in a results set - when record ranging is required - no duplication of EP legal data w AT & DE - for family and Legal record displayed as ONE document.

Individual Family Member Displays (regular)

- It is not necessary to see comprehensive families. Any one individual family member will be sufficient. *Your results may contain more than one family member. Match PR numbers to find families in output.*
- It is acceptable if other individual family member records display separately and distributed in output. *Individual Family members display in LIFO order and thus are unlikely to display together in output:*
 - The ID and PATGR commands must be used to display individual members in Patent Family groups.
 - The SORT command may be used to display families members closer to one another.

Some SORT options: SORT /PR , SORT /IN or SORT /PA

Family Displays (merged)

- It is preferable to see comprehensive family displays for the results of the search strategy.
- It is preferable to see all family members integrated per display - not separated or distributed in output.
- It is preferable to reduce duplicative display elements, such as titles, abstracts and inventor listings.

Sample Displays

fam US5579500/pn from this search result, You may choose to display ..

1 Patent Groups ONE integrated Family display

** SS 1: Results 5

or FIVE individual Family Member displays

New Family Display	Individual Family Member Displays
<p>1/1 PLUSPAT - (C) QUESTEL-ORBIT Patent Number : EP0613087 A1 19940831 [EP-613087] CA2116314 A1 19940825 [CA2116314] JP6309222 A 19941104 [JP06309222] TW389863 B 20000511 [TW-389863] US5579500 A 19961126 [US5579500]</p> <p>Title of the Invention : (A1) Apparatus and method for achieving high-speed data read access to memory.</p> <p>Patent Assignee : (A1) MATSUSHITA ELECTRIC IND CO LTD (JP)</p> <p>Inventor : (A1) SEKIBE TSUTOMU (JP); KITAMURA TOMOHIRO OCHIAI TOSHIYUKI (JP)</p> <p>Application Data : 1994US-0200217; 1994TW-0101564; 1994CA-2116314; 1994EP-0301250; 1993JP-0353164</p> <p>Priority Details : 1993JP-0035092; 1993JP-0353164</p> <p>IPC (issuing Office) : (A1) G06F-012/02</p> <p>EPO Classification(ECLA) : G06F-012/02C</p> <p>US Class Code : (O) : 711220000; (X) : 711003000</p> <p>Designated States : (EP-613087) DE FR GB</p> <p>Citation : (EP-613087)</p> <p>Cited in the search report EP293720(A) (Cat. X); EP505157(A) (Cat. A) IBM TECHNICAL DISCLOSURE BULLETIN vol. 31,no. 3, August 1988 , NEW YORK US pages 303 - 306 'High performance microprocessor memory system' Revealed during examination EP604139(A)</p> <p>Citation : (US5579500) US4691277; US4872138; US4914575; US5157776..</p> <p>Abstract of the Invention : (EP-613087) An apparatus and method for controlling data read access to memory, in response to an access request sent through a system bus. The apparatus includes a data storage device for preserving data corresponding to a predetermined address; a judging device for judging whether an access address indicated by the access request matches the predetermined address; and a control device for making the data storage means output data preserved therein to the system bus when the access address has been judged to match the predetermined address, and for making the data storage means hold data corresponding to a next address subsequent to the access address when the access address has been judged not to match the predetermined address.</p>	<p>1/5 PLUSPAT - (C) QUESTEL-ORBIT PN - CA2116314 A1 19940825 [CA2116314] TI - Apparatus and Method for Achieving High-Speed Data Read Access to Memory. PA - (A1) MATSUSHITA ELECTRIC IND CO LTD (JP) AP - CA2116314 19940223 [1994CA-2116314] PR - JP3509293 19930224 [1993JP-0035092]</p> <p>2/5 PLUSPAT - (C) QUESTEL-ORBIT PN - EP0613087 A1 19940831 [EP-613087] TI - (A1) Apparatus and method for achieving high-speed data read access to memory. PA - (A1) MATSUSHITA ELECTRIC IND CO LTD (JP) IN - (A1) SEKIBE TSUTOMU (JP); KITAMURA TOMOHIRO (JP); OCHIAI TOSHIYUKI (JP) AP - EP94301250 19940222 [1994EP-0301250] PR - JP3509293 19930224 [1993JP-0035092] IC - (A1) G06F-012/02 EC - G06F-012/02C DS - DE FR GB CT - Cited in the search report EP293720(A) (Cat. X); EP505157(A) (Cat. A) IBM TECHNICAL DISCLOSURE BULLETIN vol. 31 3, August 1988 , NEW YORK US pages 303.. AB - An apparatus and method for controlling..</p> <p>3/5 PLUSPAT - (C) QUESTEL-ORBIT PN - JP6309222 A 19941104 [JP06309222] TI - (A) MEMORY CONTROLLER AND METHOD THEREOF PA - (A) MATSUSHITA ELECTRIC IND CO LTD AP - JP35316493 19931228 [1993JP-0353164] PR - JP3509293 19930224 [1993JP-0035092] - JP35316493 19931228 [1993JP-0353164] AB - PURPOSE: To provide the memory controller and memory control method which can read.</p> <p>4/5 PLUSPAT - (C) QUESTEL-ORBIT PN - TW389863 B 20000511 [TW-389863] TI - (B) Memory controller apparatus PA - (B) MATSUSHITA ELECTRIC IND CO LTD (JP) AP - TW83101564 19940223 [1994TW-0101564] PR - JP3509293 19930224 [1993JP-0035092] AB - A memory controller apparatus for controlling data read access..</p> <p>5/5 PLUSPAT - (C) QUESTEL-ORBIT PN - US5579500 A 19961126 [US5579500] TI - (A) Control apparatus for controlling data read accesses to memory.. PA - (A) MATSUSHITA ELECTRIC IND CO LTD (JP) AP - US20021794 19940223 [1994US-0200217] PR - JP3509293 19930224 [1993JP-0035092] EC - G06F-012/02C PCL - (O) : 711220000; (X) : 711003000 CT - US4691277; US4872138; US4914575;.. AB - An apparatus and method for controlling..</p>