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

Country	Country Code	Coverage from:
Korea	KR	1978-2000
<i>Utility Models</i>		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	MD	1994
<i>Utility Models</i>		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	PH	1975-1996
<i>Utility Models</i>		1981-1996
Poland	PL	1973
<i>Utility Models</i>		1996
Portugal	PT	1976
<i>Utility Models</i>		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	ES	1968
<i>Utility Models</i>		1993
Sweden	SE	1968
Switzerland (1920)	CH	1969
Tajikistan	TJ	1998
<i>Utility Models</i>		1998
Taiwan	TW	2000
<i>Utility Models</i>		2000
Trinidad & Tobago	TT	1994
Turkey	TR	1973-1998
<i>Utility Models</i>		1996-1998
Ukraine (1987)	UA	2003
<i>Utility Models</i>		2005
United States (1920)	US	1968
<i>Designs</i>		1916 (1977)
Uruguay	UY	2007
<i>Industrial Design Apps.</i>		2007
Vietnam	VN	1984-1998
<i>Utility Models</i>		1989-1998
WIPO (PCT) Applications	WO	1978
Yugoslavia	YU	1973-1992
Zambia	ZM	1969-1994
Zimbabwe	ZW	1980-1995

**Example – STGS IMG Format
Applicant & Examiner Citations**

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Patent Number:

WO2008104530 A2 20080904 [WO2008104530]

Publication Stage:

(A2) International publication without international search report

Title:

(A2) METHOD AND DEVICE FOR VISUALLY ASSISTING A CATHETER APPLICATION

Patent Assignee:

(A2) SIEMENS AG (DE); BIOSENSE WEBSTER INC (US); BOESE JAN (DE); JOHN MATTHIAS (DE); RAHN NORBERT (DE); BARTAL MEIR (IL); GOVARI ASSAF (IL); PREISS ASSAF (IL)

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Inventor(s):

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Intl Patent Class:

(A2) A61B-019/00

Patent Number 2:

WO2008104530 A3 20081120 [WO2008104530]

Publication Stage 2:

(A3) International search report

Title 2:

(A3) METHOD AND DEVICE FOR VISUALLY ASSISTING A CATHETER APPLICATION

Patent Assignee 2:

(A3) SIEMENS AG (DE); BIOSENSE WEBSTER INC (US); BOESE JAN (DE); JOHN MATTHIAS (DE); RAHN NORBERT (DE); BARTAL MEIR (IL); GOVARI ASSAF (IL); PREISS ASSAF (IL)

Inventor 2:

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Intl Patent Class 2:

(A3) A61B-005/04 A61B-019/00

Language:

GERMAN (GER)

Application Nbr:

WOEP2008052295 20080226 [2008WO-EP52295]

Priority Details:

DE102007009764 20070227 [2007DE-10009764]

IPC Advanced All:

A61B-019/00 [2006-01 A F I B H EP]
A61B-005/04 [2006-01 A L N B H EP]

IPC Core All:

A61B-019/00 [2006 C F I B H EP]

EPO ECLA Class:

A61B-019/00N
A61B-005/06
A61B-006/12

EPO ICO Class:

K61B-005/042
K61B-006/00B8
K61B-018/14V
K61B-019/00N6R
K61B-019/00N10

Designated States:

AE AG AL AM AO AT AU AZ BA BB BG BH BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
DO DZ EC EE EG ES FI GB GD GE GH GM GT HN HR HU ID IL IN IS JP KE KG KM KN KP
KR KZ LA LC LK LR LS LT LU LY MA MD ME MG MK MN MW MX MY MZ NA NG NI NO NZ OM
PG PH PL PT RO RS RU SC SD SE SG SK SL SM SV SY TJ TM TN TR TT TZ UA UG US UZ
VC VN 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

Document Type:

Corresponding document

Citations:

Search Report [Examiner]
US2004215071(A1) (Cat. Y) [US20040215071]
WO2005111942(A1) (Cat. Y) [WO2005111942]
US2006116575(A1) (Cat. A) [US20060116575]
US2005281385(A1) (Cat. A) [US20050281385]
DE10340546(A1) (Cat. A,D) [DE10340546]
Applicant citations
DE10340455(A1) [DE10340455]
DE10340546(A1) [DE10340546]
DE102005016472(A1) [DE102005016472]

Abstract:

The invention relates to a method and to a device for visually assisting a catheter application on the heart (H) of a patient (P) using at least one image of the patient (P) obtained by means of a C-arm X-ray device (1) and using electroanatomic mapping-data of the patient (P) that is obtained by means of an electromagnetic position detection system and mapping system (2). The C-arm X-ray device (1) and the electromagnetic position detection system and mapping system (2) are calibrated in relation to each other, by means of the determination of a co-ordinate transformation between a co-ordinate system (CR) assigned to the C-arm x-ray device (1) and/or a co-ordinate system (CB) that is assigned to the at least one image generated by the C-arm X-ray device (1) and a co-ordinate system (CM) assigned to the electromagnetic position detection system and mapping system (2). The position of the patient (P) is determined during the detection of the image and/or during the detection of the electroanatomic mapping-data and is at least indirectly assigned to the image and/or the electroanatomic mapping-data.

Abstract in french:

L'invention concerne un procédé et un système d'assistance visuelle permettant l'application d'un cathéter sur le coeur (H) d'un patient (P) à l'aide d'au moins une image du patient (P), prise avec un appareil de radiographie "arc en C" (1), et à partir de données cartographiques du patient (P) obtenues à l'aide d'un système de cartographie et de détection de position électromagnétique. Selon ledit procédé, l'appareil de radiographie "arc en C" (1) et le système de cartographie et de détection de position électromagnétique (2) sont étalonnés l'un par rapport à l'autre, une transformation de coordonnées entre un système de coordonnées (CR), associé à

l'appareil de radiographie "arc en C" (1), et/ou un système de coordonnées (CB), associé à au moins une image produite à l'aide de l'appareil de radiographie "arc en C" (1), et un système de coordonnées (CM), associé au système de cartographie et de détection de position électromagnétique (2), étant déterminée, et la position du patient (P) pendant l'enregistrement de l'image et/ou pendant l'enregistrement des données cartographiques électroanatomiques est déterminée et associée, au moins indirectement, à l'image et/ou aux données cartographiques électroanatomiques.

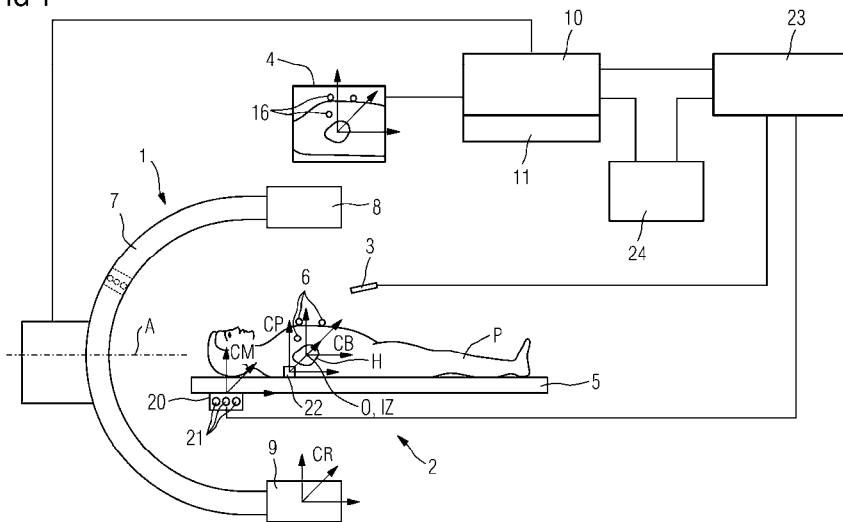
Abstract in german:

Die Erfindung betrifft Verfahren und eine Vorrichtung zur visuellen Unterstützung einer Katheteranwendung am Herzen (H) eines Patienten (P) anhand von wenigstens einem mit einem C-Bogen-Röntgengerät (1) von dem Patienten (P) gewonnenen Bild und anhand von mit einem elektromagnetischen Positionserfassungs- und Mappingsystem (2) gewonnenen elektroanatomischen Mapping-Daten von dem Patienten (P), bei dem das C-Bogen-Röntgengerät (1) und das elektromagnetische Positionserfassungs- und Mappingsystem (2) relativ zueinander kalibriert werden, indem eine Koordinatentransformation zwischen einem dem C-Bogen-Röntgengerät (1) zugeordneten Koordinatensystem (CR) und/oder einem wenigstens einem mit dem C-Bogen-Röntgengerät (1) erzeugten Bild zugeordneten Koordinatensystem (CB) und einem dem elektromagnetischen Positionserfassungs- und Mappingsystem (2) zugeordneten Koordinatensystem (CM) ermittelt wird, und bei dem die Position des Patienten (P) während der Erfassung des Bildes und/oder während der Erfassung der elektroanatomischen Mapping-Daten ermittelt und dem Bild und/oder den elektroanatomischen Mapping-Daten zumindest indirekt zugeordnet wird.

Update Code:

2008-38

FIG 1



Searching

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

Search by	Index	Search Hints	Examples
Terms from the Basic Index	/BI (default)	<p>The Basic Index incorporates: Title (TI), Original Title (OTI), Abstract (AB) and Index Terms (IT) For Select French Patents Only</p> <p>All Basic Index terms may be searched without field qualifiers.</p> <p>For all these indexes, search by:</p> <ul style="list-style-type: none"> - Single terms using Boolean or proximity operators; - Phrases using implied adjacency. <p>Use truncation. Left-hand truncation is available.</p>	<p>SYNTHETIC AND AQUEOUS HYDROPHOB+ POLYMER? +SPHERE+</p>
Title	/TI	<p>It is important to note that qualifying to /TI will search ONLY English Language Titles.</p> <p>Search English language title by:</p> <ul style="list-style-type: none"> - Single terms using Boolean or proximity operators. - Phrases using implied adjacency. <p>Use truncation. Left-hand truncation is available.</p>	<p>/TI OSTEOGENIC PROTEIN? /TI +LITOGRA+</p>
Title - French	/FT	<p>Search language title by:</p> <ul style="list-style-type: none"> - Single terms using Boolean or proximity operators. - Phrases using implied adjacency. <p>Use truncation. Left-hand truncation is available.</p>	/FT ROTATIF?
Title - German	/GT	<p>Search language title by:</p> <ul style="list-style-type: none"> - Single terms using Boolean or proximity operators. - Phrases using implied adjacency. <p>Use truncation. Left-hand truncation is available.</p>	/GT ELEKTRISCH+
Original Title	/OTI	<p>Search non-English language title:</p> <ul style="list-style-type: none"> - Single terms using Boolean or proximity operators. - Phrases using implied adjacency. <p>Use truncation. Left-hand truncation is available.</p>	<p>/OTI OPTIQUE AND MULTIPLEXEUR /OTI FOTOINICIADORES FUNCIONALIZADOS</p>

Basic Index (cont'd.)

Search by	Index	Search Hints	Examples
Abstract (English)	/AB	It is important to note that qualifying to /AB will search ONLY official English Language Abstracts – not machine translated English abstracts – see MTAB	/AB DNA AND VIRUS
Abstract (French)	/FAB	All Abstracts are searched using: - Single terms using Boolean or proximity operators. - Phrases using implied adjacency.	/FAB TRANSMISSION 3d METRIQUE
Abstract (German)	/GAB	Use truncation. Left-hand truncation is available.	/GAB UBERTRAGUNGS PRIORITAT
Abstract (Other) Country of origin language abstracts are available for a small percentage of the records (not complete coverage for any patent office)	/OAB	Use to search primarily for abstracts for following patent offices: - Spanish (ES, MX, AR, CR, PA, PE, NI, SV, GT, CL, UY) - Portuguese (BR) - Italian (IT) - Hungarian (HU)	/OAB PLURALIDAD S TRAYECTORIA /OAB +ISOMER?
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

Publication Data

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

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 APD>=1996</p>
Standardized Application Number	/XAP	<p>To facilitate cross-file 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 *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: =, <, >, <=, >=.	PRD=1998-04-07 PRD=1999-01:1999-06 PRD>=1998
Standardized Priority Number	/XPR	To facilitate cross-file 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

Search by	Index	Search Hints	Examples
<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: Subclass: ANNA Group: ANNA-NNN 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. Use double quotes to search the complementary chemical codes that contain colon [:] separators. 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?</p> <p>/EC E21B-003/02 /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. 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</p> <p>/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 /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 IPC Core All IPC Core Inventive IPC Core non-Inventive</p> <p>IPC codes can be searched at different levels : full code (ANNA-NNN/NNNN) group (ANNA-NNN) sub-class (ANNA) class (ANN+ – use unlimited truncation) ICM: Main IPC (from 1995 onwards) ICA: Additional IPC ICS: Secondary IPC</p>	<p>/ICAA C21D-005/00 /ICAI F27B-009/10 /ICAN C21D-001/34 /ICCA B22D-029/00 /ICCI F27B-009/00 /ICCN C21D-001/34</p> <p>/IC A43B-005/04 /IC1 A43B-005 /IC2 A43B /IC A43+ /ICM A63B-043 /ICA B25B-001 /ICS F01B</p>

Citations (cont'd.)

Search by	Index	Search Hints	Examples
<p>Cited Bibliographic References/Non Patent 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.)</p> <ul style="list-style-type: none"> - allow for some flexibility <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
Document Type	/DT	Search by the following EPO designated document types available: Not recommended for complete retrieval.	/DT BASIC /DT CORRESPONDING DOCUMENT /DT INTELLECTUAL FAMILY
Filing Details	/FD	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: 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. Search by the US publication number using format USNNNNNNNN Search by the presence of the field.	/FD 2000US-0730246 /FD 2001US-P132684 /FD US5105599 FD=YES

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

Statistical Analysis

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

Publication Info		Application / Priority Info		Classifications	
Patent Assignee	GET PA GET PAN	Priority Country	GET PRC	IPC Intl .Patent Classif.	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 Classification)	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 PLUSPAT 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	SDI <SDIname>;SURV QW	survey only new documents
SURV UP	SDI <SDIname>;SURV UP	survey all documents in latest update (may contain older publications recently added to EPO collection)
SURV UE	SDI <SDIname>;SURV UE	survey equivalent documents
SURV UAB	SDI <SDIname>;SURV UAB	survey documents amended with abstracts
SURV UCL	SDI <SDIname>;SURV UCL	survey documents amended with ECs & PCLs
SURV UCT	SDI <SDIname>;SURV UCT	survey documents amended with citations
SURV QM	SDI <SDIname>;SURV UP4	survey documents monthly

For further SDI SURV options, see update codes on Page 16 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

Parameters:

EMAIL SDI <SDIname> EMAIL to receive SDI results via email

RTF SDI <SDIname> EMAIL RTF to include special characters, accents etc.

XML

PDF

PR <format> SDI <SDIname> EMAIL RTF;PR ABST to specify record display format

Family Searching

1. Family search based on the patent

To create a 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

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 PLUSPAT 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 PLUSPAT file and all the corresponding records from the Legal Status database attached after the PLUSPAT records
FAMLISTE Same display as FAMLIST (English language action descriptions only)
FAMINPD Family search results from PLUSPAT 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

FAM SS (Search Set)

2. Family search based on the set of documents

To create a 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)

```
water safety
** SS 1: Results 129

Search statement 2

fam ss 1

377 Patent Groups
** SS 2: Results 946
```

Family Feature Displays

The **FAM** search feature and the **MFAM** display feature provide for the display of merged family records.

- FAM feature automatically retrieves all family member records for a set of results*
 - MFAM feature integrates individual family member records into one merged family record**
- After performing a family search, by using a number or a search statement, Questel will respond by showing the total number of PlusPat records and the number of family records in the search statement.

?water safety

** SS 1: Results 441

Search statement 2

?fam ss 1

421 Patent Groups

** SS 2: Results 1.045

prt mtst (see MFAM display formats page 20)

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 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.

* fam ss is limited to results sets with 1000 records or less

** records may also be displayed with regular formats , i.e. one record per patent country /authority

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

Displaying Family Records

Family display formats are used with regular display syntax:

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

Examples:

PRT SS 3 MTST SET

PRT MABS 1-5

PRT MMAX PSET 3

Formats

MTST	<---	TI	OTI	IC	ICAA	ICCA	EC	ICO	PCL	FI	FTM
MSC	<---	TI	OTI	IC	ICAA	ICCA	EC	ICO	PCL	FI	FTM
MABS	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS	AB	
MSTD	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS		
MALL	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS	CT	AB
		FAB	GAB	OAB							
MMAX	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS	CT	AB
MMSS	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	DS
MSTA	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS	AB	
MINI	<---	PN	TI	PA	PA0	IN	IN0	AP	PR		
MASE	<---	PN	TI	PA	PA0	IN	IN0	AP	PR	AB	

- Records may also be displayed with regular formats , i.e. one record per patent country/authority
- User defined display formats are not available for Merged Record Display

Family Display Options

- 1) **Legal Feature:** Display including corresponding Legal Status record(s):
<FORMAT> LEGAL
PRT MMAX LEGAL
- 2) **Fulltext / Clms Feature:** Display including corresponding Full-text or Claims record(s):
PRT <FORMAT> FULLEPO CLM
PRT MASE FULLEPO CLM
- 3) **Cited Feature:** Display including corresponding Cited record(s):
<FORMAT> CITALL
PRT MSTE CITALL
- 4) **Images Feature:**
PRT IMG <N-N> <FORMAT> *Please note: IMG must directly follow PRT statement*
PRT IMG 1-10 MSTA
- 5) **Plus Feature:**
PRT <FORMAT> PLUS <FIELD OR FORMAT> (FILE)
PRT MINI PLUS TI (DWPI)

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

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

```
Selected file: PLUSPAT
PLUSPAT - (c) Questel-Orbit, All Rights Reserved.
Comprehensive Worldwide Patents database
Individual records for each Country or Patent Office
Coverage: 77 patenting authorities; start dates vary from 1800 forward
For PlusPat Fact Sheet, Pricing and FAQ, see the Questel.Orbit website
Citations and FI/F-term classification available for Japanese documents
Last update of file: 2008/02/08 (YYYY/MM/DD) 2008-06/UP (last update)
Search statement 1

? MCGREW/IN AND WRIGLEY/PA
Frequency Term
      726 MCGREW/IN
     2849 WRIGLEY/PA

** SS 1: Results 174

Search statement 2

? CITF SS 1

** SS 2: Results 441

Search statement 3

? PRT
1/441 PLUSPAT - (C) QUESTEL-ORBIT
PN - WO2007111622 A1 20071004 [WO2007111622]
STG - (A1) Publ. Of int. Appl. With int. Search rep
TI - (A1) MULTI-MODALITY SENSATIONS IN CHEWING GUM COMPOSITIONS
OTI - (A1) SENSATIONS A MODALITES MULTIPLES DANS DES COMPOSITIONS DE
      CHEWING-GUM
PA - (A1) CADBURY ADAMS USA LLC (US); JANI BHARAT (US); KABSE KISHOR
      (US); BOGHANI NAVROZ (US); GEBRESELASSIE PETROS (US); GRANT R
      STEVEN (US); KIEFER JESSE (US); KUNCEWITCH THOMAS (US); KRAMER
      COLLEEN (US); ROBINSON MARY K (US); SCHMITZ KIRSTEN (US)
PA0 - CADBURY ADAMS USA LLC; / 389 Interpace Parkway (US) (except US)
      - JANI, Bharat; / 305 Kraemer Court (US) (only US)
      - KABSE, Kishor; / 65 Patriots Road (US) (only US)
      - BOGHANI, Navroz; / 74 Oakwood Village, Apartment #11 (US) (only US)
      - GEBRESELASSIE, Petros; / 110a Pleasantview Drive (US) (only US)
      - GRANT, R., Steven; / 7 Robin Court (US) (only US)
      - KIEFER, Jesse; / 23 Station Road (US) (only US)
      - KUNCEWITCH, Thomas; / 33 Glen Ridge Drive (US) (only US)
      - KRAMER, Colleen; / 30 Wearimus Road (US) (only US)
      - ROBINSON, Mary, K.; / 22 Iondian Trail (US) (only US)
      - SCHMITZ, Kirsten; / 98 Morris Street, #2 (US) (only US)
IN - (A1) JANI BHARAT (US); KABSE KISHOR (US); BOGHANI NAVROZ (US);
      GEBRESELASSIE PETROS (US); GRANT R STEVEN (US); KIEFER JESSE
      (US); KUNCEWITCH THOMAS (US); KRAMER COLLEEN (US); ROBINSON MARY
      K (US); SCHMITZ KIRSTEN (US)
IC - (A1) A23G-004/18 A23G-004/20
LA - ENGLISH (ENG)
AP - WOUS2006020102 20060523 [2006WO-US20102]
```

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PR - US68363405P 20050523 [2005US-P683634]
  - US21095405 20050824 [2005US-0210954]
  - US77669906P 20060224 [2006US-P776699]
ICAA- A23G-004/20 [2006-01 A F I B H EP]
ICCA- A23G-004/18 [2006 C F I B H EP]
EC - A23G-004/20
  - A23G-004/20H
DS - 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
DT - Corresponding document
UP - 2007-42

```

? CITB SS 1

** SS 3: Results 174

? PRT

```

1/174 PLUSPAT - (C) QUESTEL-ORBIT- image
PN - CA2592635 A1 20060706 [CA2592635]
STG - (A1) Application laid open
TI - (A1) COMBINATIONS OF COOLING AGENTS FOR USE IN CONFECTIONS
OTI - (A1) COMBINAISONS D'AGENTS DE REFROIDISSEMENT A UTILISER DANS
      DESFRIANDISES
PA - (A1) WRIGLEY W M JUN CO (US)
PA0 - WM. WRIGLEY JR. COMPANY (US)
IN - (A1) MCGREW GORDON N (US); WITKEWITZ DAVID L (US)
IC - (A1) A23G-004/06
LA - ENGLISH (ENG)
AP - CA2592635 20051222 [2005CA-2592635]
PR - US64014104P 20041229 [2004US-P640141]
  - WOUS2005046702 20051222 [2005WO-US46702]
ICAA- A23G-004/06 [2006-01 A F I B H EP]
ICCA- A23G-004/06 [2006 C F I B H EP]
EC - A23G-003/36
  - A23G-001/00M
  - A23G-004/06
  - A23L-001/226
  - A23L-001/226B4B
  - A23L-001/226B4E
ICO - K23V-002/00 &TAST &ALCO
DT - Corresponding document
UP - 2007-40

```

The FAMCITE command is available in the PlusPat 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.

```
Selected file: PLUSPAT
PLUSPAT - (c) Questel, All Rights Reserved.
Comprehensive Worldwide Patents database
Individual records for each Country or Patent Office
Coverage: 75 patenting authorities; start dates vary from 1800 forward
For PlusPat Fact Sheet, Pricing and FAQ, see the Questel website
Now available: Citations / Search Reports for German (DE) documents
Last update of file: 2006/05/17 (YYYY/MM/DD) 2006-19/UP (last update)
```

fam US5898235/PN

```
1 Patent Groups
** SS 1: Results 2
```

famcite

<< Citation Report >>

<< Source Patent Family >>

```
1/1 PLUSPAT - (C) QUESTEL- image
PN - US5898235 A 19990427 [US5898235]
    - JP10214487 A 19980811 [JP10214487]
TI - (A) Integrated circuit with power dissipation control
PA - (A) ST MICROELECTRONICS INC (US)
PA0 - STMicroelectronics, Inc., Carrollton TX [US]
IN - (A) MCCLURE DAVID C (US)
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 PLUSPAT - (C) QUESTEL- image
PN - US6651176 B1 20031118 [US6651176]
    - US2005198538 A1 20050908 [US20050198538]
TI - (B1) Systems and methods for variable control of power dissipation in
    a pipelined processor
PA - (B1) HEWLETT PACKARD DEVELOPMENT CO (US)
PA0 - Hewlett-Packard Development Company, L.P., Houston TX [US]
IN - (B1) COLON-BONET GLENN T (US); SOLTIS JR DONALD C (US)
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.

2/7 PLUSPAT - (C) QUESTEL- image

PN - US2003057429 A1 20030327 [US20030057429]

- US6710424 B2 20040323 [US6710424]

TI - (A1) RF chipset architecture

PA - (B2) AIRIP (US)

PA0 - AirIP, Palo Alto CA [US]

IN - (A1) SCHMIDT DOMINIK J (US)

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.

3/7 PLUSPAT - (C) QUESTEL- image

PN - US2002071330 A1 20020613 [US20020071330]

- US6560157 B2 20030506 [US6560157]

- JP2002176143 A 20020621 [JP2002176143]

TI - (A1) Semiconductor device

PA - (B2) MITSUBISHI ELECTRIC CORP (JP)

PA0 - Mitsubishi Denki Kabushiki Kaisha, Tokyo [JP]

IN - (A1) SUGITA MITSURU (JP); HASHIMOTO HIROYUKI (JP)

AP - 2001US-0860429 20010521; 2000JP-0373966 20001208

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.

4/7 PLUSPAT - (C) QUESTEL- image

PN - US6377681 B1 20020423 [US6377681]

TI - (B1) Signal line driving circuit with self-controlled power dissipation

PA - (B1) NAT SEMICONDUCTOR CORP (US)

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

IN - (B1) BREMNER DUNCAN JAMES (GB)

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.

5/7 PLUSPAT - (C) QUESTEL- image

PN - US2001028270 A1 20011011 [US2001028270]

- US6396336 B2 20020528 [US6396336]

- US6333671 B1 20011225 [US6333671]

TI - (B1) Sleep mode VDD detune for power reduction

PA - (B1) IBM (US)

PA0 - International Business Machines Corporation, Armonk NY [US]

IN - (B1) ROBERTS ALAN L (US); WISTORT REID A (US)

AP - 1999US-0433279 19991103; 2001US-0883048 20010615

PR - 1999US-0433279 19991103; 2001US-0883048 20010615

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.

CT - (US2001028270)

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

AB - (US6333671)

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 PLUSPAT - (C) QUESTEL- image

PN - US6294404 B1 20010925 [US6294404]
- JP2001155487 A 20010608 [JP2001155487]
- TW527596 B 20030411 [TW-527596]

TI - (B1) Semiconductor integrated circuit having function of reducing a power consumption and semiconductor integrated circuit system comprising this semiconductor integrated circuit

PA - (B1) MITSUBISHI ELECTRIC CORP (US)

PA0 - Mitsubishi Denki Kabushiki Kaisha, Tokyo [JP]

IN - (B1) SATO HIROTOSHI (JP)

AP - 2000US-0568058 20000510; 2000TW-0116902 20000821; 1999JP-0339609 19991130

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.

7/7 PLUSPAT - (C) QUESTEL- image

PN - JP2000163141 A 20000616 [JP2000163141]

TI - (A) STEP-DOWN POWER SOURCE CIRCUIT

PA - (A) NIPPON ELECTRIC CO

PA0 - (A) NEC CORP

IN - (A) 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

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

- 1/4 PLUSPAT - (C) QUESTEL- image
PN - US5513361 A 19960430 [US5513361]
TI - (A) Method and apparatus for reducing power consumption of a fan in a computer system
PA - (A) INTEL CORP (US)
PAO - Intel Corporation, Santa Clara CA [US]
IN - (A) YOUNG BRUCE A (US)
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 PLUSPAT - (C) QUESTEL- image
PN - US5483464 A 19960109 [US5483464]
- KR9505216 B1 19950522 [KR9505216]
TI - (A) Power saving apparatus for use in peripheral equipment of a computer
PA - (A) SAMSUNG ELECTRONICS CO LTD (KR)
PAO - Samsung Electronics Company, Ltd., Kyungki-do [KR]
IN - (A) SONG MOON-JONG (KR)
AP - 1993US-0176450 19931230; 1993KR-0005332 19930331
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 PLUSPAT - (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 - (A) Power management for a laptop computer with slow and sleep modes
 OTI - (A1) ENERGIEMANAGEMENTANORDNUNG FUER EINEN TRAGBAREN COMPUTER
 PA - (A) APPLE COMPUTER (US)
 PA0 - Apple Computer, Inc., Cupertino CA [US]
 IN - (A) SMITH R STEVEN (US); HANLON MIKE S (US); BAILEY ROBERT L (US)
 IN0 - SMITH R STEVEN; HANLON MIKE S; BAILEY ROBERT L
 AP - 1992US-0845781 19920305; 1990SE-0002838 19900906; 1990AU-0060168
 19900803; 1990DE-4028175 19900905; 1994SG-0000072 19940117;
 1994HK-0000363 19940421; 1990CA-2024552 19900904; 1990GB-0018259
 19900820; 1990JP-0237294 19900910
 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 PLUSPAT - (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 - (A2) Semiconductor device.
 OTI - (A2) Halbleiteranordnung.
 - (A2) Dispositif semi-conducteur.
 PA - (A2) TOKYO SHIBAURA ELECTRIC CO (JP)
 PA0 - Kabushiki Kaisha Toshiba, Kawasaki [JP]
 IN - (A2) IIZUKA TETSUYA C O PATENT DIVI; SAKURAI TAKAYASU C O PATENT DI
 AP - 1984US-0667417 19841101; 1984DE-3481957 19841030; 1984EP-0113078
 19841030; 1984JP-0032068 19840222
 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)

Document Display

Field/Index catalogues

ABS NOMT	AB AB	MTAB FAB	FAB GAB	GAB OAB	OAB							
FORMAT	FIELDS											
STDR	<---	PN	STG	TI	OTI	IT	PA	PA0	IN	IN0	IC	
		PN2	STG2	TI2	OTI2	PA2	IN2	IC2	PN3	STG3	TI3	
		OTI3	PA3	IN3	IC3	PN4	STG4	TI4	OTI4	PA4	IN4	
		IC4	PN5	STG5	TI5	OTI5	PA5	IN5	IC5	PN6	STG6	
		TI6	OTI6	PA6	IN6	IC6	PN7	STG7	TI7	OTI7	PA7	
		IN7	IC7	LA	AP	PR	ICAA	ICCA	EC	ICO	IDT	
		PCL	FI	FTM	BC	DS	DT	UP				
TEST	<---	TI	OTI	IT	IC	IC2	IC3	IC4	IC5	IC6	IC7	
		IC8	ICAA	ICCA	EC	ICO	IDT	PCL	FI	FTM	BC	
MAX	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	TI	OTI	IT	
		LA	PA	PA0	PA2	PA3	PA4	PA5	PA6	PA7	IN	
		IN0	AP	FD	PR	IC	ICAA	ICCA	EC	ICO	IDT	
		PCL	FI	FTM	BC	DS	DT	CT	STG	STG2	STG3	
		STG4	STG5	STG6	STG7	AB	UP					
VDTX	<---	PN	TI	LA	IN	IN0	PA	PA0	AP	FD	PR	
		IC	DS									
ZOOM	<---	TI	OTI	IT								
FULL	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	TI	OTI	IT	
		LA	PA	PA0	PA2	PA3	PA4	PA5	PA6	PA7	IN	
		IN0	AP	FD	PR	IC	ICAA	ICCA	EC	ICO	IDT	
		PCL	FI	FTM	BC	DS	DT	CT	STG	STG2	STG3	
		STG4	STG5	STG6	STG7	AB	UP					
FU	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	TI	OTI	IT	
		LA	PA	PA0	PA2	PA3	PA4	PA5	PA6	PA7	IN	
		IN0	AP	FD	PR	IC	ICAA	ICCA	EC	ICO	IDT	
		PCL	FI	FTM	BC	DS	DT	CT	STG	STG2	STG3	
		STG4	STG5	STG6	STG7	AB	UP					
ALL	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	TI	TI2	TI3	
		TI4	TI5	TI6	TI7	OTI	IT	OTI2	OTI3	OTI4	OTI5	
		OTI6	OTI7	LA	PA	PA0	PA2	PA3	PA4	PA5	PA6	
		PA7	IN	IN0	IN2	IN3	IN4	IN5	IN6	IN7	AP	
		FD	PR	IC	IC2	IC3	IC4	IC5	IC6	IC7	ICAA	
		ICCA	EC	ICO	IDT	PCL	FI	FTM	BC	DS	DT	
		CT	STG	STG2	STG3	STG4	STG5	STG6	STG7	AB	FAB	
		GAB	OAB	UP								
STGS	<---	PN	STG	TI	OTI	IT	PA	PA0	IN	IN0	IC	
		PN2	STG2	TI2	OTI2	PA2	IN2	IC2	PN3	STG3	TI3	
		OTI3	PA3	IN3	IC3	PN4	STG4	TI4	OTI4	PA4	IN4	
		IC4	PN5	STG5	TI5	OTI5	PA5	IN5	IC5	PN6	STG6	
		TI6	OTI6	PA6	IN6	IC6	PN7	STG7	TI7	OTI7	PA7	
		IN7	IC7	LA	AP	FD	PR	ICAA	ICCA	EC	ICO	
		IDT	PCL	FI	FTM	BC	DS	DT	CT	AB	FAB	
		GAB	OAB	UP								
TR	<---	TI	OTI	IT	IC	IC2	IC3	IC4	IC5	IC6	IC7	
		ICAA	ICCA	EC	ICO	IDT	PCL	FI	FTM	BC		
SC	<---	TI	OTI	IT								
SCAN	<---	TI	OTI	IT								
ABST	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	TI	OTI	IT	
		LA	PA	PA0	IN	IN0	AP	FD	PR	CT	STG	
		STG2	STG3	STG4	STG5	STG6	STG7	AB	UP			
BRF	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	TI	OTI	IT	
		LA	IN	IN0	PA	PA0	AP	FD	PR	IC	ICAA	
		ICCA	EC	DS	STG	STG2	STG3	STG4	STG5	STG6	STG7	
BIB	<---	PN	TI	OTI	IT	PA	PA0	IN	IN0	AP	FD	
		PR	CT	STG								
DOC	<---	STG	STG2	STG3	STG4	STG5	STG6	STG7	PN	PN2	PN3	
		PN4	PN5	PN6	PN7	TI	OTI	IT	AB	DS	AP	
		FD	PR	IN	IN0	PA	PA0	PA2	PA3	PA4	PA5	
		PA6	PA7									
MTST	<---	TI	OTI	IC	ICAA	ICCA	EC	ICO	PCL	FI	FTM	

MSC	<---	TI	OTI	IC	ICAA	ICCA	EC	ICO	PCL	FI	FTM
MABS	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS	AB	
MSTD	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS		
MALL	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS	CT	AB
		FAB	GAB	OAB							
MMAX	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS	CT	AB
MMSS	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	DS
MSTA	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	IC
		ICAA	ICCA	EC	ICO	PCL	FI	FTM	DS	AB	
MINI	<---	PN	TI	PA	PA0	IN	IN0	AP	PR		
MASE	<---	PN	TI	PA	PA0	IN	IN0	AP	PR	AB	
BIBP	<---	PN	STG	PN2	STG2	PN3	STG3	PN4	STG4	PN5	STG5
		PN6	STG6	PN7	STG7	TI	PA	PA0	IN	IN0	AP
		FD	PR	CT							
MSTE	<---	PN	TI	PA	PA0	IN	IN0	AP	PR	IC	ICAA
		ICCA	EC	ICO	PCL	FI	FTM	DS	AB		
MSTG	<---	PN	STG	TI	OTI	PA	PA0	IN	IN0	IC	AP
		PR	ICAA	ICCA	EC	ICO	IDT	PCL	FI	FTM	BC
		DS									
MCIT	<---	PN	TI	OTI	PA	PA0	IN	IN0	AP	PR	CT
		AB									
DOCF	<---	STG	STG2	STG3	STG4	STG5	STG6	STG7	PN	PN2	PN3
		PN4	PN5	PN6	PN7	TI	OTI	IT	AB	FAB	GAB
		OAB	DS	AP	FD	PR	IN	IN0	PA	PA0	PA2
		PA3	PA4	PA5	PA6	PA7					
FUF	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	TI	OTI	IT
		LA	PA	PA0	PA2	PA3	PA4	PA5	PA6	PA7	IN
		IN0	AP	FD	PR	IC	ICAA	ICCA	EC	ICO	IDT
		PCL	FI	FTM	BC	DS	DT	CT	STG	STG2	STG3
		STG4	STG5	STG6	STG7	AB	FAB	GAB	OAB	UP	
MAXA	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	TI	OTI	IT
		LA	PA	PA0	PA2	PA3	PA4	PA5	PA6	PA7	IN
		IN0	AP	FD	PR	IC	ICAA	ICCA	EC	ICO	IDT
		PCL	FI	FTM	BC	DS	DT	CT	STG	STG2	STG3
		STG4	STG5	STG6	STG7	AB	FAB	GAB	OAB	UP	
DOCA	<---	STG	STG2	STG3	STG4	STG5	STG6	STG7	PN	PN2	PN3
		PN4	PN5	PN6	PN7	TI	OTI	IT	AB	FAB	GAB
		OAB	DS	AP	FD	PR	IN	IN0	PA	PA0	PA2
		PA3	PA4	PA5	PA6	PA7					
PDFR	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	PN8	TI	OTI
		LA	IN	PA	AP	FD	PR	DS	PCL	FI	FTM
		IC	AB	FAB	GAB	OAB					
ANAC	<---	PN	PN2	PN3	PN4	PD	TI	PA	PA0	PAC	IN
		INC	AP	APD	PR	PRD	IC	ICAA	ICCA	EC	PCL
		PCL0	FI	FTM	CT	STG	STG2	STG3	STG4	AB	XP
		XAP	XPR	XCTX	XCTY	FPR					
CLAS	<---	PN	PN2	PN3	PN4	PN5	PN6	PN7	PN8	TI	PA
		PCL	FI	FTM	ICAA	ICCA	EC	IC			

● “Standardized Number” (XPN, XAP, XPR), fields are not included in any display format. 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

List of Fields

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

AB	Abstract - (EAB)
AN	Accession Number
AP	Application Nbr (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
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
OPD	Other Publication Dates
OTI	Other Title
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