

# CA<sup>SM</sup>/HCA/ZCA (Chemical Abstracts)

Subject	
Coverage	

- Analytical chemistry
- Applied chemistry
- Biochemistry

- · Chemical engineering
- Macromolecular chemistry
- Organic chemistry

### File Type

Bibliographic

Thesauri

#### **Features**

Classification Code (/CC), Company Name (/CO), Controlled Term (/CT), Cooperative Patent Classification (CPC), European Patent

Classification (/ECLA), F-Term (/FTERM), ICO (in-computer-only) Classification (/ICO), International Patent Classifications (/IPC), National Patent Classifications Current (/NCL), National Patent

Classifications Issue (/INCL), and Role (/RL)

Alerts (SDIs) Biweekly

CAS Registry Number® Identifiers ✓ Page Image

Page Images

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## **Learning Database**

## $\overline{\mathbf{V}}$

Structures

# Record Content

- Bibliographic information, indexing, and available abstracts
- Claims from the following patent authorities (June 2022):
   AU (2000-), BR (2000-), CH (1975-), CN (1985-), DE (1997-),
   EP (1979-), GB (1927-), IN (2007-), JP (1983-), KR (1999-),
   RU (1994-), US (1906-), WO (1979-)
- Patent Status Indicator information for patents and utility models
- · Legal status information for U.S. patents since 1980
- Patent classifications: IPC, CPC, ECLA, ICO, NCL and FTERM
- Cited references for journals, conference proceedings, and basic patents from the U.S., EPO, WIPO, and German patent offices added to CAS databases since 1997
- Patent examiner citations from British and French patents (2003-present), Canadian patents (2005-present), Japanese patents (2011-present), as well as nearly 300,000 patent records from 1982-2008
- Citing references

#### File Size

More than 46.3 million records (08/2022)

### Coverage

1907-present plus over 180,000 pre-1907 records

#### **Updates**

Weekly updates (more than 25,000 records)

#### Language

English

### Database Producer

Chemical Abstracts Service 2540 Olentangy River Road

P.O. Box 3012

Columbus, Ohio 43210-0012 USA Phone: 800-753-4227 (North America) Phone: 614-447-3700 (worldwide)

Fax: 614-447-3751 Email: help@cas.org Copyright Holder

### **Sources**

- Journals: Thousands of journals are monitored. New indexed records are added weekly.
- Patents
- Conference Proceedings
- Electronic-only Journals
- Books
- Dissertations
- Reviews
- Technical Disclosures
- Web Pre-prints
- Meeting Abstracts

### **User Aids**

- Support and training materials are available on the web: www.cas.org
- Online Helps (HELP DIRECTORY lists all help messages available)
- STNGUIDE

### **Clusters**

### None

### Related Databases

- CAplus
- LCA

# **Search and Display Field Codes**

Fields that allow left truncation are indicated by an asterisk (\*). The minimum stem length for left truncation is three (3) characters.

### **General Search Fields**

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index * (contains single words from title (TI), supplementary term (ST), index term (IT), and abstract (AB) fields, as well as CAS Registry Numbers)	None (or /BI or /IA)	S 50-21-5 S TRANSGENIC COTTON S ?FLUOROCARBON? S (WATER(S)OIL)/BI	AB, IT, ST, TI
Basic Index plus Claims *	/BI,BIEX or /BI,CLM	S ALLOPURINOL/BI,BIEX S TRANSGENIC/BI,CLM(W)COTTON/BI,CLM	BIB CLM ALL CLM
Abstract *	/AB	S (WATER(1W)OIL)/AB S LD50/AB S HIGH TEMP?/AB S (HIV(S)TREAT?)/AB	АВ
Accession Number Author (inventor)	/AN /AU	S 65:109061/AN S LEHNINGER A?/AU S (DUCHEYNE P?(S)EDITOR#)/AU S ANON/AU	AN AU, IN
CA Section Cross Reference (1,2) (number and title)	/SX	S 1/SX S ANALYTICAL/SX S RADIATION CHEMISTRY/SX	СС
Classification Code (2,3) (contains CA section-subsection number, if available, section title, and section group codes)	/CC (or /SC)	S 1/CC S 80-6/CC S TOXICOLOGY/CC S RADIATION CHEMISTRY/CC S L1 AND BIO/CC	СС
Classification Code Section Descriptor (2)	/CCN (or /SCN)	S TOXICOLOGY/SCN S RADIATION CHEMISTRY/CCN	SCN, CCN
Company Name (3) Controlled Term (3,4) Controlled Word (4) Corporate Source (2)	/CO /CT /CW /CS	E DOW CHEMICAL/CO S ANTITUMOR AGENTS/CT S OPTIC?/CW S DOW/CS	CO, CS, PA CT, IT CT, IT CS, PA
(organization name, patent assignee)	/CV/A	S DOW CHEM MIDLAND/CS S "DOW CORNING"?/CS S USA/CYA	CC CVA DA
Country of Author Digital Object Identifier	/CYA /DOI (or /FTDOI)	S 10.1101?/DOI	CS, CYA, PA DOI, FTDOI
Document Type (code and text)	/DT (or /TC)	S P/DT S PATENT/DT S REVIEW/DT	DT
Entry Date (5)	/ED	S ED>20010511 S ED>MAY 11, 2001	ED
Field Availability	/FA	S L1 AND ABS/FA	Not displayed
File Segment	/FS	S BIO/FS AND L2	FS
Index Term * (6)	/IT	S 75-28-5(2W)CRACKING OF/IT S DETN OF/IT	IT
International Standard (Document) Number (contains CODEN, ISBN, and ISSN) (7)	/ISN	S JOCRAM/ISN S 0021-9673/ISN	ISN, SO
Issue Number of Publication (5,8)	/IS	S 1-3/IS AND 32/VL	SO
Journal Title (11)	/JT	S J CHROMATOGR/JT S COMPT REND?/JT	JT, SO
Journal Title Keyword	/JTW	S NANO/JTW	so

#### CA/HCA/ZCA

### General Search Fields (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Language (code and text) (9)	/LA	S L1 AND EN/LA	LA
		S L1 AND ENGLISH/LA	
		S L1 NOT DE/LA	
Original Reference Number (10)	/OREF	S 63:5967A/OREF	OREF
Other Source (1)	/OS	S L1 AND MARPAT/OS	OS
Publication Date (5)	/PD	S PD>20010400	PI, SO
		S JUNE 1992-SEPT 1993/PD	
Publication Year (5)	/PY	S 1947-1949/PY	PI, PY, SO
Publisher (2)	/PB	S ACADEMIC/PB	PB
Publisher Item Identifier (1)	/PUI	S "S 0014-5793(96)01227-6"/PUI	PUI
CAS Registry Number (CAS RN)	/RN	S 50-78-2/RN	RN
(12)		S 50-78-2D/RN	
		S 50-78-2DP/RN	
		S 50-78-2P/RN	
Role (1,3)	/RL	S 99685-96-8(L)SPN/RL	IT, RL
		S 99685-96-8/SPN	·
		S FULLERENES(L)SPN/RL	
		S FULLERENES/SPN	
Source (contains publication title,	/SO	S INORG CHEM/SO	so
date, publisher, conference title,		S JOCRAM/SO	
meeting date, volume, issue,		S 0021-9673/SO	
pagination, CODEN, ISBN,		S AM CERAM SOC/SO	
ISSN, and URL) (7)		S 1992/SO	
Supplementary Term * (1)	/ST	S LIVER METAB?/ST	ST
Title *	/TI	S LIVER/TI	Ti
	,	S SPIN SPIN/TI	
		S (METABOLISME(S)VEGETAUX)/TI	
Uniform Resource Locator (1)	/URL	S "HTTP://WWW.BIOSCIENCE.ORG/	SO, URL
Cimerii Recourse Eccator (1)	70.11	BIOSCIENCE/1996/V1/D/CHINTALL/	00, 0112
		/HTMLS/324-339.HTM"/URL	
Update Date (5)	/UP	S L1 AND UP>20010400	Not displayed
	, 5.	S UP>APRIL 1, 2001	. tot diopidyod
Update Date, Addition of	/UPIT	S L2 AND UPIT>20080200	Not displayed
Registered Substance (5)	, 5	0 11 11 20000200	or alopiayou
Volume and Issue of CA	/VI	S 41-17/VI	Not displayed
Volume Number of Publication (5)	/VL	S 105-106/VL AND SCIENCE/JT	VL, SO
Volume Number of Fublication (3)	, v L	O 100 100, VE AND GOILINGE, ST	v L, 50

- (1) Content of this field is available for records from 1967 to the present except for the PREP (Preparation) role that has been assigned back to 1907. ISBNs are included only for records added since December 17, 2001.
- (2) Search with implied (S) proximity is available in this field.
- (3) A thesaurus is available in this field.
- (4) Pre-1967 subject index headings are searchable in the /CT and /CW field only if they matched the index headings in the CA Lexicon database. Unmatched pre-1967 subject headings are searchable as single words in the /IT and /BI fields.
- (5) Numeric search field that may be searched with numeric operators or ranges.
- (6) Stopwords are not removed from this field.
- (7) ISBNs are included only for records added since December 17, 2001.
- (8) Content of this field is available only for records from 1963 to the present.
- (9) Language is available only for records from 1967 to the present and for some journals prior to 1967.
- (10) OREF contains the CA volume number and page location information for abstracts published 1907-1966.
- (11) Full Journal Titles are available for most records from 1907 to the present.
- (12) Search for a non-specific derivative of a substance, a non-specific derivative's preparation, or a preparation by placing a "D", "DP", or "P" following the CAS RN. A non-specific derivative (D) is a compound that is not fully described in the source document. A "P" designation following a CAS RN means that the source document describes preparation of the specific compound. A "DP" denotes the preparation of the non-specific derivative.

# **Patent Search Fields**

Search Field Name	Search Code	Search Examples	Display Codes
Claim * <b>(15)</b>	/CLM or /BIEX	S COBALT (L) SALT#/CLM	CLM
Cooperative Patent Classification (3,13)	/CPC	S C12N0009/CPC	CPC
Cooperative Patent Classification, Action Date	/CPC.ACD	S 20121113/CPC.ACD	CPC.TAB
Cooperative Patent Classification, Combination Sets	/CPC.CS	S (H01L2224-48091 (S) H01L2924- 00014)/CPC.CS	CPC.TAB
Cooperative Patent Classification, Keywords (13)	/CPC.KW	S C12N0009/CPC (S) I/CPC.KW	CPC.TAB
Cooperative Patent Classification, Version	/CPC.VER	S 20130101/CPC.VER	CPC.TAB
Cooperative Patent Initial Classification	/CPCI	S A61K0006-0014/CPCI	CPCI
Country Number Count (1)	/CYC	S L1 AND 4-5/CYC	CY.CNT
Designated States (2)	/DS	S FR/DS;S R DE/DS	DS, PI
Designated States, Basic (2)	/DS.B /ECLA	S DE/DS.B S C01B003/ECLA	DS, PI
European Classifications (3)	(or /EPC or	S C01B003/ECLA S C01B003/00D2/ECLA	CLASS, ECLA, EPC,
	/EPCLA)		EPCLA
European Classification Keywords	/ECLA.KW (or /EPC.KW or	S A1F1/ECLA.KW	CLASS, ECLA, EPC, EPCLA
Exemplary Claim * (15)	/EPCLA.KW) /ECLM	S COBALT (L) MIXTURE/ECLM	ECLM
Extended Basic Index	/BIEX or /CLM	S ALLOPURINOL/BIEX	CLM
Family Accession Number	/FAN	S 1998:98369/FAN	FAN
Family Accession Number Count (1)	/FAN.CNT	S L1 AND FAN.CNT>1	FAN
, , , , , , , , , , , , , , , , , , , ,	(or FAM.CNT)		
F-Terms (Patent Classifications from the	/FTERM	S 4C002/BB03/FTERM	CLASS,
Japanese Patent Office) (4)	(or /FTCLA	S 4C002/FTERM	FTERM,
	or /JPCLA)		FTCLA, JPCLA
ICO (in-computer-only) Classification (3)	/ICO	S K61B0010:00L10/ICO	ECLA, EPC, EPCLA, ICO
International Patent Classification, Action Date (1)	/IPC.ACD	S 20050101/IPC.ACD	IPC.TAB
International Patent Classification, Additional	/ICA	S B01J/ICA	ICA
or Supplementary (2,6)		S B01J027/ICA	
	//DO	S CYANOGEN/ICA	IDO
International Patent Classification, All (5)	/IPC	S A61K/IPC	IPC
International Patent Classification, Basic	/IPC.B	S A61K0031-473/IPC S G01N0001-28/IPC.B	IPC.B
Patent International Patent Classification,	/ICI	S A61K/ICI	ICI
Index or Complementary (2,6)	/101	S A61K031/ICI	ICI
index of Complementary (2,0)		S AMMONIA/ICI	
International Patent Classification, Keywords	/IPC.KW	S G01N000128/IPC(S)BASIC/IPC.KW	IPC.TAB
International Patent Classification,	/ICM	S A01N/ICM	IC, ICM
Main <b>(2,6)</b>	,	S A01N025/ICM	10, 10
( ) - (		S AMMONIA/ICM	
International Patent Classification,	/IC	S C07C/IC	IC
Main and Secondary (6)		S C07C015/IC	
		S C07C015-04/IC	
		S CYANOGEN/IC	
International Patent Classification, Main	/MGR	S 10-20/MGR(S)C07C/IC	IC
Group, Range Searchable (1,2,6)	"00	0.0007/100	
International Patent Classification, Secondary	/ICS	S C02F/ICS	IC, ICS
(2,6)		S C02F001/ICS	
International Potent Classification Subsection	/SCB	S AMMONIA/ICS	10
International Patent Classification, Subgroup, Range Searchable (1,2,6)	/SGR	S SGR=>30000(S)C01B031/IC	IC
International Patent Classification, Version	/IPC.VER	S 6/IPC.VER	IPC.TAB

# Patent Search Fields (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
International Patent Initial Classification	/IPCI	S H01L0023-29/IPCI	IPCI
International Patent Reclassification	/IPCR	S C08L0061-00/IPCR	IPCR
Inventor	/IN	S PATTON JERRY R/IN	IN
National Patent Classification, Current (7)	/NCL (or	S 106035000/NCL	NCL, CLASS
valional Faterit Classification, Current (1)			NOL, CLASS
	/USNCL or	S 106/035.000/NCL	
	/USCLA)	S 433/227-433/229/NCL	
		S ZEOLITES/NCL	
National Patent Classification, Issue (8)	/INCL	S 433228000/INCL	INCL, CLASS
		S 433/227-433/229/INCL	
National Patent Classification, Issue, Range Searchable (1,8)	/NCLR	S 106020000-106040000/NCLR	NCL, CLASS
Number of Claims (15)	/CLMN	S CLMN>20	CLMN
	/AC	S DE/AC	AI, PI
Patent Application Country			
Patent Application Country, Basic	/AC.B	S DE/AC.B	AI, PI
Patent Application Date (1,9)	/AD	S AD>19920100	AI, PI
		S AD>JANUARY 20, 1993	
Patent Application Date, Basic (1,4)	/AD.B	S 19970220/AD.B	AI, PI
Patent Application Number (2,10,14)	/AP	S EP83-304630/AP	Al, Pl
11		S 83EP-0304630/AP	, -
		S JP87-10001/AP	
		S 87JP-0010001/AP	
		S US2013-13261341/AP	
		S US2013-261341/AP	
Patent Application Number, Basic (2,10,14)	/AP.B	S JP87-10001/AP.B	AI, PI
Patent Application Number Count	/AP.CNT	S 4/AP.CNT	Not displayed
Patent Application Year (1,9)	/AY	S 1990-1992/AY	AI, PI
Patent Application Year, Basic (1,9)	/AY.B	S AY.B>1997	AI, PI
Patent Assignee (11)	/PA	S PFIZER/PA	PA
raterit Assignee (11)	/FA		FA
		S PFIZER CORP/PA	
		S BADISCHE ANILIN/PA OR	
		BASF/PA	
Patent Country	/PC	S WO/PC	PI
Patent Country, Basic	/PC.B	S JP/PC.B	PI
Patent Kind Code (2)	/PK	S DEA1/PK	PI
Patent Kind Code, Basic (2)	/PK.B	S DEA1/PK.B	Pi
	,		
Patent Number (10)	/PN	S EP536930/PN	PI
		S EP-536930/PN	
		S WO8402426/PN	
		S JP04000104/PN	
		S JP62000031/PN	
		S IP6243D/PN	
Patent Number, Basic (10)	/PN.B	S JP60008341/PN.B	PI
Patent Number, Basic (10)	/PNC (or	S 3/PNC	PN.CNT
-atent Number Count (1)		3 3/FING	FIN.CIN I
2	/PN.CNT)	0.1100005045545575	D
Patent Number/Kind Code	/PNK	S US20050136407/PNK	PNK
Patent Number/Kind Code of the Basic Patent	/PNK.B	S US20050136407/PNK.B	PNK.B
Patent Status Established Date (1)	/STED	S 20210204/STED	STED
Patent Status Established Year (1)	/STEY	S 2021/STEY	STEY
Patent Status Indicator	/STI or /PSPI	S DEAD/STI	STI
atom otatao maioator	,511 51 /1 51 1	S D/PSPI	PSPI
Potent Status Indicator Posis	/CTI D or		FOFI
Patent Status Indicator Basic	/STI.B or	S ALIVE/STI.B	DOD: 5
	/PSPI.B	S A/PSPI.B	PSPI.B
Patent Status Update Date (1)	/STUP	S 20210204/STUP	Not displayed
Patent Status Update Year (1)	/STUY	S 2021/STUY	Not displayed
Priority Application Country	/PRC	S US/PRC	PRAI
Priority Application Country, Basic	/PRC.B	S US/PRC.B	PRAI
Priority Application Date (1,9)	/PRD	S PRD>19910600	PRAI
nonty Application Date (1,3)	/ 170		FIXAL
	/DDC 5	S June 20 1991/PRD	DC 41
Priority Application Date, Basic (1,9) Priority Application Number (2,10,12,14)	/PRD.B /PRN	S PRD.B>19940100	PRAI PRAI
		S US91-635890/PRN	

Priority Application Number, Basic (2,10,12,14)	/PRN.B	S 91US-0635890/PRN S IP2002-6243D/PRN S US2013-61686038/PRN S US2013-686038P/PRN S US91-721765/PRN.B	PRAI
Priority Application Year (1,9)	/PRY	S 1990-1992/PRY	PRAI
Priority Application Year, Basic (1,9)	/PRY.B	S 1997/PRY.B	PRAI
Publication Date (Patent, Basic) (1)	/PD.B	S 19980109/PD.B	PI
Publication Year (Patent, Basic) (1)	/PY.B	S 1990-1991/PY.B	PI
Update Date Patent Family (1,2)	/UPP	S US5837509/PN AND	UPP, PI
		UPP>19990100	
Update Date, Maximum (contains /UP	/UPM	S L1 and UPM>=20040400	UPP
and /UPP) (1,2)			

- (1) Numeric search field that may be searched with numeric operators or ranges.
- (2) Content of this field is available only for records starting in 1967.
- (3) A thesaurus is available in this field.
- (4) Content of this field is available only for records from January 2004 to the present. A thesaurus is available in this field.
- (5) This field contains all IPCs (pre-IPC Reform and post-IPC Reform) for the basic patents and family members. A thesaurus is available in this field.
- (6) This field contains the IPCs only for the basic patents published with pre-IPC Reform codes. This field will not be updated with the IPC Reform codes. Use the /IPC field to search all IPCs (pre-IPC Reform and post-IPC Reform) for the basic patent documents and family members.
- (7) This field contains current US Patent Classifications applied to records for basic and family U.S. patents from 1907 to the present. An online thesaurus is available. Current National Patent Classifications may be range-searchable in Manual of Classification order. However, the /NCL field is not a numeric field and may not be searched using numeric operators.
- (8) This field contains US Patent Classifications that were in effect when the patent was originally published. Content is available for basic patents only. An online thesaurus is available. Issued National Patent Classifications may be range-searchable in Manual of Classification order. However, the /INCL field is not a numeric field and may not be searched using numeric operators.
- (9) Data are available from 1962 (vol. 56) to the present.
- (10) Either STN or Derwent format may be used.
- (11) Search with implied (S) proximity is available in this field.
- (12) U.S. provisional priority numbers are searched only with the P appended, e.g., US1999-121903P/PRN.
- (13) When searching combinations of CPC and CPC.KW data, use (T) proximity operator.
- (14) Application numbers for U.S. utility patents from series code 13 forward, design patents (series code 29) and provisional patent applications (series code 60 and 61) may be searched either with or without their series code. Include the series code if known to ensure precision. Note that provisional patent application numbers searched without their series codes must have a P appended to the end of the number (e.g., US2013-686038P). Series code information is not available for U.S. patent application numbers with series codes below 13.
- (15) Coverage includes PCT (WO), US, and China, from 1999 to present (November 2020).

# **Super Search Fields**

Enter a super search code to execute a search in one or more fields that may contain the desired information. Super search fields facilitate crossfile and multifile searching. EXPAND may not be used with super search fields. Use EXPAND with the individual field codes instead.

Search Field Name	Search Code	Fields Searched	Search Examples	Display Codes
Cooperative Patent Classification (3) IPC of the Basic Patent (Old version of the /IPC super search field) (1)	/CPC /IPC.OLD	/CPCI, /CPCR /IC, /ICA, /ICI	S C09K2200-0655/CPC S A01B/IPC/OLD S A01B001/IPC.OLD	CPC, CPCI, CPCR IC, ICA, ICI
Patent Application and Priority Number (2,3,4)	/APPS	/AP, /PRN	S DE84-3400052/APPS S 84DE-3400052/APPS S US2013-13261341/APPS S US2013-261341/APPS	APPS, AI, PI, PRAI
Patent Application and Priority Number, Basic (2,3,4)	/APPS.B	/AP.B, /PRN.B	S DE84-3400052/APPS.B	APPS.B, AI, PI, PRAI
Patent Countries	/PCS	/PC, /DS	S DE/PCS	DS, PI
Patent Countries, Basic	/PCS.B	/PC.B, /DS.B	S AT/PCS.B	DS, PI
Patent Numbers (3)	/PATS	/PN	S EP536930/PATS S EP-536930/PATS S WO8402426/PATS S JP04000104/PATS S JP62000031/PATS	PI, SO
Patent Numbers, Basic (3)	/PATS.B	/PN.B	S WO9850074/PATS.B	PATS.B, PI, SO

- (1) Numeric search field that may be searched with numeric operators or ranges.
- (2) Content of these fields is available only for records from 1967 to the present.
- (3) Either STN or Derwent format may be used.

<sup>(4)</sup> Application numbers for U.S. utility patents from series code 13 forward, design patents (series code 29) and provisional patent applications (series code 60 and 61) may be searched either with or without their series code. Include the series code if known to ensure precision. Note that provisional patent application numbers searched without their series codes must have a P appended to the end of the number (e.g., US2013-686038P). Series code information is not available for U.S. patent application numbers with series codes below 13.

### **Cited References Search Fields**

Search Field Name	Search Code	Search Examples	Display Codes
Cited Reference (contains referenced author, inventor, or assignee, year, volume, page, work title, or patent number)	/RE (or /CIT)	S BLONDELLE S, 1999?/RE S DE 3604874?/RE	RE
Cited Reference Accession Number in Caplus	/RAN.CAPLUS	S 1995:998201/RAN.CAPLUS	Not displayed
Cited Reference Accession Number in CA	/RAN.CA	S 122:196348/RAN.CA	Not displayed
Cited Reference Accession Number in MEDLINE	/RAN.MED	S 96233652/RAN.MED	Not displayed
Cited Reference Author Name	/RAU	S O REILLY/RAU	RE
Cited Reference File Availability	/FILE.CIT	S L1 AND CAPLUS/FILE.CIT	Not displayed
		S L1 AND MEDLINE/FILE.CIT	
Cited Reference Inventor Name	/RIN	S ABBOTT ?/RIN	RE
Cited Reference Page Number (first)	/RPG	S 200/RPG	RE
Cited Reference Patent Country Code	/RPC	S DE/RPC	RE
Cited Reference Patent Kind Code	/RPK	S DEA1/RPK	RE
Cited Reference Patent Number	/RPN	S US5792845/RPN	RE
Cited Reference Publication Year (1)	/RPY	S 1997-1998/RPY	RE
Cited Reference Series Issue Number	/RIS	S (2 OR 3)/RIS	RE
Cited Reference Series Volume Number	/RVL	S (3 OR 4)/RVL	RE
Cited Reference Source Information (2) (contains year, volume, issue, page, and publication title)	/RSO	S (MOL AND BIOL AND 1997)/RSO	RE
Cited Reference Work (Publication Title)	/RWK	S CANCER RES/RWK	RE
Cited References Count (1)	/RE.CNT	S REC>0	RE.CNT (REC)
	(or /REC)	S 1-20/RE.CNT	

<sup>(1)</sup> Numeric search field that may be searched with numeric operators or ranges.

# **Citing References Search Fields**

Search Field Name	Search Code	Search Examples	Display Codes
Citing Reference Accession Numbers	/OS.G (/OS.CITING.AN)	S 2008:610804/OS.G	OS.G
Citing Reference Count (1)	/OSC.G (/CITING.CNT)	S 2-5/OSC.G	OSC.G
Date Last Citing Reference Entered STN	/UPOS.G (/CITING.UP)	S 16 Feb 2009/UPOS.G S UPOS.G>20090216	UPOS.G
Update Date, Citing Reference (1)	/UPOG	S 20091026/UPOG	UPOS.G

<sup>(1)</sup> Numeric search field that may be searched with numeric operators or ranges.

### **REGISTRY Search Fields**

You can search directly in CA any REGISTRY search term, including structures, with REG1stRY. To search a REGISTRY term in CA, enter the SEARCH command and your term followed by the REGISTRY field code, followed by /REG, e.g., SEARCH FENFLURAMINE/CN/REG. The REGISTRY search and crossover to CA are executed automatically and only the final CA answer set L-number is shown.

To suppress the automatic REG1stRY processing when searching CAS Registry Numbers in CA, enter SET REG1stRY OFF at an arrow prompt. To retain the OFF setting beyond the current session, enter SET REG1stRY OFF PERM at an arrow prompt.

Enter HELP FIRST at an arrow prompt in CA for more information.

<sup>(2)</sup> Search with implied (S) proximity is available in this field.

# **CA Section (/CC) Thesaurus**

The CA Section (/CC) thesaurus is available for records from 1907 to the present.

All Relationship Codes may be used with both the SEARCH and EXPAND command in the /CC thesaurus.

Code	Content	Examples
ALL	All associated terms (BT, SELF, NOTE, HNTE, OLD, CUR, REPL, NT)	E 57 CERAMICS, 1967 TO PRESENT+ALL/CC
ВТ	Broader Terms (BT, SELF)	E 1 PHARMACOLOGY, 1982 TO PRESENT+BT/CC
CUR	Current Terms (SELF, CUR)	E 1 PHARMACODYNAMICS, 1972- 1981+CUR/CC
HIE	Hierarchy (Broader and Narrower Terms) (BT, SELF, NT)	E 31 ALKALOIDS, 1967 TO PRESENT+HIE/CC
HIS	History (SELF, HNTE, CUR, OLD, REPL)	E 17 FOOD AND FEED CHEMISTRY, 1982 TO PRESENT+HIS/CC
HNTE	History Note (SELF, HNTE)	E 1 PHARMACOLOGY, 1982 TO PRESENT+HNTE/CC
KT	Keyword Terms (SELF, KT)	E TOXICITY+KT/CC
NOTE	Notes associated with the term (SELF, NOTE, HNTE)	E 4 TOXICOLOGY, 1972 TO PRESENT+NOTE/CC
NT	Narrower Terms (SELF, NT)	E 4 TOXICOLOGY, 1972 TO PRESENT+NT/CC
RT	Related Terms (SELF, RT)	E 33 CARBOHYDRATES, 1967 TO PRESENT+RT/CC
STD	Standard (Broader Terms, Notes, Narrower Terms) (BT, SELF, HNTE, NOTE, NT)	E 32 STEROIDS, 1967 TO PRESENT+STD/CC
UF	Used For (Forbidden Terms) (SELF, UF)	E 32 STEROIDS, 1967 TO PRESENT+UF/CC
USE	Use (Preferred Terms) (SELF, USE)	E IMMUNOCHEMISTRY+USE/CC

# Field Descriptors for the /CC Thesaurus

	1
Code	Description
$\rightarrow$	Self
BT	Broader Term (CA section grouping)
CUR	Current Term (current CA section)
HNTE	History Note (section history note)
KT	Keyword Terms (thesaurus terms containing the SELF term)
NOTE	Note (CA section content note)
NT	Narrower Term (subsections for CA sections from 1972 to the present)
OLD	Old Term (previously used sections)
REPL	Replacing Term (more recent, but not current, section)
RT	Related Term (related concurrently existing sections)
UF	Used for Term (non-preferred terms or sections)
USE	Use Term (preferred terms)

# Company Name (/CO) Thesaurus Search Aid

The Company Name thesaurus search aid is available in the /CO field with the most frequently occurring major company names for records from 1907 to the present.

All Relationship Codes may be used with both the SEARCH and EXPAND command in the /CO field.

Code	Content	Examples
ALL	All Associated Terms (CNUM, NAME, SELF, RT, NOTE)	E DOW CHEMICAL CO+ALL/CO
CNUM	CAS Assigned Number (CNUM, SELF, NOTE, NAME, RT)	E HONDA MOTOR CO LTD+CNUM/CO
NAME	Highest level company name information (NAME,	E DOW CHEMICAL+NAME/CO
	SELF, NOTE, RT)	E ANGUS CHEMICAL COMPANY+NAME/CO
NOTE	Note (SELF, NOTE)	E CANON INC+NOTE/CO
RT	Related Term (SELF, RT, NAME, NOTE)	E CANON INC+RT/CO

# Field Descriptors for the Company Name Thesaurus Search Aid

Code	Description	
$\rightarrow$	Self	
NAME	Preferred name for the highest level company name	
CNUM	CAS Assigned Number to identify each company family	
NOTE	Note associated with the term	
RT	Related Term	

# Controlled Term (/CT) Thesaurus for the CA Lexicon

The CA Lexicon is an online search tool for the CA indexing terms for concepts, chemical classes, and taxonomic vocabulary. The thesaurus is available for records from 1967 to the present.

All Relationship Codes may be used with both the SEARCH and EXPAND command in the /CT thesaurus.

Code	Content	Examples
ALL	All Associated Terms except for LT terms (BT, SELF, HN, NOTE, UF, USE, OLD, NEW, NT, RT, RTCS)	E AZO DYES+ALL/CT
BT	Broader Terms (BT, SELF, HN)	E BRAIN+BT/CT
HIE	Hierarchy (Broader and Narrower Terms) (BT, SELF, NT)	E BOROXINS+HIE/CT
KT	Keyword Terms (SELF, KT)	E DYES+KT/CT
HN	History Note (HN)	E PHOTOLYSIS+HN/CT
LT	Linking Terms (index heading modifying term)	E RADIOLYSIS+LT/CT
MAX	All Associated Terms, including LT terms (BT, SELF, HN, NOTE, UF, USE, OLD, NEW, NT, RT, RTCS, LT)	E DRUG DELIVERY SYSTEMS+MAX/CT
NEW	New Terms (replace OLD terms)	E NEOPLASM INHIBITORS+NEW/CT
NOTE	Notes associated with the term (SELF, HN, NOTE)	E FISH+NOTE/CT
NT	Narrower Terms (SELF, NT)	E ANTIBIOTICS+NT/CT
OLD	Old term (replaced by NEW term)	E ANTITUMOR AGENTS+OLD/CT
PFT	Preferred and Forbidden Terms (SELF, OLD, NEW, USE, UF)	E PERFUMES+PFT/CT
RT	Related Terms (SELF, RT, RTCS)	E PHOTORESISTS+RT/CT
RTCS	Related Chemical Substance Terms (SELF, RTCS)	E REFRIGERANTS+RTCS/CT
STD	Standard Terms (SELF, BT, HN, NOTE, NT, RT, RTCS)	E SUNSCREENS+STD/CT
UF	Used For (Forbidden terms) (SELF, UF)	E ARECA CATECHU+UF/CT
USE	Use Terms (SELF, USE)	E BETEL NUT+USE/CT

# Field Descriptors for the /CT Thesaurus

Code	Description	
<b>→</b>	Self	
BT	Broader Term	
HN	History Note	
KT	Keyword Terms	
NOTE	Indexing Note	
NT	Narrower Term	
RT	Related Term	
UF	Used For	
USE	Use	
RTCS	Related Chemical Substance Terms	
LT	Linking Terms (index heading modifying term)	
OLD	Old term (replaced by NEW term)	
NEW	New Terms (replace OLD terms)	

# CPC (/CPC) Thesaurus

The Cooperative Patent Classification (CPC) is jointly developed and maintained by the European Patent Office and the US Patent and Trademark Office. This thesaurus is available in the /CPC search field. All relationship codes can be used with both the EXPAND and SEARCH commands.

Relationship Code	Content	Search Examples
ALL	All usually required terms (BT, SELF, CODE, DEF)	E C12M0001-005+ALL/CPC
AUTO <b>(1)</b>   BT	Automatic relationship (BT, SELF, CODE, DEF) Broader terms (BT, SELF)	E G01J003-443+AUTO/CPC E G01J0003-443+BT/CPC
CODE	Classification Code (SELF, CODE)	E CARTRIDGES+CODE/CPC
DEF	Definition (SELF, DEF)	E B65G0045-16+DEF/CPC
HIE	Hierarchy terms (all broader and narrower terms) (BT, SELF,	E A01B0001-00+HIE/CPC
	DEF, NT)	
KT	Keyword terms (SELF, KT)	E LASER+KT/CPC
MAX	All associated terms	E G01J0003-44+MAX/CPC
NEXT	Next classification within the same class (SELF, NEXT)	E A01B0001-24+NEXT/CPC
NEXT(n)	Next n classification within the same class	E A01B0001-24+NEXT3/CPC
NT	Narrower terms	E G05B0001-04+NT/CPC
PREV	Previous Code within the same class (SELF, PREV)	E G05B0019-00+PREV/CPC
PREV(n)	Previous n classifications within the same class	E G05B0019-00+PREV2/CPC
TI `´	Complete Title of SELF Term and Broader Terms (BT, SELF)	E G05B0001-03+TI/CPC

<sup>(1)</sup> Automatic Relationship is SET OFF. In case of SET REL ON the result of EXPAND or SEARCH without any relationship code is the same as described for AUTO.

# European Patent Classification (/ECLA or /EPC) and ICO Thesauri

These thesauri are available in the /EPC search field (for ECLA codes) and /ICO search field (for in-computer-only codes). All relationship codes can be used with both the EXPAND and SEARCH commands.

Relationship Code	Content	Search Examples
ALL	All associated terms	E C12M0001-34H2+ALL/EPC
AUTO (1)	Automatic relationship (BT, SELF, CODE, DEF)	E G01J003-443+AUTO/EPC
BT	Broader terms (BT, SELF, DEF)	E G01J0003-443+BT/EPC
CODE	Classification Code (SELF, CODE)	E SCRAPER BIASING MEANS+CODE/EPC
DEF	Definition (SELF, DEF)	E B65G0045-16+DEF/EPC
HIE	Hierarchy terms (all broader and narrower terms) (BT, SELF, DEF, NT)	E A01B0001+HIE/EPC
KT	Keyword terms (SELF, KT)	E LASER+KT/EPC
MAX	All associated terms	E G01J0003-44B+MAX/EPC
NEXT	Next classification within the same class (SELF, NEXT, DEF)	E A01B0001-24+NEXT/EPC
NEXT(n)	Next n classification within the same class	E A01B0001-24+NEXT3/EPC
NT	Narrower terms (SELF, NT, DEF)	E G05B0001-04+NT/EPC
PREV	Previous Code within the same class (PREV, SELF, DEF)	E G05B0019-418N1+PREV/EPC
PREV(n)	Previous n codes within the same class	E G05B0019-418N1+PREV2/EPC
ТІ	Complete Title of the SELF Term and Broader Terms (BT, SELF, DEF)	E G05B0001-03+TI/EPC

<sup>(1)</sup> Automatic Relationship is SET OFF. In case of SET REL ON the result of EXPAND or SEARCH without any relationship code is the same as described for AUTO.

## F-Term Thesaurus

This thesaurus is available in the F-Term (/FTERM) field that contains patent classifications from the Japanese Patent Office in records from January 2004 to the present.

Code	Content	Example
ALL	All associated terms (BT, SELF,TI, NT)	E 4K001/AA16+ALL/FTERM
BRO(n) (1)	Browse n preceding and following Classifications	E 4K001/AA20+BRO3/FTERM
BT	Broader Terms (BT, SELF)	E 4K001/AA25+BT/FTERM
HIE	Hierarchy (BT, SELF, NT)	E 4K001/AA14+HIE/FTERM
NEXT(n) (1)	Next n Classifications	E 4K001/AA16+NEXT5/NCL
NT	Narrower Terms (SELF, NT)	E 4K001+NT/FTERM
PREV(n) (1)	Previous n Classifications	E 5K002+PREV3/FTERM
RT	Related term	E 4K001+RT/FTERM
TI	Complete Title of the SELF Term	E 4K001/AA07+TI/FTERM

<sup>(1)</sup> When using this code in the F-Term thesaurus, you must specify a number between 1-999 as shown in example.

# Field Descriptors for the F-Term Thesaurus

Code	Description
$\rightarrow$	Self
BT	Broader Term
NT TI	Narrower Term Title

## **IPC Thesaurus**

The classifications and catchwords for the main headings and subheadings from the current (8th) edition of the WIPO International Patent Classification (IPC) manual are available. The classifications from the previous editions (1-7) are also available as separate thesauri. To EXPAND and SEARCH in the thesauri for editions 1-7, use the field code followed by the edition number, e.g., /IPC2, for the 2nd edition. Catchwords are included only in the thesauri for the 8th, 7th, 6th, and 5th editions. The IPC thesauri are available for records from 1967 to the present.

Code	Content	Examples
ALL	All Associated Terms (BT, SELF, NT, RT)	E C01C003-00+ALL/IPC
ADV	Advanced Terms (SELF, ADVANCED)	E A01N0047-02+ADV/IPC
BRO (MAN)	Complete Class	E C01C+BRO/IPC
BT	Broader Terms (BT, SELF)	E C01F001-00+BT/IPC
COR	Core Terms (SELF, CORE)	E A01N0041-12+COR/IPC
ED	Complete title of the SELF term and IPC manual edition	E C01F001-00+ED/IPC
HIE	Hierarchy Terms (Broader and Narrower Terms) (BT, SELF, NT)	E C01C003-00+HIE/IPC
INDEX	Complete title of the SELF term	E C01F001-00+INDEX/IPC
KT	Keyword Terms (catchwords) (SELF, KT)	E CYANOGEN+KT/IPC
NEXT	Next Classification	E C01C001-00+NEXT5/IPC
NT	Narrower Terms (SELF, NT)	E C01C+NT/IPC
PREV	Previous Classification	E C01C001-12+PREV10/IPC
RT (SIB)	Related Terms (SELF, RT)	E C01C003-20+RT/IPC
TI	Complete Title of the SELF Term and Broader Terms (BT, SELF)	E C01F001-00+TI/IPC

# Field Descriptors for the IPC Thesaurus

Code	Description	
$\rightarrow$	Self	
BT	Broader Term	
KT	Keyword Term	
NT	Narrower Term	
RT	Related Term	
TI	Title	

### **National Patent Classification Thesaurus**

A thesaurus is present for the National Patent Classification, Current (/NCL) and the National Patent Classification, Issue (INCL) fields.

Code	Content	Example
ALL	All associated terms (BT, SELF,TI, NT)	E 210190000+ALL/NCL
BRO(n)	Browse n preceding and following Classifications	E 502060000+BRO3/NCL
BT	Broader Terms (BT, SELF)	E 502060000+BT/NCL
HIE	Hierarchy (BT, SELF, NT)	E 502060000+HIE/NCL
KT	Keyword Terms (1) (SELF, KT)	E ZEOLITES+KT/NCL
NEXT(n)	Next n Classifications	E 210660000+NEXT5/NCL
NT	Narrower Terms (SELF, NT)	E 502060000+NT/NCL
PREV(n)	Previous n Classifications	E 210665000+PREV3/NCL
RT	Related Term	E 220+RT/NCL
TI	Complete Title of the SELF Term	E 502060000+TI/NCL

<sup>(1)</sup> Keyword terms are the catchwords corresponding to the USPTO Manual of Classifications subject index headings and subheadings.

# **Field Descriptors for the National Patent Classification Thesaurus**

Code	Description	
$\rightarrow$	Self	
BT	Broader Term	
KT	Keyword Term	
NT	Narrower Term	
TI	Title	

# Role (/RL) Thesaurus

The thesaurus is available for records from 1967 to the present.

Code	Content	Examples
ALL	All associated terms, including Notes (BT, SELF, NOTE, NT)	E SPN+ALL/RL
BT	Broader Terms (SELF, BT)	E CAT+BT/RL
HIE	Hierarchy Terms (Broader and Narrower Terms) (BT, SELF, NT)	E FFD+HIE/RL
NOTE	Any Notes (role definitions) (SELF, NOTE)	E IMF+NOTE/RL
NT	Narrower Terms (SELF, NT)	E USES+NT/RL

# Field Descriptors for the Role Thesaurus

	<u>,                                      </u>
Code	Description
$\rightarrow$	Self
ВТ	Broader Term
NOTE	Note
NT	Narrower Term

### **DISPLAY and PRINT Formats**

Any combination of formats may be used to display or print answers. Multiple codes must be separated by spaces or commas, e.g., D L1 1-5 TI AU; D L1 1-5 TI,AU. The fields are displayed or printed in the order requested.

Hit-term highlighting is available in all fields except FAN. In the table-like display of the PI (Patent Information) field, highlighting is shown by an arrow on the right side pointing to the line that includes the hit terms. Highlighting must be on during SEARCH in order to use the FHITSEQ, FHITSTR, HIT, HITIND, HITRN, HITSEQ, HITSTR, KWIC, and OCC display formats.

Format	Content	Examples
AB	Abstract Text	D TI AB
AI (AP) <b>(1,2)</b>	Patent Application Information	D AI
AI.B (ÁP.B) <b>(1,2)</b>	Patent Application Information, Basic	D AI.B
AN	Accession Number and Original Reference Number	D 1-5 AN
AU	Author Name	D AU, TI
CC (SC)	CA Classification Code (CA section and section cross-references)	D CC
CCN (SCN)	CA Classification Code Section	D SCN
CLM <b>(2)</b>	Claim Text	D CLM
CLM(n) (2)	Claim Text for Claim n	D CLM(9)
CLMN	Number of Claims	D CLMN
CO	Corporate Name	D CO
CPC	Cooperative Patent Classification	D CPC
CPC.TAB	CPC, Tabular Display	D CPC.TAB

# **DISPLAY and PRINT Formats (cont'd)**

Format	Content	Examples
CPC.UNIQ	CPC codes unique for a basic patent and equivalents	D CPC.UNIQ
CPCI	CPC Initial Classification	D CPCI
CPCR	CPC Reclassification	D CPCR
CS	Corporate Source	D TI AU CS
CS.DIV	Corporate Source Division	D CS.DIV
CS.ORG	Corporate Source Organization	D CS.ORG
CT (2)	Controlled Term	D CT
CUR (3)	Patent Currency Status	D CUR ALL
CYA (2)	Country of Author	D CYA
CYC (CY.CNT) (2)	Patent Country Count	D CYC
DOI (FTDOI)	Digital Object Identifier	D DOI
DS <b>(2)</b>	Designated States	D DS
DS.B <b>(2)</b>	Designated States, Basic	D DS.B
DT (TC)	Document Type	D DT
ECLA (EPC, EPCLA)	Patent Family European Classifications associated with patent numbers	D ECLA
ED <b>(2)</b>	Entry Date	D ED
ECLM <b>(2)</b>	Exemplary Claim	D ECLM
FS <b>(2)</b>	File Segment	DFS
FTERM (FTCLA, JPCLA)	File Forming Terms from the Japanese Patent Office associated with	D FTERM
	patent numbers	
GI <b>(2)</b>	Graphic Image or Graphic Image Information	D GI
IC	Main and Secondary IPC	D IC
ICA	Additional or Supplementary IPC	D ICA
ICI	Index or Complementary IPC	D ICI
ICM	Main IPC	D ICM
ICO	ICO Classification	D ICO
ICS	Secondary IPC	D ICS
IN	Inventor Name	DIN
INCL	Issued National Classification	D INCL
IPC.B	IPC of the Basic Patent	D IPC.B
IPC.F	IPC, First Invention	D IPC.F
IPC.TAB	IPC, Tabular Display	D IPC.TAB
IPC.UNIQ	IPC codes unique for a basic patent and equivalents	D IPC.UNIQ
IPCI	IPC Initial Classification	D IPCI
IPCR	IPC Reclassification	D IPCR
ISN (2)	International Standard (Document) Number	DISN
IT (4)	Index Term and Role	D AN IT
JT (2)	Journal Title	DJT
JTA <b>(2)</b>	Journal Title, Abbreviated	DJT
JTF <b>(2,5,7)</b>	Journal Title, Full	D JTF 1-3
LA LOUG (2)	Language	D LA
LSUS (2)	Legal status information for U.S. patents	D LSUS
NCL OREF (5)	National Patent Classification, Current	D PI IC NCL D OREF
OREF (5)	Original Reference Number Other Source	D TI OS
OS.G (OS.CITING.AN)	Citing Reference Accession Numbers	D OS.G
OSC.G (CITING.CNT)	Citing Reference Count	D OSC.G
PA	Patent Assignee	D PA
PB	Publisher	D PB
PI (1)	Patent Information Table	DTIPI
PI.B (PN.B) <b>(1,2)</b>	Patent Information, Basic	D PI.B
PN (FN.D) (1,2)	Patent Number	D PN
PNC (PN.CNT) <b>(2)</b>	Patent Number Count	D PNC
PNK	Patent Number Count  Patent Number/Kind Code	D PNK
PNK.B	Patent Number/Kind Code  Patent Number/Kind Code of the Basic Patent	D PNK.B
PRAI (PRN) (1)	Priority Application Information	D PRAI
PRAI.B (PRN.B) <b>(1,2)</b>	Priority Application Information, Basic	D PRAI.B
PSPI (PRIN.D) (1,2)	Patent Status Patent Information Table	D PSPI
PSPI.B	Patent Status Information, Basic	D PSPI.B
יוט ו		_
PUI <b>(2)</b>	Publisher Item Identifier	D PUI

# **DISPLAY and PRINT Formats (cont'd)**

Format	Content	Examples
PY (2)	Publication Year	D TI PY
PY.B (2)	Publication Year, Basic	D TI PY.B
RE (5)	Cited References	D TI RE
RETABLE (2,5)	Cited References Table	D TI AU
RE.CNT (REC) <b>(5)</b>	Cited References Count	RETABLE D REC
RL <b>(4)</b>	Index Term and Role	D RL
RN (2)	CAS Registry Number	D AN RN
RNK (10)	Rank, Relevance Score	D RNK
RNKM (10)	Rank Multifiles	D RNKM
SO	Source	D TI AU SO
ST	Supplementary Term (CA Keyword)	D ST
STED	Patent Status Established Date	D STED, D PSPI
STEY STI	Patent Status Established Year Patent Status Indicator	D STEY, D PSPI D STI, D PSPI
SX (2,7)	CA Section Cross Reference Code	D TI SX
TI	Title of Document	DIS TI 1-10
UPOS.G (CITING.UP)	Date Last Citing Reference Entered STN	D UPOS.G
UPP (1)	Update Date, Patent Family	D UPP
URL (2)	Uniform Resource Locator	D URL
400	OL AD	D 400
ABS ALL (1,4)	GI, AB AN, OREF, ED, TI, AU, IN, CS, PA, SO, DOI, PB, DT, LA, CLMN, CC,	D ABS D 1-30 ALL
ALL (1,4)	FAN.CNT, PI, PRAI, CLASS, OS, GI, AB, ST, IT, RL, OSC.G, UPOS.G,	D 1-30 ALL
	OS.G, RE, RE.CNT	
APPS (1)	AI, PRAI	D APPS
APPS.B (1)	AI, PRAI (for Basic Patent)	D APPS.B
BIB (1)	AN, OREF, TI, AU, IN, CS, PA, SO, DOI, PB, DT, LA, FAN.CNT, PI,	D13
	PRAI, OS, OSC.G, RE.CNT (BIB is the default)	
CAN	List of CA Abstract Numbers, no L-number headers)	D CAN
CBIB (1)	AN, OREF, plus compressed bibliographic data	D L2 1 CBIB
CLASS	Classifications (IPC, CPC, NCL, ECLA, ICO and FTERM codes)	D CLASS
CPC	associated with basic patent and family members CPCI, CPCR for the basic patent and patent family members	D CPC
CPC.TAB	CPC, CPC.KW, CPC.ACD, CPC.VER in tabular format	D CPC.TAB
CPC.UNIQ	Deduplicated list of CPC codes for the patent family	D CPC.UNIQ
DMAX (1,4)	MAX, delimited for post-processing	D MAX
FAM	AN, FAN.CNT, PI for the accession number, plus PI for other family	D FAM
	accession numbers	
FAN	Family Accession Number (AN, FAN.CNT, FAN)	D FAN
FBIB (1)	BIB plus PI for other family accession numbers	D FBIB
IABS (1,4)	ABS, with text labels	D IABS
IALL (1,4) IBIB	ALL, indented with text labels BIB, indented with text labels	D IALL D IBIB
IMAX (1,4)	MAX, indented with text labels	D IMAX
IND (4)	INCL, IPCI, IPCR, CPCI, CPCR, NCL, ECLA, ICO, FTERM, CC, SX, ST,	D TI IND
	IT, RL	
IPC	International Patent Classifications for the basic patent and patent family	D L2 1 IPC
IDC P	members	D IPC.B
IPC.B IPC.TAB	IPC of the Basic Patent IPC, Tabular Display	D IPC.B D IPC.TAB
IPC.TAB IPC.UNIQ	IPC codes unique for a basic patent and equivalents	D IPC.TAB D IPC.UNIQ
ISTD (1)	STD, indented with text labels	D ISTD
MAX (1,4)	ALL, plus FAN and PI for other family accession numbers	D MAX
OBIB (1)	BIB, Original, without patent family data (AN, OREF, TI, AU, IN, CS, PA,	D OBIB
	SO, DOI, PB, PI, PRAI, DT, LA, OS)	
OIBIB (1)	OBIB, indented with text labels	D OIBIB
OSG	OSC.G, UPOS.G, OS.G (up to 50 accession numbers)	D OSG
OSG.MAX	OSC.G, UPOS.G, and OS.G (up to 1020 accession numbers)	D OSG.MAX
OS.GMAX PAGE (8)	OS.G (up to 1020 accession numbers) Page images of CA pages containing the AN of a record	D OS.GMAX D PAGE
1 AGE (0)	Trage images of OA pages containing the Aiv of a record	DIAGE

## **DISPLAY and PRINT Formats (cont'd)**

Format	Content	Examples
PATS	PI, SO	D PATS
PATS.B	PI, SO for basic patents	D PATS.B
SAM (SAMPLE) (4)	INCL, IPCI, IPCR, CPCI, CPCR, NCL, ECLA, ICO, CC, TI, ST, IT, RL	DIS SAM 1-5
SBIB (1)	BIB, Standard, without cited references (AN, OREF, TI, AU, IN, CS, PA, SO, DOI, PB, DT, LA, FAN.CNT, PI, PRAI, OS)	D 1 3 SBIB
SCAN (5,9)	INCL, IPCI, IPCR, CPCI, CPCR, NCL, ECLA, ICO, FTERM, CC, TI, ST, IT fields will appear if available (random display, no answer numbers)	D SCAN
SIBIB (1) STD (1)	BIB, without RE.CNT AN, OREF, TI, AU, IN, CS, PA, SO, DOI, PB, DT, LA, FAN.CNT, PI, PRAI, CLASS, OS, OSC.G, RE.CNT	D SIBIB D STD
CPC.HIT (HITCPC) FHITSEQ	HIT display of CPC code searched First hit CAS Registry Number, its role, text modification, its CA index name, and the sequence diagram	D CPC.HIT or D HITCPC D CBIB FHITSEQ
FHITSTR	First hit CAS Registry Number, its role, text modification, its CA index name, and the structure diagram	D CBIB FHITSTR
HIT HITIND	Fields containing hit terms NCL, CC, ST, IT, and RL containing hit terms	D HIT 1-5 D HITIND
HITRN HITSEQ	Hit CAS Registry Number, its role, and text modification Hit CAS Registry Number, its role, text modification, its CA index name, and its sequence diagram	D HITRN D HITSTR KWIC
HITSTR	Hit CAS Registry Number, its role, text modification, its CA index name, and its structure diagram	D HITSTR KWIC
IPC.HIT (HITIPC) KWIC	Hit IPC Hit terms plus 20 words on either side (Key-Word-In-Context)	D IPC.HIT or D HITIPC D 1-7 TI KWIC
OCC (5)	Number of occurrences of hit terms and fields in which they occur	D OCC

- (1) By default, patent, application, and priority numbers are displayed in STN format. To display them in Derwent format, enter SET PATENT DERWENT at an arrow prompt. To reset the display to STN format, enter SET PATENT STN.
- (2) Custom display only.
- (3) CUR must be entered on the command line, e.g., D CUR. The patent status information displays before the requested records.
- (4) By default, roles are displayed as codes and text. To suppress display of role codes and text, enter SET ROLES OFF. To display only codes, enter SET ROLES CODES.
- (5) No online display fee for this format.
- (6) Full journal titles are available for most records from 1907.
- (7) SX displays all information in the CC field, i.e., CA section and section cross-references.
- (8) The PAGE format is used in the DISPLAY command to download images of pages of printed CA with abstracts published in 1907-1998. If the abstract is located on more than one page, all the relevant pages are automatically downloaded.
- (9) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.
- (10) The RNK and RNKM formats display only the hit term occurrence ranking for the record, with the following line: RELEVANCE SCORE ##. RNK is for the single file environment, while RNKM is for the multifile environment.

# Displaying CAplus, CA, or MEDLINE documents for cited references

Enter the following in the DISPLAY command: L-number for the answer set; answer number (only one may be specified); RAN.CAPLUS(x-y), RAN,CA(x-y), RAN.MED(x-y), where (x-y) is the cited reference number, numbers, or range of numbers; and the display format for the document to display, e.g., BIB ABS. For example, to display CA records for the cited references 1 and 2 from answer 2 in the answer set L5, enter the following:

=> D RAN.CA(1-2) L5 2 BIB ABS

# SELECT, ANALYZE, and SORT Fields

The SELECT command is used to create E-numbers containing terms taken from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Υ	N
Accession Number	AN	Y (2)	N
Author	AU	Ϋ́	Υ
CA Classification Code (section and subsection)	CC	Υ	Υ
CA Classification Code Section Descriptor	CCN (SCN)	Υ	Υ
CA Section Cross-Reference	SX `´´	Υ	Υ
CAS Registry Number	RN	Y (2)	N
Citation	CIT	Y (3,4)	N
Cited References	RE	Y	N
Cited Reference(n)	RE(n)	Ý (5)	N
Cited Reference Accession Number in CA	RAN.CA	Y (6)	Ň
Cited Reference Accession Number(n) in CA	RAN.CA(n)	Y (5,6)	l N
Cited Reference Accession Number in MEDLINE	RAN.MED	Y (7)	l Ñ
Cited Reference Accession Number(n) in MEDLINE	RAN.MED(n)	Y (5,7)	l N
Cited Reference Author Name	RAU	Y (3,7)	l N
Office Reference Author Name	RIN	Ý (8)	N
Cited Reference Count	RE.CNT (REC)	Y (0)	Ϋ́Υ
Cited Reference Count  Cited Reference Page Number (first)	RPG	Ý	Ň
Cited Reference Patent Number	RPN	Ý	N
Cited Reference Publication Year	RPY	Ϋ́	N
Cited Reference Publication Teal Cited Reference Volume Number	RVL	Y	N
Cited Reference Work Title	RWK	Ϋ́	N
Citing Reference Accession Numbers (up to 50)	OS.G (OS.CITING.AN)	Y	N N
Citing Reference OS.G Information (up to 1020 accession	OS.G (OS.CITING.AN)	Y	N
	US.GIVIAX	T	IN
numbers)	OSG.MAX	Y	NI NI
Citing Reference Information (OSC.G, UPOS.G, OS.G)(up	USG.IVIAX	T	N
to 1020 accession numbers)	OSC C (CITING CNT)	\ <u>\</u>	Y
Citing Reference Count	OSC.G (CITING.CNT)	Y	
Citing Reference Date	UPOS.G (CITING.UP)	Y	Y
Claim Text	CLM	Y	N
CODEN	CODEN	Y (9)	Y
Company Name	CO	Y	Y
Controlled Term	CT	Y	Y
CPC Classification	CPC	Y	N
CPC, Initial	CPCI	Y	N
CPC, Reclassified	CPCR	Y	N
CPC Hit Display	CPC.HIT (HITCPC)	N	Y
CPC Codes Deduplicated for patent family	CPC.UNIQ	N	Y
Corporate Source	CS CS DIV	Y	Y
Corporate Source, Division	CS.DIV	Y	N
Corporate Source, Organization	CS.ORG	Y	N
Country Name of Author	CYA	Y	Y
Designated States	DS	Υ (4.40)	N
Designated States, Basic	DS.B	Y (4,10)	N
Digital Object Identifier	DOI (FTDOI)	N	Y
Document Type	DT (TC)	Y	Y
Entry Date	ED	Υ	Y

# SELECT, ANALYZE, and SORT Fields (cont'd)

Field Name	Field Code	ANALYZE/	CODT
Field Name	Field Code	SELECT (1)	SORT
European Classifications	ECLA (EPC, EPCLA)	Υ	N
Exemplary Claim Text	ECLM	⊤ (4,11)	N
Family Accession Number	FAN	Y (4,11)	N
File Forming Terms	FTERM (FTCLA, JPCLA)	Y	N
File Segment	FS	Y (4)	Υ
Genbank Number	GENBANK (GBN)	Y (2,4)	Ň
ICO Classification	ICO	Υ (-, .,	N
Index Term	I IT	Ý	N
International Standard Book Number	ISBN	Ý (12)	Y
International Standard (Document) Number	ISN	Y (12)	N
International Standard Serial Number	ISSN	Y (12)	Y
Inventor Name	IN	Y (12)	Ý
IPC	IPC	Ý (13)	N
	IPCI	Y (13)	N
IPC Initial Classification	IPCI	Y	
IPC Reclassification			N
IPC, Additional or Supplementary	ICA	Υ (42)	Y
IPC, Basic Patent	IPC.B	Y (13)	N
IPC, First	IPC.F	Y (13)	N
IPC, Index or Complementary	ICI	Y	Y
IPC, Main	ICM	Y	Y
IPC, Main and Secondary	IC	Υ	Υ
IPC, Secondary	ICS	Υ	Υ
Issued National Classification	INCL	Υ	Υ
Journal Title	JT	Υ	Υ
Journal Title, Abbreviated	JTA	Y (13)	Υ
Journal Title, Full	JTF	Y (14)	Υ
Language	LA	Υ	Υ
National Patent Classification, Current	NCL	Υ	N
Occurrence of Hit Terms	OCC	N	Y
Original Reference Number	OREF	Y (4,11)	Υ
Other Source	OS	Υ	Υ
Patent Application Country	AC	Y (4)	Υ
Patent Application Country, Basic	AC.B	Y (4,15)	Υ
Patent Application Date	AD	Y (4)	Υ
Patent Application Date, Basic	AD.B	Y (16)	Υ
Patent Application Information	Al	Y (4,17,18)	Υ
Patent Application Information, Basic	AI.B	Y (4,17,18)	Υ
Patent Application Number	AP	Y (4,18)	Υ
Patent Application Number, Basic	AP.B	Y (17,18)	Υ
Patent Application and Priority Number	APPS	Y (4,18,19)	N
Patent Application and Priority Number, Basic	APPS.B	Y (4,18,19)	N
Patent Application Year	AY	Υ , , , , ,	Y
Patent Application Year, Basic	AY.B	Y (20)	Ϋ́
Patent Assignee	PA	Υ (==,	Y
Patent Countries	PCS	Y (4,21)	N N
Patent Countries, Basic	PCS.B	Y (4,21)	N
Patent Country	PC	Y (4)	Y
Patent Country, Basic	PC.B	Y (4,22)	Ý
Patent Country Count	CYC (CY.CNT)	Y (23)	N
Patent Information	PI	Y (4,18,24)	Y
Patent Information, Basic	PI.B	Y (18,24)	Ý
Patent Kind Code	PK	Y (4)	Ý
Patent Kind Code Patent Kind Code, Basic	PK.B	Y (4,25)	Ý
Patent Number	PN	Y (4,18)	Ý
i atenti i unibei	PATS	Y (4,18,26)	N N
	LIMIS	1 (4,10,20)	IN IN

# SELECT, ANALYZE, and SORT Fields (cont'd)

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Patent Number, Basic	PN.B	Y (18,24)	Υ
<b>-</b>	PATS.B	Y (18,24)	N
Patent Number Count	PNC (PN.CNT)	Y (29)	N
Patent Number/Kind Code	PNK	Y	Υ
Patent Number/Kind Code of the Basic Patent	PNK.B	Υ	Υ
Priority Application Country	PRC	Y (4)	Υ
Priority Application Country, Basic	PRC.B	Y (4,30)	Y
Priority Application Date	PRD	Y (4)	Y
Priority Application Date, Basic	PRD.B	Y (31)	Υ
Priority Application Information	PRAI	Y (4,18,32)	Y
Priority Application Information, Basic	PRAI.B	Y (18,32)	Y
Priority Application Number	PRN	Y (4,18)	Υ
Priority Application Number, Basic	PRN.B	Y (18,32)	Υ
Priority Application Year	PRY	Y (4)	Υ
Priority Application Year, Basic	PRY.B	Y (33)	Υ
Publication Date	PD	Y (4)	Υ
Publication Date, Basic	PD.B	Y (34)	Υ
Publication Year	PY	Y ' '	Υ
Publication Year, Basic	PY.B	Y (35)	Υ
Publisher	PB	Y (3)	N
Publisher Item Identifier	PUI	Ý	N
Role	RL	Y (4)	N
Source of Document	SO	Y (36)	N
Supplementary Term	ST	Υ (00)	N
Title	Ti	Y (default)	Ϋ́
Treatment Code	TC	Y (37)	Ý
Uniform Resource Locator	URL	Υ Υ	N
Volume Number	VL	Ý	Ϋ́

- (1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT RN.
- (2) Appends /BI to the terms created by SELECT.
- (3) Extracts first author, publication year, volume, and first page with a truncation symbol appended and with /RE appended to the terms created by SELECT.
- (4) SELECT HIT and ANALYZE HIT are not valid with this field.
- (5) (n) may be a single number, range, or list of numbers separated by a space or comma.
- (6) Selects or analyzes cited reference accession number in CA or CAplus and appends /AN to the terms created by SELECT.
- (7) Selects or analyzes cited reference accession number in MEDLINE and appends /AN to the terms created by SELECT.
- (8) Selects or analyzes cited reference author name and appends /RAU to the terms created by SELECT.
- (9) Selects or analyzes the CODEN and appends /ISN to the terms created by SELECT.
- (10) Appends /DS to the terms created by SELECT.
- (11) Appends /AN to the terms created by SELECT.
- (12) Appends /ISN to the terms created by SELECT.
- (13) Selects or analyzes the IC, ICA, ICI and appends /IPC to the terms created by SELECT.
- (14) Selects or analyzes JTF and appends /JT to the terms created by SELECT.
- (15) Appends /AC to the terms created by SELECT.
- (16) Appends /AD to the terms created by SELECT.
- (17) Appends /AP to the terms created by SELECT.
- (18) Enter SET PATENT DERWENT at an arrow prompt (=>) to SELECT or ANALYZE patent, application, and priority numbers in Derwent format.
- (19) Appends /APPS to the terms created by SELECT.
- (20) Appends /AY to the terms created by SELECT.
- (21) Selects or analyzes the country codes and appends /PCS to the terms created by SELECT.
- (22) Appends /PC to the terms created by SELECT.
- (23) Appends /CY.CNT to the terms created by SELECT.
- (24) Appends /PN to the terms created by SELECT.
- (25) Appends /PK to the terms created by SELECT.
- (26) Selects or analyzes the Patent Number and appends /PATS to the terms created by SELECT.
- (27) Appends /PN to the terms created by SELECT.
- (28) Selects or analyzes Basic Patent Number and appends /PATS to the terms created by SELECT.
- (29) Appends /PN.CNT to the terms created by SELECT.
- (30) Appends /PRC to the terms created by SELECT.
- (31) Appends /PRD to the terms created by SELECT.
- (32) Appends /PRN to the terms created by SELECT.
- (33) Appends /PRY to the terms created by SELECT.

#### CA/HCA/ZCA

- (34) Appends /PD to the terms created by SELECT.
- (35) Appends /PY to the terms created by SELECT.
- (36) Selects or analyzes the CODEN and the ISSN and appends /SO to the terms created by SELECT.
- (37) Appends /DT to the terms created by SELECT.

## Sample Records

#### **DISPLAY ALL (Patent)**

```
ANSWER 1 OF 265280 CA COPYRIGHT 2020 ACS on STN
AN 173:950723 CA
ED Entered STN: 03 Dec 2020
TI Radio wave absorber
IN Hashimoto, Hirokazu
PA Fujifilm Corporation, Japan
SO PCT Int. Appl., 55pp.
    CODEN: PIXXD2
DT
    Patent
LA
    Japanese
CLMN 9
CC
    76-14 (Electric Phenomena)
    Section cross-reference(s): 49, 77
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                     APPLICATION NO.
                                                            DATE
   WO 2020230709
                     ----
                                       -----
                     A1 20201119 WO 2020-JP18622
                                                            20200508
PRAI JP 2019-91327
                      A 20190514
PSPI
    WO 2020230709 A1 71'
    PATENT NO.
                 KIND STATUS
                                         STATUS DATE
                                          _____
                                           20201202
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 _____
                     ______
WO 2020230709 IPCI H05K0009-00 [I]; C01G0049-00 [I]; C08K0003-22 [I];
                     C08L0101-00 [I]; H01F0001-34 [I]; H01F0001-37 [I];
                     H01Q0017-00 [I]
               IPCR
                    H05K0009-00 [I]; C01G0049-00 [I]; C08K0003-22 [I];
                     C08L0101-00 [I]; H01F0001-34 [I]; H01F0001-37 [I];
                     H01Q0017-00 [I]
AB
    Provided is a radio wave absorber contg. a magnetic powder and a binder,
    wherein the vol. filling rate of the magnetic powder in the radio wave
    absorber is .ltoreq.35 vol.%, and the radio wave absorber has a
    transmission attenuation amt. of .gtoreq.8.0 dB and a reflection
    attenuation amt. of .gtoreq.8.0 dB.
ST
    radio wave absorber
    Binders
IT
    Magnetic powders
    Radio wave
      (manufg. of radio wave absorber)
    Polyolefin rubber
TΤ
    RL: PEP (Physical, engineering or chemical process); TEM (Technical or
    engineered material use); PROC (Process); USES (Uses)
      (manufg. of radio wave absorber)
IT
    Ferrites
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
       (manufg. of radio wave absorber)
    Absorbents
TΤ
       (radio wave; manufg. of radio wave absorber)
    116768-92-4P, Aluminum iron strontium oxide (Al2Fe10Sr019)
    2490576-78-6P, Cobalt gallium iron titanium oxide
    (Co0.05Ga0.22Fe1.68Ti0.0503)
    RL: IMF (Industrial manufacture); PRP (Properties); SPN (Synthetic
```

#### **DISPLAY BIB LSUS (Patent)**

```
L1
    ANSWER 1 OF 1 CA COPYRIGHT 2013 ACS on STN
ΑN
    149:264451 CA Full-text
    MicroRNA expression abnormalities in pancreatic endocrine and acinar
ΤI
    Croce, Carlo M.; Calin, George A.
IN
    The Ohio State University Research Foundation, USA
PA
SO
    PCT Int. Appl., 133 pp.
    CODEN: PIXXD2
DT
    Patent
    English
FAN.CNT 1
                                        APPLICATION NO.
    PATENT NO.
                      KIND DATE
                                                                DATE
    _____
                       ----
                                          _____
                                                                 _____
    WO 2007081680 A2 20070719
WO 2007081680 A3 20071227
                                         WO 2007-US24
PТ
                                                                20070103
        W: 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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
            KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, 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
        RW: AP, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
            EA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, EP, 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, OA, BF, BJ, CF, CG, CI, CM,
            GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2007205257
                     A1 20070719 AU 2007-205257
                                                                20070103
    CA 2635616
                            20070719
                                        CA 2007-2635616
EP 2007-716208
                        A1
                                                                 20070103
                             20080917
    EP 1968622
                        A2
                                                                20070103
            AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
                                                           20070103
    JP 2009521952
                     T
                             20090611 JP 2008-549532
                        A1
    US 20080306018 A1 2001

US 7670840 B2 20100302

101204273 A 20090311
                              20081211
                                         US 2008-160064
                                                                 20080703
                                        CN 2007-80005791
                                                                20080818
                       A1 20100805
    US 20100197774
                                        US 2010-700286
                                                                20100204
PRAI US 2006-756502P
                        P 20060105
    WO 2007-US24 W 20070103
US 2008-160064 A3 20080703
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
```

#### ASSIGNMENT HISTORY FOR US 20080306018

```
LSUS RAD: 20080703
RAUP: 20081211
RAK: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).
PAO: CROCE, CARLO M. (DATE EXECUTED: 20080627)
CALIN, GEORGE A. (DATE EXECUTED: 20080616)
RAC: THE OHIO STATE UNIVERSITY, 1960 KENNY ROAD, COLUMBUS, OHIO 43210,
UNITED STATES
RAA: MACMILLAN SOBANSKI & TODD, LLC, ONE MARITIME PLAZA FIFTH FLOOR,
720 WATER STREET, TOLEDO, OH 43604-1619
```

#### 24

### CA/HCA/ZCA

MRN: 21195 MFN: 793 (5 Page(s))

LSUS RAD: 20090330

RAUP: 20090330

ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS). RAK:

PAO: THE OHIO STATE UNIVERSITY (DATE EXECUTED: 20090327)

THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, 1216 KINNEAR ROAD, RAC:

COLUMBUS, OHIO 43212, UNITED STATES

MACMILLAN, SOBANSKI & TODD, LLC, 720 WATER STREET, ONE MARITIME

PLAZA, FIFTH FLOOR, TOLEDO, OH 43604

22469 MFN: 445 (4 Page(s)) MRN:

LSUS RAD: 20080703

> RAUP: 20100302

ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS). RAK:

PAO: CROCE, CARLO M. (DATE EXECUTED: 20080627)

CALIN, GEORGE A. (DATE EXECUTED: 20080616)

RAC: THE OHIO STATE UNIVERSITY, 1960 KENNY ROAD, COLUMBUS, OHIO 43210,

UNITED STATES

RAA: MACMILLAN SOBANSKI & TODD, LLC, ONE MARITIME PLAZA FIFTH FLOOR,

720 WATER STREET, TOLEDO, OH 43604-1619

MRN: 21195 MFN: 793 (5 Page(s))

LSUS RAD: 20090330

RAUP: 20100302

ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS). RAK:

THE OHIO STATE UNIVERSITY (DATE EXECUTED: 20090327) PAO:

RAC: THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, 1216 KINNEAR ROAD,

COLUMBUS, OHIO 43212, UNITED STATES

MACMILLAN, SOBANSKI & TODD, LLC, 720 WATER STREET, ONE MARITIME

PLAZA, FIFTH FLOOR, TOLEDO, OH 43604 22469 MFN: 445 (4 Page(s))

MRN:

OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)

#### **DISPLAY OSG**

ANSWER 1 OF 1 CA COPYRIGHT 2013 ACS on STN

THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

UPOS.G Date last citing reference entered STN: 27 Feb 2012

OS.G CAPLUS 2012:181723; 2010:1328434; 2010:548903; 2009:1288101;

2009:637424; 2007:75901; 2005:702147; 2005:3368; 2003:236743;

2001:230866

#### **DISPLAY IPC.TAB**

ANSWER 1 OF 1 CA COPYRIGHT 2013 ACS on STN L1

PΤ WO 2007081680

IPCI CODE	VERSION	POS	INV	CC	ASSIGNMENT	DATE	STAT
A61N0001-30	(200601)	F	I	US	Human	20070719	0
A61K0038-00	(200601)	F	I	US	Human	20071227	0
A61K0038-00	(200601)	F	I	US	Human	20071227	0
C12Q0001-58	(200601)	L	I	US	Human	20071227	0
C12Q0001-58	(200601)	L	I	US	Human	20071227	0
IPCR CODE	VERSION	POS	INV	CC	ASSIGNMENT	DATE	STAT
A61N0001-30	(200601)	F	I	US	Human	20070719	0

PI AU 2007205257

IPCI CODE VERSION POS INV CC ASSIGNMENT DATE STAT 

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A61K0038-00
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                              I US Human
                                                20080129 0
                (200601) F
                              I US Human
A61K0038-00
                                                20080129 O
                (200601) L
                              I US Human
                                                20080129 O
C12Q0001-58
                (200601) L I US Human
                                                20080129 O
C12Q0001-58
IPCR CODE
                VERSION POS INV CC ASSIGNMENT DATE STAT
A61K0038-00 (200601) F I US Human 20080129 O C12Q0001-58 (200601) L I US Human 20080129 O
```

PI CA 2635616

#### **DISPLAY ALL (PRE-1907 JOURNAL RECORD)**

```
ANSWER 1 OF 1 CA COPYRIGHT 2013 ACS on STN
    0:419 CA Full-text
AN
    Entered STN: 07 Dec 2003
ED
    CIII. - A new synthesis of phloroglucinol
TΙ
ΔIJ
    Jerdan, David Smiles
    Heidelberg University Chemical Laboratory, Heidelberg, Germany
CS
    Journal of the Chemical Society, Transactions (1897), 71, 1106-1114
    CODEN: JCHTA3; ISSN: 0368-1645
DOI 10.1039/ct8977101106
DT Journal
LA
    English
CC
    10 (Organic Chemistry)
OS
    CASREACT 0:419
AB Recent researches in the terpene series, and especially investigations into the nature
of camphor, have led to the development of various formulae to represent the constitution
of the latter. Especially prominent within the last few years have been the formulae
proposed by Tiemann and others, in which camphor is represented as containing two
variously substituted pentamethylene rings, which have three carbon atoms in common. The
proposed formulae may also be described as consisting of a substituted hexamethylene ring
in which two carbon atoms in the para position are united by single bonds to a seventh
carbon atom. At the suggestion of the late Professor Victor Meyer, the author made
various experiments with a view to the synthesis of a substance of analogous
constitution. Although, unfortunately, the end in view was not attained, the experiments
resulted in a new synthesis of phloroglucinol from ethylic acetonedicarboxylate, and thus
added another to the many known methods of passing from the fatty to the aromatic series.
Phloroglucinol itself has already been prepared synthetically from another member of the
fatty series by Baeyer (Ber., 1885, 18, 3457) who, by heating the monosodium derivative
of ethylic malonate, obtained the ethylic salt of phloroglucinoltricarboxylic acid. The
ethereal salt, when melted with potash, yielded phloroglucinol.
IT Charcoal, bone
    Crystallization
    Etherification
    Fractionation
    Hydrazones
    Hydrolysis
     Lactones
     Wood, pine
        (new synthesis of phloroglucinol)
     64-17-5, Ethyl alcohol 64-19-7, Acetic acid 67-56-1, Methyl alcohol
TТ
     67-66-3, Chloroform 71-43-2, Benzene 76-22-2, Camphor 100-63-0,
```

Phenylhydrazine 105-50-0, Ethyl acetonedicarboxylate 106-93-4, Ethylene dibromide 107-07-3, Ethylene chlorhydrin 108-73-6, Phloroglucinol 124-38-9, Carbon dioxide 141-82-2, Malonic acid

Sodium 7647-01-0, Hydrogen chloride 7664-93-9, Sulfuric acid 7705-08-0, Ferric chloride 7726-95-6, Bromine 7783-89-3, Silver bromate 8002-05-9, Petroleum 8032-32-4, Ligroin 17194-00-2, Barium

497-19-8, Sodium carbonate 513-77-9, Barium carbonate

hydroxide 129874-08-4, Terpene

(new synthesis of phloroglucinol)

#### **EXPAND** in the CA Section Thesaurus (/CC)

#### => E CERAMICS+ALL/CC

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506928 --> CERAMICS/CC
         1860 USE 17 CERAMICS, 1962 ONLY/CC
E2
         9758 USE 21 CERAMICS, 1963-1966/CC
90140 USE 57 CERAMICS, 1967 TO PRESENT/CC
E3
        490140
****** END ******
=> E E4+ALL
E5
      7573149
                BT1 APPLIED/CC
Е6
       490140
                  --> 57 CERAMICS, 1967 TO PRESENT/CC
                   NOTE THIS SECTION INCLUDES THE PREPARATION, COMPOSITION,
                         ANALYSIS, PROPERTIES, AND USES OF GLASS, CERAMICS,
                         GLAZES, ENAMELS, REFRACTORIES, CLAY PRODUCTS,
                         ABRASIVES, AND CARBON PRODUCTS. ORGANIC GLASSES ARE
                         INCLUDED IN SECTION 37. STUDIES OF RAW MATERIALS ARE
                         INCLUDED IN SECTION 53 WHEN THE INTEREST IS OF
                         GEOLOGICAL SIGNIFICANCE AND ULTIMATE USE IS
                         INCIDENTAL. CERMETS CONTAINING MORE THAN ONE PERCENT
                         METAL ARE INCLUDED IN SECTION 56. SOME SPECIFIC USES
                         AND PROPERTIES OF CERAMICS ARE COVERED IN OTHER
                         SECTIONS (E.G., 63, 65, 75, AND 76).
E7
         1860
                   OLD 17 CERAMICS, 1962 ONLY/CC
E8
                   OLD 19 GLASS AND CERAMICS, 1908-1909/CC
          496
                   OLD 19 GLASS AND CERAMICS, 1911-1920/CC
Ε9
         4422
                   OLD 19 GLASS AND POTTERY, 1906-1907/CC
        1044
E10
                   OLD 19 GLASS, CLAY PRODUCTS, REFRACTORIES, AND ENAMELED
       46601
E11
                         METALS, 1921-1961/CC
                  OLD 20 GLASS AND CERAMICS, 1910 ONLY/CC
E12
         252
E13
         9758
                   OLD 21 CERAMICS, 1963-1966/CC
           0
                   NT1 57-0 CERAMICS, 1972 TO PRESENT, REVIEWS/CC
E15
            0
                   NT1 57-1 CERAMICS, 1972 TO PRESENT, GLASS (OXIDE AND
                         NONOXIDE GLASSES)/CC
                  NT1 57-2 CERAMICS, 1972-1981, CLAYS AND CLAY PRODUCTS/CC
            0
E16
E17
            0
                   NT1 57-2 CERAMICS, 1982 TO PRESENT, CERAMICS/CC
E18
            0
                   NT1 57-3 CERAMICS, 1972-1981, GLAZES/CC
E19
            0
                   NT1 57-3 CERAMICS, 1982 TO PRESENT, PORCELAIN/CC
                         57-4 CERAMICS, 1972-1981, WHITEWARE/CC
E20
            0
                    NT1
E21
            0
                   NT1 57-4 CERAMICS, 1982 TO PRESENT, GLAZES AND GLASSY
                         COATINGS/CC
E22
           0
                   NT1 57-5 CERAMICS, 1972-1981, REFRACTORIES/CC
           0
                   NT1 57-5 CERAMICS, 1982 TO PRESENT, CLAYS AND CLAY
E23
                         PRODUCTS/CC
E24
           Ω
                   NT1 57-6 CERAMICS, 1972-1981, ABRASIVES/CC
                   NT1 57-6 CERAMICS, 1982 TO PRESENT, REFRACTORIES/CC
E25
           0
           Ω
                   NT1 57-7 CERAMICS, 1972-1981, OTHER/CC
E27
            Ω
                   NT1 57-7 CERAMICS, 1982 TO PRESENT, ABRASIVES/CC
                  NT1 57-8 CERAMICS, 1982 TO PRESENT, CARBON PRODUCTS/CC
            Ω
E28
            Ω
                   NT1 57-9 CERAMICS, 1982 TO PRESENT, OTHER/CC
****** END ******
```

#### **EXPAND** in /CT Thesaurus for the CA Lexicon

### => E SUNFLOWER+ALL/CT

# => E AZO DYES+ALL/CT

```
E1
        14659
                BT3 Chemical compounds/CT
E2
         60367
                 BT2 Organic compounds/CT
E3
         5673
                   BT1 Azo compounds/CT
E4
         32096 BT3 Materials/CT
E5
        13049
                  BT2 Coloring materials/CT
        136743
                   BT1 Dyes/CT
E6
F.7
        10012
                      --> Azo dyes/CT
                        HNTE Valid heading during volume 126 (1997) to
                             present.
E8
        12084
                        OLD Dyes, azo/CT
Ε9
                        UF
                             Azo dye/CT
E10
                        UF
                             Azodye/CT
                        UF
E11
                             Azodyes/CT
                        NT1 1-(Phenylazo)-2-naphthol/CT
E12
             0
E13
            0
                        NT1 4-(Dimethylamino)azobenzene/CT
                        NT1 4-Amino-4'-nitroazobenzene/CT
E14
            0
            0
                        NT1 4-Aminoazobenzene/CT
E15
E16
            0
                        NT1 Amaranth (dye)/CT
E17
           0
                       NT1 C.I. Acid Red 14/CT
E18
           Ω
                        NT1 Carmine 6B/CT
                        NT1 Congo red/CT
NT1 Disperse Red 1/CT
E19
            0
E20
            0
E21
            0
                        NT1 Eriochrome Black T/CT
                        NT1 Methyl orange/CT
NT1 Methyl red/CT
NT1 New Coccine/CT
E22
            0
E23
            0
E24
            0
                        NT1 Pigment Yellow 12/CT
E25
            0
E26
                       NT1 Pigment Yellow 128/CT
            0
                       NT1 Reactive azo dyes/CT
E27
         1056
E28
           0
                         NT2 4-(2-Sulfatoethylsulfonyl)aniline/CT
                       NT1 Sunset Yellow/CT
E29
            0
E30
            0
                       NT1 Tartrazine/CT
E31
            0
                       NT1 Trypan blue/CT
          264
                       RT Formazans/CT
E32
        45065
E33
                       RT Pigments, nonbiological/CT
E34
          677
                        RT Stains, coloring materials/CT
E35
                        RTCS 2,5-Dimethoxyaniline/CT
                        RTCS 4-Phenylazophenol/CT
****** END *******
```

#### **EXPAND** in /RL Thesaurus

#### => E PREP+ALL/RL E1 5299444 --> PREP/RL Ε2 5299444 Preparation/RL NOTE Vol. 1 (1907) to present - Assigned to a substance in studies of the synthesis of the substance as a distinct chemical entity, formed with preparative intent, via a chemical, biochemical, or nuclear reaction. The recovery, purification, separation, or other intentional formation with preparative intent of a desired substance also receives a PREP role. NT1 BMF/RL NT1 BPN/RL E3 85501 F:4 190130 NT1 BYP/RL E5 64754 NT1 CPN/RL E.6 2933 NT1 IMF/RL E.7 713210 E8 173903 NT1 PNU/RL NT1 PUR/RL E9 375278

### CA/HCA/ZCA

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E10 2529014 NT1 SPN/RL ******** END ********
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#### EXPAND in the Company Name (/CO) Thesaurus Search Aid

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=> E DOW CHEMICAL+NAME/CO
```

```
NAME DOW CHEMICAL CO/CO
        17194
          88 --> DOW CHEMICAL/CO
****** END ******
=> E E1+ALL
                 CNUM CAS1000235/CO
E3
            0
E4
        17194
               --> DOW CHEMICAL CO/CO
                       NOTES 1886: Joy Morton & Co. established
                       1897: Dow Chemical Co. incorporated
                       1898: Firma Johann Haltermann founded
                       1900: Midland Chemical Co. merged into Dow Chemical Co.
                       1907: Rohm & Haas Co. founded
                       1910: Joy Morton & Co. renamed Morton Salt Co.
                       1917: Union Carbide & Carbon Corp. incorporated
                       1920: Carbide and Carbon Chemicals Corp. established
                       1933: Ethyl Dow Co. formed
                       1940: Carlisle Chemical Co. founded
                       1942: Dow Chemical of Canada organized
                       1955: Carlisle Chemical Co. acquired Advance Solvents
                       & Chemical Co.
                       1957: Shipley Co. founded
                       1957: Union Carbide & Carbon Corp. renamed Union
                       Carbide Corp.
                       1970: Rodel Inc. established
                       1980: Carlisle Chemical Co. renamed Carstab Corp.
                       1989: DowElanco formed
                       1989: Morton International, Inc. acquired Carstab Corp.
                       1992: Rohm & Haas Co. acquired Shipley Co.
                       1995: Union Carbide Corp. acquired Shell Polypropylene
                       1997: ChiroTech Technology Ltd. established
                       1997: Dow Chemical Co. acquired full ownership of Dow
                       Mitsubishi Chemical Ltd.
                       1998: Dow Chemical Co. acquired Hampshire Chemical
                       Corp.
                       1998: Dow Chemical Co. acquired Mycogen Corp.
                       1998: Dow Chemical Co. acquired Sentrrachem Ltd.
                        integrated
                       1999: Dow Chemical Co. acquired Angus Chemical Company
                       1999: Rohm & Haas Co. acquired LeaRonal, Inc.
                       1999: Rohm & Haas Co. acquired Morton International,
                        2001: Dow-Reichhold Specialty Latex LLC formed
                        2001: Dow Chemical Co. acquired ChiroTech Technology
                       Ltd.
                       2001: Dow Chemical Co. acquired Haltermann AG
                        2001: Dow Chemical Co. acquired Michael Cotts Chemicals
                        2001: Dow Chemical Co. acquired Union Carbide Corp.
                        2004: Shipley Co. and Rodel Inc. merged to form Rohm &
                       Haas Electronic Materials
                        2006: Dow Chemical Co. acquired Zhejiang Omex
                       Environmental Engineering Ltd
                       2007: Dow Chemical Co. acquired Wolff Walsrode AG
                       2008: Dow-Reichhold Specialty Latex LLC dissolved
                       2009: Dow Chemical Co. acquired Rohm & Haas
E5
                  RT1 ADVANCE SOLVENTS CHEMICAL CORP/CO
E6
            32
                  RT1 AGRIGENET ADV SCI CO/CO
E7
           33
                  RT1 AGRIGENET CORP/CO
```

TI O		рш1	ACDICENSERIOS ING/CO		
E8	66		AGRIGENETICS INC/CO		
E9	14	RT1	AGRIGENETICS RESEARCH ASSOCIATES LTD/CO		
E10	18	RT1	AMERCHOL CORP/CO		
E11	19	RT1	AMERCHOL CORPORATION/CO		
E12	9	RT1	ANGUS CHEM CO/CO		
E13	36	RT1	ANGUS CHEMICAL CO/CO		
E14	65	RT1	ANGUS CHEMICAL COMPANY/CO		
E15	13	RT1	ANGUS CHEMIE GMBH/CO		
E16	8	RT1	AWD TECHNOLOGIES INC/CO		
E17	13	RT1	BENFIELD CORP/CO		
E18	2	RT1	BORIDE PRODUCTS INC/CO		
E19	65	RT1	BUNA SOW LEUNA OLEFINVERBUND G M B H/CO		
E20	52	RT1	BUNA SOW LEUNA OLEFINVERBUND GMBH/CO		
E21	68	RT1	BUSHY RUN RES CENT/CO		
E22	11	RT1	CARBIDE AND CARBON CHEM CO/CO		
• • •					
E323	1	RT1	UNION CARBIDE SERVICES K K/CO		
E324	1	RT1	UNION CARBIDE SOUTH AFRICA PTY LTD/CO		
E325	1	RT1	UNION CARBIDE STELLITE CO/CO		
E326	12	RT1	UNION CARBIDE TECH CENT/CO		
E327	9	RT1	UNION CARBIDE TECHNICAL CENTER/CO		
E328	1	RT1	UNION CARBIDE THAILAND LTD/CO		
E329	6	RT1	UNION CARBIDE U K LTD/CO		
E330	6	RT1	UNION CARBIDE UK LTD/CO		
E331	2	RT1	WESTERN CARBIDE CORP/CO		
E332	12	RT1	WOLFF CELLULOSICS G M B H CO K G/CO		
E333	16	RT1	WOLFF CELLULOSICS GMBH CO KG/CO		
E334	242	RT1	WOLFF WALSRODE A G/CO		
E335	115	RT1	WOLFF WALSRODE AG/CO		
E336	21	RT1	WOLFF WALSRODE AKTIENGESELLSCHAFT/CO		
E337	1	RT1	WOLFF WALSRODE GMBH CO KG/CO		
E338	11	RT1	ZHEJIANG OMEX ENVIRONMENTAL ENGINEERING CO LTD/CO		
E339	4	RT1	ZHEJIANG OMEX ENVIRONMENTAL ENGINEERING LIMITED/CO		
E340	13	RT1	ZHEJIANG OMEX ENVIRONMENTAL ENGINEERING LTD/CO		
*****	END	*****	**		

### **EXPAND** in the International Patent Classification (/IPC) Thesaurus

### => E A23G001-00/IPC

E#	FREQUENCY	AT	TERM
E1	13332	24	A23G/IPC
E2	2925		A23G0001/IPC
E3	2261	25	> A23G0001-00/IPC
E4	178	2	A23G0001-02/IPC
E5	190	10	A23G0001-04/IPC
E6	1		A23G0001-05/IPC
E7	21	2	A23G0001-06/IPC
E8	3	2	A23G0001-08/IPC
E9	1		A23G0001-09/IPC
E10	52	2	A23G0001-10/IPC
E11	16	2	A23G0001-12/IPC
E12	3	2	A23G0001-14/IPC
=> E	E3+ALL		
E13	0	BT4	A/IPC
			SECTION A - HUMAN NECESSITIES
E14	0	BT4	FOODSTUFFS; TOBACCO/IPC
E15	0	BT3	A2/IPC
E16	0	BT2	A23/IPC
			FOODS OR FOODSTUFFS; THEIR TREATMENT, NOT COVERED BY
			OTHER CLASSES
			Note
			(1) Attention is drawn to the following places:
			Deline arbanidas denimations themas

<sup>-</sup> Polysaccharides, derivatives thereof

### CA/HCA/ZCA

0.00.0.		
		<ul> <li>Animal or vegetable oils, fats, fatty substances or waxes</li> </ul>
E17 13	3332 B	- Biochemistry, beer, spirits, wine, vinegar T1 A23G/IPC
		COCOA; COCOA PRODUCTS, e.g. CHOCOLATE; SUBSTITUTES FOR COCOA OR COCOA PRODUCTS; CONFECTIONERY; CHEWING GUM; ICE-CREAM; PREPARATION THEREOF Note
		<ul> <li>(1) In this subclass, the following term is used with the meaning indicated: <ul> <li>"ice-cream" includes any edible frozen or congealed semi-liquid or pasty substance, e.g. slush-ice.</li> <li>(2) In this subclass, subject matter which cannot be completely classified in a single one of the main groups should be classified in each relevant main group.</li> </ul> </li> </ul>
E18 2	2261 -	-> A23G0001-00/IPC
		Cocoa; Cocoa products, e.g. chocolate; Substitutes therefor (kitchen equipment for cocoa preparation A47J, e.g. apparatus for making beverages A47J0031-00) CORE
E19	178 N	VALID FROM 19680901 TO PRESENT ( IPC EDITION: 1-8 ) T1 A23G0001-02/IPC
		. Preliminary treatment, e.g. fermentation of cocoa (machines for roasting cocoa A23N0012-00) ADVANCED
E20	190 N	VALID FROM 19680901 TO PRESENT ( IPC EDITION: 1-8 ) T1 A23G0001-04/IPC
		. Apparatus specially adapted for manufacture or treatment of cocoa or cocoa products (machines for roasting cocoa A23N0012-00; crushing or grinding apparatus in general B02C) ADVANCED
E21	21 N	VALID FROM 19680901 TO PRESENT ( IPC EDITION: 1-8 ) T2 A23G0001-06/IPC
		Apparatus for preparing or treating cocoa beans or nibs ADVANCED
• • •		VALID FROM 19680901 TO PRESENT ( IPC EDITION: 1-8 )
E46	173 N	T3 A23G0001-54/IPC Composite products, e.g. layered, coated, filled ADVANCED
E47	509 N	VALID FROM 20060101 TO PRESENT ( IPC EDITION: 8 ) T2 A23G0001-56/IPC
	202 1	Liquid products; Solid products in the form of powders, flakes or granules for making liquid products, e.g. for making chocolate milk
		ADVANCED VALID FROM 20060101 TO PRESENT ( IPC EDITION: 8 )
*****	END ***	*****

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