

CASM/HCA/ZCA (Chemical Abstracts)

| Subject Coverage | Analytical chemistryApplied chemistryBiochemistry | | | Chemical engineeringMacromolecular chemistryOrganic chemistry | |
|---------------------|--|--|---|---|--|
| File Type | Bibliographic | | | | |
| Features | Thesauri | 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) | | Patent Classification (CPC), Pation (/ECLA), F-Term (/FTERM), Passification (/ICO), International C), National Patent Classifications | |
| | Alerts (SDIs) | Biweekl | y | | |
| | CAS Registry Number® Identifiers | Ø | Page Images | | |
| | Keep & Share | $\overline{\checkmark}$ | SLART | | |
| | <u>Learning</u> <u>Database</u> | | Structures | \square | |
| | Register Links | $\overline{\checkmark}$ | | | |
| Record Content | Claims from the (1975-), CN (1975-), CN (1990-), GB (1990-), WC Substance in C (CN, DE, EP, F) Patent Status In Legal status in Patent classific Cited reference U.S., EPO, WII Patent examine | e following 985-), CZ (973 -), IN (0 (1979-) Claim (SCL FR, GB, IN ndicator in formation f cations: IPC es for journ PO, and G er citations present), J from 1982 | 1993-), DE (1997 2007-), JP (1983- M) role indicator for JP, KR, US, and formation for pate for U.S. patents sin C, CPC, ECLA, IC rals, conference perman patent office from British and lapanese patents | e: AM (2015-), AU (2000-), BR (2000-), CH -), EA (1997-), EE (2000-), EP(1979-), ES), KR (1999-), RU (1994-), TW (2000-), or substances from select patent offices WO) nts and utility models | |
| File Size | More than 50.1 m | More than 50.1 million records (10/2025) | | | |
| Coverage | 1907-present plus | s over 180, | 000 pre-1907 reco | ords | |
| Updates | Weekly updates (| Weekly updates (more than 25,000 records) | | | |
| Language | English | | | | |

Database Producer

CAS

2540 Olentangy River Road

P.O. Box 3012

Columbus, Ohio 43210-0012 USA Phone: 800-753-4227 (North America) Phone: 614-447-3731 (worldwide)

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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: https://www.cas.org/training/solution/stn

- 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

| General Search Fleius | | | |
|---|-----------------------------|---|--|
| 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 | AB |
| 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 | CC |
| 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 | CC |
| Classification Code Section Descriptor (2) | /CCN (or /SCN) | S TOXICOLOGY/SCN S RADIATION CHEMISTRY/CCN | SCN, CCN |
| Company Name (3c) Controlled Term (3c,4) Controlled Word (4) Corporate Source (2) (organization name, patent | /CO /CT /CW /CS | E DOW CHEMICAL/CO S ANTITUMOR AGENTS/CT S OPTIC?/CW S DOW/CS S DOW CHEM MIDLAND/CS | CO, CS, PA CT, IT CT, IT CS, PA |
| assignee) Country of Author Digital Object Identifier | /CYA /DOI (or /FTDOI) | S "DOW CORNING"?/CS S USA/CYA 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 File Segment | /FA /FS | S L1 AND ABS/FA S BIO/FS AND L2 | Not displayed 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) Journal Title (11) | /IS /JT | S 1-3/IS AND 32/VL S J CHROMATOGR/JT S COMPT REND?/JT | SO JT, SO |
| Journal Title Keyword | /JTW | S NANO/JTW | so |

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 S L1 AND ENGLISH/LA S L1 NOT DE/LA | 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 S JUNE 1992-SEPT 1993/PD | PI, SO |
| 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 |
| | | BIOSCIENCE/1996/V1/D/CHINTALL/ | |
| | | /HTMLS/324-339.HTM"/URL | |
| Update Date (5) | /UP | S L1 AND UP>20010400 | Not displayed |
| II I A B A A LEE | " | S UP>APRIL 1, 2001 | |
| Update Date, Addition of Registered Substance (5) | /UPIT | S L2 AND UPIT>20080200 | Not displayed |
| 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 |

- (1) Content of this field is available for records from 1967 to the present with exception for select role coverage. ISBNs are included only for records added since December 17, 2001.
- (2) Search with implied (S) proximity is available in this field.
- (a) PREP role uniquely assigned back to 1907. (b) SCLM role assignment corresponds to PatentPak claim tags coverage. (c) 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 * (15) | /CLM or /BIEX | S COBALT (L) SALT#/CLM | CLM |
| Cooperative Patent Classification (3,13) Cooperative Patent Classification, Action Date | /CPC /CPC.ACD | S C12N0009/CPC S 20121113/CPC.ACD | CPC 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 Cooperative Patent Initial Classification Country Number Count (1) Designated States (2) Designated States, Basic (2) European Classifications (3) | /CPC.VER /CPCI /CYC /DS /DS.B /ECLA (or /EPC or /EPCLA) | S 20130101/CPC.VER S A61K0006-0014/CPCI S L1 AND 4-5/CYC S FR/DS;S R DE/DS S DE/DS.B S C01B003/ECLA S C01B003/00D2/ECLA | CPC.TAB CPCI CY.CNT DS, PI DS, PI CLASS, ECLA, EPC, EPCLA |
| European Classification Keywords | /ECLA.KW (or /EPC.KW or /EPCLA.KW) | S A1F1/ECLA.KW | CLASS, ECLA, EPC, EPCLA |
| Exemplary Claim * (15) Extended Basic Index Family Accession Number Family Accession Number Count (1) | /ECLM /BIEX or /CLM /FAN /FAN.CNT | S COBALT (L) MIXTURE/ECLM S ALLOPURINOL/BIEX S 1998:98369/FAN S L1 AND FAN.CNT>1 | ECLM CLM FAN FAN |
| F-Terms (Patent Classifications from the Japanese Patent Office) (4) | (or FAM.CNT) /FTERM (or /FTCLA or /JPCLA) | S 4C002/BB03/FTERM S 4C002/FTERM | CLASS, FTERM, 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 or Supplementary (2,6) | /ICA | S B01J/ICA S B01J027/ICA S CYANOGEN/ICA | ICA |
| International Patent Classification, All (5) | /IPC | S A61K/IPC S A61K0031-473/IPC | IPC |
| International Patent Classification, Basic Patent | /IPC.B | S G01N0001-28/IPC.B | IPC.B |
| International Patent Classification, Index or Complementary (2,6) | /ICI | S A61K/ICI S A61K031/ICI S AMMONIA/ICI | ICI |
| International Patent Classification, Keywords | /IPC.KW | S G01N000128/IPC(S)BASIC/IPC.KW | IPC.TAB |
| International Patent Classification, Main (2,6) | /ICM | S A01N/ICM S A01N025/ICM S AMMONIA/ICM | IC, ICM |
| International Patent Classification, Main and Secondary (6) | /IC | S C07C/IC S C07C015/IC S C07C015-04/IC S CYANOGEN/IC | IC |
| International Patent Classification, Main Group, Range Searchable (1,2,6) | /MGR | S 10-20/MGR(S)C07C/IC | IC |
| International Patent Classification, Secondary (2,6) | /ICS | S C02F/ICS S C02F001/ICS S AMMONIA/ICS | IC, ICS |
| 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 |
| | | | |
| nventor | /IN | S PATTON JERRY R/IN | IN |
| National Patent Classification, Current (7) | /NCL (or | S 106035000/NCL | NCL, 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 |
| valional ratent Glassification, issue (0) | /IIIOL | S 433/227-433/229/INCL | INOL, OLAGO |
| | /NOLD | | NOL OLAGO |
| National Patent Classification, Issue, Range | /NCLR | S 106020000-106040000/NCLR | NCL, CLASS |
| Searchable (1,8) | | | |
| Number of Claims (15) | /CLMN | S CLMN>20 | CLMN |
| Patent Application Country | /AC | S DE/AC | AI, PI |
| Patent Application Country, Basic | /AC.B | S DE/AC.B | AI, PI |
| | | S AD>19920100 | AI, PI |
| Patent Application Date (1,9) | /AD | | 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 | AI, PI |
| , , , | | 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 |
| | | 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 Count (1) | /PNC (or | S 3/PNC | PN.CNT |
| atom Number Count (1) | /PN.CNT) | C 0/1 140 | 1 14.0141 |
| | , | 0.11000050400405/50446 | D1114 |
| 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 otatus mulcator | /3 11 OI /F 3F I | S D/PSPI | PSPI |
| 2 | (OTL D | | F3P1 |
| Patent Status Indicator Basic | /STI.B or | S ALIVE/STI.B | |
| | /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 |
| • • • | | S June 20 1991/PRD | |
| | 1 | | |
| Priority Application Date, Basic (1,9) | /PRD.B | S PRD.B>19940100 | PRAI |

Patent Search Fields (cont'd)

| Search Field Name | Search Code | Search Examples | Display Codes |
|--|----------------|--|------------------|
| 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 | |
| Ultimate Owner | /UO | S MACRONIX INTERNATIONAL COMPANY LIMITED | UO |
| Ultimate Owner Standardized | /UOS | S MACRONIX | UOS |
| Update Date Patent Family (1,2) | /UPP | S US5837509/PN AND | |
| | | UPP>19990100 | UPP, PI |
| Update Date, Maximum (contains /UP and /UPP) (1,2) | /UPM | S L1 and UPM>=20040400 | UPP |

- (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 W08402426/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.

⁽⁴⁾ 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 | |

⁽¹⁾ 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 |

⁽¹⁾ 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.

⁽²⁾ 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

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

⁽¹⁾ 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. Note that the EPC replaced ECLA and ICO in 2013.

| 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 |
| TI | Complete Title of the SELF Term and Broader Terms (BT, SELF, DEF) | E G05B0001-03+TI/EPC |

⁽¹⁾ 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 |

⁽¹⁾ 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. Note that the CPC replaced the NCL in 2013.

| 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 |

⁽¹⁾ 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

| Code | Description |
|---------------|---------------|
| \rightarrow | Self |
| BT | 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.

| AN TI I I I(9) IN C.TAB C.UNIQ |
|---|
| AN TI I I I(9) IN C.TAB |
| AN TI I I I(9) IN C.TAB |
| TI I I I(9) IN C.TAB |
| I 1 1(9) IN C.TAB |
| 1 1(9) 1N C.TAB |
| 1 1(9) 1N C.TAB |
| 1(9) 1N C.TAB |
| IN C.TAB |
| C.TAB |
| C.TAB |
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| , LIMIO |
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| CI |
| R |
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| B F TAB UNIQ |
| B F TAB UNIQ |
| B F TAB UNIQ |
| |

| Format | Content | Examples |
|-----------------------------|--|----------------|
| JT (2) | Journal Title, Abbreviated | D JT |
| JTA (2) | Journal Title | D JT |
| JTF (2,5,7) | Journal Title, Full | D JTF 1-3 |
| LA | Language | D LA |
| LSUS (2) | Legal status information for U.S. patents | D LSUS |
| NCL | National Patent Classification, Current | D PI IC NCL |
| OREF (5) | Original Reference Number | D OREF |
| os | Other Source | D TI OS |
| OS.G (OS.CITING.AN) | Citing Reference Accession Numbers | D OS.G |
| OSC.Ġ (CITING.CNT) | Citing Reference Count | D OSC.G |
| PA | Patent Assignee | D PA |
| РВ | Publisher | D PB |
| PI (1) | Patent Information Table | D TI PI |
| PI.B (PN.B) (1,2) | Patent Information, Basic | D PI.B |
| PN | Patent Number | D PN |
| PNC (PN.CNT) (2) | Patent Number Count | D PNC |
| PNK | Patent Number/Kind Code | D PNK |
| PNK.B | Patent Number/Kind Code of the Basic Patent | D PNK.B |
| PRAI (PRN) (1) | Priority Application Information | D PRAI |
| PRAI.B (PRN.B) (1,2) | Priority Application Information Priority Application Information, Basic | D PRAI.B |
| PSPI | Priority Application Information, Basic Patent Status Patent Information Table | D PSPI |
| PSPI.B | Patent Status Information, Basic | D PSPI.B |
| | Publisher Item Identifier | D PUI |
| PUI (2) | | D TI PY |
| PY (2) | Publication Year | |
| 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 |
| DE ONT (DEO) (5) | 07. 10. (| RETABLE |
| RE.CNT (REC) (5) | Cited References Count | D REC |
| RL (4) | 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 | Patent Status Established Year | D STEY, D PSPI |
| STI | Patent Status Indicator | 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 |
| ABS | GI, AB | D ABS |
| ALL (1,4) | AN, OREF, ED, TI, AU, IN, CS, PA, UO, UOS, SO, DOI, PB, DT, LA, | D 1-30 ALL |
| | CLMN, CC, FAN.CNT, PI, PRAI, CLASS, OS, GI, AB, ST, IT, RL, | |
| | OSC.G, UPOS.G, 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, UO, UOS, SO, DOI, PB, DT, LA, | D 1 3 |
| | FAN.CNT, PI, 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 |
| OLAGO | associated with basic patent and family members | DOLAGO |
| CDC | | D CBC |
| CPC | 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 | |

| Format | Content | Examples |
|-------------------|---|--------------------------|
| 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) | ALL, indented with text labels | D IALL |
| IBIB | BIB, indented with text labels | 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, IT, RL | D TI IND |
| IPC | International Patent Classifications for the basic patent and patent family members | D L2 1 IPC |
| IPC.B | IPC of the Basic Patent | D IPC.B |
| IPC.TAB | IPC, Tabular Display | D IPC.TAB |
| IPC.UNIQ | IPC codes unique for a basic patent and equivalents | 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, SO, DOI, PB, PI, PRAI, DT, LA, OS) | D OBIB |
| 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 | OS.G (up to 1020 accession numbers) | D OS.GMAX |
| 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) | BIB, without RE.CNT | D SIBIB |
| CPC.HIT (HITCPC) | HIT display of CPC code searched | D CPC.HIT or D |
| FHITSEQ | First hit CAS Registry Number, its role, text modification, its CA index name, and the sequence diagram | 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 | Fields containing hit terms | D HIT 1-5 |
| HITIND | NCL, CC, ST, IT, and RL containing hit terms | D HITIND |
| HITRN | Hit CAS Registry Number, its role, and text modification | D HITRN |
| HITSEQ | Hit CAS Registry Number, its role, text modification, its CA index name, | D HITSTR KWIC |
| HITSTR | and its sequence diagram Hit CAS Registry Number, its role, text modification, its CA index name, and its structure diagram | D HITSTR KWIC |
| IPC.HIT (HITIPC) | Hit IPC | D IPC.HIT or D HITIPC |
| KWIC | Hit terms plus 20 words on either side (Key-Word-In-Context) | 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.
- SX displays all information in the CC field, i.e., CA section and section cross-references.
- (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).

| opeomea noia(e). | | | |
|---|---------------------|------------------------|---------------------------------------|
| Field Name | Field Code | ANALYZE/ SELECT (1) | SORT |
| Abstract | AB | Υ | N |
| Accession Number | AN | Y (2) | N |
| Author | AU | Y | Y |
| CA Classification Code (section and subsection) | CC | Y | Ϋ́ |
| CA Classification Code Section and Subsection) CA Classification Code Section Descriptor | CCN (SCN) | Ý | Ϋ́ |
| CA Section Cross-Reference | SX | Y | Ϋ́ |
| | RN | | |
| CAS Registry Number Citation | CIT | Y (2) | N N |
| | RE | Y (3,4) | |
| Cited References | | · · | N |
| Cited Reference(n) | RE(n) | Y (5) | N |
| Cited Reference Accession Number in CA | RAN.CA | Y (6) | N |
| Cited Reference Accession Number(n) in CA | RAN.CA(n) | Y (5,6) | N |
| Cited Reference Accession Number in MEDLINE | RAN.MED | Y (7) | N |
| Cited Reference Accession Number(n) in MEDLINE | RAN.MED(n) | Y (5,7) | N |
| Cited Reference Author Name | RAU | Υ | N |
| | RIN | Y (8) | N |
| Cited Reference Count | RE.CNT (REC) | Υ | Υ |
| Cited Reference Page Number (first) | RPG | Υ | N |
| Cited Reference Patent Number | RPN | Υ | N |
| Cited Reference Publication Year | RPY | Υ | N |
| Cited Reference Volume Number | RVL | Υ | N |
| Cited Reference Work Title | RWK | Υ | N |
| Citing Reference Accession Numbers (up to 50) | OS.G (OS.CITING.AN) | Υ | N |
| Citing Reference OS.G Information (up to 1020 accession numbers) | OS.GMAX | Υ | N |
| Citing Reference Information (OSC.G, UPOS.G, OS.G)(up to 1020 accession numbers) | OSG.MAX | Υ | N |
| Citing Reference Count | OSC.G (CITING.CNT) | Υ | Υ |
| Citing Reference Date | UPOS.G (CITING.UP) | Y | Ϋ́ |
| Claim Text | CLM | Ý | Ň |
| CODEN | CODEN | Y (9) | Y |
| Company Name | CO | Y | Ϋ́ |
| Controlled Term | CT | Ý | Ϋ́ |
| CPC Classification | CPC | Ý | Ň |
| CPC, Initial | CPCI | Y | N N |
| CPC, Initial CPC, Reclassified | CPCR | Y | N N |
| | | N | Y |
| CPC Hit Display | CPC.HIT (HITCPC) | | = = = = = = = = = = = = = = = = = = = |
| 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 | Υ | Y |

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

| SELECT, ANALTZE, and SURT | ricius (cont u) | | |
|---|----------------------|------------------------|------|
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| Designated States | DS | Υ | N |
| Designated States, Basic | DS.B | Y (4,10) | N |
| Digital Object Identifier | DOI (FTDOI) | N | Y |
| Document Type | DT (TC) | Υ | Y |
| Entry Date | ED | Υ | Y |
| European Classifications | ECLA (EPC, EPCLA) | Υ | N |
| Exemplary Claim Text | ECLM | T (4,11) | N |
| Family Accession Number | FAN | Y (4,11) | N |
| File Forming Terms | FTERM (FTCLA, JPCLA) | Υ | N |
| File Segment | FS | Y (4) | Y |
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| ICO Classification | ICO | Υ | N |
| Index Term | IT | Υ | N |
| International Standard Book Number | ISBN | Y (12) | Y |
| International Standard (Document) Number | ISN | Y (12) | N |
| International Standard Serial Number | ISSN | Y (12) | Y |
| Inventor Name | IN | Υ | Y |
| IPC | IPC | Y (13) | N |
| IPC Initial Classification | IPCI | Υ | N |
| IPC Reclassification | IPCR | Υ | N |
| IPC, Additional or Supplementary | ICA | Υ | Υ |
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| IPC, First | IPC.F | Y (13) | N |
| IPC, Index or Complementary | ICI | Υ | Y |
| IPC, Main | ICM | Υ | Y |
| IPC, Main and Secondary | IC | Υ | Y |
| IPC, Secondary | ICS | Υ | Y |
| Issued National Classification | INCL | Υ | Y |
| Journal Title | JT | Υ | Y |
| Journal Title, Abbreviated | JTA | Y (13) | Y |
| Journal Title, Full | JTF | Y (14) | Y |
| Language | LA | Υ | Y |
| National Patent Classification, Current | NCL | Υ | N |
| Occurrence of Hit Terms | OCC | N | Y |
| Original Reference Number | OREF | Y (4,11) | Y |
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| Patent Application Country | AC | Y (4) | Υ |
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| Patent Application Date, Basic | AD.B | Y (16) | Y |
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| Patent Application Number, Basic | AP.B | Y (17,18) | Y |
| 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 (22) | Y |
| Patent Application Year, Basic | AY.B | Y (20) | Y |
| Patent Assignee | PA | Υ (4.04) | Y |
| Patent Countries | PCS | Y (4,21) | N |
| Patent Countries, Basic | PCS.B | Y (4,21) | N |
| Patent Country | PC | Y (4) | Y |
| Patent Country, Basic | PC.B | Y (4,22) | Y |
| 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) | Y |
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| Patent Kind Code, Basic | PK.B | Y (4,25) | Y |
| Patent Number | PN | Y (4,18) | Y |
| | PATS | Y (4,18,26) | N |

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

| | 1 10100 (00111 0.) | | |
|---|--------------------|------------------------|------|
| Field Name | Field Code | ANALYZE/ SELECT (1) | SORT |
| Patent Number, Basic | PN.B | Y (18,24) | Y |
| | 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 | Y | Υ |
| Priority Application Country | PRC | Y (4) | Υ |
| Priority Application Country, Basic | PRC.B | Y (4,30) | Υ |
| Priority Application Date | PRD | Y (4) | Υ |
| Priority Application Date, Basic | PRD.B | Y (31) | Υ |
| Priority Application Information | PRAI | Y (4,18,32) | Υ |
| Priority Application Information, Basic | PRAI.B | Y (18,32) | Υ |
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| 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 | N |
| Publisher Item Identifier | PUI | Y | N |
| Role | RL | Y (4) | N |
| Source of Document | SO | Y (36) | N |
| Supplementary Term | ST | Y | N |
| Title | TI | Y (default) | Υ |
| Treatment Code | TC | Y (37) | Υ |
| Ultimate Owner | UO | Y (38) | Υ |
| Ultimate Owner Standardized | UOS | Y (39) | Υ |
| Uniform Resource Locator | URL | Υ ΄΄ | N |
| Volume Number | VL | Υ | Υ |

- (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.
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- (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.
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- (24) Appends /PN to the terms created by SELECT.
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- (27) Appends /PN to the terms created by SELECT.
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- (29) Appends /PN.CNT to the terms created by SELECT.

Continued on next page

- (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.

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 (34) Appends /PD to the terms created by SELECT.
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 (37) Appends /DT to the terms created by SELECT.
 (38) Appends /UOS to the terms created by SELECT.
 (39) Appends /UOS to the terms created by SELECT.

- (39) Appends /UOS to the terms created by SELECT.

Sample Records

DISPLAY ALL (Patent)

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ANSWER 1 OF 265280 CA COPYRIGHT 2020 ACS on STN
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    173:950723 CA
AN
    Entered STN: 03 Dec 2020
ED
ΤТ
    Radio wave absorber
TN
    Hashimoto, Hirokazu
    Fujifilm Corporation, Japan
   FUJIFILM HOLDINGS CORP.
UO
UOS Fujifilm
SO PCT Int. Appl., 55pp.
    CODEN: PIXXD2
DT
   Patent
T.A
   Japanese
CLMN 9
    76-14 (Electric Phenomena)
    Section cross-reference(s): 49, 77
FAN.CNT 1
                                                               DATE
                                        APPLICATION NO.
    PATENT NO.
                      KIND DATE
                                         _____
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    WO 2020230709
                        A1
                             20201119
                                         WO 2020-JP18622
                                                                20200508
PRAI JP 2019-91327
                        A
                             20190514
PSPI
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    PATENT NO.
                                            STATUS DATE
    _____
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                             _____
                                             _____
    WO 2020230709
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                             Alive
                                             20201202
CLASS
PATENT NO.
              CLASS PATENT FAMILY CLASSIFICATION CODES
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 WO 2020230709 IPCI H05K0009-00 [I]; C01G0049-00 [I]; C08K0003-22 [I];
                      C08L0101-00 [I]; H01F0001-34 [I]; H01F0001-37 [I];
                      H01Q0017-00 [I]
                      H05K0009-00 [I]; C01G0049-00 [I]; C08K0003-22 [I];
                IPCR
                       C08L0101-00 [I]; H01F0001-34 [I]; H01F0001-37 [I];
                       H01Q0017-00 [I]
    Provided is a radio wave absorber contq. 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
IT
    Binders
    Magnetic powders
    Radio wave
       (manufg. of radio wave absorber)
ΤТ
    Polyolefin rubber
    RL: PEP (Physical, engineering or chemical process); TEM (Technical or
    engineered material use); PROC (Process); USES (Uses)
       (manufg. of radio wave absorber)
ΤТ
    Ferrites
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
    (Uses)
       (manufg. of radio wave absorber)
• • •
IT
    7782-61-8, Ferric nitrate nonahydrate 7784-13-6, Aluminum chloride
    hexahydrate 10025-70-4, Strontium chloride hexahydrate
                                                            10025-77-1,
    Ferric chloride hexahydrate 10026-22-9, Cobalt nitrate hexahydrate
    13494-90-1, Gallium nitrate 13693-11-3, Titanium sulfate
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (manufg. of radio wave absorber)
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DISPLAY BIB LSUS (Patent)

RAUP: RAK:

RAC:

RAA:

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L1
    ANSWER 1 OF 1 CA COPYRIGHT 2013 ACS on STN
AN
    149:264451 CA Full-text
ΤI
    MicroRNA expression abnormalities in pancreatic endocrine and acinar
    tumors
    Croce, Carlo M.; Calin, George A.
TN
PA
    The Ohio State University Research Foundation, USA
    PCT Int. Appl., 133 pp.
    CODEN: PIXXD2
DT
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    English
LA
FAN.CNT 1
                                                               DATE
    PATENT NO.
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                                        APPLICATION NO.
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                  A2 20070719
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                                                                20070103
    WO 2007081680
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            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,
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    AU 2007205257
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EP 2007-716208
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                                                                20080818
    US 20100197774
                       A1 20100805
                                        US 2010-700286
                                                               20100204
PRAI US 2006-756502P
                       P
                             20060105
    WO 2007-US24 W 20070103
US 2008-160064 A3 20080703
                             20070103
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
ASSIGNMENT HISTORY FOR US 20080306018
LSUS RAD:
             20080703
     RAUP:
             20081211
             ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).
     RAK:
             CROCE, CARLO M. (DATE EXECUTED: 20080627)
     PAO:
             CALIN, GEORGE A. (DATE EXECUTED: 20080616)
             THE OHIO STATE UNIVERSITY, 1960 KENNY ROAD, COLUMBUS, OHIO 43210,
     RAC:
             UNITED STATES
             MACMILLAN SOBANSKI & TODD, LLC, ONE MARITIME PLAZA FIFTH FLOOR,
             720 WATER STREET, TOLEDO, OH 43604-1619
     MRN:
             21195
                     MFN: 793 (5 Page(s))
             20090330
LSUS RAD:
             20090330
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ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, 1216 KINNEAR ROAD,

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

THE OHIO STATE UNIVERSITY (DATE EXECUTED: 20090327)

COLUMBUS, OHIO 43212, UNITED STATES

PLAZA, FIFTH FLOOR, TOLEDO, OH 43604

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

LSUS RAD: 20080703 RAUP: 20100302

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

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

LSUS RAD: 20090330 RAUP: 20100302

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

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

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

COLUMBUS, OHIO 43212, UNITED STATES

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

PLAZA, FIFTH FLOOR, TOLEDO, OH 43604

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

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

DISPLAY OSG

L1 ANSWER 1 OF 1 CA COPYRIGHT 2013 ACS on STN

OSC.G 10 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

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L1 ANSWER 1 OF 1 CA COPYRIGHT 2013 ACS on STN

PI WO 2007081680

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PI AU 2007205257

| IPCI CODE | VERSION | POS | INV | CC | ASSIGNMENT | DATE | STAT |
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| C12Q0001-58 | (200601) | L | I | US | Human | 20080129 | 0 |

• • •

DISPLAY ALL (PRE-1907 JOURNAL RECORD)

```
ANSWER 1 OF 1 CA COPYRIGHT 2013 ACS on STN
Ь1
     0:419 CA Full-text
AN
    Entered STN: 07 Dec 2003
ED
TI
     CIII. - A new synthesis of phloroglucinol
     Jerdan, David Smiles
AU
    Heidelberg University Chemical Laboratory, Heidelberg, Germany
CS
    Journal of the Chemical Society, Transactions (1897), 71, 1106-1114
SO
    CODEN: JCHTA3; ISSN: 0368-1645
DOI 10.1039/ct8977101106
DТ
    Journal
LΑ
    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.
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.
    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
     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
     497-19-8, Sodium carbonate 513-77-9, Barium carbonate
                                                               7440-23-5,
     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
     hydroxide 129874-08-4, Terpene
        (new synthesis of phloroglucinol)
```

EXPAND in the CA Section Thesaurus (/CC)

=> E CERAMICS+ALL/CC

| E1 | 506928 | > | CERAI | MICS/CC | | |
|-------|---------|-------|-------|-----------|-----------|-----------|
| E2 | 1860 | USE | 17 | CERAMICS, | 1962 ONLY | /CC |
| E3 | 9758 | USE | 21 | CERAMICS, | 1963-1966 | /CC |
| E4 | 490140 | USE | 57 | CERAMICS, | 1967 TO P | RESENT/CC |
| ***** | *** END | ***** | *** | | | |
| | | | | | | |

=> E E4+ALL

| 5 5- | · · ALL | | |
|-------|---------|----------|---|
| E5 | 7573149 | BT1 APPL | JED/CC |
| E6 | 490140 | | CERAMICS, 1967 TO PRESENT/CC |
| 20 | 150110 | | 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 57. STODIES 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 | | 17 CERAMICS, 1962 ONLY/CC |
| E8 | 496 | | 19 GLASS AND CERAMICS, 1908-1909/CC |
| E9 | 4422 | | 19 GLASS AND CERAMICS, 1911-1920/CC |
| E10 | 1044 | | 19 GLASS AND POTTERY, 1906-1907/CC |
| E11 | 46601 | | 19 GLASS, CLAY PRODUCTS, REFRACTORIES, AND ENAMELED |
| | | | METALS, 1921-1961/CC |
| E12 | 252 | OLD | 20 GLASS AND CERAMICS, 1910 ONLY/CC |
| E13 | 9758 | OLD | 21 CERAMICS, 1963-1966/CC |
| E14 | 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 |
| E16 | 0 | NT1 | 57-2 CERAMICS, 1972-1981, CLAYS AND CLAY PRODUCTS/CC |
| E17 | 0 | NT1 | 57-2 CERAMICS, 1982 TO PRESENT, CERAMICS/CC |
| E18 | 0 | | 57-3 CERAMICS, 1972-1981, GLAZES/CC |
| E19 | 0 | | 57-3 CERAMICS, 1982 TO PRESENT, PORCELAIN/CC |
| E20 | 0 | NT1 | 57-4 CERAMICS, 1972-1981, WHITEWARE/CC |
| E21 | 0 | NT1 | 57-4 CERAMICS, 1982 TO PRESENT, GLAZES AND GLASSY |
| | | | COATINGS/CC |
| E22 | 0 | | 57-5 CERAMICS, 1972-1981, REFRACTORIES/CC |
| E23 | 0 | | 57-5 CERAMICS, 1982 TO PRESENT, CLAYS AND CLAY |
| | | | PRODUCTS/CC |
| E24 | 0 | | 57-6 CERAMICS, 1972-1981, ABRASIVES/CC |
| E25 | 0 | | 57-6 CERAMICS, 1982 TO PRESENT, REFRACTORIES/CC |
| E26 | 0 | | 57-7 CERAMICS, 1972-1981, OTHER/CC |
| E27 | 0 | | 57-7 CERAMICS, 1982 TO PRESENT, ABRASIVES/CC |
| E28 | 0 | | 57-8 CERAMICS, 1982 TO PRESENT, CARBON PRODUCTS/CC |
| E29 | 0 | | 57-9 CERAMICS, 1982 TO PRESENT, OTHER/CC |
| ***** | *** END | ***** | |

EXPAND in /CT Thesaurus for the CA Lexicon

=> E SUNFLOWER+ALL/CT

```
7005
              --> Sunflower/CT
                 HNTE Valid heading during volumes 1-135 (1907-2001) only.
         8213
                 NEW Helianthus annuus/CT
****** END ******
=> E AZO DYES+ALL/CT
        18639 BT3 Chemical compounds/CT
E2
        75233 BT2 Organic compounds/CT
E3
        10402
                   BT1 Azo compounds/CT
F:4
        42595 BT3 Materials/CT
               BT2 Coloring materials/CT
E5
        41181
Е6
       169970
                  BT1 Dyes/CT
E7
       16529
                     --> Azo dyes/CT
                       HNTE Valid heading during volume 126 (1997) to
                            present.
E8
                       OLD Dyes (L) azo/CT
E.9
       12082
                       OLD Dyes, azo/CT
                       UF Azo dye/CT
E10
                       UF Azodye/CT
E11
E12
            0
                       NT1 4-(Dimethylamino)azobenzene/CT
                       NT1 4-Amino-4'-nitroazobenzene/CT
E13
                      NT1 4-Aminoazobenzene/CT
          303
                       NT1 Acid azo dyes/CT
E15
E16
            Ω
                        NT2 Acid Red 1/CT
            0
                        NT2 Acid Red 14/CT
E17
E18
                         NT2 Acid Red 88/CT
            Ω
            0
                         NT2 Acid Yellow 36/CT
E19
E20
            0
                         NT2 Amaranth (dye)/CT
                         NT2 Eriochrome Black T/CT
NT2 Methyl orange/CT
E21
            0
E22
            0
                         NT2 Methyl red/CT
E23
           0
                        NT2 New Coccine/CT
           0
E24
                        NT2 Orange G/CT
E25
           0
           0
                        NT2 Sunset Yellow/CT
E26
E27
           0
                        NT2 Tartrazine/CT
E28
           0
                        NT2 Trypan blue/CT
           0
                     NT1 Allura Red 40/CT
E29
E30
          14
                     NT1 Azo dye intermediates/CT
          17
                      NT1 Basic azo dyes/CT
E31
          0
E32
                      NT1 Carmine 6B/CT
          131
E33
                       NT1 Cationic azo dyes/CT
                       NT1 Direct azo dyes/CT
E34
          144
E35
          0
                       NT2 Congo red/CT
                         NT2 Trypan blue/CT
E36
           0
E37
          925
                       NT1 Disperse azo dyes/CT
                        NT2 Disperse Blue 165/CT
E38
           0
                         NT2 Disperse Blue 291/CT
            0
E39
                        NT2 Disperse Blue 79/CT
E40
           Ω
                        NT2 Disperse Red 1/CT
E41
           0
E42
           0
                        NT2 Disperse Violet CW/CT
E43
           0
                      NT1 Pigment Orange 36/CT
E44
           0
                       NT1 Pigment Yellow 12/CT
E45
           0
                       NT1 Pigment Yellow 128/CT
           0
                       NT1 Pigment Yellow 180/CT
E46
                       NT1 Pigment Yellow 74/CT
           0
E47
E48
         1519
                       NT1 Reactive azo dyes/CT
E49
           0
                        NT2 4-(2-Sulfatoethylsulfonyl)aniline/CT
           43
E50
                         NT2 Tetrazolium dyes/CT
E51
            0
                          NT3 Nitro Blue Tetrazolium/CT
E52
            0
                       NT1 Solvent Red 24/CT
Continued on next page
```

```
0
E53
                      NT1 Sudan Black B/CT
                       NT1 Sudan I/CT
NT1 Sudan II/CT
E54
           0
E55
            0
E56
          427
                        RT Formazans/CT
         1313
                             Stains, coloring materials/CT
E57
                        RT
E58
                        RTCS 2,5-Dimethoxyaniline/CT
E59
                        RTCS 4-Phenylazophenol/CT
******* END ******
```

EXPAND in /RL Thesaurus

```
=> E PREP+ALL/RL
      5299444
               --> PREP/RL
E.2
      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.
       85501 NT1 BMF/RL
190130 NT1 BPN/RL
E3
E4
                NT1 BYP/RL
E5
       64754
                NT1 CPN/RL
E6
        2933
       713210
E7
                NT1 IMF/RL
       173903
                NT1 PNU/RL
       375278
                NT1 PUR/RL
E10
      2529014
                 NT1 SPN/RL
****** END ******
```

EXPAND in the Company Name (/CO) Thesaurus Search Aid

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

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=> E E1+ALL
E3
                 CNUM CAS1000235/CO
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
                        Company
```

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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
                   RT1 ADVANCE SOLVENTS CHEMICAL CORP/CO
E6
            32
                   RT1 AGRIGENET ADV SCI CO/CO
E7
            33
                   RT1 AGRIGENET CORP/CO
E.8
           66
                  RT1 AGRIGENETICS INC/CO
           14
                   RT1 AGRIGENETICS RESEARCH ASSOCIATES LTD/CO
E9
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
                   RT1 ANGUS CHEMIE GMBH/CO
E15
           13
                  RT1 AWD TECHNOLOGIES INC/CO
            8
E16
                  RT1 BENFIELD CORP/CO
E17
            13
            2
                  RT1 BORIDE PRODUCTS INC/CO
E18
E19
           65
                  RT1 BUNA SOW LEUNA OLEFINVERBUND G M B H/CO
E20
           52
                  RT1 BUNA SOW LEUNA OLEFINVERBUND GMBH/CO
           68 RT1 BUSHY RUN RES CENT/CO
11 RT1 CARBIDE AND CARBON CHEM CO/CO
E21
E22
• • •
            1 RT1 UNION CARBIDE SERVICES K K/CO
1 RT1 UNION CARBIDE SOUTH AFRICA PT
E323
E324
                  RT1 UNION CARBIDE SOUTH AFRICA PTY LTD/CO
E325
            1
                  RT1 UNION CARBIDE STELLITE CO/CO
E326
            12
                   RT1
                       UNION CARBIDE TECH CENT/CO
                   RT1
E327
             9
                       UNION CARBIDE TECHNICAL CENTER/CO
                       UNION CARBIDE THAILAND LTD/CO
E328
             1
                  RT1
                  RT1 UNION CARBIDE U K LTD/CO
E329
            6
                 RT1 UNION CARBIDE UK LTD/CO
E330
            6
                 RT1 WESTERN CARBIDE CORP/CO
            2
E331
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
                   RT1 ZHEJIANG OMEX ENVIRONMENTAL ENGINEERING CO LTD/CO
E338
            11
                  RT1 ZHEJIANG OMEX ENVIRONMENTAL ENGINEERING LIMITED/CO
RT1 ZHEJIANG OMEX ENVIRONMENTAL ENGINEERING LTD/CO
E339
            4
           13
****** 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 E9 | 3 1 | 2 | A23G0001-08/IPC A23G0001-09/IPC |
| E10 | 52 | 2 | A23G0001-09/1FC 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: |
| | | | (1) Attention is drawn to the following places:Polysaccharides, derivatives thereof |
| | | | - Animal or vegetable oils, fats, fatty substances or |
| | | | waxes |
| | | | - Biochemistry, beer, spirits, wine, vinegar |
| E17 | 13332 | BT1 | A23G/IPC |
| | | | COCOA; COCOA PRODUCTS, e.g. CHOCOLATE; SUBSTITUTES FOR |
| | | | COCOA OR COCOA PRODUCTS; CONFECTIONERY; CHEWING GUM; |
| | | | ICE-CREAM; PREPARATION THEREOF Note |
| | | | (1) In this subclass, the following term is used with |
| | | | the meaning indicated: |
| | | | - "ice-cream" includes any edible frozen or congealed |
| | | | semi-liquid or pasty substance, e.g. slush-ice. |
| | | | (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. |
| E18 | 2261 | > | A23G0001-00/IPC |
| што | 2201 | | Cocoa; Cocoa products, e.g. chocolate; Substitutes |
| | | | therefor (kitchen equipment for cocoa preparation A47J, |
| | | | e.g. apparatus for making beverages A47J0031-00) |
| | | | CORE |
| | | | VALID FROM 19680901 TO PRESENT (IPC EDITION: 1-8) |
| E19 | 178 | NT1 | A23G0001-02/IPC |
| | | | . Preliminary treatment, e.g. fermentation of cocoa (machines for roasting cocoa A23N0012-00) |
| | | | ADVANCED |
| | | | VALID FROM 19680901 TO PRESENT (IPC EDITION: 1-8) |
| E20 | 190 | NT1 | 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 VALID FROM 19680901 TO PRESENT (IPC EDITION: 1-8) |
| E21 | 21 | NT2 | VALID FROM 19680901 TO PRESENT (IPC EDITION: 1-8) A23G0001-06/IPC |
| _ | | _ | • |
| | | | |

| | | | Apparatus for preparing or treating cocoa beans or nibs ADVANCED VALID FROM 19680901 TO PRESENT (IPC EDITION: 1-8) |
|--------|---------|-------|--|
| E46 | 173 | NT3 | A23G0001-54/IPC |
| | | | Composite products, e.g. layered, coated, filled ${\tt ADVANCED}$ |
| | | | VALID FROM 20060101 TO PRESENT (IPC EDITION: 8) |
| E47 | 509 | NT2 | A23G0001-56/IPC |
| | | | 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 * | ***** | *** |

In North America

CAS Customer Center P.O. Box 3012 Columbus, Ohio 43210-0012 U.S.A.

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Email: help@cas.org
Internet: www.cas.org

In EMEA

CAS Customer Center EMEA (represented by FIZ Karlsruhe) P.O. Box 2465 76012 Karlsruhe Germany

Phone: +49-7247-808-555 E-mail: EMEAhelp@cas.org Internet: www.fiz-karlsruhe.de

In Japan

JAICI (Japan Association for International Chemical Information) Nakai Building 6-25-4 Honkomagome, Bunkyo-ku Tokyo 113-0021 Japán

Phone: +81-3-5978-3601 (Technical Service) +81-3-5978-3621 (Customer Service) Email: support@jaici.or.jp (Technical Service) customer@jaici.or.jp (Customer Service)

www.jaici.or.jp