STN® LIBRARY AND INFORMATION SCIENCE TRAINING MANUAL

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SECTION 1:
INTRODUCTION TO STN

INTRODUCTION TO STN

STN International[SM] (Scientific & Technical Information Network) is operated jointly by CAS and FIZ Karlsruhe worldwide and is represented in Japan by JAICI.

STN provides users access to a variety of worldwide databases that cover a broad range of information related to many scientific and technical fields including:

- Agricultural Science
- Biotechnology
- Chemistry
- Engineering
- Health and Safety
- Government Regulations
- Materials Science
- Medicine
- Patents
- Pharmaceuticals
- Science and Technical Business

ABOUT CAS

Chemical Abstracts Service (CAS), a division of the American Chemical Society, is located in Columbus, Ohio.

- CAS has the world's largest and most comprehensive collection of chemical and scientific information
- CAS indexes and summarizes articles from more than 10,000 scientific journals, as well as patents, conference proceedings, and other reputable chemical sources
- Abstracts for more than 38 million documents are accessible online through CAS databases
- The CAS REGISTRY[SM] database is the world's largest, most authoritative collection of disclosed chemical substance information
- REGISTRY contains records for more than 85 million organic and inorganic substances and more than 65 million protein and nucleotide sequences (4/14)
- CAS Registry Numbers® are used by many organizations around the world to identify substances without the ambiguity of chemical nomenclature

ABOUT FIZ KARLSRUHE

FIZ Karlsruhe, located in Karlsruhe, Germany, is a member of the Leibniz Association (WGL), an association of non-academic scientific research and service institutions.

- FIZ Karlsruhe is an expert in information transfer and knowledge management required for research and development
- FIZ Karlsruhe supports and promotes science by offering innovative information services, with business segments to complement each other with respect to the information offered and usage possibilities:

Online service STN International

Databases and information services

Full-text supply

Development of E-Science solutions

- FIZ Karlsruhe has information products and services targeted at researchers, information professionals and patent attorneys

ABOUT JAICI

JAICI (Japan Association for International Chemical Information), located in Tokyo, Japan, is an organization dedicated for chemical information by chemistry-oriented academic societies and chemical industries.

- JAICI includes 27 regular members (academic societies), about 100 sustaining and supporting members (chemical industries), and a large number of subscription members
- JAICI was approved as Shadan Hojin (not-for-profit, incorporated body) by the Japanese Government in July 1975, under supervision of the Ministry of Education, Science, Sports and Culture and the Science and Technology Agency (These two Government offices later merged into the Ministry of Education, Culture, Sports, and Technology in 2001)
- JAICI provides CAS with abstracts and index entries from Japanese patent documents and journal articles for inclusion into the CAS databases
- JAICI is the sole marketing agent of CAS in Japan since 1980, and began supporting the users of CAS ONLINE, which later developed into STN International in 1984
- JAICI continues to market STN and its databases, prepare technical support documents, give workshops, receive help desk calls, etc.

WHAT MAKES STN UNIQUE?

STN provides the world's largest collection of scientific and technical information for the research community. The synergy between STN databases provides information professionals, scientists, engineers, and anyone who needs technical information with worldwide coverage of current and comprehensive journals and patents, as well as authoritative collections of substance information, chemical reactions, life science information, and chemical structure searching.

STN, and the tools and interfaces that support it, are developed primarily by scientists. The system is designed to handle the unique attributes of scientific and technical data sources and provides tools that work very effectively with this type of data, providing ease of use and high quality output. Some of these unique functionalities include:

- A continuous search history across databases. Answer set numbers are not overwritten when moving between databases, which provides flexibility in cross-file and simultaneous multifile searching
- CAplus, REGISTRY, and Derwent World Patent Index® (DWPI) databases are all in one system, with multifile search capability
- Multiple truncation symbols that maximize search term utility
- Option to automatically search for plurals and abbreviations. Standard abbreviations are propagated through the CA℠ and Derwent family of databases
- Phrases are automatically searched with implied proximity ((W) operator). The search term "ice cream" automatically searches ice (W) cream on STN
- Robust search tools to access chemical substance information particularly in the area of chemical structure searching
- Post-processing table and report tools that accommodate patent graphics, substance information, numerical data, and other key data fields, providing an attractive and functional way for clients to view various types of technical information

STN SEARCH INTERFACES

The complete content of STN can be accessed through two interfaces:

- STN Express® software
- STN® on the Web℠

STN Express

STN Express provides a fully integrated software package with the power and flexibility of STN:

- Secure searching via SSL VPN and data encryption
- Post-processing tools:

Create reports and tables from search results with ease

Customize report output and highlighting

Use accounting features to track costs

- Links to full-text resources
- *Discover!* Wizards

Assist those not familiar with STN command language in searching

Maximize value of STN tools such as thesauri and analysis tools

Setup and edit alerts quickly

Allow users to save STN results for use in other related applications such as STN® AnaVist™ and SciFinder®

STN on the Web

STN on the Web combines the STN command functionality with Web browser technology:

- All the power and content of STN available on the Web
- Solution for situations where loading of software is not desirable
- Use search commands or search assistants
- Can be accessed anywhere the Web is available
- Secure session feature (https)
- Integrated text and images
- Full-text solution
- Graphic chemical structure searching
- Context sensitive help

Note

It is assumed that STN on the Web will be the search platform that students in the STN Library and Information Science (LIS) Training Program will be using because of its web browser interface. Upon request, LIS students may be given the ability to download the STN Express software using their STN Login ID and password from: http://www.cas.org/products/stn/whatsnew

SECTION 2:
KEY DATABASES OVERVIEW

KEY DATABASES OVERVIEW

STN provides access to a variety of worldwide databases with content spanning the realm of science and technology. There are many types of databases on STN:

- Bibliographic (CAplus, EMBASE, PIRA)
- Full text (EPFULL, USPATFULL)
- Chemical structure/reaction (REGISTRY, DRUGU, CASREACT®)
- Numeric property (REAXYSFILE™)
- Directory (STNGUIDE℠)

Some databases on STN have a very narrow scope. For example, the WELDASEARCH database covers worldwide literature on every aspects of welding and contains more than 217,000 records.

Other databases on STN have a very broad scope. For example, the CAplus database has more than 38 million records that cover science and technology (as of 4/14).

In order to achieve the best possible search results on STN, one of the most critical steps is selecting the appropriate database(s). Many sources are available to help users learn about and choose appropriate databases:

- STN Database Summary Sheets (DBSS)
- STNGUIDE database on STN (online searchable summary sheets)
- INDEX command on STN

Databases on STN are organized into clusters. Some clusters contain databases covering the same subject area. For example, the ENGINEERING cluster on STN contains all the databases with content relevant to engineering. Other clusters contain databases that share a similar feature; for instance, the FULLTEXT cluster includes all the databases that contain full text documents.

Cluster names can be used in place of database names to enter all the databases in the cluster simultaneously for searching. A listing of all the clusters and the databases they contain can be found in:

- HELP in STN
- CAS website: http://www.cas.org/products/stn/dbss

Finding the desired databases in STN is easy to do, as the right tools are readily available.

DATABASES AVAILABLE FOR STN LIS TRAINING PROGRAM

A select group of databases are available to participants in the STN Library and Information Science (LIS) Training Program for hands-on practice. Login IDs and passwords will be provided by your instructor. This workbook includes examples that demonstrate the use of some of the databases' search capabilities.

Databases beginning with an "L" are learning versions – these are static (not updated)
versions of databases that give access to a small percentage of records available in the full database.

You will be introduced to several key databases that are used extensively in the later search examples: CAplus, Derwent World Patents Index, and REGISTRY. Detailed information on other databases included can be found in the STN Database Summary Sheets.

Web Resource

Check the STN LIS Training Program website for the databases that are currently available: http://www.cas.org/training/stn/stnlis

CAPLUS

The Chemical Abstracts Plus (CAplus) database provides worldwide coverage of a wide range of scientific and technical disciplines.

CAplus contains scientific literature from 1907 to present, with particular emphasis on all areas that touch chemistry. CAS has an ongoing project to selectively add content for patents and journal articles dating prior to 1907. CAplus contains bibliographic information, abstracts, and subject and substance indexing for documents from:

- More than 10,000 journals from more than 185 countries in more than 50 different languages
- Cover-to-cover coverage for more than 1,500 core journals
- 63 patent-issuing authorities around the world
- Other sources such as conference proceedings, books, dissertations, etc.

One key aspect of CAplus is its currency, or the time between when a document is published and when it appears in a database. CAplus is updated with nearly 3,000 records daily and provides:

- Patents from the following core patent-issuing authorities or countries, within 2 days of patent's issuance (bibliographic information and abstract) and are fully indexed in less than 27 days from date of issue:
    - United States
    - Great Britain
    - Japan
    - Germany
    - France
    - Russia
    - Canada
    - EPO (European Patent Office)
    - WIPO (World Intellectual Property Office)
- Bibliographic information and abstracts for all articles in more than 1,500 core journals are added within 7 days
- English language abstract for each record, even if the full text is not available in English. These abstracts are translated by CAS scientists fluent in the original language of publication to ensure accuracy.

Having the knowledge of a competitor's patent within two days of its publication means that a company can make key business decisions faster.

CAplus Indexing

One of the most valuable components of CAplus is the detailed subject and substance indexing added by the CAS scientists who build the database:

- Detailed indexing highlights the new and novel concepts and substances discussed in the document with controlled terminology
- CAS Registry Numbers provide unambiguous identification of chemical substances, as well as a mechanism for substance based document retrieval
- CAS roles (RL) provide context for the function of substances within a given document:

Was the substance prepared?

How was it used?

Are adverse effects of the substance discussed?

- Certain abbreviations and acronyms are automatically generated for terms in the abstract text, the keyword phrases, and the text modifying phrases for index entries. The sections of the CAplus record noted below in RED show some of these indexing attributes:

```
AN   1986:620590  CAPLUS  Full-text
DN   105:220590
OREF 105:35503a,35506a
ED   Entered STN:  26 Dec 1986
TI   Tetrodotoxin and the Haitian zombie
AU   Yasumoto, Takeshi; Kao, C. Y.
CS   Faculty Agric., Tohoku University, Senda
SO   Toxicon (1986), 24(8), 747-9
     CODEN: TOXIA6; ISSN: 0041-0101
DT   Journal
LA   English
CC   4-5 (Toxicology)
AB     In the livers of porcupine fish and puffer fish (preserved in MeOH) from
       Haiti, tetrodotoxin (I)  [4368-28-9] concns. were <0.4 and 1.2 μg/g, resp.
       In 2 samples of zombie potion collected in 1982 and 1984 in the Artibonite
       region of Haiti, I content was <1.1 and <0.22 μg/g, resp. The presence of
       only traces of I in the samples is due to high pH (10-12); at this pH, I
       decomps. irreversibly into pharmacol. inactive products.
ST   tetrodotoxin fish liver Haiti zombie
IT   Poisons
    (composition of zombie potions, tetrodotoxin in relation to)
IT   Diodon holocanthus
     Diodon hystrix
     Sphaeroides testudineus
    (tetrodotoxin of liver of, Haiti zombie potion composition in relation to)
IT   Liver, composition
    (tetrodotoxin of porcupine and puffer fish, Haiti zombie potion composition
    in relation to)
IT   4368-28-9
     RL: BIOL (Biological study)
    (of porcupine and puffer fish liver, Haiti zombie potion composition in
    relation to)
OSC.G   2     THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
UPOS.G  Date last citing reference entered STN:  21 Jul 2009
OS.G   CAPLUS 2009:494828; 2002:99771
```

STN is the only system that gives access to the complete Chemical Abstracts database including searchable and displayable abstracts and the complete indexing. These features provide greater comprehensiveness, timeliness, and search quality.

DERWENT WORLD PATENT INDEX (DWPI)

The Derwent World Patent Index, produced by Thomson Reuters Scientific, is the largest value added patent database, containing more than 25.7 million patents from over 50 patent issuing authorities worldwide. DWPI contains many unique features to facilitate patent retrieval:

- Intellectually enhanced abstracts and titles for improved relevance and easier scanning of answers
- Patent Assignee Codes that facilitate efficient and comprehensive company name searching and analysis
- Patent Classification codes from multiple authorities
- Two level record structure
- Invention level data
- Member data (equivalents)

Unique searching features of the DWPI implementation on STN help make the most of its valuable content:

- Links from WPI to information in other Derwent databases
- Thesauri for special Derwent indexing such as Patent Assignee Codes and Manual Codes
- Post-processing and analysis tools provided in STN Express
- Patent family searching and sorting
- Derwent specific automatic plural and abbreviation searching

The DWPI learning file (LWPI) is available for hands-on searching in the STN LIS Training Program.

BASIC INDEX

To facilitate searching, many databases are constructed so that several indexes are bundled into a single index called the Basic Index (default index). The Basic Index is a good place to start when searching for keywords pertaining to subjects of interest.

The fields making up the Basic Index vary by database. The Database Summary Sheet for each database provides information as to what fields are included in its Basic Index, as well as what other specialized indexes are available.

CAplus Basic Index

In the CAplus database, the Basic Index is made up of single words from the following indexes:

BASIC INDEX	DESCRIPTION
Title (TI)	Supplementary Terms (ST) – contain keywords using the author's words from the literature (great for uncovering new or novel technology)
Abstract (AB)	Indexing Terms (IT) – CAS controlled vocabulary and substance indexing that includes CAS RNs provide a link between REGISTRY and CAplus

```
AN    2004:293513  CAPLUS  Full-text
DN    141:7426
TI    Template Assembled Cyclopeptides as Multimeric System for
      Integrin Targeting and Endocytosis
AU    Boturyn, Didier; Coll, Jean-Luc; Garanger, Elisabeth;
      Favrot, Marie-Christine; Dumy, Pascal
CS    LEDSS, UMR CNRS, Grenoble, 38041, Fr.
SO    Journal of the American Chemical Society (2004), 126(18),
      5730-5739
      CODEN: JACSAT; ISSN: 0002-7863
PB    American Chemical Society
DT    Journal
LA    English
OS    CASREACT 141:7426
AB    The aVb3 integrin receptor plays an important role in human metastasis and
      tumor-induced angiogenesis.  Cyclic peptide, cyclo[RGDfV] (f = D-Phe),
      represents a selective aVb3 integrin ligand that has been extensively used for
      research, therapy, and diagnosis of neoangiogenesis.  Here, the authors report
      the modular synthesis and biol. characterization of template assembled
      cyclopeptides as a multimeric system for targeting and endocytosis of cells
      expressing aVb3 integrin.  Cyclo[RGDfK] was cleanly assembled in a multivalent
      mode by chemoselective oxime bond formation to a cyclodecapeptides template
      labeled by different reporter groups.  Binding propensity to the aVb3 receptor
      and the associated good uptake property displayed by the multivalent mols.
      demonstrated the interest in the RAFT mol. to design new multimeric system with
      hitherto unreported properties.  These peptides offer an interesting perspective
      for the reevaluation of integrins as angiogenesis regulators (R. Hynes et al.,
      Nature Med. 2003, 9, 918-921) as well as for the design of more sophisticated
      systems such as mol. conjugate vectors.
ST    cyclic multimeric peptide prepn integrin receptor binding endocytosis; RGD
      peptide fluorescein labeled template assembled synthesis cyclization
```

Highlighted sections indicate components of the Basic Index in CAplus.

```
IT   Peptides, preparation
     RGD peptides
     RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);
     BIOL (Biological study); PREP (Preparation)
```

DWPI Basic Index

In the DWPI database, the Basic Index is made up of single words from the following fields:

- Title (TI)
- Abstract (AB)
- Abstract, Extension (ABEX)
- Abstract, Documentation Type (ABDT)
- Mechanism of Action (ACTN)
- Activity (ACTV)
- Advantage (ADV)
- Detailed Description (DETD)
- Drawing Description (DRWD)
- Novelty (NOV)
- Technology Focus (TECH)
- Title Terms (TT)
- Use/Advantage Section (UADV)
- Use Section (USE)

Highlighted sections indicate components of the Basic Index in DWPI.

```
AN   2003-391607 [200337]   WPINDEX  Full-text
CR   1993-076437; 2000-348922; 2001-549070
DNC  C2003-103960 [37]
TI   Novel lanthionine-bridged biologically active peptides e.g. vasopressin,
     somatostatin or enkephalin, useful as pharmaceutically active compounds
DC   B04
IN   GOODMAN M; OSAPAY G
PA   (GOOD-I) GOODMAN M; (KOLB-I) KOLBECK W; (OSAP-I) OSAPAY G
CYC  1
PI   US 20020165132  A1 20021107 (200337)* EN  24[4]
     US 6673769      B2 20040106 (200411)  EN
ADT  US 20020165132 A1 Cont of US 1991-742908 19910809;
     US 20020165132 A1 CIP of US 1993-21606 19930128;
     US 20020165132 A1 Cont of US 1995-467472
     19950606; US 20020165132 A1 Div Ex US 1999-384061 19990826;
     US 20020165132 A1 US 2001-852870 20010510; US 6673769 B2
     Cont of US 1991-742908 19910809; US 6673769 B2 CIP of US
     1993-21606 19930128; US 6673769 B2 Cont of US 1995-467472
     19950606; US 6673769 B2 Cont of US 1999-384061 19990826; US
     6673769 B2 US 2001-852870 20010510
FDT  US 20020165132 A1 Cont of US 6028168 A; US 20020165132 A1
     Div ex US 6268339 B; US 6673769 B2 Cont of US 6028168 A;
     US 6673769 B2 Cont of US 6268339 B
     PRAI US 2001-852870       20010510
     US 1991-742908       19910809
     US 1993-21606        19930128
```

```
     US 1995-467472       19950606
     US 1999-384061       19990826
IPCR C07K0001-00 [I,C]; C07K0001-04 [I,A]; C07K0001-113 [I,A];
     C07K0014-435 [I,C]; C07K0014-575 [I,A]; C07K0014-585 [I,A];
     C07K0014-655 [I,A]; C07K0014-70 [I,A]; C07K0007-00 [I,C]; C07K0007-16 [I,A]
EPC  C07K0001-04; C07K0001-113; C07K0007-16; C07K0014-575G;
     C07K0014-585; C07K0014-655; C07K0014-70
NCL  NCLM  514/009.000
     NCLS  530/317.000
AB US 20020165132 A1   UPAB: 20050530
     NOVELTY - Lanthionine-bridged biologically active peptides (I) having
     improved biological activity, are new.
     DETAILED DESCRIPTION - Biologically active peptides (I) having improved
     biological activity chosen from lanthionine-bridged biologically active
     peptides of formula (F1).
          R1 = a sequence of 2-7 amino acids selected from naturally occurring
          amino acids and its D-enantiomers and peptidomimetics;
          R2 = -H, 1-8C alkyl, 7-12C aralkyl, -HCO, 2-18C acyl or 2-18C aracyl
          a naturally occurring amino acid or sequence of up to 25 amino acids,
          where the N-terminal -NH2 group is present or is replaced by 1-8C
          alkyl, 7-12C aralkyl, -HCO, 2-18C acyl -OH, -H or NHCOR6, and
          peptidomimetics;
          R3 = -OH, -NH2, a naturally occurring amino acid or a sequence of up
          to 25 amino acids, where the C-terminal -COOH is present or is
          replaced by -CONH2 or -CH2OH, and peptidomimetics;
          R4, R5, R7, R8 = hydrogen, cyclohexyl or substituted or
          unsubstituted 1-10C alkyl; and R6 = alkyl or aralkyl residue.
          C(O)R3 may replaced by CH2OH, with the proviso that R1 is not
          Phe-Trp-Lys-Thr, when R2 is Phe or R3 is Thr(o1).
     INDEPENDENT CLAIMS are also included for:
          (1) naturally occurring peptides having a linear structure
          cyclized by a thioether bond to form (I);
          (2) peptides having the amino acid sequence of endothelin or
          endothelin analog modified to (I), where at least one of the
          disulfide bridges in the endothelin or its analog has been
          replaced by a thioether bond, and the rings are sequentially
          overlapping; and
          (3) preparation of (I).
     USE - (I) is useful as pharmaceutically active compounds.
     ADVANTAGE - (I) (preferably lanthionine bridged enkephalin analog
     peptides) has a biologically activity greater than that of the
     naturally occurring peptide, enkephalin (claimed).
     TECH BIOTECHNOLOGY - Preparation: Preparation of (I) using an
     appropriate combination of solid-phase peptide synthesis and/or
     classical synthesis methods, involves using a peptide fragment
     containing a moiety which is cyclized either attached to the resin used
     or after cleavage from the resin to the desired lanthionine-bridged
     cyclic peptide fragment which can optionally be elongated at the -N
     and/or -C terminal to form the final peptide by fragment condensation
     or step by step synthesis. The peptide fragments containing the moiety
     to be cyclized are assembled on an appropriate resin using tert-
     butoxycarbonyl-chemistry with any peptide coupling method, serine is
     incorporated at the desired place, which is then converted to
     dehydroalanine using disuccinimido carbonate, the S-protecting group
     attached to the cysteine coupled the desired place is selectively
     removed, the Michael addition of the SH group to the double bond is
     promoted by a slightly sic milieu, and the peptide and the other
     protecting groups are cleaved from the resin by treatment with HF. The
     peptide chain is assembled at any appropriate resin using the
     Fmoc-strategy with any usable coupling agent, intermediately using
     cleavage of the Fmoc-protecting group by the piperidine-method, where
     the cleavage of the acid labile S protecting group is carried out by
     any appropriate acid or reagent (all claimed).
FS   CPI
MC   CPI: B04-C01A; B04-C01B
```

CAS REGISTRY

CAS REGISTRY is the most complete and authoritative collection of disclosed chemical substance information in the world. REGISTRY has a different data structure from CAplus and DWPI and provides a different kind of value:

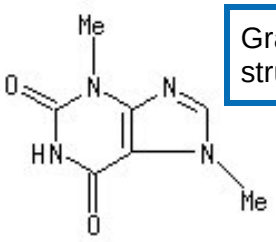
- REGISTRY is the authoritative source for CAS Registry Numbers (CAS RNs)
    - CAS RNs are unique numerical identifiers for substances
    - Think of a CAS RN as a social security number for a chemical
- REGISTRY contains chemical substance information registered by CAS from 1907 to the present
- All types of chemical substances are indexed in this database:
    - Organic and inorganic compounds
    - Sequences
    - Polymers
    - Metals and alloys
    - Mixtures
    - Minerals
    - Salts
- Substance identification information for compounds is an integral part of REGISTRY:
    - Chemical names, including systematic nomenclature
    - Structures
    - Sequences
    - CAS RNs

What a REGISTRY Record Looks Like

- Information in a REGISTRY record is organized in a series of fields that are labeled with codes. A complete list of fields is given in the Database Summary Sheet.
- The CAS Registry Number is found in the RN field and is also the accession number for the record.

```
RN    83-67-0  REGISTRY
ED    Entered STN:  16 Nov 1984
CN    1H-Purine-2,6-dione, 3,7-dihydro-3,7-dimethyl-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN    Theobromine (8CI)
OTHER NAMES:
CN    3,7-Dimethyl-3,7-dihydro-1H-purine-2,6-dione
CN    3,7-Dimethylxanthine
CN    Diurobromine
CN    NSC 5039
CN    Santheose
CN    SC 15090
CN    Teobromin
CN    Theosalvose
CN    Theostene
CN    Thesal
MF    C7 H8 N4 O2
CI    COM
LC    STN Files:   ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CABA,
      CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, DDFU, DETHERM*,
      DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IMSRESEARCH, IPA,
      MEDLINE, MSDS-OHS, NAPRALERT, PS, REAXYSFILE*, RTECS*, SPECINFO,
      TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, USPATOLD, VETU
        (*File contains numerically searchable property data)
      Other Sources:   DSL**, EINECS**, TSCA**
        (**Enter CHEMLIST File for up-to-date regulatory information)
```

Chemical names, common names, and trade names are found in the Chemical Name (CN) field.



Graphic display of the chemical structure of the substance.

Experimental and calculated properties may be available for specific substances in REGISTRY.

```
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

           3702 REFERENCES IN FILE CA (1907 TO DATE)
             47 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           3722 REFERENCES IN FILE CAPLUS (1907 TO DATE)
```

Example of experimental property information in REGISTRY:

```
=> D EPROP

Experimental Properties (EPROP)
```

Experimental properties are measured directly in the laboratory.

```
   PROPERTY (CODE)   |    VALUE    |    CONDITION    |   NOTE
=====================+=============+=================+==========
IR Absorption Spectra|Spectrum     |                 | (1)   AIST
IR Absorption Spectra|Spectrum     |                 | (2) BIORAD
IR Absorption Spectra|Spectrum     |                 | (3)    WSS
Mass Spectra         |Spectrum     |                 | (3)    WSS
Mass Spectra         |Spectrum     |                 | (1)   AIST
Melting Point (MP)   |357-358 deg C|                 | (4)    CAS
• • •
```

To see a picture of a substance spectrum, click the **Spectrum** hyperlink.

```
Spectra may be displayed by clicking the links in the property table, or in
bulk using the SPEC or MAX formats.

(1)  "Integrated Spectral Data Base System of Organic Compounds" data were
     obtained from the National Institute of Advanced Industrial Science and
     Technology (Japan)
(2)  Infrared spectral data from the Bio-Rad/Sadtler IR Data Collection was
     obtained from Bio-Rad Laboratories, Philadelphia, PA (US).  Copyright
     (C) Bio-Rad Laboratories.   All Rights Reserved.
(3)  Spectral data were obtained from Wiley Subscription Services, Inc. (US)
(4   Bertrand, Gabriel; Compt. rend. 1932 V194, P26-8 CAPLUS
• • •
```

To read how a particular property was determined, click the corresponding CAplus hyperlink.

```
See HELP PROPERTIES for information about property data sources in REGISTRY.
```

Example of predicted (calculated) property information in REGISTRY:

```
=> D CALC
```

Predicted properties are calculated mathematically based on criteria.

```
Predicted Properties (PPROP)
       PROPERTY (CODE)       |        VALUE         |   CONDITION    |NOTE
=============================+======================+================+====
Bioconc. Factor (BCF)        |1.0                   |pH 1  25 deg C  |(1)
Bioconc. Factor (BCF)        |1.0                   |pH 2  25 deg C  |(1)
Bioconc. Factor (BCF)        |1.0                   |pH 3  25 deg C  |(1)
Bioconc. Factor (BCF)        |1.0                   |pH 4  25 deg C  |(1)
Bioconc. Factor (BCF)        |1.0                   |pH 5  25 deg C  |(1)
Bioconc. Factor (BCF)        |1.0                   |pH 6  25 deg C  |(1)
Bioconc. Factor (BCF)        |1.0                   |pH 7  25 deg C  |(1)
Bioconc. Factor (BCF)        |1.0                   |pH 8  25 deg C  |(1)
Bioconc. Factor (BCF)        |1.0                   |pH 9  25 deg C  |(1)
Bioconc. Factor (BCF)        |1.0                   |pH 10 25 deg C  |(1)
Density (DEN)                |1.60+/-0.1 g/cm**3    |20 deg C        |(1)
Freely Rotatable Bonds (FRB) |0                     |                |(1)
H acceptors (HAC)            |6                     |                |(1)
H donors (HD)                |1                     |                |(1)
Hydrogen Donors/Acceptors Sum|7                     |                |(1)
(HDAS)
```

```
Koc (KOC)                    |6.99                  |pH 1  25 deg C  |(1)
Koc (KOC)                    |9.31                  |pH 2  25 deg C  |(1)
Koc (KOC)                    |9.63                  |pH 3  25 deg C  |(1)
• • •

logD (LOGD)                  |-0.86                 |pH 1  25 deg C  |(1)
logD (LOGD)                  |-0.74                 |pH 2  25 deg C  |(1)
logD (LOGD)                  |-0.72                 |pH 3  25 deg C  |(1)
• • •

Mass Intrinsic Solubility    |6.1 g/L               |25 deg C        |(1)
 (ISLB.MASS)                 |                      |                |
Mass Solubility (SLB.MASS)   |8.5 g/L               |pH 1  25 deg C  |(1)
Mass Solubility (SLB.MASS)   |6.3 g/L               |pH 2  25 deg C  |(1)
Mass Solubility (SLB.MASS)   |6.1 g/L               |pH 3  25 deg C  |(1)
• • •

Molar Intrinsic Solubility   |0.034 mol/L           |25 deg C        |(1)
 (ISLB.MOL)                  |                      |                |
Molar Solubility (SLB.MOL)   |0.047 mol/L           |pH 1  25 deg C  |(1)
Molar Solubility (SLB.MOL)   |0.035 mol/L           |pH 2  25 deg C  |(1)
Molar Solubility (SLB.MOL)   |0.034 mol/L           |pH 3  25 deg C  |(1)
• • •

Molar Volume (MVOL)          |112.0+/-7.0 cm**3/mol|20 deg C        |(1)
                             |                      |760 Torr        |
Molecular Weight (MW)        |180.16                |                |(1)
pKa (PKA)                    |9.90+/-0.50           |Most Acidic     |(1)
                             |                      |25 deg C        |
pKa (PKA)                    |0.59+/-0.70           |Most Basic      |(1)
                             |                      |25 deg C        |
Polar Surface Area (PSA)     |62.30 A**2            |                |(1)

This substance may exist in multiple tautomeric forms. The predicted property
values in this table are calculated based upon the displayed form and may
therefore differ from experimental values based on the actual tautomeric ratio at
equilibrium.

1)  Calculated using Advanced Chemistry Development (ACD/Labs) Software
    V8.14 ((C) 1994-2008 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY
```

SECTION 3:
SEARCHING SKILLS

OVERVIEW OF SEARCHING SKILLS IN THE STN LIS TRAINING PROGRAM

The following section focuses on the highlights, features, tips, and techniques used in searching on STN, giving a high-level overview of what can be done when using STN to search the scientific and technical information that exists in the world today. This section will focus on searching skills for finding information using:

- Keywords/concepts
- Specialized indexes
- Author names
- Company names
- Chemical names
- Multiple databases

CAS offers a variety of training options that are available at no cost:

- Instructor-led training
- Self-directed learning
- Individual or group training
- e-Seminars

For more information, please visit: http://www.cas.org/training/stn

Note
If you repeat any of the searches in this workbook as a form of practice, the E-numbers, the L-numbers, and/or the number of results may differ from what is shown in this workbook.

SEARCHING SKILLS

Before logging onto STN, you should have an organized search plan/strategy and understand a few basic STN search commands.

Basic Commands

It is easy to begin searching on STN. There are only five basic commands that you need to learn in order to begin searching. STN provides many other commands so that you can access specialized functionality, but these five (5) commands will go a long way in your searching.

USE THIS COMMAND	WHEN YOU WANT TO
FILE (FIL)	Enter a single file or multiple files in order to conduct a search
EXPAND (E)	View potential search terms in an easy to browse, alphabetical listing
SEARCH (S)	Perform a search pertaining to a topic of interest
DISPLAY (D)	Look at the record set results in a specified format
LOGOFF (LOG)	Terminate an STN online session

For additional STN commands:

- Review the STN LIS Quick Reference Card
- Refer to Appendix II from this training manual
- Use **HELP COMMANDS** to display a list of commands that may be used in a specific database

Use the CAS Web Resource listed below:

Web Resource

For additional information about using STN commands, visit:
http://www.cas.org/training/stn/stn-pocket-guide

At the STN arrow prompt **(=>)**, you can:

- Type a full command: Typing the full command will cause the system to prompt you for any additional information needed to complete the command (recommended for novice searchers).
- Use the abbreviated version of the command: Using the abbreviated version of a command indicates that you are searching in “expert” mode, which will cause the system to use defaults for information that you do not specifically input.

The general format for entering a command on STN is

=> COMMAND INSTRUCTIONS <ENTER>

- Example:

  => SEARCH (CHOCOLATE OR COCOA) <ENTER>

Basic Keyword Searching

Keyword searching is the technique used when a research topic is concept based rather than related to a specific chemical substance or author. Keyword searching is most commonly done as free text searching in the Basic Index.

In this section, you will learn how to build a solid search strategy and display records using some key searching tools.

Conduct a Basic Keyword Search

Search Question

Locate records on the use of talc in cosmetics.

SEARCH STRATEGY

STEP	TO RETRIEVE REFERENCES BY USING A KEYWORD SEARCH
1	Understand your search question and identify potential keywords
2	Identify relevant database(s)
3	Build a search query
4	Conduct a preliminary search
5	Evaluate answers
6	Modify the search strategy
7	Display answers

Note

The search strategy process and actual search examples that follow will demonstrate how to answer this keyword search question. Keep in mind that the search results will probably differ due to new records being added to the databases on a daily basis.

Step 1: Understand Your Search Question and Identify Potential Keywords

Although general concepts are known at the beginning of a search, one consideration is whether the intent of the search is for general information on a subject area, or if the intent of the search is for information regarding a specific aspect of a subject area. The degree of specificity influences how the search query is built.

- Identify keywords
- Consider synonyms
- Consider suffixes on root words
- Consider using truncation
- Don't forget acronyms and abbreviations
- Consider how search terms will relate to one another
- Boolean logic
- Proximity of search terms

Identify Keywords and Create Search Terms

Keywords and search terms can come from your own knowledge of a subject or other information resources that you could use to gain more information about an unknown subject. They can also arise from collaboration with your client. Additionally, STN provides resources (like controlled terminology thesauri that will be discussed later) to assist you in finding even more relevant key words.

Acronyms and Synonyms

Consider using acronyms for phrase searching (e.g., DYNAMIC RANDOM ACCESS MEMORY or DRAM), as well as synonyms for related words (e.g., CANCER, NEOPLASM, or MELANOMA).

- Conducting a preliminary search helps in uncovering alternate terms/words that you can use to enhance your search retrieval
- Using a database's online thesaurus, such as the CA Lexicon in CAplus, can also uncover additional alternate terms to enhance your search retrieval
- Visiting these helpful websites is another way in which you can find alternate terms for your search:

  www.acronymfinder.com

  www.synonym.com

  http://thesaurus.reference.com/

Use Truncation to Create Efficient Search Terms

Once key concepts and possible search terms are identified, you can increase the comprehensiveness and efficiency of your search query using truncation. STN uses three truncation symbols: **?** **#** **!**

SYMBOL	FUNCTION	EXAMPLES	RETRIEVAL POSSIBILITIES
?	Any number of characters (including zero) at the beginning or at the end of a term	BACTERICID**?**	BACTERICID**E** BACTERICID**AL**
	Left-* OR right-hand truncation	**?**ICID**?**	**BACTER**ICID**E** **PEST**ICIDE**S**
#	Zero or one character at the end of a term	BACTERICIDE**#**	BACTERICIDE BACTERICIDE**S**
!	Exactly one character within or at the end of a term	T**!!**th	T**EE**TH T**OO**TH T**RU**TH
		AMIN**!**	AMIN**E** AMIN**O**
		ORGAN**!**ZATION	ORGANI**Z**ATION ORGANI**S**ATION
!!#	Multiple uses of the symbols # and ! are allowed	T**!!**TH#	T**EE**TH T**OO**TH T**RU**TH**S**

* Used when left-hand truncation is available in the database. See the specific Database Summary Sheet for more information.

- Multiple uses of the symbols **#** and **!** are permitted
- Combinations of **?** and **#** or **?** and **!** are not allowed
- Many databases on STN (e.g., CAplus, WPINDEX, USPATFULL) have SLART (simultaneous left and right truncation) using the **?** symbol. For a summary of the databases that have SLART, visit: http://www.cas.org/products/stn/dbss
- Using right truncation or SLART will greatly enhance search results
- General format for using truncation:

  => SEARCH COSMETIC?

Use Plural and Abbreviation Commands to Enhance Retrieval

- STN also provides tools to automatically retrieve plurals, as well as standard abbreviations
- The SET command provides more comprehensive search results
- SET options can be toggled using ON and OFF
- For more information on SET options, use HELP SET to show all available SET options with brief descriptions

Within STN on the Web, you just need to click the desired SET option hyperlink to find out more information

An alternative way is to use HELP SET [PARAMETER] at the system prompt, where the PARAMETER is the desired SET option:

=> HELP SET PLURALS

- To see what SET options are configured for your STN Login ID, type:

  => DISPLAY SET

  (To see all of the SET Parameters, type ALL)

SET PLURALS

With the SET PLURALS ON command, you can broaden your search easily in any text searchable database when using the SEARCH command by automatically including the plural forms of search terms:

- If you search the singular, STN will automatically search the plural (OR them together)
- STN creates regular plurals (-s or –es) for each search term
- Any irregular plural, e.g., mice for mouse
- Increases search comprehensiveness
- No extra charge for the additional search terms for the plurals in databases with search term pricing
- STN system-wide feature
- SET PLURALS is not applied to search terms that you have truncated
- The default for SET PLURALS is OFF
- Applies to search terms in the Basic Index or specific fields that comprise the Basic Index in all STN databases, provided the terms do not contain any truncation symbols
- Separate posting line appears if any occurrences of the plural terms are found
- Can be turned on and off as needed
- Can be set permanently (PERMANENT option means that SET command applies to all future sessions – without PERM the SET command will only be valid for the current session) – enter SET PLURALS ON PERM
- General format:

  => SET PLURALS ON

  => SET PLURALS ON PERM

SET ABBREVIATION

The ABBREVIATION option of the SET command is used to specify whether abbreviations of search terms should be added automatically in the SEARCH command. STN can check against a dictionary of standard abbreviations. To see a list of terms for which abbreviations will be added, enter HELP ABB at an arrow prompt in the database.

- When you SET ABB ON, abbreviations are generated for all terms searched in the Basic Index, or in the specific fields that comprise the Basic Index
- A separate posting line appears if any occurrences of an abbreviation are found, however, searching the abbreviated form will not generate the spelled out term
- The default for SET ABB is OFF
- To retain the ON setting beyond the current session, enter SET ABB ON PERM
- No search term charges for the abbreviation terms created in databases with search term charges
- Only CAS and DWPI databases utilize the SET ABB command, since abbreviations and acronyms are inserted into these databases
- General format for using SET command:

=> SET ABBREVIATION ON
=> SET ABB ON PERM

```
=> SET ABB ON
SET COMMAND COMPLETED

=> S CONCENTRAT?
        357548 CONCENTRAT?
        95926 CONC
         312322 CONCD
        35362 CONCG
        2066523 CONCN
L1     2569472 CONCENTRAT?
      (CONCENTRAT? OR CONC OR CONCD OR CONCG OR CONCN)

=> SET PLURALS ON
SET COMMAND COMPLETED

=> S ALCOHOL
        300445 ALCOHOL
        185612 ALCOHOLS
        449767 ALCOHOL
               (ALCOHOL OR ALCOHOLS)
        617661 ALC
        198935 ALCS
        717031 ALC(ALC OR ALCS)
L2      906833 ALCOHOL
               (ALCOHOL OR ALC)
```

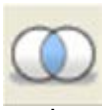
CONSIDER HOW SEARCH TERMS WILL RELATE TO ONE ANOTHER

On STN, search terms can be connected using either standard Boolean logic or database defined proximity operators.

BOOLEAN LOGIC

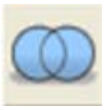
Boolean logic is used between terms to specify search precision.

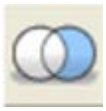
STN uses three standard Boolean logic operators: AND, OR, and NOT

- **AND**  searches for records that mention all of the concepts, anywhere in the record

  One concept could be in the title while another could be in the abstract or indexing

  - Example: cat AND dog

- **OR**  searches for records with any of the concepts and synonyms
  - Don't forget to use parentheses with concepts that use OR as the Boolean operator
    - Example: (bovine OR cow OR cattle)

- **NOT**  removes a concept or answer set from results
  - Use NOT to compare results between sets:

    => SEARCH L3 NOT L1

    (This means that you want to search answer set L3 but want to exclude any answers that appear in answer set L1)

  - Beware of using NOT to remove concepts

It is better to add additional concepts than to NOT something out by eliminating useful results:

- Boolean logic can be used separately or in combination

PROXIMITY OPERATORS

Proximity operators are used to specify the desired proximity of search terms with respect to one another within records. The closer the terms are in a search record, the greater the direct relationship between those terms.

PROXIMITY OPERATOR	DESCRIPTION
AND	Search terms are in the same record
(L)	Search terms are in the same information unit
(P)	Definition varies with the field and database, but usually means within the same sentence
(S)	Definition varies with the field and database, but usually means within the same sentence
(A)	Terms are adjacent in any order
(W)	Terms are adjacent in input order

- To search for a variation of the word COSMETIC that is adjacent to TALC within two (2) terms of each other in any order:

  => SEARCH COSMETIC? (2A) TALC

- Some proximity operators work differently in the various STN databases: use HELP (S) or HELP (P) to see definitions and how to apply proximity operators in different databases
- (nA) or (nW) are used to specify that terms are “n” or fewer terms apart, where “n” stands for a number qualifier (ex: 2A or 4W)
- (XW) is used to specify direction with any number of intervening words/terms

NOT Proximity Operators

There are some **NOT** operators that can be used:

- **(NOTL)**
- **(NOTP)**
- **(NOTS)**
- **(NOTA)**
- **(NOTW)**

Implied Proximity

It is very straightforward to search bound phrases on STN. STN has the capability to accept phrase searching with implied proximity using the (W) operator.

- Example:

  => SEARCH CHOCOLATE MILK
  (STN implies chocolate (W) milk, which saves you keystrokes)

Step 2: Identify Relevant Database(s)

Many worldwide databases of scientific and technical information are available on STN. Information about the databases can be found in the following resources:

- STN Database Summary Sheets (DBSS) http://www.cas.org/products/stn/dbss
- STNGUIDE is a no-cost database that provides searchable access to all of the information covered in the STN DBSS
- INDEX command on STN
- CAS Help Desk, can provide search assistance and answer your search questions, by calling: 1-800-753-4227 (North America)

Enter the Database Name

- Use the FILE command to enter the desired database once you login into STN.
- Based on the keyword search question: Locate records on the use of talc in cosmetics, we decided that the CAplus database would be an appropriate place to start our search.
- At the STN arrow prompt, you would type:

  => FILE CAPLUS

Step 3: Build a Search Query

Building a search query requires the following:

- Identify the main concepts and their relationship, if any
- Choose a set of search terms
- Identify various word forms that can be taken into consideration using the techniques outlined in Step 1, e.g., truncation
- Think about using Boolean logic or proximity operators

Assuming that you have conducted your preliminary interview with your client, and that you have exhausted your own resources in terms of finding keywords, check the validity of your terms in the database in which you will conduct your search.

Verify search terms using the EXPAND command

The EXPAND command (E) is used to verify that a search term of interest is in the database.

- EXPAND results in an alphanumeric list of terms adjacent to the requested term
- EXPAND will search the Basic Index (default index), unless you specify a specialized index, such as /CT for controlled terms or /CO for company name field

> **Note**
>
> There may be other words in the EXPAND list that could be used as search terms as well. Using EXPAND as part of your searching strategy will help you be a more efficient searcher.

Using the basic EXPAND command moves your search term to the third entry in your search (see the following search example).

- An E-reference number is assigned to each term in the list
- The default for the displayed list is 12 E-numbered terms at a time, unless you specify a different amount
- To continue the list, type the letter E at the command prompt

EXPAND is useful in keyword searching to:

- Determine if a term exists in the database
- Identify related terms of interest
- There is no cost to use the EXPAND command

General format to use the EXPAND command at the STN arrow prompt:

=> EXPAND COSMETIC
=> E COSMETIC/CT

Helpful Hint

Novice searchers using SET EXPAND CONTINUOUS can:

- Enter SET EXPAND CONTINUOUS to enable the E-numbers to continue with each EXPAND command in the current online session
- Have up to 999 E-numbers in a single session
- Using SET EXPAND CONTINUOUS PERM allows you to:
- Make this feature permanent until you change your settings, by turning it off

To turn on this feature, at the STN arrow prompt enter:

=> **SET EXPAND CONTINUOUS PERM**

To turn off this feature, at the STN arrow prompt enter:

=> **SET EXPAND CONTINUOUS OFF**

```
=> FILE CAPLUS

=> SET EXPAND CONTINUOUS PERM

SET COMMAND COMPLETED

=> EXPAND COSMETIC

ENTER FIELD CODE (BI):BI
E1            1     COSMETEUTICAL/BI
E2            1     COSMETI/BI
E3        84786 --> COSMETIC/BI
E4           10     COSMETICA/BI
E5            1     COSMETICACT/BI
E6           59     COSMETICAL/BI
E7         1674     COSMETICALLY/BI
E8            2     COSMETICALS/BI
E9            1     COSMETICE/BI
E10           1     COSMETICEFFECTS/BI
E11           1     COSMETICEPNS/BI
E12           1     COSMETICES/BI
```

As a novice searcher, when you type the entire command EXPAND COSMETIC, you will be prompted for the field code as shown in this example.

The term typed appears in the third position (in this example, as E3.)

```
=> E
E13          2     COSMETICEUTICALS/
E14          1     COSMETICFORMULA/
E15          1     COSMETICGRADE/BI
E16          3     COSMETICI/BI
E17          4     COSMETICIAN/BI
E18          3     COSMETICIANS/BI
E19          1     COSMETICIZE/BI
E20          2     COSMETICIZING/BI
E21          2     COSMETICO/BI
E22          1     COSMETICOL/BI
E23          1     COSMETICOLOGICAL/BI
E24          9     COSMETICOLOGY/BI

=> E
E25          6     COSMETICOS/BI
E26          1     COSMETICPRODUCTS/BI
E27      84439     COSMETICS/BI

E28          1     COSMETICSD/BI
E29          1     COSMETICSSOLID/BI
E30          1     COSMETICSUSPENSION/BI

• • •
```

To continue the list, type E at the prompt.

Column 2 gives postings: the number of records for a specific term.

Once you have verified the search terms you want to use in your search, you will be able to move onto the next step: how to use the E-numbers to select the terms of interest.

For example:

=> SEARCH E3 or E6-E7

Step 4: Conduct a Preliminary Search

Once you have collected all of the terms that you want to use, you are ready to conduct a preliminary search in order to verify if you chose the correct search thought process. The SEARCH command (S) is used to retrieve records with your search terms. Various word forms can be taken into account by using truncation symbols, or by using Boolean logic.

- Records are placed in an answer set labeled with a L-number
- Answers are arranged in reverse chronological order (most recent first)
- Save keystrokes and search using the E-numbers from a prior EXPAND list

```
=> E TALC

E49          80     TALBUTAL/BI
E50           3     TALBUTAMIDE/BI
E51       56857 --> TALC/BI
E52           1     TALC13/BI
E53           1     TALC50/BI
E54           1     TALC63/BI
E55           1     TALC7/BI
E56          13     TALCA/BI
E57           3     TALCACEOUS/BI
E58          16     TALCAHUANO/BI
E59           1     TALCALONE/BI
E60           1     TALCALSIMAG/BI

=> SEARCH COSMETIC? AND E51

         114585 COSMETIC?
          56857 TALC/BI
L1         3451 COSMETIC? AND TALC/BI
```

Step 5: Evaluate Answers

Once the preliminary search has been conducted, review the records to determine if your query retrieved the desired results.

No cost display formats are useful in keyword searching to:

- Verify that the search query is retrieving the types of information needed
- Identify additional, file-specific terminology (other terms/words to use) to enhance results

No cost display formats allow a portion of the record to be viewed for free. There are two no cost display formats:

- D SCAN (DISPLAY SCAN), for CAS databases and BIOSIS
- D SCAN format has the benefit of random record retrieval of old and new records
- D TRIAL (DISPLAY TRIAL), for most STN databases

Refer to the specific Database Summary Sheet for more details on which no cost format is used, if any. The DBSS will also tell you what fields will be displayed when you use one of these no cost formats. Look in the DISPLAY and PRINT Format section of the DBSS to find the DISPLAY formats that are available.

For example, below is an excerpt from the Database Summary Sheet of CAplus DISPLAY and PRINT Formats:

CAPLUS

DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
ABS	GI, AB	D ABS
ALL (1,4)	AN, OREF, ED, TI, AU, IN, CS, PA, SO, PB, DT, LA, IC (ICM, ICS), ICA, ICI, INCL, CC, FAN.CNT, PI, PRAI, CLASS, OS, GI, AB, ST, IT, RL, RE	D 1-30 ALL
APPS (1)	AI, PRAI	D APPS
BIB (1)	AN, OREF, TI, AU, IN, CS, PA, SO, PB, DT, LA, FAN.CNT, PI, PRAI, OS, RE.CNT (BIB is the default)	D 1 3
CAN	List of CA Abstract Numbers, no L-number headers	D CAN
CBIB (1)	AN, DN, OREF, plus compressed bibliographic data	D L2 1 CBIB
CLASS	Classifications (IPC, ECLA, and FTERM codes) associated with basic patent and family members	D CLASS
DALL (1,4)	ALL, delimited for post-processing	D DALL
DMAX (1,4)	MAX, delimited for post-processing	D MAX
FAM	AN, DN, FAN.CNT, PI for the accession number, plus PI for other family accession numbers	D FAM
FAN	Family Accession Number (AN, FAN.CNT, FAN)	D FAN
FBIB (1)	BIB plus PI for other family accession numbers	D FBIB
IABS	ABS, with text labels	D IABS
IALL (1,4)	ALL, indented with text labels	D IALL
IBIB	BIB, indented with text labels	D IBIB
IC	Main and Secondary IPCs (ICM, ICS) for the basic patent	D PI IC
IMAX (1,4)	MAX, indented with text labels	D IMAX
IND (4)	IC (ICM, ICS), ICA, ICI, NCL, CC, ST, IT, RL	D TI IND
IPC	IPC, for the basic patent and patent family members	D L2 1 IPC
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
ISTD (1)	STD, indented with text labels	D ISTD
MAX (1,4)	ALL, plus PI for other family accession numbers	D MAX
OBIB (1)	BIB, Original, without patent family data (AN, DN, OREF, TI, AU, IN, CS, PA, SO, PB, PI, DS, AI, PRAI, DT, LA, OS)	D OBIB
OIBIB (1)	OBIB, indented with text labels	D OIBIB
PAGE (8)	Page images of CA pages containing the AN of a record	D PAGE
PATS (1)	PI, SO	D PATS
SAM (4)	IC (ICM, ICS), ICA, ICI, INCL, CC, TI, ST, IT, RL	DIS SAM 1-5
SCAN (4,5,9)	IC (ICM, ICS), ICA, ICI, INCL, CC, TI, ST, IT, RL (random display, no answer numbers)	D SCAN
SBIB (1)	BIB, Standard, without RE.CNT (AN, DN, OREF, TI, AU, IN, CS, PA, SO, PB, DT, LA, FAN.CNT, PI, PRAI, OS)	D 1 3 SBIB
SIBIB (1)	SBIB, indented with text labels	D SIBIB
STD (1)	AN, DN, OREF, TI, AU, IN, CS, PA, SO, PB, DT, LA, IC, ICA, ICI, INCL, FAN.CNT, PI, PRAI, CLASS, OS, RE.CNT	D STD
XML	BIB AB in XML format	D XML

```
=> DISPLAY SCAN

ENTER (L1) OR L#:L1

L1    3451 ANSWERS   CAPLUS  COPYRIGHT 2012 ACS on STN
IPCI A61K0008-19 [I,A]; A61K0008-25 [I,A]; A61K0008-29 [I,A]; A61Q0001-02 [I,A]
IPCR A61K0008-19 [I,A]; A61K0008-25 [I,A]; A61K0008-29 [I,A]; A61Q0001-02 [I,A]
CC   62-4 (Essential Oils and Cosmetics)
TI   Water- and oil-repellent, fluoroalkylphosphonic acid-treated pigments, and
     cosmetics containing them
ST   water oil repellent fluoroalkylphosphonic acid treated pigment cosmetic;
     perfluorohexylethylphosphonic acid treated titania pigment cosmetic
IT   Mica-group minerals
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        ((perfluorohexyl)ethylphosphonic acid-treated; water- and
        oil-repellent, perfluorooctanoic acid-free, fluoroalkylphosphonic
        acid-treated pigments for cosmetics)
IT   Cosmetic powders
       Cosmetics and personal care products
     Foundations (cosmetics)
     Pigments, nonbiological
        (water- and oil-repellent, perfluorooctanoic acid-free,
        fluoroalkylphosphonic acid-treated pigments for cosmetics)
IT   12174-53-7, Sericite   13463-67-7, Titanium oxide (TiO2), biological
     studies   14807-96-6, Talc, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        ((perfluorohexyl)ethylphosphonic acid-treated; water- and
        oil-repellent, perfluorooctanoic acid-free, fluoroalkylphosphonic
        acid-treated pigments for cosmetics)
IT   252237-40-4
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (pigments treated with; water- and oil-repellent, perfluorooctanoic
        acid-free, fluoroalkylphosphonic acid-treated pigments for
        cosmetics)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):END
```

To continue scanning through records, type the number of records to be displayed. Trapped at a colon prompt? Type **END** or **0** to return to a STN arrow prompt: **=>**

Step 6: Modify the Search Strategy

Conducting a search is a creative process. Online searches evolve differently depending on the subject matter and the choices a searcher makes. Each searcher will employ a different strategy. Since there is no one "right" way to perform a search, you will need to understand the basic processes and functionality of searching on STN. When manipulating search strategies based on the search request, you may need to broaden the search for some concepts or narrow the search for other concepts.

Aspects to consider now:

- Are the answers seen in the preliminary step the kinds of answers wanted?
- Are a large proportion of the answers relevant?
- Is the number of answers retrieved from your search acceptable?

TO BROADEN THE SEARCH STRATEGY FOR COMPREHENSIVENESS	TO NARROW THE SEARCH STRATEGY FOR PRECISION
Apply truncation to terms	Choose more specific terms
Use more alternate terms (acronyms, synonyms or database thesaurus, if available)	Add another concept
Use Boolean and/or proximity operators	Use Boolean and/or proximity operators
Use plurals and/or abbreviations	

Which Direction Should you Take?

Consider using the techniques discussed in Step 1 to modify your search. To get ideas for additional keywords, review the indexing terms that you displayed when using the D SCAN or D TRIAL feature. The following search techniques will be used to demonstrate how to modify the search in order to retrieve more comprehensive and more precise results:

- Use a database thesaurus
- Use plurals and abbreviations
- Use Boolean logic
- Use proximity operators

Use a Database Thesaurus

When searching in CAplus, use the CAplus controlled term thesaurus (CA Lexicon), which is useful for:

- Identifying new and useful subject and chemical keywords
- Searching for references on broad subject areas
- Gathering information on classes of substances and organisms

The CA Lexicon is an online search tool that covers indexing from 1907 to the present. It not only provides synonyms for a particular term, but it also provides related terms (RT) and related terms that are chemical substances (RTCS). It is easy to see the most commonly used substances for a given topic.

To search the CA Lexicon using STN on the Web, utilize the EXPAND command (E) with the /CT search field. The EXPAND command is used to determine whether a term is in the thesaurus. The presence of an AT (Associated Terms) column indicates that thesaurus terminology is available.

```
=> E TALC/CT

E#   FREQUENCY    AT     TERM
--   ---------    --     ----
E61          2     9     TALBOTIA NAGANUM/CT
E62          0     1     TALBOTII/CT
E63          0    10 --> TALC/CT
E64          0     2     TALC (MG3H2(SIO3)4)/CT
E65         71     4     TALC DEPOSITS/CT
E66         49     2     TALCITE/CT
E67         24     7     TALCITE (ROCK)/CT
E68          0     1     TALCOSA/CT
E69          0     2     TALCUM/CT
E70          0     1     TALDYCOLA/CT
E71          0     1     TALE/CT
E72          0     2     TALE HOMEOBOX TG-INTERACTING FACTOR/CT

=> E E63+ALL

E73       3884   BT5  Geological materials/CT
E74      65389     BT4  Minerals/CT
E75       1188       BT3  Phyllosilicate minerals/CT
E76      18208         BT2  Clay minerals/CT
E77       7842           BT1  Smectite-group minerals/CT
E78          0             -->  Talc/CT
E79                          UF   Talc (Mg3H2(SiO3)4)/CT
E80                          UF   Talcum/CT
E81          0               NT1  Steatite/CT
E82       2478               RT   Crystal nucleating agents/CT
********** END **********
```

EXPAND using the /CT field to access the controlled term thesaurus (CA Lexicon) in STN on the Web.

EXPAND is used to view the associated terms. The ALL relationship code is used to see the full hierarchy.

Note

Thesauri are available in many STN databases. To learn more about database thesaurus features, use the following:

=> HELP THESAURUS

Utilize the Plurals and Abbreviations Commands

Plural forms of terms can be automatically retrieved using SET PLURALS ON. Use SET ABB ON to automatically get terms that are abbreviated in CAplus. This search example shows both of these commands set on permanently by adding PERM to the end of the command.

```
=> SET ABB ON PERM; SET PLURALS ON PERM

SET COMMAND COMPLETED


SET COMMAND COMPLETED


=> S COSMETIC? AND (E51 OR E78-E81)

THE ESTIMATED SEARCH COST FOR FILE 'CAPLUS' IS 14.16 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:Y
        114585 COSMETIC?
         56857 TALC/BI
           394 TALCS/BI
         56926 TALC/BI
                 ((TALC OR TALCS)/BI)
         41177 TALC/CT  (1 TERM)
             0 "TALC (MG3H2(SIO3)4)"/CT
             0 TALCUM/CT
           917 STEATITE/CT  (1 TERM)
L2        3586 COSMETIC? AND (TALC/BI OR (TALC/CT OR "TALC (MG3H2(SIO3)4)"/CT
               OR TALCUM/CT OR STEATITE/CT))
```

Stacking commands: to enter multiple commands at once, separate the commands with semicolons.

Note

Only CAS databases and DWPI databases utilize the SET ABB command.

Use of the “NOT” Boolean logic operator

This example shows how including plurals and abbreviations, paired with the “NOT” Boolean operator, allows you to compare answer sets to one another.

```
=> S L2 NOT L1

L3         135 L2 NOT L1

=> D HIT 10

L3   ANSWER 10 OF 135  CAPLUS  COPYRIGHT 2012 ACS on STN
ST   zinc oxide paraffin lanolin vaseline bisabolol ointment skin cosmetic
IT   Cosmetic ointments
       Cosmetic powders
     Homogenization
        (skin care and protection ointment preparation for children and adults
        comprising zinc oxide, paraffin oil, lanolin, vaseline and bisabolol,
        method for obtaining thereof)
IT   77-92-9, Citric acid, biological studies   515-69-5, Bisabolol
     1314-13-2, Zinc oxide (ZnO), biological studies   14807-96-6,
     Talcum, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (skin care and protection ointment preparation for children and adults
        comprising zinc oxide, paraffin oil, lanolin, vaseline and bisabolol,
        method for obtaining thereof)
```

Note the use of abbreviations in both the indexing terms and the abstract of the CAplus record. Having SET ABB ON will automatically include these abbreviations as part of your query.

Search the query with more precise proximity

The (2A) operator retrieves terms within two words of each other. Number qualifiers can be used with the (nW) operator as well.

```
=> S COSMETIC? (2A) (TALC OR TALCUM OR STEATITE)

        114585 COSMETIC?
         56857 TALC
           394 TALCS
         56926 TALC
                 (TALC OR TALCS)
          4107 TALCUM
             2 TALCUMS
          4107 TALCUM
                 (TALCUM OR TALCUMS)
          1831 STEATITE
            61 STEATITES
          1848 STEATITE
                 (STEATITE OR STEATITES)
L4         596 COSMETIC? (2A) (TALC OR TALCUM OR STEATITE)

=> D HIT 25 50 75

L4   ANSWER 25 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
IT   1309-37-1, Red iron oxide, biological studies   12174-53-7, Sericite
     12227-89-3, Black iron oxide   13463-67-7, Titania, biological studies
     14807-96-6, Talc, biological studies   51274-00-1, Yellow iron
     oxide
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic pigments surface-treated with
        alkylalkoxypolysiloxanes to impart sufficient water resistance and good
        dispersibility in hydrocarbon solvents)

L4   ANSWER 50 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
ST   cosmetic siloxane titania talc composite powder

L4   ANSWER 75 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
IT   1309-37-1, Red iron oxide, biological studies   2943-75-1,
     N-Octyltriethoxysilane   12174-53-7, Sericite   12227-89-3, Black iron
     oxide   13463-67-7, Titania, biological studies   14807-96-6, Talc
     , biological studies   51274-00-1, Yellow iron oxide   61417-49-0,
     Isopropyl triisostearoyltitanate   125607-98-9,
     Tridecafluorooctyltriethoxysilane
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic pigment powders treated with
        (perfluoro)alkylalkoxysilanes or alkoxytitanium alkylates in water for
        good water repellency, improved affinity to skin, etc.)
```

DISPLAY HIT is a low cost browsing format that displays the fields containing the hit terms of the selected records.

Step 7: Display Records

Answers may be displayed in pre-defined formats or custom field displays. The DISPLAY command (D) is used to see the detailed record(s).

The DISPLAY command requires three pieces of information:

- Answer set L-number
- Answer number(s) to be displayed
- Format

General format

To display the second answer set in the bibliographic format with the field codes written out (IBIB), rather than just the two letter field codes and the abstract (ABS) for records 1 and 200.

=> DISPLAY L2 IBIB ABS 1 200

The IBIB format is a helpful format for giving to your customers who are not familiar with the STN field code abbreviations. Common selections are automatically included as the default settings, but vary by database. Check the STN Database Summary Sheet to determine what is the default DISPLAY format that is used if a format is not specified:

THE DEFAULT SETTING FOR	IS THE FOLLOWING	NOTES
Answer set L-number	Most recently created L-number	Type D HIS if you are interested in an answer set created earlier
Answer number(s)	First answer	Answer number input options include: • 1-5 to see the first five answers • 1 5 or 1,5 to see answers 1 and 5
Format	Bibliographic Information (BIB)	• IBIB: Bibliographic Information with field codes written out • TI: Title • ABS: Abstract and Graphic Images • ALL: Full record • HIT: Fields containing hit terms • HITIND: Index fields (ST and IT) containing hit terms • KWIC – Hit terms plus 20 words on either side (Key Word-in-Context) • Formats can be combined: D IBIB ABS

DISPLAY formats vary by database. After the STN arrow prompt, type **HELP FORMAT** or **HELP DFIELDS** for more information while online.

Example records

```
=> D IBIB 1 595

L4   ANSWER 1 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER:        2011:266077  CAPLUS  Full-text
TITLE:                   Composition for cosmetic preparation having
                         ultraviolet shielding effect and sebum solidifying
                         ability, and cosmetic preparation
INVENTOR(S):             Ijiri, Hirofumi; Sato, Kazuo; Suzuki, Masaharu;
                         Hasegawa, Yukio
PATENT ASSIGNEE(S):      Miyoshi Kasei, Inc., Japan
SOURCE:                  PCT Int. Appl., 31pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                Japanese
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
     WO 2011024364        A1    20110303    WO 2010-JP4286         20100629
         W:  AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
             CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG,
             ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG,
             PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY,
             TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR,
             HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE,
             SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG, BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ,
             TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:                       JP 2009-200539      A  20090831

L4   ANSWER 595 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER:        1929:7827  CAPLUS  Full-text
DOCUMENT NUMBER:         23:7827
ORIGINAL REFERENCE NO.:  23:930h-i
TITLE:                   Mineral aspects of steatite talc
AUTHOR(S):               Catet, Victor
SOURCE:                  Aromatics (1928), 9, 17-8
                         CODEN: AROAAL; ISSN: 0097-4072
DOCUMENT TYPE:           Journal
LANGUAGE:                Unavailable
```

Relevance Ranking

STN provides the capability to relevance rank record sets based upon frequency of hit terms, as well as the location and proximity of the terms. The FOCUS command is used to rearrange the records in an answer set to bring the most relevant to the top. Records are normally displayed in reverse chronological order with the most recent answer first. Consider relevance ranking when you want to bring the most pertinent records to the top – the last answer could possibly be the most important. Compare the two lists of titles below:

```
=> D TI 1-5

L4   ANSWER 1 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Composition for cosmetic preparation having ultraviolet shielding effect
     and sebum solidifying ability, and cosmetic preparation

L4   ANSWER 2 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   New bicyclic dioxanes, their preparation and their use as fragrant
     compounds

L4   ANSWER 3 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Cosmetic containing chlorella extract

L4   ANSWER 4 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Cosmetic composition containing makeup powders and liquid moisturizers

L4   ANSWER 5 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Solid powder cosmetic having a plurality of powdery cosmetics in a
     container


=> FOCUS
PROCESSING COMPLETED FOR L4
L5          596 FOCUS L4 1-

=> D TI 1-5

L5   ANSWER 1 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Fibrous and mineral content of cosmetic talcum products

L5   ANSWER 2 OF 596  CAPLUS  COPYRIGHT 2012  ACS on STN
TI   Mineralogical characterizaton of cosmetic talc products

L5   ANSWER 3 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Biological effects of cosmetic talc

L5   ANSWER 4 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Cosmetics containing talc produced in Pokhara, Nepal

L5   ANSWER 5 OF 596  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Cosmetic compositions comprising talc and mica and iron oxide
```

By default, STN always assumes the last L-number.

Web Resource

For additional information about using the FOCUS command, visit: http://www.cas.org/training/stn/stn-pocket-guide or type HELP FOCUS at an arrow prompt (=>).

REFINING RESULTS USING SPECIALIZED INDEXES

Another technique for adjusting a search strategy is to refine an answer set using search terms that are not in the Basic Index. This technique – called searching specialized indexes – allows you to use search terms to specify that records are:

- From a particular type of source document – e.g., patent, journal article, dissertation
- Written in a particular language
- Published within a specific time period

Document Type Specialized Index

The Document Type index (DT) contains an indication of the type of source document.

Search Question

What patent publications have appeared covering the use of talc in cosmetics?

Technique

The EXPAND command is used to identify the file-specific term used for the Document Type of interest.

```
=> E PATENTS/DT

E83     7612323      P/DT
E84     7612323      PATENT/DT
E85           0 --> PATENTS/DT
E86      249240      PREPRINT/DT
E87       13732      PRODUCT REVIEW/DT
E88      323886      R/DT
E89      323886      REPORT/DT
E90     2486255      REVIEW/DT
E91       13732      RP/DT
E92      323886      T/DT
**** END OF FIELD ****
```

Use EXPAND to identify the appropriate search term. NOTE the abbreviated term of P for PATENT.

Refine the Answer Set to Patents

```
=> D HIS

     FILE 'CAPLUS' ENTERED AT 15:04:15 ON 14 MAR
                SET EXPAND CONTINUOUS PERM
                EXPAND COSMETIC BI
                E TALC
L1          3451 SEARCH COSMETIC? AND E51
                E TALC/CT
                E E63+ALL
                SET ABB ON PERM
                SET PLURALS ON PERM
L2          3586 S COSMETIC? AND (E51 OR E78-E81)
L3           135 S L2 NOT L1
L4           596 S COSMETIC? (2A) (TALC OR TALCUM OR STEATITE)
L5           596 FOCUS L4 1-
                E PATENTS/DT

=> S L4 AND P/DT

       7612323 P/DT
L6         529 L4 AND P/DT

=> D BIB ABS HITIND 3

L6   ANSWER 3 OF 529  CAPLUS  COPYRIGHT 2012 ACS on STN
AN   2011:206233  CAPLUS  Full-text
TI   Cosmetic containing chlorella extract
IN   Zhang, Bingquan
PA   Peop. Rep. China
SO   Faming Zhuanli Shenqing, 5pp.
     CODEN: CNXXEV
DT   Patent
LA   Chinese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   CN 101972218         A     20110216    CN 2010-10293886       20100921
PRAI CN 2010-10293886           20100921
AB     The title cosmetic comprises extraction liquid or dry powder of chlorella
with broken cell walls.  The nutrients in chlorella can be uniformly assimilated
through the skin to activate human cells and repair damaged genes.
IPCI A61K0008-97 [I,A]; A61Q0019-00 [I,A]; A61Q0001-08 [I,A]; A61Q0001-04
     [I,A]; A61Q0001-10 [I,A]; A61Q0017-04 [I,A]; A61Q0005-12 [I,A]
CC   62 (Essential Oils and Cosmetics)
IT   INDEXING IN PROGRESS
IT   56-81-5, Glycerol   64-17-5, Ethanol   107-88-0, 1,3-Butanediol
     1309-37-1, Ferric oxide   9002-89-5, Polyvinyl alcohol   13463-67-7,
     Titanium oxide   14807-96-6, Talc   26264-14-2, Propanediol
     31566-31-1, Glyceryl monostearate
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic containing chlorella extract)
```

The DISPLAY HISTORY (D HIS) command is a convenient way to recall your prior search history to locate a specific L-number.

HITIND provides the HIT INDexing within a record.

Note the language of the original publication. Other patent equivalents may be available in the desired language.

STN syntax note: When searching non-numeric field codes (e.g., Document Type (DT), Language (LA), Author (AU), Corporate Source (CS), use the “term” and a forward slash with the desired field code. Numeric field codes can be searched this way, or they may be searched using the greater than, less than, and equals signs.

Refine the Answer Set to a Particular Language

Recall that the Language index (LA) indicates the language of the original source document even though the abstracts are in English.

Search Question

Limit the patents to those published in English.

The EXPAND command is used to identify the file-specific term used for the language of interest.

Technique

```
=> E ENGLISH/LA 5

E93   19606766     EN/LA
E94   19606766     ENG/LA
E95   19606766 --> ENGLISH/LA
E96        178     EO/LA
E97      97768     ES/LA

=> S L6 AND E95

      19606766 ENGLISH/LA
L7         106 L6 AND ENGLISH/LA

=> D BIB 106

L7   ANSWER 106 OF 106  CAPLUS  COPYRIGHT 2012 A
AN   1974:454336  CAPLUS  Full-text
DN   81:54336
OREF 81:8627a,8630a
TI   Fragrance retention by chelating agent-coated talc
IN   Augsburger, Larry L.; Marvel, John R.
PA   Johnson and Johnson
SO   U.S., 4 pp.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   US 3801709           A     19740402    US 1970-84519          19701027
PRAI US 1970-84519              19701027
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
```

This command limits the EXPAND display to five results, rather than the default of twelve.

EN and ENG are abbreviated forms of the word ENGLISH and are valid search terms in the CAplus/LA field. All languages are represented with a two-letter code as well as being spelled out.

Recall that the documents display in reverse chronological order by default. We have displayed the oldest document to determine the time period covered within this answer set.

Refine the Records Set to a Particular Date Range

The Publication Year index (PY) contains the publication year of the source document.

Search Question

How many patents have been published in English since 2000?

Publication year information may be in several formats, based on the database (refer to the specific Database Summary Sheet):

- Single years, e.g., PY=2002 or 2002/PY
- Date ranges, e.g., 1997-2002/PY or PY>=1997

```
=> S L7 AND PY>=2000

      13871278 PY>=2000
L8           82 L7 AND PY>=2000

=> D BIB 82

L8   ANSWER 82 OF 82  CAPLUS  COPYRIGHT 2012 ACS on STN
AN   1994:541264  CAPLUS  Full-text
DN   121:141264
OREF 121:25411a,25414a
TI   Cosmetic compositions containing surface-treated pigments
IN   Jorgensen, Lise Wivestad
PA   Procter and Gamble Co., USA
SO   PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     ---------------     ----   --------    --------------------     --------
PI   WO 9415580           A1    19940721    WO 1994-US306            19940110
         W:  AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KP, KR, KZ, LK, LV,
             MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, UZ, VN
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     CA 2153324           A1    19940721    CA 1994-2153324          19940110
     CA 2153324           C     19990615
     AU 9459938           A     19940815    AU 1994-59938            19940110
     EP 678015            A1    19951025    EP 1994-906059           19940110
     EP 678015            B1    19970827
     EP 678015            B2    20010131                                     <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
     CN 1118987           A     19960320    CN 1994-191440           19940110
     CN 1057669           C     20001025                                     <--
     JP 08505624          T     19960618    JP 1994-516263           19940110
     AT 157246            T     19970915    AT 1994-906059           19940110
     ES 2106508           T3    19971101    ES 1994-906059           19940110
     SG 94678             A1    20030318    SG 1996-2083             19940110 <--
     AU 9852137           A     19980319    AU 1998-52137            19980119
     AU 698747            B2    19981105
     GR 3035337           T3    20010531    GR 2001-400029           20010201 <--
PRAI US 1993-3086         A     19930111
     WO 1994-US306        W     19940110
OSC.G   22    THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)
RE.CNT  6     THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

This patent record had additional countries added since the year 2000.

STN Continuous Search History

One of the strengths of searching on STN is the availability of a continuous search history. L-number sets are not overwritten when a new database is entered, allowing queries that have been developed in one database to be portable to other STN databases.

Search Question

How many patents have been published in English since 2000?

Simply search the L-number from the CAplus search in LWPI.

LIS program participants only have access to LWPI (learning file for DWPI); causing your search results to be minimal compared to results retrieved in DWPI with this same search.

```
=> D HIS

     FILE 'CAPLUS' ENTERED AT 15:04:15 ON 14 MAR 2012
                SET EXPAND CONTINUOUS PERM
                EXPAND COSMETIC BI
                E TALC
L1          3451 SEARCH COSMETIC? AND E51
                E TALC/CT
                E E63+ALL
                SET ABB ON PERM
                SET PLURALS ON PERM
L2          3586 S COSMETIC? AND (E51 OR E78-E81)
L3           135 S L2 NOT L1
L4           596 S COSMETIC? (2A) (TALC OR TALCUM OR STEATITE)
L5           596 FOCUS L4 1-
                E PATENTS/DT
L6           529 S L4 AND P/DT
                E ENGLISH/LA 5
L7           106 S L6 AND E95
L8            82 S L7 AND PY>=2000

=> FILE LWPI

LWPI IS A STATIC LEARNING FILE
 >>>   PATENT DRAWINGS AVAILABLE FOR DISPLAY   <<<

=> S L4

           5387 COSMETIC?
           1769 TALC
             11 TALCS
           1777 TALC
                  (TALC OR TALCS)
            191 TALCUM
             44 STEATITE
L9            3 COSMETIC? (2A) (TALC OR TALCUM OR STEATITE)
```

Use D HIS to recall the continuous search history.

Three patents in LWPI match the criteria that was established within the previous query.

```
=> D BIB ABS

L9   ANSWER 1 OF 3  LWPI COPYRIGHT 2012       THOMSON REUTERS on STN
AN   2010-F66164 [201036]   LWPI
TI   Powder spray cosmetic used as antiperspirant and deodorant, contains
     hydrophilic spherical powder, polyether modified silicone and propellant
DC   A25; A26; A96; D21; E11
IN   HORIKOSHI M; NAGASAWA M; TSUCHIKURA T
PA   (KAOS-C) KAO CORP
CYC  1
PIA  JP 2010116341   A  20100527 (201036)* JA  16[0]
ADT  JP 2010116341 A JP 2008-290144 20081112
PRAI JP 2008-290144       20081112
AN   2010-F66164 [201036]   LWPI
AB   JP 2010116341 A   UPAB: 20101130
       NOVELTY - Powder spray cosmetic contains (a) hydrophilic spherical powder,
       (b) polyether modified silicone, and (c) propellant. The cosmetic has
       viscosity of 1x 103-1x 105 mPa.second at 25 degrees C, when the component
       (b) is 40 mass% decamethyl cyclopentasiloxane solution.
       USE - Powder spray cosmetic used as antiperspirant and deodorant.
       ADVANTAGE - The cosmetic has excellent dispersibility, reduced
       sedimentation velocity and favorable re-dispersibility.
```

AUTHOR NAME SEARCHING

Author names are searched in the Author Name field (/AU). Author names are inverted in STN (the last name is first, followed by the first name, initials, etc.) and must be searched in this format.

In CAS databases, names are taken from the original documents. The exact form of entry of the name may vary, depending on how the author is cited in a particular publication.

- First and middle names may be given in full or both may be given as initials
- Middle name or initial may not be present in all entries

Other database producers may enhance or standardize author names depending on their indexing practices.

Tips for Searching Author Names

- Author name entries are case sensitive.
- Author names are displayed in the order in which they appear in the original document.

FOR AUTHOR NAMES	EXAMPLE	TIP	EXAMPLE
Where there may be confusion about the form of the name	Karl Wurth Karl A. Wurth K.A. Wurth	EXPAND on the last name and first initial	WURTH K/AU
With internal punctuation (apostrophes, hyphens)	O'Brian	EXPAND on variations with punctuation eliminated	OBRIAN/AU O BRIAN/AU
With internal spaces	La Bar	EXPAND on variations with spaces eliminated	LA BAR/AU LABAR/AU
Containing an umlaut	Muller	EXPAND on variations substituting : ae for a oe for o ue for u	Muller/AU Mueller/AU
Where there may be confusion about the surname	Bing Chen	EXPAND using both names as the surname	BING/AU CHEN/AU

FOR AUTHOR NAMES	EXAMPLE	TIP	EXAMPLE
Where the last name contains a prefix	Van der Beek	EXPAND both with and without blanks	VAN DER BEEK/AU VAN DERBEEK/AU VANDERBEEK/AU VANDER BEEK/AU
Where the last names are transliterated from another alphabet (e.g., the Cyrillic alphabet)	Spasski	EXPAND using alternate spellings	…SKI/AU …SKY/AU

Format for searching author names:

=> EXPAND WURTH K/AU

=> SEARCH WURTH K?/AU

You may also use truncation to retrieve all forms of an author's name, after you check the author name using the EXPAND command.

SEARCH STRATEGY

STEPS	TO RETRIEVE RESEARCH WRITTEN BY A KNOWN AUTHOR
1	To retrieve research written by a known author.
2	Modify the search strategy to include all search concepts.
3	Display answer(s).

Conduct an Author Search

Search Question

Locate research published by the British physicist Stephen W. Hawking. We are particularly interested in his research on cosmology, the universe, and gravity.

Step 1: Conduct a Preliminary Search to FIND the Author's Name

Always EXPAND (E) on an author's name before you search for it to verify that the author is in the database that you chose. Then search the E-numbers that correspond to their name. When you use the EXPAND command, include a space before the first name or initial.

```
=> FILE CAPLUS

=> E HAWKING S/AU

E1            6     HAWKING ROBERT G/AU
E2            1     HAWKING ROBERT GEORGE/AU
E3            0 --> HAWKING S/AU
E4            1     HAWKING S H/AU
E5           66     HAWKING S W/AU
E6            1     HAWKING SHIRLEY E/AU
E7            5     HAWKING STEPHEN/AU
E8            4     HAWKING STEPHEN W/AU
E9            1     HAWKINGON ALFRED T/AU
E10           5     HAWKINGS C S V/AU
E11           1     HAWKINGS ELAINE/AU
E12           1     HAWKINGS G S/AU

=> S E5 OR E7-E8

             66 "HAWKING S W"/AU
              5 "HAWKING STEPHEN"/AU
              4 "HAWKING STEPHEN W"/AU
L1           75 "HAWKING S W"/AU OR ("HAWKING STEPHEN"/AU OR "HAWKING STEPHEN
                W"/AU)
```

Select E# for the relevant author that includes both his initials and first name.

After reviewing the authors, the E-numbers selected could all relate to Stephen W. Hawking – even the one without the middle initial.

Step 2: Modify the Search Strategy to Include All Search Concepts

The search results are refined using subject terminology describing the author's research in the search question.

```
=> D SCAN

L1    75 ANSWERS   CAPLUS  COPYRIGHT 2012 ACS on STN
CC   70-3 (Nuclear Phenomena)
TI   The gravitational Hamiltonian in the presence of non-orthogonal boundaries
ST   field theory gravitational Hamiltonian
IT   Gravitational field theory
        (gravitational Hamiltonian in the presence of non-orthogonal
        boundaries)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L1    75 ANSWERS   CAPLUS  COPYRIGHT 2012 ACS on STN
CC   70-3 (Nuclear Phenomena)
TI   Generalized spin structures in quantum gravity
ST   quantum field gravity spin
IT   Field theory
        (gravitational, quantum, generalized spin structure in)
IT   Gravitation
        (quantum, generalized spin structure in)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> S UNIVERSE OR COSMOLOGY OR GRAVIT?
         51879 UNIVERSE
          1418 UNIVERSES
         52093 UNIVERSE
                 (UNIVERSE OR UNIVERSES)
          5048 COSMOLOGY
          1760 COSMOLOGIES
          6619 COSMOLOGY
                 (COSMOLOGY OR COSMOLOGIES)
         40721 COSMOL
            57 COSMOLS
         40725 COSMOL
                 (COSMOL OR COSMOLS)
         41344 COSMOLOGY
                 (COSMOLOGY OR COSMOL)
        125683 GRAVIT?
         70142 GR
          2311 GRS
         71704 GR
                 (GR OR GRS)
        193301 GRAVIT?
                 (GRAVIT? OR GR)
L2      240005 UNIVERSE OR COSMOLOGY OR GRAVIT?

=> S L1 AND L2

L3          59 L1 AND L2
```

Use D SCAN to see if answers are on target.

Add other search question concepts.

Trapped at a colon prompt: Type **END** or **0** to exit the answer scan feature.

Step 3: Display Answers

```
=> D L3 BIB 1-2 58-59

L3   ANSWER 1 OF 59  CAPLUS  COPYRIGHT 2012 ACS on STN
AN   2010:1238465  CAPLUS  Full-text
DN   153:590654
TI   No-boundary measure in the regime of eternal inflation
AU   Hartle, James; Hawking, S. W.; Hertog, Thomas
CS   Department of Physics, University of California, Santa Barbara, CA, 93106,
     USA
SO   Physical Review D: Particles, Fields, Gravitation, and Cosmology (2010),
     82(6), 063510/1-063510/18
     CODEN: PRDPC8; ISSN: 1550-7998
PB   American Physical Society
DT   Journal
LA   English
RE.CNT  39    THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 2 OF 59  CAPLUS  COPYRIGHT 2012 ACS on STN
AN   2008:828267  CAPLUS  Full-text
DN   149:317309
TI   Classical universes of the no-boundary quantum state
AU   Hartle, James B.; Hawking, S. W.; Hertog, Thomas
CS   Department of Physics, University of California, Santa Barbara, CA,
     93106-9530, USA
SO   Physical Review D: Particles, Fields, Gravitation, and Cosmology (2008),
     77(12, Pt. A), 123537/1-123537/28
     CODEN: PRDPC8; ISSN: 1550-7998
PB   American Physical Society
DT   Journal
LA   English
RE.CNT  36    THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 58 OF 59  CAPLUS  COPYRIGHT 2012 ACS on STN
AN   1976:469566  CAPLUS  Full-text
DN   85:69566
OREF 85:11119a,11122a
TI   Gamma rays from primordial black holes
AU   Page, Don N.; Hawking, S. W.
CS   California Inst. Technol., Pasadena, CA, USA
SO   Astrophysical Journal (1976), 206(1, Pt. 1), 1-7
     CODEN: ASJOAB; ISSN: 0004-637X
DT   Journal
LA   English
OSC.G   129   THERE ARE 129 CAPLUS RECORDS THAT CITE THIS RECORD (131 CITINGS)

L3   ANSWER 59 OF 59  CAPLUS  COPYRIGHT 2012 ACS on STN
AN   1971:470027  CAPLUS  Full-text
DN   75:70027
OREF 75:11063a,11066a
TI   Gravitationally collapsed objects of very low mass
AU   Hawking, Stephen
CS   Inst. Theor. Astron., Univ. Cambridge, Cambridge, UK
SO   Monthly Notices of the Royal Astronomical Society (1971), 152(1), 75-8
     CODEN: MNRAA4; ISSN: 0035-8711
DT   Journal
LA   English
OSC.G   188   THERE ARE 188 CAPLUS RECORDS THAT CITE THIS RECORD (189 CITINGS)
```

Notice the hit term highlighting due to the truncation that was used in the search statement.

COMPANY NAME SEARCHING

Searching by company name is a common method of beginning an investigation. Company name searches can be done in support of competitive intelligence, joint ventures, technology transfer, or patent portfolio management. Several databases on STN provide tools to help you with company name searching.

Search Question

Conduct a search on Syngenta and its subsidiaries.

SEARCH STRATEGY

STEPS	TO LOCATE RESEARCH DONE BY A COMPANY
1	Locate company name variations using the Patent Assignee Code thesaurus (/PACO) in DWPI.
2	Locate company name variations using the CAplus Company Name thesaurus (/CO).
3	Conduct a simultaneous multifile search using terms retrieved from DWPI and CAplus.
4	Refine and display answers.

Note

If you repeat any of the searches in this workbook as a form of practice, the E-numbers, the L-numbers, and/or the number of results may differ from what is shown in this workbook.

Step 1: Locate Company Name Variations Using the Patent Assignee Code Thesaurus (/PACO) in DWPI

The Derwent Patent Assignee Code (PACO) provides two invaluable lookup features. The ability to:

- Find the correct Derwent code to retrieve all DWPI patent records for a patent assignee of interest
- Confirm the precise Derwent definition of a given Patent Assignee Code

```
=> FILE LWPI

LWPI IS A STATIC LEARNING FILE
 >>>   PATENT DRAWINGS AVAILABLE FOR DISPLAY   <<<

 >>> THE FILE HAS BEEN RELOADED ON JANUARY 23, 2011 <<<

=> SET EXPAND CONTINUOUS PERM

SET COMMAND COMPLETED

=> E SYNGENTA/PACO

E#   FREQUENCY    AT     TERM
--   ---------    --     ----
E1           0     1     SYNGENIX/PACO
E2           0     1     SYNGENIX LTD/PACO
E3           0     2 --> SYNGENTA/PACO
E4           0     1     SYNGENTA AG/PACO
E5           0     1     SYNGENTA AGRIC DISCOVERY INC/PACO
E6           0     1     SYNGENTA BIOLINE LTD/PACO
E7           0     1     SYNGENTA CO LTD/PACO
E8           0     1     SYNGENTA CORP/PACO
E9           0     1     SYNGENTA CROP PROPERTIES INC/PACO
E10          0     1     SYNGENTA CROP PROTECTION AG/PACO
E11          0     1     SYNGENTA CROP PROTECTION INC/PACO
E12          0     1     SYNGENTA HOLDING AG/PACO
```

EXPAND on a company name in the /PACO field to determine the appropriate code to use. The PACO field is a thesaurus field. This is indicated by the extra column, Associate Terms (AT), that displays after using the EXPAND command.

The presence of a number ≥1 in the AT column indicates that there is information available for the term of interest. EXPAND on the E-number associated with Syngenta to determine more information by using the +ALL relationship code.

```
=> E E3+ALL

E13          0   -->  SYNGENTA/PACO
E14        102   CODE SYGN-C/PACO
E15        102   CODE SYGN-C/PACO
********** END **********
```

The DWPI PACO for Syngenta is SYGN-C. To see a list of the companies that are represented by this code, EXPAND on the appropriate E-number. Using ALL will display the associated terms.

```
=> E E14+ALL

E16         102   -->  SYGN-C/PACO
E17               DEF  SYNGENTA/PACO
E18               DEF  SYNGENTA AG/PACO
E19               DEF  SYNGENTA AGRIC DISCOVERY INC/PACO
E20               DEF  SYNGENTA BIOLINE LTD/PACO
E21               DEF  SYNGENTA CO LTD/PACO
E22               DEF  SYNGENTA CORP/PACO
E23               DEF  SYNGENTA CROP PROPERTIES INC/PACO
E24               DEF  SYNGENTA CROP PROTECTION AG/PACO
E25               DEF  SYNGENTA CROP PROTECTION INC/PACO
E26               DEF  SYNGENTA HOLDING AG/PACO
E27               DEF  SYNGENTA HOLDING CO LTD/PACO
E28               DEF  SYNGENTA HOLDING SA/PACO
E29               DEF  SYNGENTA INC/PACO
E30               DEF  SYNGENTA INVESTMENT CORP/PACO
E31               DEF  SYNGENTA INVESTMENTS INC/PACO
E32               DEF  SYNGENTA INVOLVEMENT CO LTD/PACO
E33               DEF  SYNGENTA JAPAN KK/PACO
E34               DEF  SYNGENTA JOINING GMBH/PACO
E35               DEF  SYNGENTA KOREA CO LTD/PACO
E36               DEF  SYNGENTA LTD/PACO
E37               DEF  SYNGENTA MOGEN BV/PACO
E38               DEF  SYNGENTA PARTICIPATION AG/PACO
E39               DEF  SYNGENTA PARTICIPATION CO LTD/PACO
E40               DEF  SYNGENTA PARTICIPATIONS/PACO
E41               DEF  SYNGENTA PARTICIPATIONS AG/PACO
E42               DEF  SYNGENTA PROTECAO CULTIVOS LTDA/PACO
E43               DEF  SYNGENTA SEEDS AG/PACO
E44               DEF  SYNGENTA SEEDS BV/PACO
E45               DEF  SYNGENTA SEEDS CO/PACO
E46               DEF  SYNGENTA SEEDS INC/PACO
E47               DEF  SYNGENTA SEEDS PTY LTD/PACO
E48               DEF  SYNGENTA SEEDS SAS/PACO
********** END **********
```

The list of company name variations represents the definition of the STGN-C PACO.

To conduct a comprehensive company name search in DWPI, three fields must be included in the search:

1. The Patent Assignee Code (PACO), discussed above
2. The Patent Assignee (PA)
   - The entity that is the recipient of a transfer of a patent application, patent, trademark application, or trademark registration from its owner of record
3. The Agent (AG) field
   - This field in DWPI contains information about the law firm or other agency that prosecutes the patent
   - Often, patents are prosecuted by inside counsel for a particular company, but the company may not be listed in the PA field (this is especially true if the document is a patent application)

```
=> S SYNGENTA/PA,AG OR SYGN-C/PACO

           102 SYNGENTA/PA
            55 SYNGENTA/AG
           102 SYGN-C/PACO
L1         104 SYNGENTA/PA,AG OR SYGN-C/PACO

=> D HIT 1-2 93

L1   ANSWER 1 OF 104  LWPI COPYRIGHT 2012 THOMSON REUTERS on STN
PA   (SYGN-C) SYNGENTA PARTICIPATIONS AG

L1   ANSWER 2 OF 104  LWPI COPYRIGHT 2012 THOMSON REUTERS on STN
PA   (SYGN-C) SYNGENTA LTD

L1   ANSWER 93 OF 104  LWPI COPYRIGHT 2012 THOMSON REUTERS on STN
PA   (ANGS-I) ANGST M; (CHAR-I) CHARMILLOT P; (HOFE-I) HOFER D; (NOVS-C)
     NOVARTIS AG; (NOVS-C) NOVARTIS-ERFINDUNGEN VERW GES MBH; (SYGN-C)
     SYNGENTA CROP PROTECTION INC; (SYGN-C) SYNGENTA PARTICIPATIONS AG

Member(0007)
AG   William A. Teoli, Jr., Syngenta Crop Protection, Inc.
       AGA: Patent and Trademark Dept., 410 Swing Road, Greensboro, NC, US
```

Two additional records are captured by including the Agent (AG) and Patent Assignee (PA) fields as part of the search.

Note

Many more records would have been found if we had searched in WPINDEX rather than LWPI, the learning file for DWPI.

Step 2: Locate Company Name Variations Using the CAplus Company Name Thesaurus (/CO)

You can easily identify related forms for names of many major companies that CAS has compiled from records in its database by using the Company Name thesaurus in the CA[SM]/CAplus family of databases on STN.

- This tool provides standard thesaurus functions in the Company Name (/CO) field
- Each company family is assigned a Company Number (CNUM) and a Preferred Name (NAME) for the highest level company name
- The thesaurus identifies related company names, e.g., Related Terms (RT) and Joint Ventures (JV) under the preferred company name (NAME)
- NOTES on the "history" of the company are provided, when available

```
=> FILE CAPLUS

=> E SYNGENTA/CO

E#    FREQUENCY     AT      TERM
--    ---------     --      ----
E49           3             SYNGENIX LIMITED/CO
E50           2             SYNGENIX LTD/CO
E51          88      2 --> SYNGENTA/CO
E52          18             SYNGENTA AG/CO
E53           1             SYNGENTA AGRIBUSINESS BIOTECHNOLOGY RESEARCH/CO
E54           1             SYNGENTA AGRIBUSINESS BIOTECHNOLOGY RESEARCH INC/CO
E55           1             SYNGENTA AGRICULTURAL DISCOVERY INST/CO
E56           1             SYNGENTA AGRICULTURAL DISCOVERY INSTITUTE/CO
E57           6             SYNGENTA AGRO/CO
E58           3             SYNGENTA AGRO GMBH/CO
E59           1             SYNGENTA AGRO S A/CO
E60           2             SYNGENTA AGRO S A S/CO

=> E E51+ALL

E61          20      NAME SYNGENTA LTD/CO
E62          88    -->  SYNGENTA/CO
********** END **********
```

EXPAND on a company name in the /CO field and continue to EXPAND until there are Associated Terms (AT) available.

The presence of Associated Terms indicates a valid search term.

EXPAND to determine the parent company name.

The parent company will appear at the top of the list.

Expand on the parent company list to see the company history and additional search terms.

```
=> E E61+ALL

E63           0     CNUM CAS1000264/CO
E64          20   -->  SYNGENTA LTD/CO
                        NOTES 1953: ICI acquired Plant Protection Ltd.
                        1974: Ciba acquired Funk Seeds International
                        1975: Sandoz acquired Rogers Seed Co.
                        1976: Sandoz acquired Northrup King & Co.
                        1980: Sandoz acquired Zaadunie BV
                        1989: Sandoz acquired Hilleshog AB
                        1993: ICI spun off Zeneca Agrochemicals
                        1996: Ciba and Sandoz merged to form Novartis
                        1997: Zeneca Agrochemicals acquired Mogen International
                        1998: Novartis Agricultural Discovery Institute formed
                        2000: Novartis agribusiness and Zeneca Agrochemicals
                        merged to form Syngenta Ltd.
E65           6     RT1  GARST SEED CO/CO
E66          20       RT2  GARST SEED COMPANY/CO
E67          13     RT1  HILLESHOEG AB/CO
E68           4     RT1  HILLESHOEG RES AB/CO
E69           7     RT1  HILLESHOG AB/CO
E70           1     RT1  HILLESHOG SEED CO LTD/CO
E71           1     RT1  HILLESHOG SUGAR BEET BREEDING INST/CO
E72           7     RT1  ICI AGRIC DIV/CO
E73           2     RT1  ICI AGRICULTURAL MALAYSIA LTD/CO
E74           6     RT1  ICI AGRO/CO
E75         130     RT1  ICI AGROCHEM/CO
E76           4     RT1  ICI PROTECTION DE L AGRICULTURE S A/CO
E77           3     RT1  MOGEN INTERNATIONAL/CO
E78           5     RT1  MOGEN INTERNATIONAL NV/CO
E79          40       RT2  MOGEN INTERNATIONAL N V/CO
E80           2     RT1  NORTHRUP KING AND CO/CO
E81           1     RT1  NORTHRUP KING CO/CO
E82          11     RT1  NOVARTIS AGRICULTURAL DISCOVERY INSTITUTE/CO
E83          60     RT1  NOVARTIS CROP PROTECTION AG/CO
E84          41     RT1  PLANT PROT LTD/CO
E85          22     RT1  PLANT PROTECTION LTD/CO
E86          88     RT1  SYNGENTA/CO
E87           8     RT1  SYNGENTA AT LIMITED/CO
E88          60     RT1  SYNGENTA BIOTECHNOLOGY INC/CO
E89         164     RT1  SYNGENTA CENTRAL TOXICOLOGY LABORATORY/CO
E90         159     RT1  SYNGENTA CROP PROTECTION AG/CO
E91          64     RT1  SYNGENTA CROP PROTECTION INC/CO
E92         466     RT1  SYNGENTA LIMITED/CO
E93           9     RT1  SYNGENTA MOGEN B V/CO
E94           4     RT1  SYNGENTA PARTICIPATIONS/CO
E95         778     RT1  SYNGENTA PARTICIPATIONS AG/CO
E96         491       RT2  SYNGENTA PARTICIPATIONS A G/CO
E97         271     RT1  SYNGENTA SEEDS B V/CO
E98          55     RT1  TORREY MESA RESEARCH INSTITUTE/CO
E99           1     RT1  ZAADUNIE BV/CO
E100          4       RT2  ZAADUNIE B V/CO
E101         63     RT1  ZENECA AG PRODUCTS/CO
E102          2     RT1  ZENECA AGRO/CO
E103          1     RT1  ZENECA AGRO BELGIUM/CO
E104         26     RT1  ZENECA AGROCHEM/CO
E105        131     RT1  ZENECA AGROCHEMICALS/CO
E106          2     RT1  ZENECA MOGEN/CO
********** END **********
```

Relative Terms (RT) provide additional company names to include in a comprehensive search.

Use the company names highlighted to create your search command on the next page in order to search the Basic Index as well.

```
=> S E64+ALL OR (((ZENECA (W) (AGRO? OR MOGEN)) OR ZAADUNIE OR "PLANT PROTECTION
LTD" OR "NORTHRUP KING" OR "MOGEN INTERNATIONAL" OR (ICI (W) AGR?) OR (NOVARTIS
(W) AGRI?) OR HILLESHOEG)/CS OR SYNGENTA/CS)

          3085 "SYNGENTA LTD"+ALL/CO  (44 TERMS)
          2849 ZENECA/CS
         83309 AGRO?/CS
            98 MOGEN/CS
           255 ZENECA (W) (AGRO? OR MOGEN)
             5 ZAADUNIE/CS
             1 "PLANT PROTECTION LTD"/CS
             0 "NORTHRUP KING"/CS
             2 "MOGEN INTERNATIONAL"/CS
          6938 ICI/CS
        574976 AGR?/CS
           150 ICI (W) AGR?
          8880 NOVARTIS/CS
        439353 AGRI?/CS
            41 NOVARTIS (W) AGRI?
            23 HILLESHOEG/CS
          2751 SYNGENTA/CS
L2        3550 "SYNGENTA LTD"+ALL/CO OR (((ZENECA (W) (AGRO? OR MOGEN)) OR ZAAD
               UNIE OR "PLANT PROTECTION LTD" OR "NORTHRUP KING" OR "MOGEN INTE
               RNATIONAL" OR (ICI (W) AGR?) OR (NOVARTIS (W) AGRI?) OR HILLESHO
               EG)/CS OR SYNGENTA/CS)

=> D HIT 1-3 12-15 3540-3541 3549-3550

L2   ANSWER 1 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
PA   Syngenta Participations AG, Switz.
CO   Syngenta Participations AG

L2   ANSWER 2 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
PA   Syngenta Participations AG, Switz.
CO   Syngenta Participations AG

L2   ANSWER 3 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
PA   Syngenta Crop Protection AG, Switz.
CO   Syngenta Crop Protection AG

L2   ANSWER 12 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
PA   Syngenta Participations AG, Switz.
CO   Syngenta Participations AG

L2   ANSWER 13 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
PA   Syngenta Limited, UK
CO   Syngenta Limited

L2   ANSWER 14 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
CS   Syngenta Seeds Ltda., Uberlandia, Minas Gerais, 38400-974, Brazil

L2   ANSWER 15 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
PA   Syngenta Participations AG, Switz.
CO   Syngenta Participations AG

L2   ANSWER 3540 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
CO   Plant Protection Ltd.

L2   ANSWER 3541 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
CO   Northrup, King & Co.

L2   ANSWER 3549 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
CO   Plant Protection Ltd.

L2   ANSWER 3550 OF 3550  CAPLUS  COPYRIGHT 2012 ACS on STN
CO   Hilleshog Sugar Beet Breeding Inst.
```

Including subsidiary names within the /CS part of the query results in a retrieval of an additional two records.

Step 3: Conduct a Simultaneous Multifile Search Using Terms retrieved from DWPI and CAplus

For the most exhaustive search, the terms found in the CAplus Company Name thesaurus could be examined individually within DWPI to determine if Patent Assignee Codes exist for the subsidiaries individually. Alternately, the terms that have been found so far can be searched across several STN databases at once.

The INDEX command is a cost effective way to determine which STN databases contain the information you need. With INDEX, you can efficiently:

- Find the databases that cover your search topic (the greatest occurrence of hits)
- Enter and search the databases with the greatest occurrence of hits
- For more information on the INDEX command, type: => HELP INDEX
- For more information on database clusters, visit: http://www.cas.org/products/stn/dbss

General format:

=> INDEX STNLIS (Using a cluster name)

=> INDEX CAPLUS LWPI USPATFULL (searching two or more database names)

Note

- CAS has created a database cluster that is specific to the STN LIS Training Program: STNLIS.
- To see a definition of a cluster name, type DISPLAY CLUSTER [NAME] at an arrow prompt: => DISPLAY CUSTER STNLIS.
- Caution: STN LIS Training Program participants:

  If you use any of the other STN database clusters, you will run into some issues due to STN LIS database limitations.

  It is recommended that you only use the STNLIS cluster.

Search using the company names found earlier in your search.

INDEX provides a preview of search results in multiple databases.

```
=> INDEX STNLIS

INDEX 'APOLLIT, BIBLIODATA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, EPFULL,
       ICSD, INPADOCDB, JAPIO, LBIBLIO, LCA, LDRUG, LEMBASE, LINSPEC,
       LINPAFAMDB, LMARPAT, LWPI, MEDLINE, PATDD, PATDPA, PATDPAFULL,
       PCTGEN, REGISTRY, USPAT2, USPATFULL'
ENTERED AT 16:41:56 ON 14 MAR 2012

29 FILES IN THE FILE LIST IN STNINDEX


=> S (((ZENECA (W) (AGRO? OR MOGEN)) OR ZAADUNIE OR "PLANT PROTECTION LTD" OR
"NORTHRUP KING" OR "MOGEN INTERNATIONAL" OR (ICI (W) AGR?) OR (NOVARTIS (W)
AGRI?) OR HILLESHOEG)/CS OR SYNGENTA/CS)
          4   FILE APOLLIT
          1   FILE BIBLIODATA
       3225   FILE CAPLUS
        301   FILE CASREACT
          0*  FILE CHEMCATS
          0*  FILE CHEMLIST
          0*  FILE CIN
          0*  FILE EPFULL
          0*  FILE ICSD
      11027   FILE INPADOCDB
         64*  FILE JAPIO
  13 FILES SEARCHED...
          4   FILE LEMBASE
         13   FILE LINPAFAMDB
          0*  FILE LMARPAT
        103   FILE LWPI
        526   FILE MEDLINE
          0*  FILE PATDD
       3144   FILE PATDPA
        317   FILE PATDPAFULL
      30905   FILE PCTGEN
          0*  FILE REGISTRY
        478   FILE USPAT2
       1204   FILE USPATFULL

  15 FILES HAVE ONE OR MORE ANSWERS,   29 FILES SEARCHED IN STNINDEX

L3   QUE (((ZENECA (W) (AGRO? OR MOGEN)) OR ZAADUNIE OR "PLANT PROTECTION LTD"
         OR "NORTHRUP KING" OR "MOGEN INTERNATIONAL" OR (ICI (W) AGR?) OR (NOVA
         RTIS (W) AGRI?) OR HILLESHOEG)/CS OR SYNGENTA/CS)
```

In this example, databases with an * and zero hits do not have /CS as a search field. Databases that have this but have an * did not handle the (W) proximity operator correctly and assumed AND instead.

INDEX searches result in queries that can be searched later in the session.

Databases may be entered individually by typing with the database name or the appropriate F-number. Alternately, if all databases with hits are desired, type FIL HITS.

```
=> D RANK

F1        30905   PCTGEN
F2        11027   INPADOCDB
F3         3225   CAPLUS
F4         3144   PATDPA
F5         1204   USPATFULL
F6          526   MEDLINE
F7          478   USPAT2
F8          317   PATDPAFULL
F9          301   CASREACT
F10         103   LWPI
F11          64*  JAPIO
F12          13   LINPAFAMDB
F13           4   APOLLIT
F14           4   LEMBASE
F15           1   BIBLIODATA

=> FIL HITS

=> SET MSTEPS ON
SET COMMAND COMPLETED

=> S L3
L4        30905 FILE PCTGEN
L5        11027 FILE INPADOCDB
L6         3225 FILE CAPLUS
L7         3144 FILE PATDPA
L8         1204 FILE USPATFULL
L9          526 FILE MEDLINE
L10         478 FILE USPAT2
L11         317 FILE PATDPAFULL
L12         301 FILE CASREACT
L13         103 FILE LWPI
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ZENECA (W) '
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ICI (W) AGR?'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'NOVARTIS (W) AGRI?'
L14          64 FILE JAPIO
L15          13 FILE LINPAFAMDB
L16           4 FILE APOLLIT
L17           4 FILE LEMBASE
L18           1 FILE BIBLIODATA

TOTAL FOR ALL FILES
L19       51316 L3
```

D RANK lists databases in descending order by number of possible hits.

SET MSTEPS ON creates a separate L-number for each database in the multifile search as well as a combined set.

The JAPIO database does not use the (W) proximity operator and assumes AND instead.

Step 4: Refine and Display Answers

Record sets in each database can be refined by using keywords, date ranges, document types, etc.. Often, it is useful to enter each database individually and to take advantage of file-specific tools and features that are available. Those techniques will be shown in more advanced STN searching courses.

To see a record from each database to show where your search terms appear, use the following DISPLAY command:

=> D TI HIT 1 FROM EACH

This command uses a DISPLAY format that is common to all databases in the multifile set, such as title (TI).

```
=> D TI HIT 1 FROM EACH

L19   ANSWER 1 OF 51316  PCTGEN COPYRIGHT 2012 WIPO on STN
TI    Chlamydomonas glucan dikinase gene, enzyme, and modified starch, uses,
      methods of production thereof [File created by using OCR software]
PA    Syngenta Participations AG
      Basu, Shib S
      Lanahan, Mike
      Kinkema, Michael

L19   ANSWER 30906 OF 51316 INPADOCDB COPYRIGHT 2012 EPO/FIZ KA on STN
TI    FUNGIZIDZUSAMMENSETZUNGEN.
PA    SYNGENTA PARTICIPATIONS AG

L19  ANSWER 41933 OF 51316  CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Stacking of translational enhancer elements to increase polypeptide
     expression in plants
PA   Syngenta Participations AG, Switz.

L19  ANSWER 45158 OF 51316  PATDPA COPYRIGHT 2012 DPMA/FIZ KA on STN
TI   (CE) FUNGIZIDZUSAMMENSETZUNGEN
PA   Syngenta Participations AG (*CH Basel)

L19  ANSWER 48302 OF 51316  USPATFULL on STN
TI     Scaevola plant named `Bomy Dabule`
PA     Syngenta Crop Protection AG, Basel, SWITZERLAND (non-U.S. corporation)

L19  ANSWER 49506 OF 51316     MEDLINE on STN
TI   In vivo assays of langerhans cell migration.
CS   Syngenta Central Toxicology Laboratory, Macclesfield, UK.

L19  ANSWER 50032 OF 51316  USPAT2 on STN
TI     Garden bean SB4285
PA     Syngenta Participations AG, Basel, SWITZERLAND (non-U.S. corporation)

L19    ANSWER 50510 OF 51316 PATDPAFULL  COPYRIGHT 2012 DPMA on STN
TI     Neues Hybridsystem fuer Brassica napus
PA     Syngenta Participations AG, Basel, CH

L19  ANSWER 50827 OF 51316  CASREACT  COPYRIGHT 2012 ACS on STN
TI   Process for preparation of pyrazole carboxylic acid amides
PA   Syngenta Participations AG, Switz.
```

```
L19  ANSWER 51128 OF 51316  LWPI COPYRIGHT 2012       THOMSON REUTERS on STN
TI   Pesticidal mixture, useful for controlling fungal diseases caused by
     phytopathogens, comprises a carboxylic acid amide fungicide and a
     benzamide fungicide, where the mixture does not comprise e.g. fluopicolide
     and mandipropamid
PA   (SYGN-C) SYNGENTA PARTICIPATIONS AG

L19  ANSWER 51231 OF 51316  JAPIO  (C) 2012 JPO  on STN
TI   PROCESS FOR PREPARING 3-ISOCHROMANONE
PA   SYNGENTA LTD

L19   ANSWER 51295 OF 51316 LINPAFAMDB COPYRIGHT 2012 EPO/FIZ KA on STN
TI    EXPRESSION VON PHYTASE IN PFLANZEN.
    - HERSTELLUNG VON ENZYMEN IN SAMEN UND IHRE VERWENDUNG.
    • • •
    - BINARY VECTOR PMOG413, BINARY VECTOR PMOG429, A METHOD OF PRODUCING
      TRANSGENIC PLANTS OR PLANT ORGANS CONTAINING THE ELEVATED PHYTASE AMOUNT
      (VARIANTS), AND A FODDER COMPOSITION (VARIANTS).
PA    KONINKLIJKE DSM N.V.; SYNGENTA MOGEN B.V.
PA    SYNGENTA MOGEN B.V., RIDDERKERK
PA    KONINKLIJKE DSM N.V.; SYNGENTA MOGEN B.V.
PA    DSM GIST HOLDING B.V.; SYNGENTA MOGEN B.V.
PA    GIST-BROCADES N.V.; SYNGENTA MOGEN B.V.
PA    GIST BROCADES NV; SYNGENTA MOGEN BV
PA    GIST BROCADES NV; SYNGENTA MOGEN BV
PA    MOGEN INTERNATIONAL; GIST-BROCADES
PA    MOGEN INTERNATIONAL; GIST-BROCADES, B.V.
PA    MOGEN INTERNATIONAL
PA    GIST-BROCADES, B.V.; MOGEN INTERNATIONAL
PA    KONINKLIJKE DSM N.V.; SYNGENTA MOGEN B.V.

L19   ANSWER 51308 OF 51316  APOLLIT  COPYRIGHT 2012 FIZ KA on STN
TI    Protecting paints. Zinc pyrithione could replace conventional
      fungicide/algaecides blends

L19  ANSWER 51312 OF 51316  LEMBASE  COPYRIGHT (c) 2012 Elsevier B.V. All
     rights reserved on STN
TI   Gene ontology mapping as an unbiased method for identifying molecular
     pathways and processes affected by toxicant exposure: Application to acute
     effects caused by the rodent non-genotoxic carcinogen
     diethylhexylphthalate.
AU   Currie, Richard A. (correspondence); Oliver, Jason D.; Moore, David J.;
     Lim, Fei Ling; Gwilliam, Victoria; Kimber, Ian; Moggs, Jonathan G.;
     Orphanides, George
CS   Syngenta Central Toxicology Laboratory, Alderley Park, Cheshire SK10
     4TJ, United Kingdom. richard.currie@syngenta.com

L19   ANSWER 51316 OF 51316  BIBLIODATA  COPYRIGHT  2012 DDB on STN

MAIN:
TI    Gesunde Reben - gesunder Wein: Ratgeber Weinbau.
```

Before removing duplicate records, use DISPLAY HISTORY (DHIS) to review L-numbers so you can determine your database priority when using the DUPLICATE REMOVE (DUP REM) command.

```
=> D HIS

     FILE 'LWPI' ENTERED AT 16:34:21 ON 14 MAR 2012
                SET EXPAND CONTINUOUS PERM
                E SYNGENTA/PACO
                E E3+ALL
                E E14+ALL
L1           104 S SYNGENTA/PA,AG OR SYGN-C/PACO

     FILE 'CAPLUS' ENTERED AT 16:36:11 ON 14 MAR 2012
                E SYNGENTA/CO
                E E51+ALL
                E E61+ALL
L2          3550 S E64+ALL OR (((ZENECA (W) (AGRO? OR MOGEN)) OR ZAADUNIE OR "PL

     INDEX 'APOLLIT, BIBLIODATA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN,
     EPFULL, ICSD, INPADOCDB, JAPIO, LBIBLIO, LCA, LDRUG, LEMBASE, LINSPEC,
     LINPAFAMDB, LMARPAT, LWPI, MEDLINE, PATDD, PATDPA, PATDPAFULL,
     PCTGEN, REGISTRY, USPAT2, USPATFULL' ENTERED AT 16:41:56 ON 14
     MAR 2012
                SEA (((ZENECA (W) (AGRO? OR MOGEN)) OR ZAADUNIE OR "PLANT PROTE
               ---------
               4   FILE APOLLIT
               1   FILE BIBLIODATA
            3225   FILE CAPLUS
• • •
            1204   FILE USPATFULL
L3              QUE (((ZENECA (W) (AGRO? OR MOGEN)) OR ZAADUNIE OR "PLANT PROTE
               ---------

     FILE 'PCTGEN, INPADOCDB, CAPLUS, PATDPA, USPATFULL, MEDLINE, USPAT2,
     PATDPAFULL, CASREACT, LWPI, JAPIO, LINPAFAMDB, APOLLIT, LEMBASE,
     BIBLIODATA' ENTERED AT 16:45:29 ON 14 MAR 2012
                SET MSTEPS ON
L4          30905 FILE PCTGEN
L5          11027 FILE INPADOCDB
L6           3225 FILE CAPLUS
L7           3144 FILE PATDPA
L8           1204 FILE USPATFULL
L9            526 FILE MEDLINE
L10           478 FILE USPAT2
L11           317 FILE PATDPAFULL
L12           301 FILE CASREACT
L13           103 FILE LWPI
L14            64 FILE JAPIO
L15            13 FILE LINPAFAMDB
L16             4 FILE APOLLIT
L17             4 FILE LEMBASE
L18             1 FILE BIBLIODATA
     TOTAL FOR ALL FILES
L19         51316 S L3
```

MULTIFILE SUBSTANCE-BASED SEARCHING

The continuous search history on STN is more than a handy convenience. It provides a mechanism for easy data transfer between databases which is not possible on other platforms. For example, using REGISTRY, you can locate substance information and then easily capture bibliographic records in other databases to put that substance into a particular context.

REGISTRY and CAplus Databases

In this section, you will discover the synergy between REGISTRY and CAplus. The content covered in both CAplus and REGISTRY was reviewed in the Key Databases Overview section earlier in this training manual.

Chemical Name Searching

A substance of interest may be identified by a common name or a trade name. REGISTRY is a rich source for chemical nomenclature.

Search Question

What has been reported on the substance called theobromine?

SEARCH STRATEGY

STEPS	TO LOCATE RESEARCH DONE ON A NAME COMPOUND
1	Locate the REGISTRY record for the substance
2	Locate references related to this substance
3	Refine and display answers as needed

Step 1: Locate the REGISTRY Record for the Substance

Using a chemical name to locate the REGISTRY record associated with a compound of interest requires you to:

- Enter REGISTRY by typing the following at the arrow prompt:

  => FILE REGISTRY
- Verify that the chemical name is in the database
- Run the search
- Display answers

Verify that the Chemical Name is in the Database

REGISTRY contains an extensive collection of chemical names, assigned by CAS and collected from the chemical literature. However, a specific name may or may not be in the database.

Use the EXPAND (E) command to determine whether a chemical name can be used in your search query. EXPAND can also help identify other compounds that are related to your substance of interest. Keep in mind, there is no cost associated with using EXPAND.

In REGISTRY, chemical names are in the Chemical Name index (CN). Search the chemical name with /CN at the end:

=> E THEOBROMINE/CN

=> SEARCH THEOBROMINE/CN

```
=> FILE REGISTRY

=> E THEOBROMINE/CN
E1            1     THEOBROMA OIL/CN
E2            1     THEOBROMIDE, 1-(2-(CYCLOHEXYLAMINO)ETHYL)-, HYDROCHLORIDE/CN
E3            1 --> THEOBROMINE/CN
E4            1     THEOBROMINE 1-N-METHYLTRANSFERASE/CN
E5            1     THEOBROMINE 3-DEMETHYLASE/CN
E6            1     THEOBROMINE CALCIUM GLUCONATE/CN
E7            1     THEOBROMINE CALCIUM SALICYLATE/CN
E8            1     THEOBROMINE COMPOUND WITH IODINE BROMIDE/CN
E9            1     THEOBROMINE COMPOUND WITH IODINE CHLORIDE/CN
E10           1     THEOBROMINE COMPOUND WITH IODINE TRIBROMIDE/CN
E11           1     THEOBROMINE CONJUGATE MONO ACID/CN
E12           1     THEOBROMINE DIMER/CN
```

The second column shows “postings,” or the number of REGISTRY records containing the search term.

Run the Search

SEARCH (S) is used to retrieve records containing the term(s) of interest. The search term can be indicated two ways:

- By fully typing the term of interest: THEOBROMINE/CN
- By using the associated E-number: E3

```
=> S E3

L1            1 THEOBROMINE/CN
```

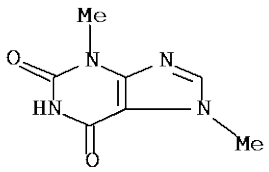
As with bibliographic databases, the record is placed in a set labeled with an L-number.

Display Answers

The DISPLAY command (D) is used to see the detailed REGISTRY record. IDE is the default display format within REGISTRY.

The IDE format will provide the identification information for a specific substance. REGISTRY has different display formats than bibliographic databases. Review the REGISTRY Database Summary Sheet DISPLAY and Print Formats.

```
=> D IDE

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2012 ACS on STN
RN   83-67-0  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   1H-Purine-2,6-dione, 3,7-dihydro-3,7-dimethyl-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Theobromine (8CI)
OTHER NAMES:
CN   3,7-Dimethyl-3,7-dihydro-1H-purine-2,6-dione
CN   3,7-Dimethylxanthine
CN   Diurobromine
CN   NSC 5039
CN   Santheose
CN   SC 15090
CN   Teobromin
CN   Theosalvose
CN   Theostene
CN   Thesal
MF   C7 H8 N4 O2
CI   COM
LC   STN Files:   ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CABA,
       CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, DDFU, DETHERM*,
       DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IMSRESEARCH, IPA,
       MEDLINE, MSDS-OHS, NAPRALERT, PS, REAXYSFILE*, RTECS*, SPECINFO,
       TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, USPATOLD, VETU
         (*File contains numerically searchable property data)
     Other Sources:   DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```




```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

            3716 REFERENCES IN FILE CA (1907 TO DATE)
              47 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            3739 REFERENCES IN FILE CAPLUS (1907 TO DATE)
```

Hit terms are also highlighted in REGISTRY.

Step 2: Locate References Related to this Substance

Search Question

What has been reported on the substance called theobromine?

REGISTRY contains chemical substance information.

Bibliographic references and abstracts of papers discussing substances known by a specific chemical name are stored in CAplus. The L-number generated in the REGISTRY search is the key to locating relevant references.

Conducting a REGISTRY search is an important first step in substance searching. It results in an answer set containing a CAS Registry Number, an unambiguous search term for a chemical substance.

Locating CAplus references associated with a compound of interest requires that you:

- Enter CAplus
- Search the REGISTRY L-number from the REGISTRY search
- Evaluate answers

The continuous file history available in STN provides easy crossover between REGISTRY and CAplus. The SEARCH command is searching for the CAS RN in CAplus.

Enter CAplus and Run the Search

```
=> FILE CAPLUS

=> S L1

L2          3739 L1
```

>3700 records in CAplus contain the CAS RN for this substance.

Use D SCAN TI HITIND in CAplus to:

- Verify that the search is retrieving the types of information you want
- Identify terminology to enhance your results
- Recall that D SCAN TI HITIND randomly selects an answer from the CAplus answer set and displays the title and indexing.

```
=> D SCAN TI HITIND

L2    3739 ANSWERS   CAPLUS  COPYRIGHT 2012 ACS on STN

L2    3739 ANSWERS   CAPLUS  COPYRIGHT 2012 ACS on STN
TI   Analysis of Total Caffeine and Other Xanthines in Specialty Coffees Using
     Mixed Mode Solid-Phase Extraction and Liquid Chromatography-Diode-Array
     Detection After Microwave Digestion
IT   58-08-2, Caffeine, analysis   58-55-9, Theophylline, analysis
     83-67-0, Theobromine
     RL: ANT (Analyte); ANST (Analytical study)
     (caffeine and xanthines in coffee determined by solid-phase extraction
     and HPLC after microwave digestion)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L2    3739 ANSWERS   CAPLUS  COPYRIGHT 2012 ACS on
TI   In vitro transdermal delivery of caffeine, theobromine, theophylline and
     catechin from extract of Guarana, Paullinia Cupana
IT   58-08-2, Caffeine, biological studies   58-55-9, Theophylline, biological
     studies   83-67-0, Theobromine
     RL: NPO (Natural product occurrence); PRP (Properties); THU (Therapeutic
     use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
     (in vitro transdermal delivery of caffeine, theobromine, theophylline
     and catechin from extract of Guarana, Paullinia Cupana)
```

Type **1** to see another answer or **0** to exit D SCAN.

The first paper reports analytical study (ANST) of theobromine.

This last paper reports on the natural product occurrence (NPO); properties (PRP), therapeutic use (THU), biological study (BIOL), occurrence (OCCU), and uses (USES) of theobromine.

Step 3: Refine and Display Answers as Needed

Once you have conducted your initial search, refine and display your answers as needed for desired results.

MULTIFILE SUBSTANCE AND REFERENCE SEARCHING

As with bibliographic searching, it is easy to extend a substance search across multiple STN databases. STN provides tools specifically to facilitate substance searching.

Search Question

Extend the search on theobromine to other STN databases.

SEARCH STRATEGY

STEPS	TO CONDUCT A MULTIFILE SUBSTANCE AND REFERENCE SEARCH ON STN
1	Locate the REGISTRY record for the substance (see previous section.)
2	Create search terms using SELECT CHEM
3	Preview multifile retrieval using INDEX
4	Conduct a simultaneous multifile search
5	Remove duplicate records
6	Refine and display as desired

Step 1: Locate the REGISTRY Record for the Substance

```
=> FILE REGISTRY

=> D L1 RN FCN

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2012 ACS on STN
RN   83-67-0  REGISTRY
CN   1H-Purine-2,6-dione, 3,7-dihydro-3,7-dimethyl-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Theobromine (8CI)
OTHER NAMES:
CN   3,7-Dimethyl-3,7-dihydro-1H-purine-2,6-dione
CN   3,7-Dimethylxanthine
CN   Diurobromine
CN   NSC 5039
CN   Santheose
CN   SC 15090
CN   Teobromin
CN   Theosalvose
CN   Theostene
CN   Thesal
```

FCN (Full Chemical Name) display format displays all the chemical names for the substance.

The CAS RN and other names for any given substance are a good source of search terms. In REGISTRY, these terms reside in separate fields as highlighted.

Step 2: Create Search Terms Using SELECT CHEM

SELECT CHEM (SEL CHEM) extracts common chemical names, systematic chemical names, and CAS RNs from a REGISTRY record and requalifies them to the Basic Index. The automatic field code requalification is what provides portability for these search terms to the other databases on STN.

While many databases on STN are searchable by CAS RN, there are differences in the way each database is built – one database may be organized so that CAS RNs are included as part of the Indexing Terms (IT) while another database may put CAS RNs in a separate field (RN). Regardless of the specific fields of residence for the CAS RNs and chemical names, database producers tend to include these as part of the Basic Index (BI).

```
=> SEL CHEM L1

E13 THROUGH E24 ASSIGNED

=> D SEL E13-E24

E13          1     DIUROBROMINE/BI
E14          1     NSC 5039/BI
E15          1     SANTHEOSE/BI
E16          1     SC 15090/BI
E17          1     TEOBROMIN/BI
E18          1     THEOBROMINE/BI
E19          1     THEOSALVOSE/BI
E20          1     THEOSTENE/BI
E21          1     THESAL/BI
E22          1     3,7-DIMETHYL-3,7-DIHYDRO-1H-PURINE-2,6-DIONE/BI
E23          1     3,7-DIMETHYLXANTHINE/BI
E24          1     83-67-0/BI
```

Use D SEL to review the search terms. Some terms may be ambiguous and you may choose not to use them.

Note the requalification from /CN or /RN to /BI.

Step 3: Preview Multifile Retrieval Using INDEX

The INDEX environment on STN provides the opportunity to preview the performance of a query within a multifile environment. Displayable L-number sets are not created within INDEX; however, a preview of the number of documents that would be obtained in each database is given. The end result of an INDEX search is a searchable query that can be used later during the session.

```
=> INDEX STNLIS

INDEX 'APOLLIT, BIBLIODATA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, EPFULL,
       ICSD, INPADOCDB, JAPIO, LBIBLIO, LCA, LDRUG, LEMBASE, LINSPEC,
       LINPAFAMDB, LMARPAT, LWPI, MEDLINE, PATDD, PATDPA, PATDPAFULL,
       PCTGEN, REGISTRY, USPAT2, USPATFULL'
ENTERED AT 09:43:19 ON 15 MAR 2012

29 FILES IN THE FILE LIST IN STNINDEX
```

```
=> S E13-E24

         4   FILE APOLLIT
      5341   FILE CAPLUS
       187   FILE CASREACT
       649   FILE CHEMCATS
   5 FILES SEARCHED...
         8   FILE CHEMLIST
        12   FILE CIN
      1126   FILE EPFULL
   8 FILES SEARCHED...
         0*  FILE ICSD
       526   FILE INPADOCDB
       135   FILE JAPIO
        10   FILE LCA
  13 FILES SEARCHED...
        42   FILE LDRUG
         1   FILE LEMBASE
         1   FILE LINSPEC
         1   FILE LINPAFAMDB
        31   FILE LWPI
  19 FILES SEARCHED...
      1909   FILE MEDLINE
         4   FILE PATDPA
        21   FILE PATDPAFULL
  24 FILES SEARCHED...
       707   FILE REGISTRY
      1461   FILE USPAT2
      5726   FILE USPATFULL

  21 FILES HAVE ONE OR MORE ANSWERS,   29 FILES SEARCHED IN STNINDEX

L3    QUE (DIUROBROMINE/BI OR "NSC 5039"/BI OR SANTHEOSE/BI OR "SC 15090"/BI OR
          TEOBROMIN/BI OR THEOBROMINE/BI OR THEOSALVOSE/BI OR THEOSTENE/BI OR TH
          ESAL/BI OR "3,7-DIMETHYL-3,7-DIHYDRO-1H-PURINE-2,6-DIONE"/BI OR "3,7-D
          IMETHYLXANTHINE"/BI OR 83-67-0/BI)

=> D RANK

F1         5726   USPATFULL
F2         5341   CAPLUS
F3         1909   MEDLINE
F4         1461   USPAT2
F5         1126   EPFULL
F6          707   REGISTRY
F7          649   CHEMCATS
F8          526   INPADOCDB
F9          187   CASREACT
F10         135   JAPIO
F11          42   LDRUG
F12          31   LWPI
F13          21   PATDPAFULL
F14          12   CIN
F15          10   LCA
F16           8   CHEMLIST
F17           4   APOLLIT
F18           4   PATDPA
F19           1   LEMBASE
F20           1   LINSPEC
F21           1   LINPAFAMDB
```

E13-E24 are the chemical names obtained from using the SEL CHEM command.

A QUERY (QUE) is created that includes all the CAS RNs and chemical names so that it can be used to search in other STN databases.

Use D RANK to list the databases in descending order by number of potential records.

- The postings indicate the number of records that would be retrieved in each database, if the search were actually run within the database environment.

- A hit of 1 record could be an important database while a database with more hits may not be as important – it depends on the search, how comprehensive you need to be, and how the database is constructed.

Step 4: Conduct a Simultaneous Multifile Search

Using the preview list from INDEX, select the databases of interest in which you want to conduct the actual search.

The SEARCH command is searching the QUERY that was created when the INDEX command was used.

```
=> SET MSTEPS ON

SET COMMAND COMPLETED

=> FILE CAPLUS MEDLINE LDRUG LWPI

=> S L3

L4         5341 FILE CAPLUS
L5         1909 FILE MEDLINE
L6           42 FILE LDRUG
L7           31 FILE LWPI

TOTAL FOR ALL FILES
L8         7323 L3
```

SET MSTEPS ON is a system tool that creates a separate L-number set for each database searched in a multifile search.

This combined total L-number set includes duplicate records.

Step 5: Remove Duplicate Records

Remove duplicate records using DUPLICATE REMOVE (DUP REM).

SET DUPORDER FILE is a system tool that keeps de-duplicated records in preferential file order. The preferential order is set by the order of the L-numbers in the DUP REM step. In this example, LWPI records were kept preferentially over those from MEDLINE and LDRUG.

```
=> SET DUPORDER FILE

SET COMMAND COMPLETED

=> DUP REM L4 L7 L5 L6

DUPLICATE IS NOT AVAILABLE IN 'LWPI'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

L9          6483 DUP REM L4 L7 L5 L6 (840 DUPLICATES REMOVED)
                 ANSWERS '1-5321' FROM FILE CAPLUS
                 ANSWERS '5322-5352' FROM FILE LWPI
                 ANSWERS '5353-6462' FROM FILE MEDLINE
                 ANSWERS '6463-6483' FROM FILE LDRUG
```

Step 6: Refine and Display answer sets

The separate and combined L-numbers allow for simultaneous refinement with keywords, or sequential refinement with keywords, specified fields and with file-specific indexing. For demonstration or review purposes, you can display a record from each database in order to get a feel for database coverage and default display formats.

```
=> D 1 FROM EACH

L9   ANSWER 1 OF 6483  CAPLUS  COPYRIGHT 2012 ACS on STN DUPLICATE 1
AN   2011:12704  CAPLUS  Full-text
DN   154:253577
TI   Interactions between minimum run time, modifier concentration, and
     efficiency parameters in a high performance liquid chromatography
     separation
AU   Chester, T. L.; Stalcup, A. M.
CS   Department of Chemistry, University of Cincinnati, Cincinnati, OH,
     45221-0172, USA
SO   Journal of Chromatography, A (2011), 1218(2), 218-228
     CODEN: JCRAEY; ISSN: 0021-9673
PB   Elsevier B.V.
DT   Journal
LA   English
RE.CNT  36    THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9   ANSWER 5353 OF 6483     MEDLINE on STN            DUPLICATE 524
AN   1984097198     MEDLINE  Full-text
DN   PubMed ID: 6658304
TI   In vitro effects of pentoxifylline on hemoglobin affinity for oxygen and
     electrolytic equilibrium of human blood.
AU   Ferraresi I; Bozzini F; Torta D; Frigerio R; Bernasconi C; Agostoni A
SO   La Ricerca in clinica e in laboratorio, (1983 Oct-Dec) Vol. 13, No. 4, pp.
     459-65.
     Journal code: 7613947. ISSN: 0390-5748. L-ISSN: 0390-5748.
CY   Italy
DT   (IN VITRO)
     Journal; Article; (JOURNAL ARTICLE)
     (RESEARCH SUPPORT, NON-U.S. GOV'T)
LA   English
FS   Priority Journals
EM   198402
ED   Entered STN: 19 Mar 1990
     Last Updated on STN: 19 Mar 1990
     Entered Medline: 22 Feb 1984

L9    ANSWER 6463 OF 6483  LDRUG  COPYRIGHT 2012 THOMSON REUTERS on STN
AN    1994-09886  LDRUG   A G   Full-text
TI    Analysis of Aqueous Solutions of Nitrogen Containing Drugs by a Capillary
      Gas Chromatographic Method.
AU    Zhuravleva I L; Terenina M B; Golovnya R V; Filimonova M A
CS    Inst.Food-Chem.Russian-Acad.Sci.
LO    Moscow, Russia,
SO    Khim.Farm.Zh. (27, No. 5, 58-63, 1993) 5 Fig. 2 Tab. 20 Ref.
      CODEN: KHFZAN       ISSN:  0023-1134
AV    Institute for Food Chemicals, Russian Academy of Sciences, Moscow,
      Russia.
LA    Russian
DT    Journal
FA    AB; LA; CT; MPC
```

2011 journal article

1983 Italian journal article

1993 Russian journal article

```
L9   ANSWER 5322 OF 6483  LWPI COPYRIGHT 2012       THOMSON REUTERS on STN
AN   2009-R44206 [200978]   LWPI
CR   2009-R44015; 2009-R44017
TI   Processing unfermented cocoa beans useful for preparing cocoa products
     e.g. cocoa powder involves preparing a mixture of fermented pulp with the
     acid-treated depulped cocoa beans and further processing the mixture
DC   D13
IN   BERNAERT H; CAMU N; LOHMUELLER T
PA   (CALL-N) CALLEBAUT AG BARRY
CYC  122
PI   WO 2009138420   A2 20091119 (200978)* EN  37[0]
     WO 2009138420   A3 20091230 (201002)  EN
ADT  WO 2009138420 A2 WO 2009-EP55756 20090513; WO 2009138420 A3 WO
     2009-EP55756 20090513
PRAI EP 2008-165256       20080926
     EP 2008-165260       20080926
     EP 2008-156260       20080515
     EP 2008-156268       20080515
     EP 2008-156275       20080515
IPCI A23G0001-00 [N,A]; A23G0001-00 [N,C]; A23G0001-00 [I,A]; A23G0001-00
     [I,C]; A23G0001-02 [N,A]; A23G0001-02 [N,C]; A23G0001-02 [I,A];
     A23G0001-02 [I,C]; A23G0001-04 [N,C]; A23G0001-04 [I,C]; A23G0001-06
     [N,A]; A23G0001-06 [I,A]; A23L0001-30 [I,A]; A23L0001-30 [I,C];
     A23L0001-30 [I,A]; A23L0001-30 [I,C]
```

2009 WIPO patent

SECTION 4:
MANAGING STN RESULTS

MANAGING STN SEARCH RESULTS

Saving an Answer Set

Saving an answer set lets you "hold" an answer set for a future online session. There are different reasons that you may want to save an answer set:

- To gather additional information before continuing your search
- To pause your online session when an interruption occurs
- To allow your client/customer to review your results, which may lead to modifications in searching

STEPS	TO STORE AND MANAGE STN SEARCH RESULTS
1	Save answers
2	Recall the saved search results in a future online session
3	Reuse the saved results
4	Delete saved answer sets when no longer needed

Step 1: Save Answers

The following information is required to SAVE an answer set:

- Answer set L-number
- File name:
  - Begins with a letter of the alphabet
  - 1-12 characters in length
  - Contains alpha-numeric values only
  - Ends in /A
- Title (optional but recommended): TITLE must be included on the command line if you wish to add a descriptive title

```
=> SAVE TITLE

ENTER L#, L# RANGE, ALL, OR (END):L2
ENTER NAME OR (END):THEOBRO1/A
ENTER TITLE (NONE):THEOBROMINE DOCUMENTS IN CAPLUS
ANSWER SET L2 HAS BEEN SAVED AS 'THEOBRO1/A'
```

Step 2: Recall Saved Results

D SAVED gives an inventory of answer sets saved in storage.

```
=> D SAVED

NAME             CREATED      NOTES/TITLE
--------------   -----------  -----------------------------------
THEOBRO1/A       04 AUG 2008  3365 ANSWERS IN FILE CAPLUS
                              THEOBROMINE DOCUMENTS IN CAPLUS
```

Step 3: Reuse Saved Results

Stored answer sets can be recalled in a future online session using the ACTIVATE command. Stored answer sets save only the current search results. Additional results are not retrieved when opening a saved transcript.

- Answer set is not removed from storage when it is activated
- Answer sets must be activated in the database(s) in which they were created

DISPLAY results in more detail from an activated answer set:

```
=> FILE CAPLUS

=> ACTIVATE THEOBRO1/A

TITLE: THEOBROMINE DOCUMENTS IN CAPLUS
L10  (         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  THEOBROMINE/CN
L11         3365 SEA FILE=CAPLUS ABB=ON  PLU=ON  L10

=> D L11 27 BIB ABS

L11  ANSWER 27 OF 3365  CAPLUS  COPYRIGHT 2012 ACS on STN
AN   2008:498650  CAPLUS  Full-text
DN   149:24720
TI   Caffeine-induced hyperactivity in the horse: comparisons of drug and
     metabolite concentrations in blood and cerebrospinal fluid
AU   Vickroy, T. W.; Chang, S.-K.; Chou, C.-C.
CS   Department of Physiological Sciences, College of Veterinary Medicine,
     University of Florida, Gainesville, FL, USA
SO   Journal of Veterinary Pharmacology and Therapeutics (2008), 31(2), 156-166
     CODEN: JVPTD9; ISSN: 0140-7783
PB   Blackwell Publishing Ltd.
DT   Journal
LA   English
```

The next L-number in the current session is assigned to the activated answer set.

```
AB      The goals of this study were to elucidate the temporal and quant.
        relationships between caffeine and its major bioactive metabolites
        in blood and cerebrospinal fluid (CSF) and to characterize the
        pharmacokinetic-pharmacodynamic relationship for caffeine-induced
        changes in spontaneous locomotor activity in the horse.  We
        hypothesized that caffeine and its metabolites distribute
        efficiently into the CSF to antagonize adenosine A1 and A2a
        receptors and that spontaneous locomotor activity correlates well
        with caffeine and/or metabolite concns. in CSF and blood.  A
        microdialysis system was developed to allow simultaneous monitoring
        of locomotor activity and collection of CSF and blood samples for
        pharmacokinetic anal.  CSF concns. of caffeine and its metabolites
        were evaluated to determine the percentage of central adenosine
        receptor blockade by the established standard inhibition curves.
        Caffeine increased the spontaneous locomotor activity for up to 4 h
        in a dose-dependent manner.  After 3 mg/kg caffeine administration,
        blood caffeine concentration as well as locomotor activity
        increased sharply to near peak level while CSF caffeine concns.
        exhibited a slow rise to a steady-state 75 min later. High
        correlation coefficient was found between locomotor activity and
        caffeine concns. in blood (R2 = 0.95) and in CSF (R2 = 0.93).  At 3
        mg/kg dosage, theophylline was the only detectable caffeine
        metabolite in the CSF.  The concns. reached in the CSF were
        sufficient to partially block central adenosine A1 (14% blockade)
        and A2a (11% blockade) receptors.  There were no statistically
        significant differences between the pharmacokinetics of caffeine in
        the blood and CSF.  This study provides novel evidence that
        locomotor stimulation in horses is closely correlated with caffeine
        concns. in the blood and CSF and, furthermore, is consistent with
        blockade of central adenosine receptors.
```

Note

Hit term highlighting will be reinstated with the ACTIVATE command, if the search terms that were searched on are present.

SEARCH with saved results

The activated answer sets can be refined using additional search terms and treated as any other L-number. The new search locates answers in the saved/activated answer set that matches the additional requirement.

```
=> S L11 AND PY>=2000

       9864991 PY>=2000
L12         840 L11 AND PY>=2000
```

Step 4: Delete Saved Answer Sets When No Longer Needed

The items saved in long-term storage can be removed using the DELETE command (DEL). The easiest way to DELETE the correct answer set is to display the saved items to ensure that you have selected the correct saved search. Once the correct answer set/query name is located, the DELETE command is issued with the name.

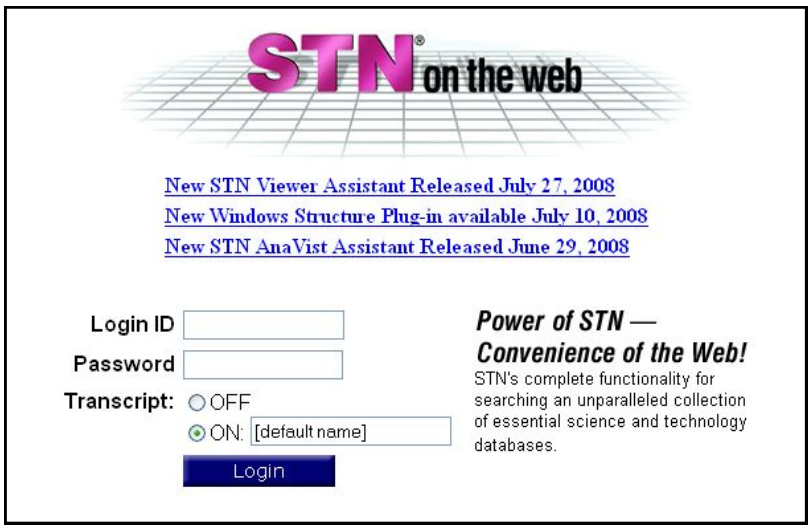
```
=> D SAVED

NAME             CREATED      NOTES/TITLE
--------------   -----------  -----------------------------------
THEOBRO1/A       04 AUG 2008  3365 ANSWERS IN FILE CAPLUS
                              THEOBROMINE DOCUMENTS IN CAPLUS


=> DEL THEOBRO1/A

DELETE THEOBRO1/A? (Y)/N:Y

=> D SAVED

NO SAVED QUERIES, ANSWER SETS, OR L# LISTS
```

STN provides you one more chance to back out of doing a deletion.

WORKING WITH TRANSCRIPTS

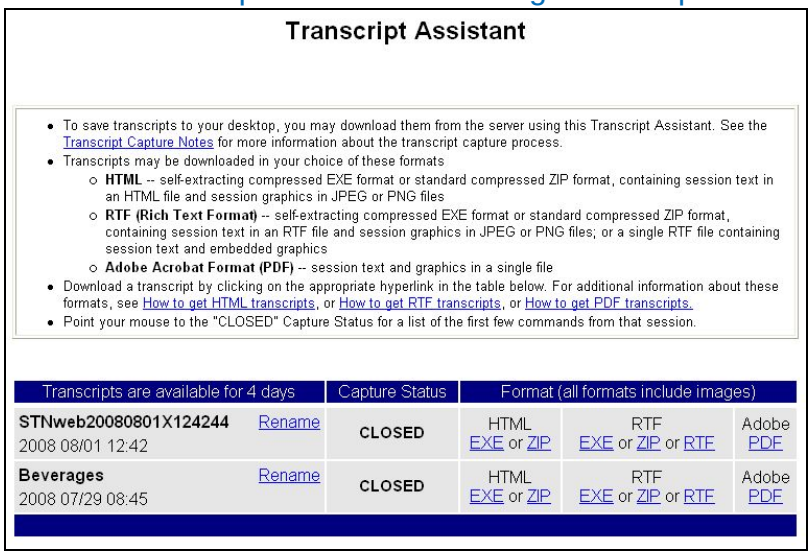
Creating a transcript eliminates the need to print your search history and results. Transcripts are named and created at the time you login to each search session. As you search online, information is automatically added to the transcript. Once you log off STN, you can review, edit and print your transcript offline.

STN on the Web transcripts are saved automatically during your session as long as the ON radio button is checked. Transcripts are available to download via the Transcript Assistant for four days. Transcripts can be downloaded as PDF, RTF or HTML files.



Name your transcript something meaningful, or STN will assign a default name as you can see below. We suggest that you name your transcript when you first login.

Use the Transcript Assistant to manage transcripts within STN on the Web:



SECTION 5:
CURRENT AWARENESS

CURRENT AWARENESS

Current awareness alerts are valuable for all users of scientific and technical information. An alert provides “immediate” knowledge to new information in an area of interest based on the delivery frequency.

A STNmail ID is required to setup automatic current awareness alerts. Use the SET MAILID command in the STNmail database.

- A current awareness alert is also known as a SDI (Selective Dissemination of Information)
  - Alerts run on a designated, periodic basis
  - Alerts run only on the segment of a database that has been added/updated since the last run
- Current awareness alerts allow monitoring of:
  - New developments in research
  - Competitor organizations
  - Potential new markets or uses for a company’s products
- Current awareness information may be obtained through:
  - Periodic searches performed manually to assess information in an area at any given time
  - Automatic current awareness alerts to continuously monitor new literature in an area of interest

Single File Automatic Current Awareness Alerts

The ALERT or SDI command is used to set up a single file automatic current awareness alert. A series of sub-prompts is used to specify setup parameters.

Search Question

Monitor new research in the area of the use of talc in cosmetics.

```
=> ALERT

ENTER QUERY L# FOR SDI REQUEST OR (END):L2
ENTER UPDATE FIELD CODE (UP) OR ?:UP
ENTER SDI REQUEST NAME, (AA001/S), OR END:COSTALC/S
ENTER COST CENTER (LEGAL DEPARTMENT) OR NONE:NONE
ENTER TITLE (NONE):USE OF TALC IN COSMETICS
ENTER METHOD OF DELIVERY ONLINE OR EMAIL:EMAIL
ENTER EMAIL ID (6283C):MSPARKS@CAS.ORG
MSPARKS@CAS.ORG
RECEIVE DELIVERY NOTIFICATION? (Y)/N:Y
ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN?  Y/(N):Y
ENTER PRINT FORMAT (BIB) OR ?:BIB ABS
HIGHLIGHT HIT TERMS? (Y)/N:Y
ARCHIVE ANSWERS? Y/(N):N
REDISTRIBUTE ANSWERS? Y/(N):N
ENTER MAXIMUM NUMBER OF HITS TO BE PRINTED PER RUN (100):100
SORT SDI ANSWER SET (N)/Y?:N
SEND SDI WITH NO ANSWERS? (Y)/N:N
DISPLAY CURRENCY INFORMATION? (Y)/N:Y
ENTER SDI RUN FREQUENCY - DAILY, (WEEKLY), BIWEEKLY, OR ?:WEEKLY
ENTER SDI EXPIRATION DATE 'YYYYMMDD' OR (NONE):NONE
QUERY L2 HAS BEEN SAVED AS SDI REQUEST 'COSTALC/S'
```

Use either the SDI or ALERT command to start a current awareness alert.

If you are unsure of how to answer a sub-prompt for setup information, type a ? and STN will provide more information.

Helpful Hint

For more information on update codes specific to the database of interest, type:
=> HELP UPDATE.

SELECTING SETUP OPTIONS

Patent databases have many different update fields available.

THIS SETUP OPTION	IS USED TO	NOTES
Update field	Determine if a record should be included in an alert answer set	Update fields are based on the date in a record: • First enters a file (/ED) • Is updated (/UP)
Alert request name	Identify an alert within STN comparable to a file name	Syntax: • Begin with a letter • 1-12 characters • Contains only letters (A-Z) and numbers (0-9) • End with /S for SDI
Cost center	Distinguish alert charges on STN invoices	
Title	Identify alert when setup parameters are displayed	40 character limit (more descriptive than alert request name)
Method of delivery	Specify the way alert results should be delivered	• E-mail (requires STNmail ID) • Online
Email ID	Specify the internet or STNmail address where alert results are sent	Delivery can be in PDF, RTF, or HTML
Delivery notification	Notify when results are delivered to a different address	More delivery options are on the following page
Print format	Specify the answer display format	
Maximum number of hits	Specify upper limit on number of result records	Up to 5000 answers can be sent
Display currency information	Display the patent currency banner at the time the alert was run	For CAS databases only

DELIVERY OPTIONS

Current awareness results can be delivered via:

- E-mail
- Online storage of answer sets
- Corporate intranet using STN Easy® for Intranets℠

Several e-mail delivery options are available. The options provide embedded graphics for structures and images and a link to the full text of the document, or just text only.

The form of the e-mail address determines the format in which the results are received:

RESULTS AVAILABLE VIA	E-MAIL FORMAT	EXAMPLE
E-mail delivery in the following formats (graphics and full-text links included): • RTF • PDF • HTML • ASCII text	name@company.com	student@lis.com
E-mail delivery of ASCII text (no graphics)	name@company.internet	student@lis.internet
Hyperlinks from STN Easy for Intranets (graphics and full-text links included)	STNID@stnalerts.org	ssscas03qxb@stnalerts.org

VERIFY SDI SETUP

Current awareness alerts do not display by default. To see current awareness alerts saved under a login ID, type:

=> D SAVED/S

```
=> D SAVED/S

NAME             CREATED      NOTES/TITLE
--------------   -----------  -----------------------------------
COSTALC/S        11 AUG 2008  SDI REQUEST FOR FILE CAPLUS
                              USE OF TALC IN COSMETICS
```

Helpful Hint

To see the complete details of the alert, including the search query, type:
=> D COSTALC/S FULL

```
=> D COSTALC/S FULL

NAME             CREATED      NOTES/TITLE
--------------   -----------  -----------------------------------
COSTALC/S        11 AUG 2008  SDI REQUEST FOR FILE CAPLUS
                              USE OF TALC IN COSMETICS
COST CENTER                   NONE
UPDATE QUALIFIER              UP
METHOD OF DELIVERY            EMAIL
EMAIL ID(S)                   MSPARKS@CAS.ORG
NOTIFICATION                  YES
PRINT FORMAT                  BIB ABS
MAXIMUM NUMBER OF HITS
   TO BE PRINTED              100
HIGHLIGHTING                  YES
DUPLICATE ELIMINATION         YES
PRINT FILE BACKGROUND         NO
SEND SDI WITH NO ANSWERS      NO
SDI RUN FREQUENCY             WEEKLY
DISPLAY QUERY WITH RESULTS    YES
DISPLAY CURRENCY MESSAGE      YES


L3       QUE  ABB=ON  PLU=ON  COSMETIC? AND (TALC/BI OR (TALC/CT OR "TALC
         (MG3H2(SIO3)4)"/CT OR TALCUM/CT OR STEATITE/CT))
```

Web Resource

Additional information about setting up database alerts is available at:
http://www.cas.org/File Library/Training/STN/User Docs/currentawarenessuserguide.pdf

Or type HELP SDI at an arrow prompt (=>).

MULTIFILE AUTOMATIC CURRENT AWARENESS ALERTS

A multifile alert allows you to:

- Create multiple current awareness alerts
- Remove duplicate records
- Receive unique search results

There is no limit to the number of databases that may be included in the multifile alert. The query, display formats, and frequency may be customized to each database in the multifile alert. All databases that are searchable and that have an alert capability are available for multifile alerts.

The duplicate detection option removes previously seen records, not only within databases but also across databases. If the multifile alert contains databases that do not support duplicate detection, answers from these databases will be considered unique with respect to the other databases.

Search Question

Monitor new research in the area of the use of talc in cosmetics in both CAplus and DWPI.

To create a multifile alert profile:

- Enter all the databases to be searched
- Enter ALERT MFILE (SDI MFILE works as well) at a STN arrow prompt (**=>**)

Naming conventions are the same as for a single file alert profile. Other prompts will be similar to those for a single file alert.

Once ALERT setup is entered:

- You will be prompted to provide information for the general parameters that apply to the multifile profile as a whole
- You will then be prompted for parameters specific to each database

The same search result L-number can be used as the search query for all databases, or the query may be customized to each database by using different L-numbers for each database. A multifile combined answer set L-number may also be used.

It is recommended that you begin each component of a multifile alert with the same text, followed by an abbreviation for the database. This allows for the files to be grouped together when displaying the alerts in the future for quick editing or deletion.

```
=> ALERT MFILE

MULTIFILE SDI GENERAL PARAMETERS
--------------------------------
ENTER MULTIFILE SDI REQUEST NAME ('AA001/S'), OR END:COSTALCMULTI/S
ENTER TITLE (NONE):MULTIFILE TALC IN COSMETICS
ENTER COST CENTER (LEGAL DEPARTMENT) OR NONE:NONE
ENTER METHOD OF DELIVERY (EMAIL), ONLINE, OR RSS:EMAIL
ENTER EMAIL ID (6283C):MSPARKS@CAS.ORG
MSPARKS@CAS.ORG
RECEIVE DELIVERY NOTIFICATION? (Y)/N:Y
ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI
  RUN?  Y/(N):Y
HIGHLIGHT HIT TERMS? (Y)/N:Y
SEND SDI WITH NO ANSWERS? (Y)/N:N
ENTER SDI EXPIRATION DATE 'YYYYMMDD' OR (NONE):NONE
-----------------------------------------------
MULTIFILE SDI FILE SPECIFIC PARAMETERS: CAPLUS
                                       ------
ENTER COMPONENT SDI REQUEST NAME ('AA001/S') OR END:COSTALCAP/S
ENTER QUERY L# FOR MULTIFILE SDI REQUEST OR END:L7
ENTER UPDATE FIELD CODE (UP) OR ?:UP
ENTER PRINT FORMAT (BIB) OR ?:BIB ABS HITIND
ARCHIVE ANSWERS? Y/(N):N
REDISTRIBUTE ANSWERS? Y/(N):N
ENTER MAXIMUM NUMBER OF HITS TO BE PRINTED PER RUN (100):100
SORT SDI ANSWER SET (N)/Y?:N
DISPLAY CURRENCY INFORMATION? (Y)/N:Y
ENTER SDI RUN FREQUENCY - DAILY, (WEEKLY), BIWEEKLY, OR ?:WEEKLY
-----------------------------------------------
MULTIFILE SDI FILE SPECIFIC PARAMETERS: WPINDEX
                                       -------
ENTER COMPONENT SDI REQUEST NAME ('AA001/S') OR END:COSTALWPI/S
ENTER QUERY L# FOR MULTIFILE SDI REQUEST OR END:L7
ENTER UPDATE FIELD CODE (UP) OR ?:UP
ENTER PRINT FORMAT (STD) OR ?:STD
ARCHIVE ANSWERS? Y/(N):N
REDISTRIBUTE ANSWERS? Y/(N):N
ENTER MAXIMUM NUMBER OF HITS TO BE PRINTED PER RUN (100):100
SORT SDI ANSWER SET (N)/Y?:N
ENTER SDI RUN FREQUENCY - WEEKLY, (EVERYUPDATE), MONTHLY,
  OR ?:WEEKLY
MULTIFILE SDI HAS BEEN SAVED AS SDI REQUEST 'COSTALCMULTI/S'
QUERY L5 HAS BEEN SAVED AS SDI REQUEST 'COSTALCAP/S' FOR FILE
  CAPLUS
QUERY L6 HAS BEEN SAVED AS SDI REQUEST 'COSTALWPI/S' FOR FILE
  WPINDEX
```

Same codes and information are used for each database as for a single database alert.

Verify the SDI setups by typing:
=> D SAVED/S

Helpful Hint

An existing single database SDI can be moved to a multifile SDI by entering the single file SDI name at the prompt that asks for the single file component. The existing single file SDI must be from a database for which the multifile component is being defined. Once the single database SDI becomes a component of a multifile SDI, the single file SDI no longer exists.

DELIVERY OPTIONS

Multifile current awareness alert results may be delivered individually by database or as a package. The right option for you depends on how timely you need the results. The default for a multifile SDI results are delivered according to the run frequency setup in the multifile SDI parameters for each database. The results are delivered for each database, even if run on the same day. For example, a SDI in three (3) databases will result in three different deliveries of answers – one for each database. The benefit is that the results are delivered in a very timely manner (e.g., daily, weekly, biweekly).

If you can wait up to 30 days for delivery of the results, a multifile SDI package may be your preferred delivery choice. The SDI is delivered on the last day of the month regardless of the individual database updates and SDI frequency. The answer sets can have duplicate records removed. You must enter PACKAGE on the command line after ALERT MFILE to request a monthly delivery of packaged results. Answer the usual prompts for ALERT MFILE. The print format requested must be either the default print format in each database or a format that is valid for each database.

```
=> ALERT MFILE PACKAGE

MULTIFILE SDI GENERAL PARAMETERS
--------------------------------
ENTER MULTIFILE SDI REQUEST NAME ('AA001/S'), OR END:PACKTALC/S
ENTER TITLE (NONE):PACKAGE ALERT TALC IN COSMETICS
ENTER COST CENTER (LEGAL DEPARTMENT) OR NONE:NONE
ENTER METHOD OF DELIVERY (EMAIL), ONLINE, OR RSS:EMAIL
ENTER EMAIL ID (6283C):MSPARKS@CAS.ORG
MSPARKS@CAS.ORG
RECEIVE DELIVERY NOTIFICATION? (Y)/N:N
ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN?  Y/(N):Y
SET FILE ANSWER PREFERENCE FOR DUPLICATE REMOVAL? (N)/Y:Y
CURRENT FILE PREFERENCE:     1) CAPLUS
                             2) WPINDEX
ENTER THE NUMBER OF THE FIRST PREFERRED FILE (OR END):2
FILE PREFERENCE:     1) WPINDEX
                     2) CAPLUS
ENTER PRINT FORMAT (FILEDEFAULT) OR ?:BIB ABS
HIGHLIGHT HIT TERMS? (Y)/N:Y
ARCHIVE ANSWERS? Y/(N):N
REDISTRIBUTE ANSWERS? Y/(N):N
ENTER MAXIMUM NUMBER OF HITS TO BE PRINTED PER FILE (100):100
SORT SDI ANSWER SET (N)/Y?:N
SEND SDI WITH NO ANSWERS? (Y)/N:Y
DISPLAY CURRENCY INFORMATION? (Y)/N:Y
ENTER SDI EXPIRATION DATE 'YYYYMMDD' OR (NONE):NONE
-----------------------------------------------
MULTIFILE SDI FILE SPECIFIC PARAMETERS: WPINDEX
                                       -------
ENTER COMPONENT SDI REQUEST NAME ('AA001/S') OR END:PACKTALWPI/S
ENTER QUERY L# FOR MULTIFILE SDI REQUEST OR END:L4
ENTER UPDATE FIELD CODE (UP) OR ?:UP
-----------------------------------------------
```

```
MULTIFILE SDI FILE SPECIFIC PARAMETERS: CAPLUS
                                        ------
ENTER COMPONENT SDI REQUEST NAME ('AA001/S') OR END:PACKTALCAP/S
ENTER QUERY L# FOR MULTIFILE SDI REQUEST OR END:L4
ENTER UPDATE FIELD CODE (UP) OR ?:UP
MULTIFILE SDI HAS BEEN SAVED AS SDI REQUEST 'PACKTALC/S'
QUERY L4 HAS BEEN SAVED AS SDI REQUEST 'PACKTALWPI/S' FOR FILE WPINDEX
QUERY L4 HAS BEEN SAVED AS SDI REQUEST 'PACKTALCAP/S' FOR FILE CAPLUS

Verify the multifile and package alert creation:

=> D SAVED/S

NAME             CREATED      NOTES/TITLE
--------------   -----------  ----------------
COSTALC/S        11 AUG 2008  SDI REQUEST FOR FILE CAPLUS
                              USE OF TALC IN COSMETICS
COSTALCAP/S      11 AUG 2008  CAPLUS MEMBER OF SDI COSTALCMULTI/S
                              MULTIFILE TALC IN COSMETICS
COSTALCMULTI/S 11 AUG 2008  SDI MFILE REQUEST
                              MULTIFILE TALC IN COSMETICS
COSTALWPI/S    11 AUG 2008  WPINDEX MEMBER OF SDI COSTALCMULTI/S
                              MULTIFILE TALC IN COSMETICS
PACKTALC/S     11 AUG 2008  SDI MFILE REQUEST
                              PACKAGE ALERT TALC IN COSMETICS
PACKTALCAP/S   11 AUG 2008  CAPLUS MEMBER OF SDI PACKTALC/S
                              PACKAGE ALERT TALC IN COSMETICS
PACKTALWPI/S   11 AUG 2008  WPINDEX MEMBER OF SDI PACKTALC/S
                              PACKAGE ALERT TALC IN COSMETICS
```

Verify the SDI setups by typing:
=> D SAVED/S

SECTION 6: UNDERSTANDING AND MANAGING COSTS ON STN

UNDERSTANDING COSTS ON STN

A complete list of costs associated with searching any specific database can be seen by entering HELP COST at the STN command arrow prompt (**=>**) in that database. Below are examples of some common costs associated with searching on STN:

- **Connect hour fees** – In most STN databases, there is a time-based charge for the amount of time spent online in a database. Connect time is measured to the nearest hundredth of an hour and varies by database. When searching in multiple databases simultaneously, connect time is accrued based on the time that processing is being done in each database.
- **Search term fees** – Some databases accrue a charge for each search term that is used. These costs vary by database.
- **Display fees** – Each database has a cost for each data element you display from it. Predefined display formats are available in each database, and each format has a different cot as listed in the STN Price List. For information on display costs for fields not listed in the Price List, type HELP COST at the prompt in the database of interest.
- **Command specific charges** – For certain commands, such as FOCUS, ANALYZE, SORT, TABULATE, TRANSFER and SELECT, a fee is charged each time the command is used.
- **Alert (SDI) costs** – Each database has a per run cost for alerts (SDIs). The cost usually varies by the frequency with which the alert runs.
- **Saved results fee** – Each saved result (search strategy, query, or answer set) generates a nominal fee of $1 per month until deleted.

MANAGING COSTS ON STN

STN provides information professionals with many tools to manage costs. For example:

- Use “H” or “Z” databases
- Use SET NOTICE
- Use cost centers

Using “H” and “Z” Databases

When an STN database is also designed with an “H” or “Z”, you have a choice in the pricing method that is most cost effective for your needs. The standard database offers you a low connect hour fee with search term charges.

- The “H” database charges a higher connect hour fee, but has no search term charges, so it is optimal for searches with large numbers of search terms.
- The “Z” database provides no connect hour fee with higher search term charges, so it is a good choice when you do not want to worry about the time you are spending on a search, such as when exploring a database using EXPAND

Using SET NOTICE

The SET NOTICE command allows users to set a cost limit for searches or displays. If any request would exceed the set cost, STN will warn the user of the cost and request confirmation before executing the request.

```
=> SET NOTICE

ENTER DISPLAY OR SEARCH (DISPLAY):DISPLAY
ENTER AMOUNT IN U.S. DOLLARS, OR OFF (100):200
NOTICE SET TO 200 U.S. DOLLARS FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D ALL 1-

YOU HAVE REQUESTED DATA FROM 3013 ANSWERS - CONTINUE? Y/(N):Y
THE ESTIMATED COST FOR THIS REQUEST IS 9852.51 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:N
REQUEST CANCELED
```

Using Cost Centers

Another tool that STN searchers can use to manage costs are cost centers. Cost centers allow you to group costs associated with one project or department on your invoice.

- You can request that a group of login IDs be assigned to a single cost center, so that the invoice will show a subtotal for the group
- During an online session, you can also enter a cost center for a portion of their searching by typing SET ACCOUNT
- Alerts can also be setup to bill a particular cost center

```
=> SET ACCOUNT

ENTER COST CENTER (NONE):LEGAL DEPARTMENT
COST CENTER SETTING WILL TAKE EFFECT WITH THE NEXT SUCCESSFUL FILE COMMAND
SET COMMAND COMPLETED
```

STN usage is normally billed monthly. However, organizations may also enter into a fixed cost agreement for use of certain databases on STN. Such fixed costs agreements have the benefit of allowing an organization to know what its costs for STN searching will be each month, which often makes budgeting easier.

Special STN pricing is available for colleges and universities that will be using STN in academic pursuits with no commercial involvement.

Any questions regarding STN pricing can be directed to CAS Customer Center at help@cas.org or by phone at 1-800-753-4227 (North America).

SECTION 7: ADDITIONAL TOOLS FOR THE INFORMATION PROFESSIONAL

ADDITIONAL TOOLS FOR THE INFORMATION PROFESSIONAL

The work demands of the information professional have changed over time. Information professionals not only search and retrieve information, but also:

- Choose, administer, and provide training for user resources
- Develop and maintain information portals
- Provide high level analysis of information to support organizational decision-making
- Take a key role in intellectual property management effort
- Provide competitive intelligence

These job functions present many challenges, but those information professionals who master them can be rewarded with high levels of respect within their organizations, and are also often offered a key role in decision-making.

In order to support information professionals in their multitude of job functions, STN offers a suite of tools that integrate with, or augment the services STN provides.

Information professionals may be asked to administer various additional tools including:

- STN Easy®
- SciFinder®
- STN® AnaVist™
- STN® Viewer™
- CAS Full Text Options

END USER TOOLS

End user tools are designed for use by individuals who do not regularly retrieve information from STN. Examples include:

- Students in a college library
- Scientists in a lab
- Vice President of a healthcare company
- Engineer in a plant

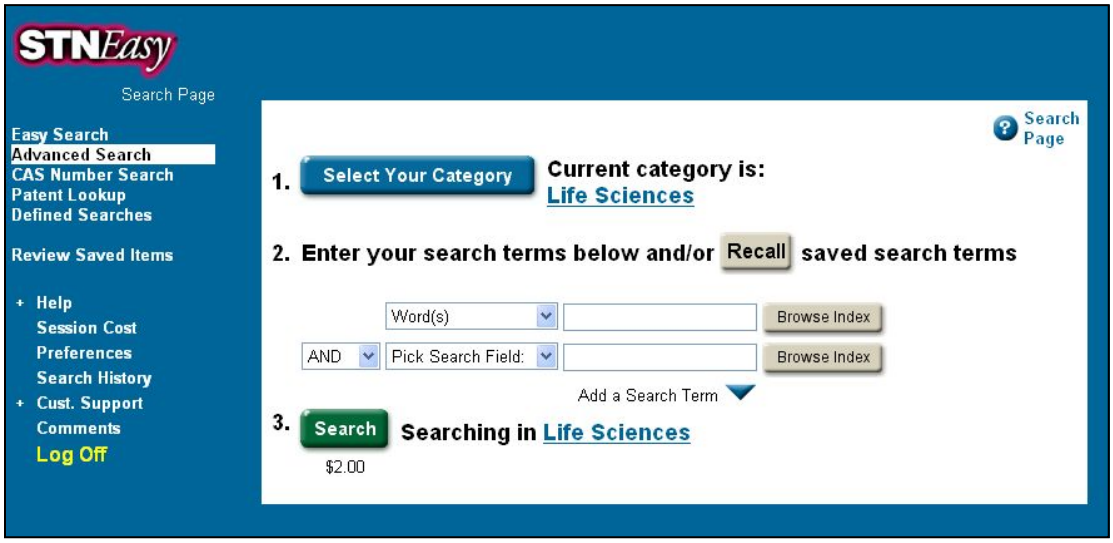
These individuals often want to conduct some of their own information retrieval. As an information professional, if you can demonstrate which end user tools are available to them, you will be able to effectively demonstrate how STN can fit their searching needs.

STN EASY

STN Easy is the end user interface of STN. STN Easy provides access to key databases from STN in an easy-to-use, point-and-click format. Users can get started with very little training and the simplified pricing model protects them from unexpected costs. STN Easy does not allow for all the types of complex search queries that can be done in STN, but it is a great starting point for quick access to journal literature, patent information, substance data, regulatory information, and many other things.

STN for Intranets provides customizable searching for end users from a corporate information portal of intranet. The interface and database availability can be customized to meet the exact needs of an organization. This portal interface can also serve as a convenient place to post results of current awareness alerts for use by groups of people with similar needs.

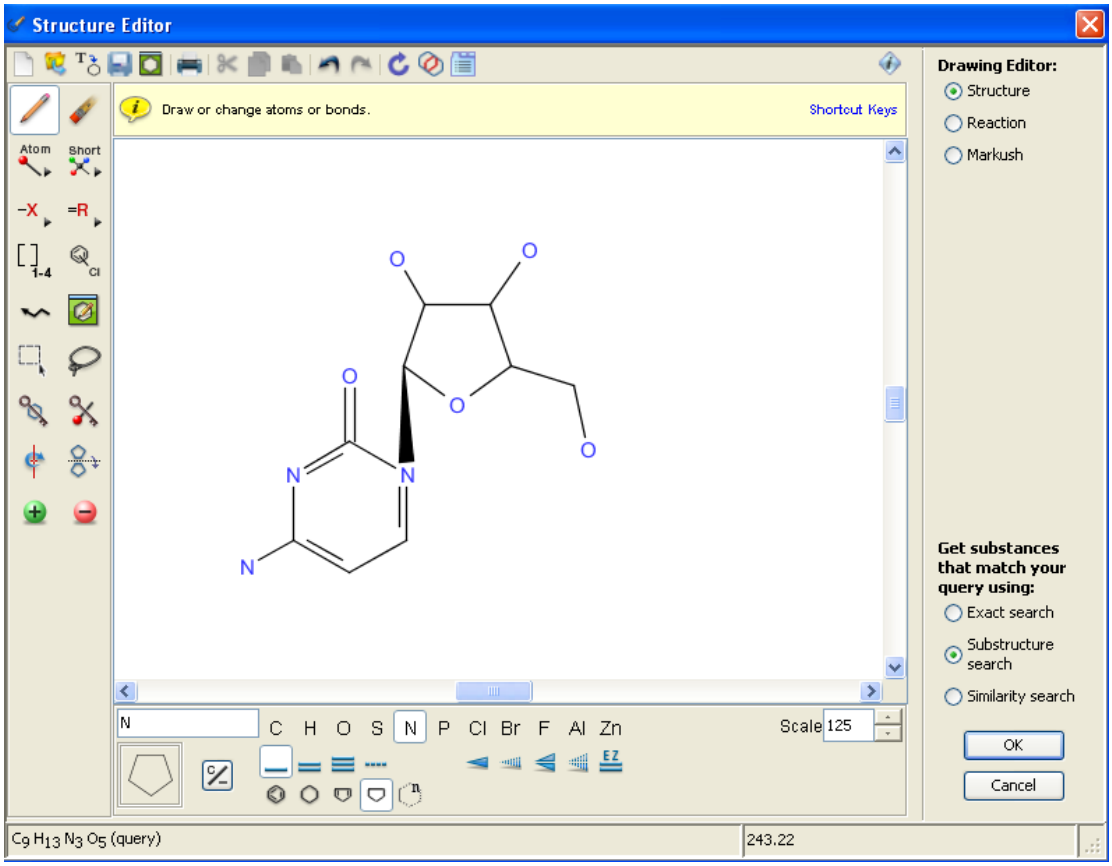
For more information visit: http://www.cas.org/products/stn/easy



SCIFINDER

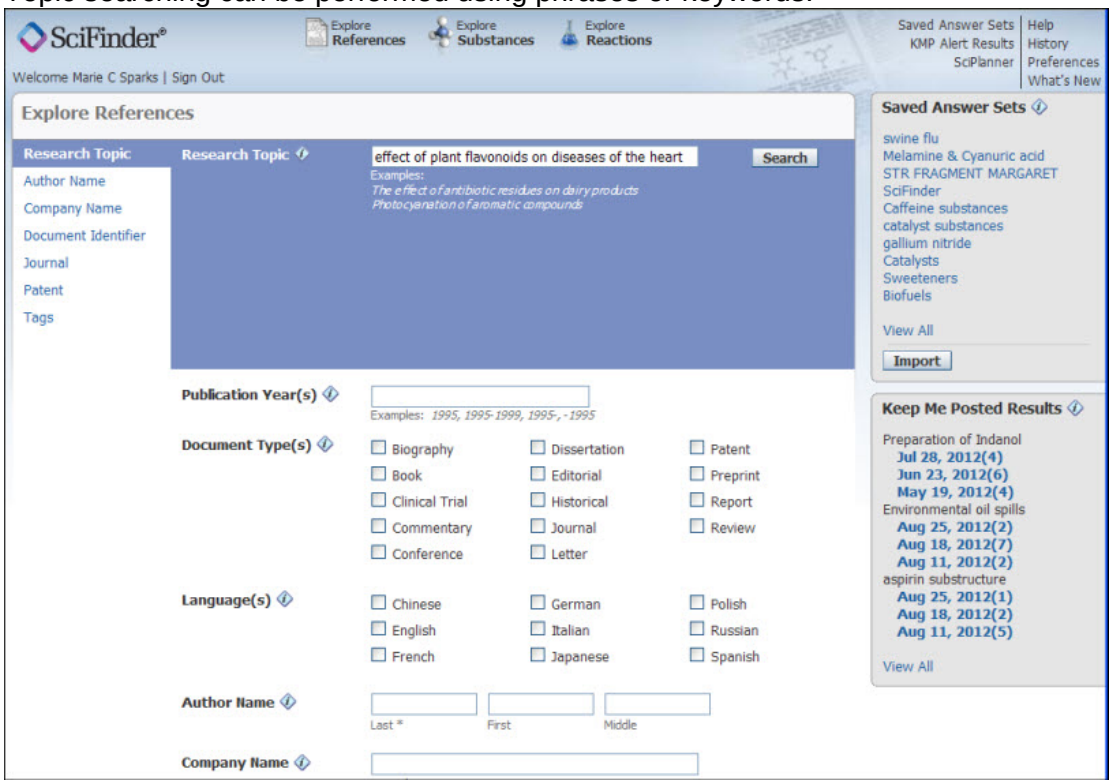
SciFinder®

SciFinder is an end user interface to the databases produced by CAS, that contains the full CAS bibliographic database, CAplus, and REGISTRY, as well as MEDLINE® and information on reactions, regulatory, and chemical suppliers. The interface is extremely intuitive and the pricing models are protective for end users. SciFinder offers extremely powerful searching tools and analysis capabilities for an end user product, without being too complicated. SciFinder is an extremely popular tool for chemists, as well as in many non-chemistry science or technology companies or departments where users desire an easy interface that covers a broad range of content areas and allows users to search patent, journal, and substance information in one place.

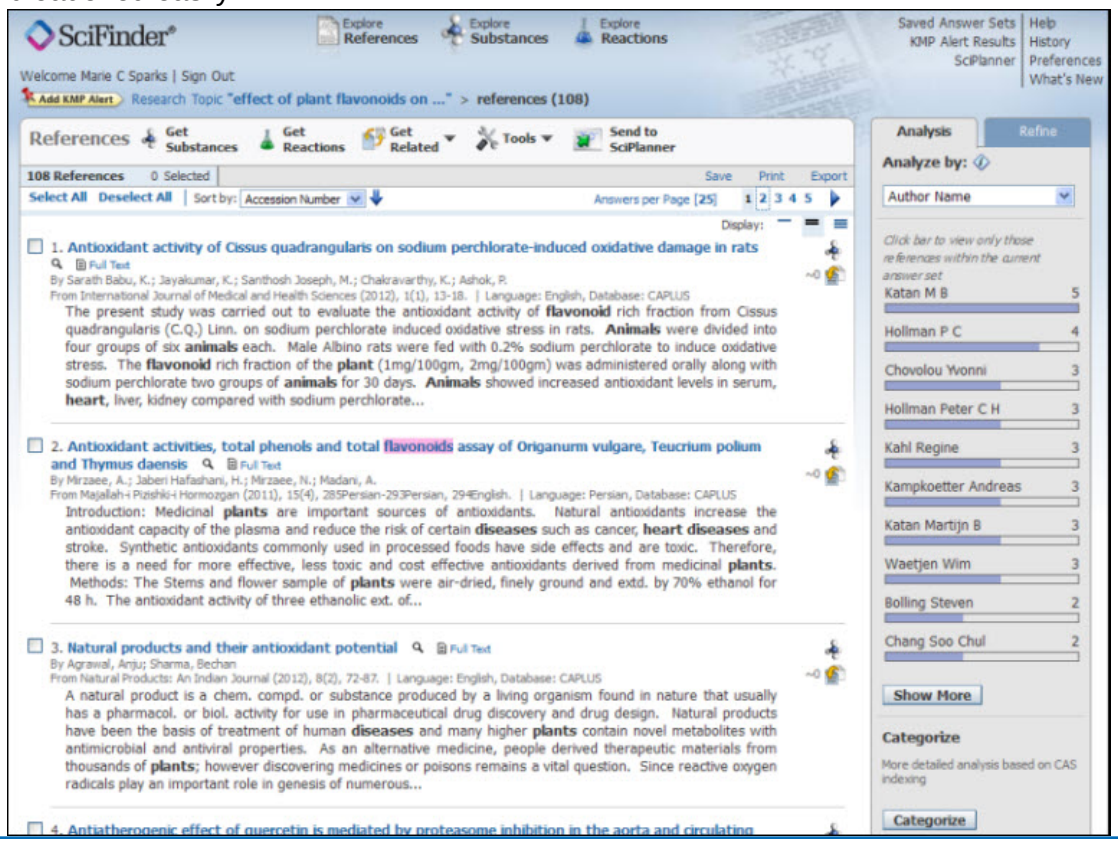


SciFinder is ideal not only for text searching, but for chemical structure, reaction, and sequence searching by end users.

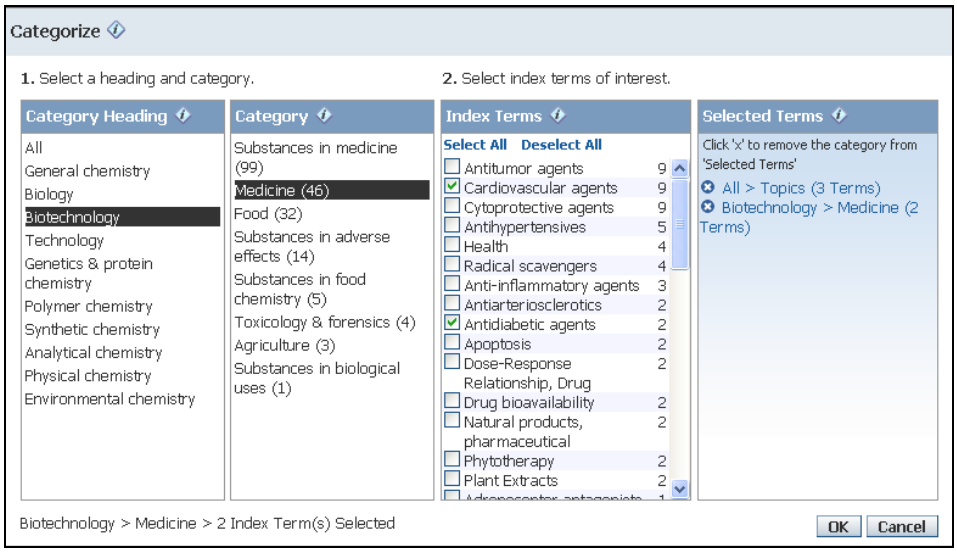
Topic searching can be performed using phrases or keywords.



Hit term highlighting is shown in the results page. Results can be narrowed or broadened easily.



Results may be further analyzed with SciFinder's built-in tools; such as Categorize.



ANALYSIS TOOLS

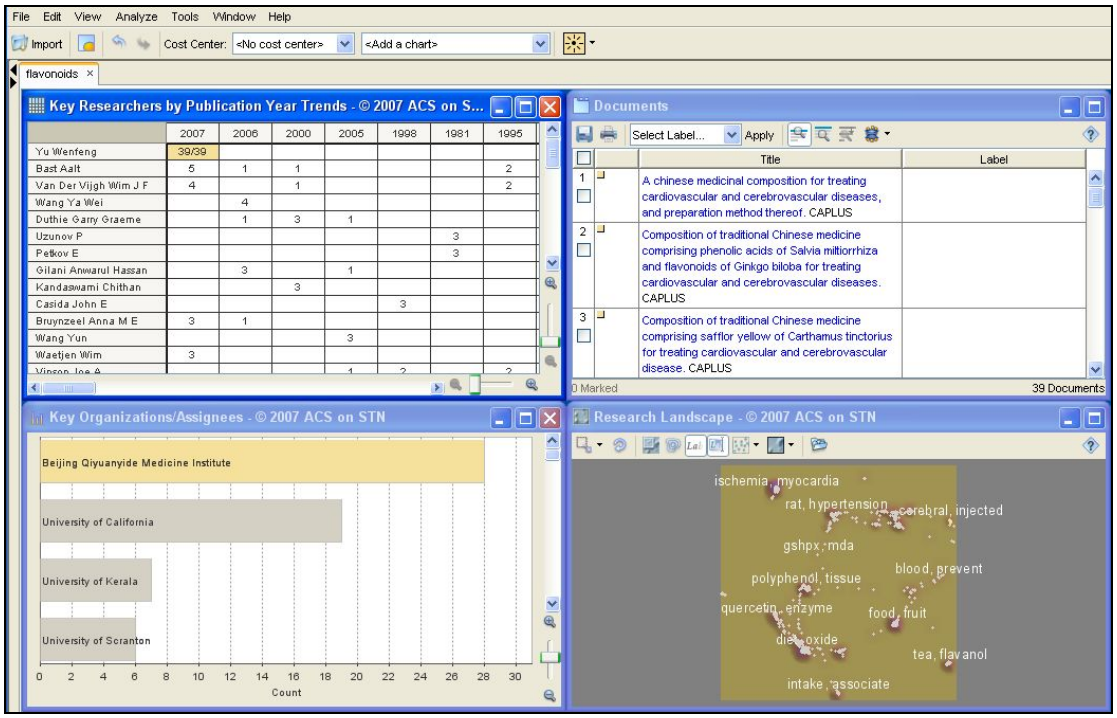
Corporate information professional are often asked not only to retrieve information but also to analyze it. Some of these types of requests might include:

- Show me the trends in research in an area
- Compare the various companies working in an area
- Help us to find new ways to generate revenue from our existing patents
- Where is the largest current area of growth in this industry?
- Provide a competitive assessment of a technology
- Analyze the patent landscape – who are the competitors, what are they doing, what do we expect them to do next, where do we have a strategic advantage?

STN ANAVIST

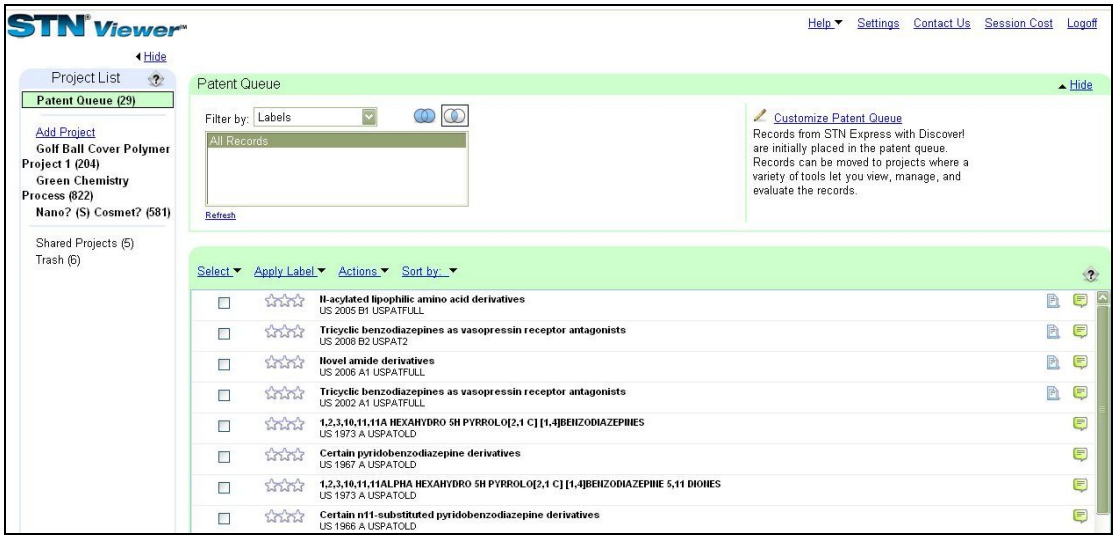
These types of requests require more than just a list of references. In order to fulfill them, tools are needed that allow comparison of data in a very in-depth way. An information professional that is skilled in this area can provide immense value to diverse projects including competitive intelligence, R&D planning, strategic planning, and patent portfolio management.

STN AnaVist is a tool for analysis and visualization of journal and patent data. With STN AnaVist, information can be analyzed and easily shared with interested parties so that they can further investigate the area of interest. The research landscape provides a visual representation of the peaks in a research area. Interactive charts allow for easy comparison of various aspects of a data set, such as the different companies that have been assigned patents. STN AnaVist seamlessly integrates with both STN Express and STN on the Web so that searches can be easily transferred to STN AnaVist when higher-level analysis is needed.

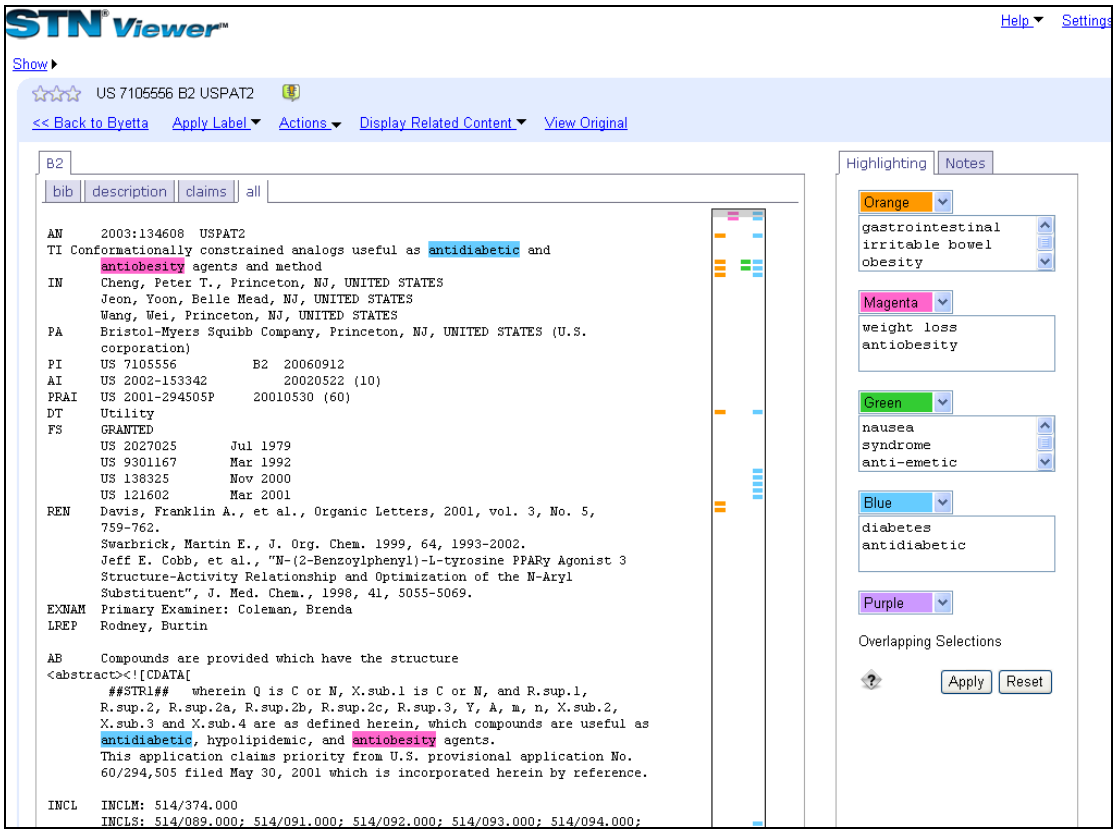


STN VIEWER

Full text patents can be long and complicated documents, making it challenging to quickly find the information that is of interest. STN Viewer is a web-based workflow productivity tool for patent information professionals and others, such as patent agents, patent attorneys, and R&D decision makers, who need to review and analyze full text patents. STN Viewer allows users to view, highlight, navigate, and annotate full text patent documents. Annotated patents can be shared with other users as well, saving users' time and promoting collaboration. STN Viewer seamlessly integrates with both STN on the Web and STN Express, so that it is easy to move from searching to review, or share patents with others for review.



Highlighting and truncation options in STN Viewer make it easy to locate terms of interest in patents.

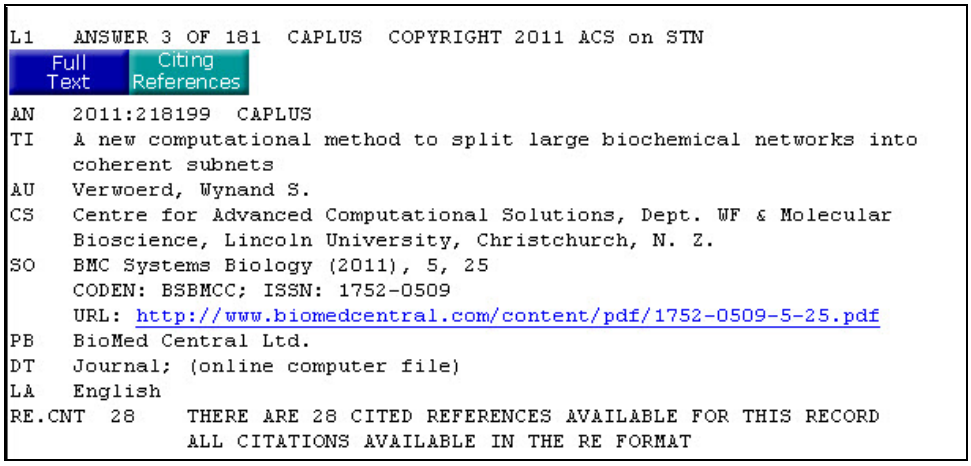


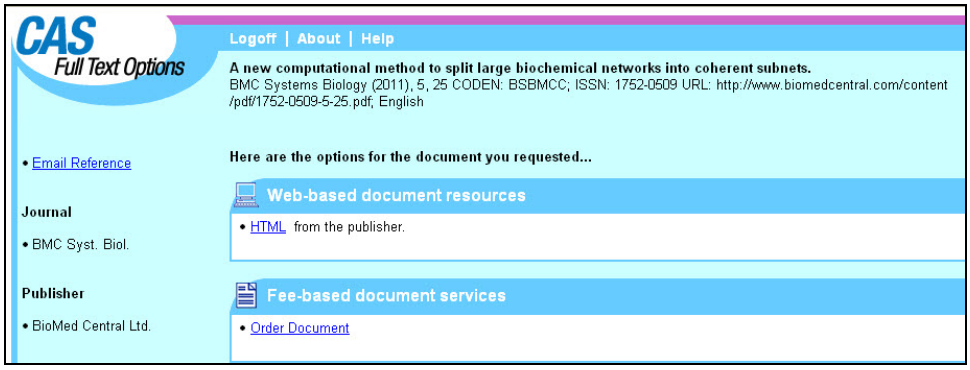
For more information visit: http://www.cas.org/products/stn/viewer

CAS FULL TEXT OPTIONS

CAS Full Text Options helps to integrate STN and other CAS products with the full text of more than 7,400 electronic journals from nearly 360 participating publishers and full text patents from five patent offices: USPTO (U.S. Patent and Trademark Office), Espacenet (European Patent Office), SIPO (State Intellectual Property Office of the P.R.C.), JPO (Japanese Patent Office), and KIPRIS (Korea Intellectual Property Rights Information Service). CAS Full Text Options is integrated with all of the STN interfaces as well as SciFinder. Links to CAS Full Text Options also appear in STN transcripts and report output.

When a user finds a document of interest while searching or reviewing search results, they can use CAS Full Text Options to see if this resource is already purchased by their organization, in which case CAS Full Text Options will link users to the publisher sites or to an institution's journal collection, if enabled. CAS Full Text Options increases the use and value of an organization's electronic access rights and print journal holdings because users can access them directly from search results – right at their desktops. CAS Full Text Options requires very little setup and maintenance, but can be highly customized if desired.





SEARCHING SUPPORT

Information professionals need to seek additional sources for searching. Tools are available to assist you in some cases, such as:

- Coverage during a vacation or extended absence from work
- Overflow help for times of high workload
- Advanced specialized searches
- Comprehensive searches, such as patentability

In these situations, CAS can provide you with the search services of the Science IP staff.

SCIENCE IP®
The CAS Search Service

Science IP provides fast, accurate, and comprehensive searches of the world's scientific and patent literature. Science IP is staffed by a small group of experienced searchers with backgrounds in various science and technology areas who provide searching on an as needed basis at an hourly rate. These searchers are highly skilled and have access to all relevant search systems and databases, not just STN or CAS content. Customers consistently comment on the quality of Science IP's searching and their consultative approach to working with their customer to get them exactly what is needed.

For more information regarding Science IP visit:
http://www.cas.org/products/science-ip

APPENDICES

APPENDIX I:
LINKS TO ADDITIONAL INFORMATION ON THE WEB

WEBSITE	URL
CAS website	www.cas.org
CAplus Coverage Across the Sciences	http://www.cas.org/content/references
CAplus Coverage Patents	http://www.cas.org/content/references/patentcoverage
Database Summary Sheets	http://www.cas.org/products/stn/dbss
Guide for New STN Searchers	http://www.cas.org/training/stn/new-stn-searchers
STN Commands	http://www.cas.org/training/stn/commands-qrc
STN on the Web LIS	stnweb.cas.org?USERTYPE=LIS
STN Easy Interface	stneasy.cas.org
STN Express Software	http://www.cas.org/products/stn/express-softwaredoc
STN Support	http://www.cas.org/products/stn/support
STN Training (includes instructor-led, web-based, and additional training resources	http://www.cas.org/training/stn
Acronym Finder	www.acronymfinder.com
Synonym Finder	www.synonym.com

APPENDIX II:
STN COMMANDS AND ALIASES

STN Commands

STN Command Definitions: http://www.cas.org/training/stn/stn-pocket-guide

- FILE
- EXPAND
- SEARCH
- DISPLAY
- LOGOFF
- INDEX
- DUPLICATE
- FOCUS
- SORT
- SELECT
- ANALYZE
- TRANSFER
- TABULATE
- FSORT
- FSEARCH
- PRINT
- SAVE
- ACTIVATE
- DELETE
- SDI
- DISPLAY HISTORY
- DISPLAY COST
- QUERY
- SET
- NEWS

FILE Command

STN COMMAND	FUNCTION	EXAMPLE
FILE FIL B	Enter a file, multiple files, a database cluster or combination of databases and clusters	=> **FILE CAPLUS** => **FIL LWPI** => **B CAPLUS APOLLIT**

EXPAND Command

STN COMMAND	FUNCTION	EXAMPLE
EXPAND E EXP	View terms online in the search index(es)	=> **EXPAND NUCLEAR** => **E ATOMIC/CT** => **EXP PLASTIC**

SEARCH Command

STN COMMAND	FUNCTION	EXAMPLE
SEARCH S	Searches terms or L-numbers [1]	=> **SEARCH BIOMASS** => **S L9**

[1]: L-number answer sets are created as a result of SEARCH or QUERY commands.

DISPLAY Command

STN COMMAND	FUNCTION	EXAMPLE
DISPLAY D DIS	Look at answers, has other display functions	=> **DISPLAY L1- 1-4 BIB** => **D SCAN** => **DIS COST**
D HISTORY	Display online history session	=> **D HIS**

LOGOFF Command

STN COMMAND	FUNCTION	EXAMPLE
LOGOFF LOG Y END BYE Y	Terminate online session	=> **DOGOFF** => **LOG Y** => **END** => **BYE Y**

APPENDIX III:
STN FAQS

QUESTION	ANSWER
What does STN stand for?	Scientific and Technical Information Network
How can I get help when I have a question while I am searching?	Type HELP DIRECTORY at the arrow prompt in any database and STN will give you a list of available help topics for that database. Some frequently used helps are listed below: HELP COST: Shows the key costs associated with searching a database HELP SFIELDS: Show the searchable fields in any given database HELP DFIELDS: Shows the displayable fields in any database If you need additional help, you can call the STN Help Desk at 1-800-753-4227 from 8 AM to 8 PM U.S. Eastern time weekdays. You will talk to a STN expert who can answer questions or walk you through unfamiliar search processes. This is provided free of charge to all STN users.
I am stuck at a colon prompt in STN. How do I get back to the arrow prompt?	The colon prompt in STN is shown when the system is requesting an answer to a question it has asked. To get out of the colon prompt, you can answer the question or just type END or 0 (zero) to exit that function and go back to a new STN arrow prompt (=>.)
What databases are available for use in the STN LIS Training Program?	The CAS website maintains a current list of databases available for participants in the STN Library and Information Science Training Program at: http://www.cas.org/training/stn/stnlis
How do I retrieve my transcript in STN on the Web?	In STN on the Web, your transcript is automatically captured during your session, unless you chose to turn it off when you logged into the system. Once you log off, a “Retrieve Transcript” link will appear in the bottom left corner of your session window. Click on this link and it will allow you to retrieve your transcript in HTML, RTF, or PDF formats. Your most recent transcript is at the top of the list and they are in chronological order. Your transcript will be available in this area for at least four days after your search, but if you do not save it to your computer, it will no longer be available after that time..

How do I retrieve my transcripts in STN Express?	In STN Express, you will be asked when you begin your session, if you would like to keep a transcript, and what name you would like for it. At any point during your online session, you can toggle your transcript on and off by clicking on the area labeled “Transcript” in the toolbar at the bottom of your online session window. Once you have logged out of your session, you can access your transcripts by clicking the Edit Transcript option on your STN Express toolbar and choosing the proper file.
Is STN just for chemistry searching?	No. STN has a definite strength in chemistry. Many of the databases and features provided in STN are beneficial for chemistry searching. However, STN actually covers all aspects of science and technology including engineering, material science, food and agriculture, technology related business, and many other areas. We encourage you to look at the total list of STN databases to really see the breadth of content coverage: http://www.cas.org/products/stn/dbss
Do I need a separate login ID for STN on the Web, STN Express, and STN Easy?	No. Your standard STN login ID will allow you to access any of these interfaces.

APPENDIX IV:
SEARCH REQUEST FORM

Date of Request:_____ Date Needed By:_____

Requestor's Name:_____

Phone Number: _____ E-mail:_____

Information Need (topic, company, substance, etc.):
THE MORE COMPLETELY YOU DESCRIBE YOUR REQUEST, THE BETTER

_____

_____

_____

_____

What other terms might be used in the literature to describe these key concepts?

_____

_____

Relevant Types of Literature:

Journal Articles

Patents

News/Magazine Articles

Conference Proceedings

Other_____

Relevant Timeframe:

Current Year Only

All Available Years

Specific Date Range:_____

Preferred Delivery: E-mail In-Person Hardcopy

Other Notes or Instructions:

_____

_____

_____