

STN Basics

March 2005



At the end of this workshop, you will be able to

- Choose an STN database containing information on a topic of interest
- Perform a simple keyword search in any STN bibliographic database
- Use STN tools such as truncation and logic operators to maximize recall of relevant answers
- Refine search strategies
- Set up a single-file current awareness alert

Before you begin

This workshop is designed for individuals who want to learn how to search in bibliographic, word-searchable databases using STN command language. It is designed for both

- The new STN command line searcher
- The experienced command line searcher who wants to review basic commands and strategies for searching bibliographic databases

This workshop highlights the use of STN Express[®] with *Discover!*[™] software.

Helpful HINT

To set up an STN account or obtain STN Express software, contact CAS Customer Service at help@cas.org

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OVERVIEW

In this section, you will

- Discover the range of information available through STN International SM
- Define terminology commonly used in online searching
- Identify the fields that comprise the Basic Index of bibliographic files

STN International Overview

STN International is a service that covers a broad range of information related to many scientific fields. It can be accessed

- Online, through STN Express with *Discover!*
- On the web, through STN[®] on the WebSM

A wide range of scientific and technical topics are covered:

- Biotechnology
- Chemistry
- Engineering
- Health and safety
- Government regulations
- Materials science
- Medicine
- Patents
- Scientific and technical business

This information is stored in more than 200 databases.

Terminology

A number of terms are used commonly in online searching.

Database

The information available through STN International is stored in >200 **databases (files)**. There are several types of databases:

- Bibliographic
- Chemical structure
- Reaction
- Directory

Bibliographic databases are created by extracting pieces of information such as the title, author names, source, and abstract from a publication and compiling this information in a record.

Record

Bibliographic databases are comprised of numerous **records**, which correspond to individual publications, such as research papers or patent publications.

Illustration:

JACS
ARTICLES
Published on Web 04/10/2004

Template Assembled Cyclopeptides as Multimeric System for Integrin Targeting and Endocytosis

Didier Boturyn,[†] Jean-Luc Coll,[‡] Elisabeth Garanger,^{†‡} Marie-Christine Favrot,[‡] and Pascal Dumy^{*†}

Contribution from the LEDSS, UMR CNRS 5616 and ICMG, FR-2607, Université Joseph Fourier, BP 53, 38041 Grenoble Cedex 9, France, and GRCP, INSERM U578, IFR-73, Domaine de la Merci, 38706 La Tronche, France

Received January 6, 2004; E-mail: Pascal.Dumy@ujf-grenoble.fr

Abstract: The $\alpha v \beta_3$ integrin receptor plays an important role in human metastasis and tumor-induced angiogenesis. c[RGDfV] peptide represents a selective $\alpha v \beta_3$ integrin ligand that has been extensively used for research, therapy, and diagnosis of neoangiogenesis. We report here the modular synthesis and biological characterization of template assembled cyclopeptides as a multimeric system for targeting and endocytosis of cells expressing $\alpha v \beta_3$ integrin. c[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 $\alpha v \beta_3$ receptor and the associated good uptake property displayed by the multivalent molecules demonstrated the interest in the RAFT molecule to design new multimeric system with hitherto unreported properties. These compounds offer an interesting perspective for the reevaluation of integrins as angiogenesis regulators (Hynes, R. O. *Nature Med.* 2003, 9, 918–921) as well as for the design of more sophisticated systems such as molecular conjugate vectors.

This research paper — a journal article — is available online via the CAPLUSSM record below.



AN 2004:293513 CAPLUS [Full-text](#)
DN 141:7426
ED Entered STN: 11 Apr 2004
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
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 15
AB The $\alpha v \beta_3$ integrin receptor plays an important role in human metastasis and tumor-induced angiogenesis. Cyclic peptide, cyclo[RGDfV] (f = D-Phe) represents a selective $\alpha v \beta_3$ integrin ligand that has been extensively used for research, therapy, and diagnosis of neoangiogenesis. Here, the authors report the modular synthesis and biol.

•
•
•

Indexes

Each database record is organized in a series of **indexes (fields)**, which are labeled with identifying codes.

In addition to information such as titles, authors, and abstract text from the original document, many database producers also add **indexing terms** that highlight the key concepts covered in the document.

Indexing terms typically are **controlled terminology**. This means that regardless of the jargon used in the original research paper, the term used by the database producer is constant. The assignment of uniform indexing terms allows searchers to locate documents on a particular topic.

Illustration:

Indexes include TI for title, AU for author, and CS for corporate source.

The highlighted indexes are examples of different types of "indexing terms" used in CAplus:

- CC = category code
- ST = supplementary terms
- IT = index terms

```
AN 2001:752414 CAPLUS
TI Spin, Charge, and Lattice States in Layered Magnetoresistive Oxides
AU Mitchell, J. F.; Argyriou, D. N.; Berger, A.; Gray, K. E.; Osborn, R.;
Welp, U.
CS Materials Science Division, Argonne National Laboratory, Argonne,
IL, 60439, USA
SO Journal of Physical Chemistry B (2001), 105(44), 10731-10745
CODEN: JPCBFK; ISSN: 1089-5647
PB American Chemical Society
DT Journal; General Review
LA English
CC 76-0 (Electric Phenomena)
AB A review. Colossal magnetoresistive materials are perovskite-related
mixed-valent (Mn3+/Mn4+) manganese oxides that exhibit both
spontaneous (at a Curie transition) and magnetic field-induced
insulator-metal transitions. In this article, we discuss how a
particular class of these manganite materials, naturally layered
manganites La2-2xSr1+2xMn2O7, has allowed us to exptl. probe
many of these tightly coupled phenomena.
ST review spin charge lattice state layered magnetoresistive oxide
IT Crystal structure
Electric charge
Electron spin
Giant magnetoresistance
Magnetoresistors
(spun, charge, and lattice states in layered magnetoresistive oxides)
IT Oxides (inorganic), properties
RL: PRP (Properties)
(spun, charge, and lattice states in layered magnetoresistive oxides)
IT 1310-98-1, Manganite 59707-46-9, Lanthanum manganese strontium
oxide
RL: PRP (Properties)
(spun, charge, and lattice states in layered magnetoresistive oxides)
RE.CNT 94 THERE ARE 94 CITED REFERENCES AVAILABLE FOR
THIS RECORD
RE
(1) Abrikosov, A; Phys Rev B 2000, V61, P7770 CAPLUS
(2) Akimoto, T; Phys Rev B 1999, V59, PR14153 CAPLUS
•
•
•
```

Basic Index

To facilitate searching, many files are constructed so that several indexes are merged into a single index called the **Basic Index** (default index). The Basic Index is where you will typically search for technical words pertaining to subjects of interest.

The indexes making up the Basic Index are database-dependent.

CAplus Basic Index

The CAplus database covers worldwide literature from all areas of chemistry, biochemistry, life sciences, chemical engineering, and related sciences.

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

- Title
- Abstract
- Supplementary Terms
- Indexing Terms

AN	2004:293513	CAPLUS	Full-text
DN	141:7426		
ED	Entered STN:	11 Apr 2004	
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		
CC	34-3 (Amino Acids, Peptides, and Proteins) Section cross-reference(s): 1, 15		
AB	The $\alpha\text{V}\beta\text{3}$ integrin receptor plays an important role in human metastasis and tumor-induced angiogenesis. Cyclic peptide, cyclo[RGDfV] (f = D-Phe), represents a selective $\alpha\text{V}\beta\text{3}$ 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 $\alpha\text{V}\beta\text{3}$		

Words from the highlighted sections make up the Basic Index of CAplus.

(continued on next page)

	<p>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 $\alpha V\beta 3$ receptor and the assocd. 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.</p>				
ST	cyclic multimeric peptide prepn integrin receptor binding endocytosis; RGD peptide fluorescein labeled template assembled synthesis cyclization				
IT	Peptides, preparation RGD peptides				
	<p>RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (cyclic; prepn. and biol. activity of template-assembled RGD cyclopeptides as multimeric system for integrin targeting and endocytosis of cells expressing $\alpha V\beta 3$ integrin)</p>				
IT	Angiogenesis (neovascularization; prepn. of template-assembled RGD cyclopeptides as potential agents for diagnosis of neoangiogenesis)				
IT	Solid phase synthesis (peptide; prepn. and biol. activity of template-assembled RGD cyclopeptides as multimeric system for integrin targeting and endocytosis of cells expressing $\alpha V\beta 3$ integrin)				
IT	Human (prepn. of template-assembled RGD cyclopeptides as potential agents for diagnosis of neoangiogenesis)				
IT	Integrins				
	<p>RL: BSU (Biological study, unclassified); BIOL (Biological study) ($\alpha V\beta 3$; prepn. and biol. activity of template-assembled RGD cyclopeptides as multimeric system for integrin targeting and endocytosis of cells expressing $\alpha V\beta 3$ integrin)</p>				
IT	137813-35-5				
	<p>RL: BSU (Biological study, unclassified); BIOL (Biological study) (prepn. and biol. activity of template-assembled RGD cyclopeptides as multimeric system for integrin targeting and endocytosis of cells expressing $\alpha V\beta 3$ integrin)</p>				
IT	188982-03-8P	343312-29-8P	343312-30-1P	343312-31-2P	343312-32-3P
	696660-87-4P	697288-12-3P	697288-13-4P	697288-14-5P	697288-15-6P
	697288-37-2P	697288-38-3P	697288-39-4P		
	<p>RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. and biol. activity of template-assembled RGD cyclopeptides as multimeric system for integrin targeting and endocytosis of cells expressing $\alpha V\beta 3$ integrin)</p>				
IT	58-85-5, Biotin	108-30-5, Succinic anhydride,	reactions	3326-32-7,	
	FITC (isomer I)	47375-34-8	80366-85-4	280578-04-3	388633-54-3
	<p>RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. and biol. activity of template-assembled RGD cyclopeptides as multimeric system for integrin targeting and endocytosis of cells expressing $\alpha V\beta 3$ integrin)</p>				
RE.CNT	59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD				
RE					
	(1) Arap, W; Science 1998, V279, P377 CAPLUS				
	(2) Arnon, R; FASEB J 1992, V6, P3265 CAPLUS				
	(3) Bitan, G; Biochemistry 1999, V38, P3414 CAPLUS				
	(4) Boturnyn, D; Tetrahedron Lett 2001, V42, P2787 CAPLUS				
	(5) Brooks, P; Science 1994, V264, P569 CAPLUS				
	●				
	●				
	●				

BIOSIS Basic Index

The BIOSIS database contains information on life sciences including biological and biomedical areas.

The highlighted words make up the Basic Index of BIOSIS.

AN 2004:304177 BIOSIS [Full-text](#)
DN PREV200400306814
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 [Reprint Author]
CS UMR 5616LEDSS, CNRS, BP 53, F-38041, Grenoble, 9, France
Pascal.Dumy@ujf-grenoble.fr
SO Journal of the American Chemical Society, (May 12 2004) Vol. 126, No. 18, pp. 5730-5739. print.
ISSN: 0002-7863 (ISSN print).
DT Article
LA English
ED Entered STN: 7 Jul 2004
Last Updated on STN: 7 Jul 2004
AB The alphavbeta3 integrin receptor plays an important role in human metastasis and tumor-induced angiogenesis. c(-RGDfV-) peptide represents a selective alphavbeta3 integrin ligand that has been extensively used for research, therapy, and diagnosis of neoangiogenesis. We report here the modular synthesis and biological characterization of template assembled cyclopeptides as a multimeric system for targeting and endocytosis of cells expressing alphavbeta3 integrin. c(-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 alphavbeta3 receptor and the associated good uptake property displayed by the multivalent molecules demonstrated the interest in the RAFT molecule to design new multimeric system with hitherto unreported properties. These compounds offer an interesting perspective for the reevaluation of integrins as angiogenesis regulators (Hynes, R. O. Nature Med. 2003, 9, 918-921) as well as for the design of more sophisticated systems such as molecular conjugate vectors.
CC Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids 10064
IT Major Concepts
Biochemistry and Molecular Biophysics
IT Chemicals & Biochemicals
alpha-v-beta-3 integrin receptor; c[-RGDfV-] peptide: alpha-v-beta-3 integrin receptor ligand, assembly; cyclodecapeptides; cyclopeptides: template assembled; integrin
IT Methods & Equipment
chemoselective oxime bond formation: laboratory techniques
IT Miscellaneous Descriptors
angiogenesis: tumor-induced; binding propensity; endocytosis; integrin targeting; metastasis; neoangiogenesis
RN 153-87-7Q (integrin)
60791-49-3Q (integrin)

Database Summary Sheets

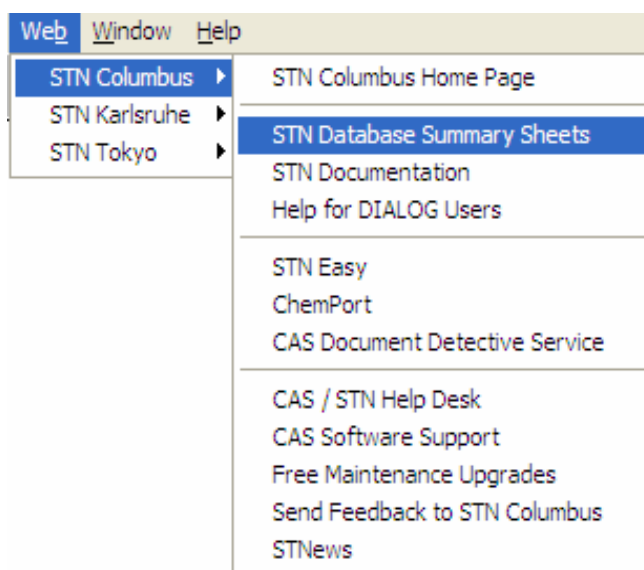
STN Database Summary Sheets are produced for every file on STN. The DBSS offers a handy guide to the information you need to use the file. Each Sheet describes file content, sources of the file, file data, and producer. Search fields are defined and a search example for each field is shown. Display fields and formats are also given. A sample record is included in each DBSS to allow you to see the way information is presented in a record.

For more information visit:

<http://www.cas.org/ONLINE/DBSS/dbsslist.html> 

Helpful HINT

Database Summary Sheets are easily accessed in STN Express with *Discover!* From the Web menu



BASIC KEYWORD SEARCHING

In this section, you will learn to

- Identify a technology-relevant database
- Use STN commands and STN tools such as logic operators and truncation to build a search query
- Search a database using keywords describing technology areas of interest
- Display results

Keyword Searching

Keyword searching is the technique used when a research interest is concept-based, rather than related to a specific chemical substance. The most common form of keyword searching is free-text searching in the Basic Index.

Search Question: *What has been reported on fluorescent green dyes for the coloring of paper?*

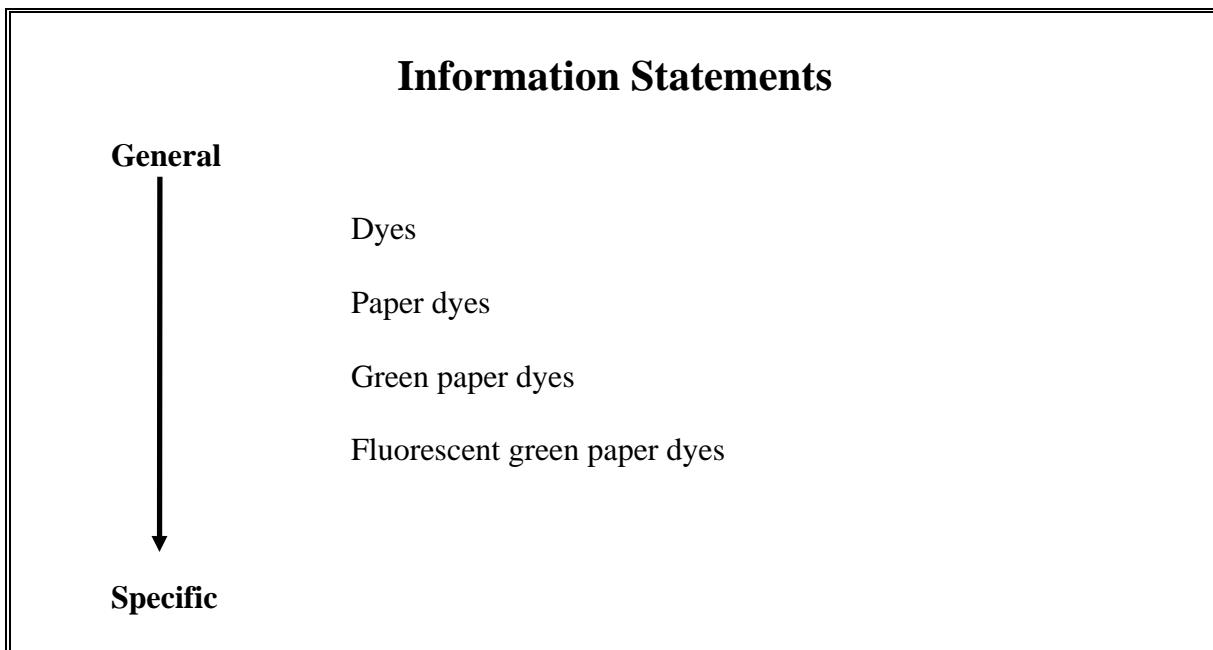
Search Strategy

To retrieve references by using a keyword search

- Step 1 Determine your search question.
- Step 2 Identify a relevant database.
- Step 3 Build an initial search query.
- Step 4 Conduct a preliminary search.
- Step 5 Evaluate answers.
- Step 6 Adjust the search strategy.
- Step 7 Display answer(s).

Step 1: Determine Your Search Question

Although general concepts will be known at the beginning of a search, one consideration that should be made is whether the intent of the search is for general information on a subject area or for a specific aspect of a topic. The degree of specificity influences how the search query is built.



Step 2: Identify a Relevant Database

>200 databases of scientific and technical information are available on STN. Information about the databases can be found in the following resources:

- CAS Catalog: <http://www.cas.org/catalog.pdf> 
- STN Database Summary Sheets: www.cas.org/ONLINE/DBSS/dbsslist.html 

Illustration: Online Database Summary Sheet

A partial capture of a database summary sheet is shown below

STN STN Database Summary Sheet

PAPERCHEM2

PAPERCHEM2 (Elsevier Engineering Information, Inc. File) is a bibliographic database that contains international patent and journal literature pertaining to pulp and paper technology. Information on hemicellulose, arbohydrates, lignin, wood extractives, engineering and processes, graphic arts, corrosion, packaging, and more is included.

Nearly 1,000 periodicals in more than 20 languages are screened, as well as patent gazettes from six major countries. Entries from these periodicals are indexed using keywords from the Thesaurus of Pulp and Paper.

The records contain bibliographic, indexing information, and abstracts.

This database is available in STN Easy. Customers may reach STN Easy in the following ways:

In Europe: <http://stneasy.fiz-karlsruhe.de>
In Japan: <http://stneasy-japan.cas.org>
In North America and elsewhere: <http://stneasy.cas.org>

Subject Coverage

International patent and journal literature related to pulp and paper technology, including:

- Carbohydrates
- Chemistry of Cellulose
- Corrosion
- Corrugated and Particle Board
- Engineering and Process Control

Worksheet

Using the CAS web site, do the following:

- Locate the PAPERCHEM2 database summary sheet.

- What subjects does the database cover?

- What indexes make up the Basic Index?

- How often is the file updated? When did it begin?

Step 3: Build a Search Query

Building a search query requires that you

- A. Identify the main concepts
- B. Choose a set of search terms
- C. Link search terms with logic operators

A. Identify the main concepts

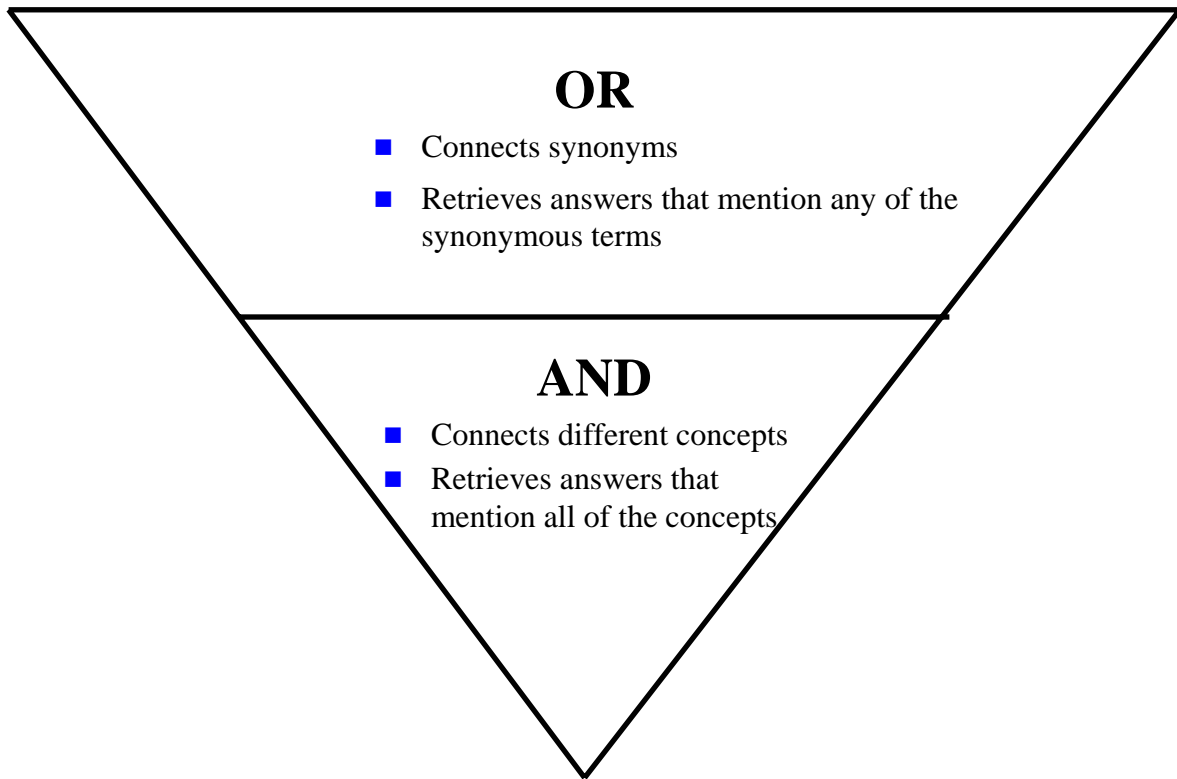
Worksheet		
<i>Directions: Recall that you are to find information on green paper dyes. Write each concept from this statement in a separate column of the worksheet.</i>		
Concept 1	Concept 2	Concept 3

B. Choose search terms

Choosing search terms for a concept involves identifying synonyms for that concept. Keep in mind that different terminology, including acronyms, may be used by others within a discipline. Add synonyms under the associated main concepts in the *Worksheet* above.

C. Link search terms with logic operators

Logic operators are used between terms to specify search precision.



Helpful HINT

Use parentheses to enclose synonyms, e.g. (DOG OR CANINE)

<h3><i>Worksheet</i></h3>
<p><i>Directions: Use logic operators to begin building search queries from the word strings below.</i></p>
PAPER _____ DYE
PAPER _____ PULP _____ DYE _____ COLOR

Step 4: Conduct a Preliminary Search

At this point, you are ready to take a first look into the selected database. The preliminary search will help you decide if your search strategy will achieve the desired results.

Three **Basic Commands** are used sequentially in the preliminary search. They are used in all keyword searching.

Use this command	When you want to	Format Example
FILE	Enter a file	=> FILE PAPERCHEM2
E (EXPAND)	Verify a term is in the database	=> E PAPER
S (SEARCH)	Search for records containing a term(s) and create an answer set (L#) of those records	=> S PAPER

Command line format

The general format for entering a command on STN is

=> Command Instructions <Enter >

Illustration:

```
=> FILE CAPLUS <ENTER >
```

Web Resource

Additional information about using STN commands is given in <http://www.cas.org/training/stncommands/index.html>

Enter the database

The **FILE command** is used to enter a file.

```
=> FILE PAPERCHEM2
```

```
FILE 'PAPERCHEM2' ENTERED AT 09:37:03 ON 13 SEP 2004  
Paperchem2 compilation and indexing (C) 2004  
Elsevier Engineering Information Inc. All rights reserved.
```

```
FILE COVERS 1967 TO 6 Sep 2004 (20040906/ED)
```

Upon file entry, a file banner appears. File coverage and updates are noted.

Verify search terms

The **EXPAND command (E)** is used to verify that a term of interest is in the database. EXPAND is useful in keyword searching to

- Determine a term's searchability
- Identify alternate word forms

EXPAND results in an alphanumeric list of terms adjacent to the requested term. It is like opening up a dictionary.

```
=> E DYE
```

```
E1          1      DYCOTILEDONEOUS/BI  
E2          7      DYCRIL/BI  
E3        16030  --> DYE/BI  
E4          170    DYEABILITY/BI  
E5          31     DYEABLE/BI  
E6          26     DYEBATH/BI  
E7           3     DYEBATHS/BI  
E8           2     DYECOR/BI  
E9          899    DYED/BI  
E10         10     DYEHOUSE/BI  
E11          2     DYEHOUSES/BI  
E12        1966    DYEING/BI
```

The term you typed appears at E3.

*The second column gives **postings** — the number of records containing a term of interest.*

=> E

E13	69	DYEINGS/BI
E14	1	DYELIKE/BI
E15	4	DYELINE/BI
E16	11	DYER/BI
E17	9	DYERA/BI
E18	12	DYERS/BI
E19	6880	DYES/BI
E20	1	DYESHEET/BI
E21	1	DYESTSTUFF/BI
E22	183	DYESTUFF/BI
E23	201	DYESTUFFS/BI
E24	1	DYEWOOD/BI

To continue expanding a list, type E.

Note: There are other words in the EXPAND lists that could be used as search terms as well.

=> E COLOR

E1	11	COLOPHONY/BI
E2	1	COLOPHOSPERMUM/BI
E3	27209	--> COLOR/BI
E4	1	COLOR4/BI
E5	43	COLORA/BI
E6	4	COLORABILITY/BI
E7	2	COLORABLE/BI
E8	2	COLORACCESS/BI
E9	1	COLORACTION/BI
E10	1	COLORADA/BI
E11	2	COLORADIA/BI
E12	274	COLORADO/BI

=> E COLOUR

E1	1	COLOTRON/BI
E2	1	COLOUMN/BI
E3	658	--> COLOUR/BI
E4	2	COLOURANT/BI
E5	5	COLOURANTS/BI
E6	7	COLOURATION/BI
E7	1	COLOURBIBLE/BI
E8	1	COLOURBLIND/BI
E9	1	COLOURBOOKS/BI
E10	2	COLOURBOSS/BI
E11	1	COLOURBOX/BI
E12	1	COLOURCENTRAL/BI

Check for both American and British spellings.

Create search terms

The EXPAND listing indicated a number of word forms for the search terms. Search retrieval will be enhanced by including these word forms. Various word forms can be taken into account using truncation symbols.

Truncation symbols

Truncation symbols (wild cards) can be used to allow for various forms of a word:

- Singular and plural word forms
- Prefixes and suffixes
- Spelling variations within a word (e.g., British/American spellings)

Truncation symbol	Definition	Example	Retrieval possibilities
?	Zero to any number of characters at the <i>end</i> of a term	GROW?	GROW GROWL GROWING GROWTH
#	Zero or one character at the <i>end</i> of a term	GROW##	GROW GROWS GROWTH
!	Exactly one character <i>within</i> a term or at the <i>end</i> of a term	T!TH AMIN!	TEETH TOOTH TRUTH AMINE AMINO

note

- Some databases (e.g., CAPlus) allow left-truncation using the ? symbol.
- Truncation symbols may be combined within the same term.
- Multiple uses of # and ! are allowed.

Worksheet

Directions: Use truncation symbols to create search terms that would retrieve the following groups of words.

Paper or papers

Dye, dyes, dyeing, dyestuff, dyestuffs

Color or colour

Run the search

The **SEARCH command (S)** is used to retrieve records containing your search terms.

```
=> S PAPER# AND (DYE? OR COLOR? OR COLOUR?)
```

```
236096 PAPER#  
19595 DYE?  
32162 COLOR?  
834 COLOUR?
```

```
L1 27981 PAPER# AND (DYE? OR COLOR? OR COLOUR?)
```

27981 records contain both concepts. Records are placed in an answer set labeled L1. Answers are arranged from newest to oldest.

Step 5: Evaluate Answers

The **DISPLAY command (D)** is used to view record(s). The DISPLAY command requires three pieces of information:

- Answer set L-number
- Answer number(s)
- Format

No-cost display formats are useful in keyword searching to

- Verify that your search query is retrieving the types of information you want
- Identify additional, file-specific terminology to enhance your results

No-cost formats allow you to view a portion of the record for free. Indexes displayed are database-dependent. There are two no-cost formats:

- D TRIAL, for most STN databases
- D SCAN, for CAplus and BIOSIS

Using the D TRIAL format

All databases have a default format that displays when the display command is typed. You may need to specify certain information on the command line to override the defaults.

The default setting for	Is the following:	Notes
Answer set L-number	Last L-number created	Use 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 to see answers 1 and 5
Format	BIB	Use the TRIAL format to evaluate answers

=> D TRIAL L1 35

L1 ANSWER 35 OF 27981 PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING INFORMATION INC. on STN

TI Studies on **dyeing** of jute pulp to make **coloured** paper

CT Pulps; Jute; **Dyeing**; Raw Materials; **Colored Papers**; **Paper** Boards; Kraft **Papers**; Brightness; Pulping; ENGLISH

Hit-term highlighting is available in many STN files to help you see your search terms in the display.

=> D L1 TRIAL 42, 49, 151, 5857, 7901

L1 ANSWER 42 OF 27981 PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING INFORMATION INC. on STN

TI Ultraviolet microscopic study on lignin distribution in the **fiber** Cell wall of BCTMP

CT Bleaching; Synthetic Fiber **Papers**; Ozone; Optical Properties; KOREAN

L1 ANSWER 49 OF 27981 PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING INFORMATION INC. on STN

TI On capillary and SLIT die rheometry (Part II)

CT Coated **Papers**; **Color**; Rheology; Capillaries; Dies; Kaolin; **Pigment**; ENGLISH

L1 ANSWER 151 OF 27981 PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING INFORMATION INC. on STN

TI Transparently beautiful

CT Translucent **Papers**; Transparent **Papers**; **Colored Papers**; Lasers; **Paper** Boards; Product Design; Marketing; ENGLISH

L1 ANSWER 5857 OF 27981 PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING INFORMATION INC. on STN

TI Two-**Color** Thermal Recording Sheet

IC B41M005-26

NCL B41M5-26

CT COATINGS; **COLOR** PRINTING; GAA; JAPANESE; PATENTS; PRINTING; PRINTING **PAPERS**; SENSITIZED **PAPERS**; SMEARING; SPECIALTY **PAPERS**; THERMAL **PAPERS**; THERMOGRAPHIC **PAPERS**

L1 ANSWER 7901 OF 27981 PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING INFORMATION INC. on STN

TI Thermal Transfer Recording Sheet

NCL 428-216

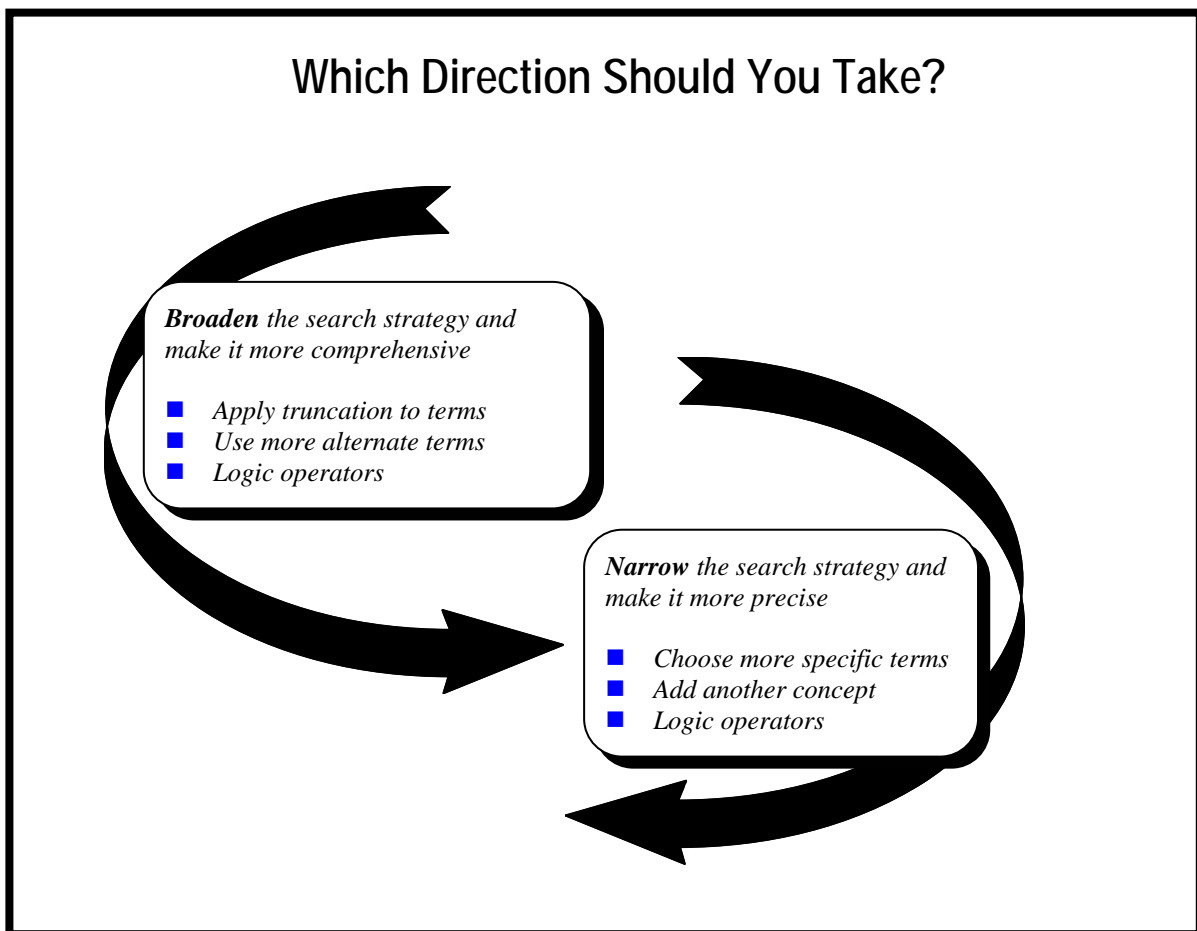
CT COATINGS; DULL FINISHES; **DYE** TRANSFER PROCESS; ENGLISH; FINISHES; GAA; HEAT TRANSFER PRINTING; HYDROCARBONS; OLEFINS; PABD; PATENTS; PLASTICS; PRINTING; SPECIALTY **PAPERS**; SYNTHETIC POLYMERS; THERMOPLASTICS; TRANSFER **PAPERS**; TRANSFER PRINTING; UNITED STATES

Step 6: Adjust the Search Strategy

Online searches evolve differently depending on the subject matter and the choices a searcher makes. Generally, when manipulating your search strategy, you may broaden your search for some concepts and narrow it for others.

Aspects to consider now:

- Are the answers you see in the evaluation step the kinds of answers you want?
- Are a large proportion of the answers relevant?
- Are the number of answers acceptable?



Add alternate terminology

<h1>Worksheet</h1>	
<p><i>Directions: Review the previous D TRIAL displays. Identify alternate terms for each concept. Write them under the associated column.</i></p> <p><i>Use the additional terms to write a more comprehensive search query.</i></p>	
Paper	Dye or color
New query:	

Search the new query:

```
=> S (PAPER# OR PULP# OR FIBER#)

      236096 PAPER#
      106940 PULP#
      73040 FIBER#
L2    307488 (PAPER# OR PULP# OR FIBER#)

=> S (DYE? OR COLOR? OR COLOUR? OR PIGMENT#)

      19595 DYE?
      32162 COLOR?
      834 COLOUR?
      11391 PIGMENT#
L3    53946 (DYE? OR COLOR? OR COLOUR? OR PIGMENT#)

=> S L2 AND L3

L4    36593 L2 AND L3
```

*L-numbers may be combined with other search terms or other L-numbers via the **SEARCH** command.*

Helpful HINT

For more efficient and flexible searching in STN files, develop separate queries for each concept.

note

→ The preceding searches could have been combined into one. The answer set is the same:

```
=> S (PAPER# OR PULP# OR FIBER#) AND (DYE? OR COLOR? OR  
COLOUR? OR PIGMENT#)
```

```
236096 PAPER#  
106940 PULP#  
73040 FIBER#  
19595 DYE?  
32162 COLOR?  
834 COLOUR?  
11391 PIGMENT#  
L5 36593 (PAPER# OR PULP# OR FIBER#) AND (DYE? OR  
COLOR? OR COLOUR? OR PIGMENT#)
```

Add another concept

Worksheet

Directions: Adjust your search strategy so that the results focus on **fluorescent** paper dyes.

New query:

Add another concept to the search query:

```
=> S L5 AND (FLUORES? OR VIVID OR BRIGHT?)

      1767 FLUORES?
        64 VIVID
      11486 BRIGHT?
L6      2669 L5 AND (FLUORES? OR VIVID OR BRIGHT?)
```

Worksheet

Directions: Sharpen the results further to focus on **green** fluorescent dyes.

New query:

Add another concept to the search query:

```
=> S L6 AND GREEN

      3754 GREEN
        56 GREENS
      3791 GREEN
          (GREEN OR GREENS)
L7      62 L6 AND GREEN

=> D TRI 1-

YOU HAVE REQUESTED DATA FROM 62 ANSWERS - CONTINUE? Y/(N):Y

L7  ANSWER 1 OF 62  PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING
    INFORMATION
    INC. on STN
TI  Preparation of specialized paper
CT  Paper; Cellulose Derivatives; Transition Metals; Bleached
    Pulps; Fluorescence; Fluoresceins; Kaolin; Ph;
    ENGLISH

L7  ANSWER 2 OF 62  PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING
    INFORMATION
    INC. on STN
```

(continued on next page)

TI Effects of Cu on degradation of Japanese **paper** used for painting fabricated in the late Edo era

CT **Paper**; Degradation; Copper; Painting; **Pigment**; Spectrometers; Concentrators; **Fluorescence**; JAPANESE

L7 ANSWER 3 OF 62 PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING INFORMATION INC. on STN

TI Stabilizing effect of chromated salt treatment on the **green color** of ma bamboo (*dendrocalamus latiflorus*)

CT **Color**; Inorganic Salts; Dendrocalamus; Light; Chromates; Optical Properties; Oxygen; Weathering; ENGLISH



Step 7: Display answers in more detail

Answers may be displayed in predefined formats or custom field displays.

To specify the answers you would like to see, type:

- Answer set L-number
- Answer number(s)
- Format

The default setting for	Is the following:	Notes
Answer set L-number	Last L-number created	Use 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 to see answers 1 and 5
Format	Bibliographic information (BIB)	IBIB — Bibliographic information with field codes written out ABS — Abstract ALL — Full record

Helpful HINT

For information about pre-defined display formats within a file, type

=> HELP FORMAT

=> DISPLAY

ENTER (L7), L# OR ?:L7
ENTER ANSWER NUMBER OR RANGE (1):9
ENTER DISPLAY FORMAT (BIB):IALL

L7 ANSWER 9 OF 107 PAPERCHEM2 COPYRIGHT 2004 ELSEVIER ENGINEERING
INFORMATION INC. on STN
ACCESSION NUMBER: 2000:6768 PAPERCHEM2
SYSTEM NUMBER: 000630638
DOCUMENT NUMBER: UNPUBLISHED
TITLE: Studies on the **dyeing** of Hanji by natural
dye-stuffs (I) - with a focus on the
color tone of yellow **color**
series
AUTHOR(S): Jeon, Cheol (Won Kwang Univ); Jin, Yeong-Mun
SOURCE: Palpu Chongi Kisul, Vol. 32, no. 3, pp. 48-56.
Korea Tech Assoc Pulp Pap Ind (Seoul). 30 ref..
DOCUMENT TYPE: Journal
FILE SEGMENT: PAPERCHEM
LANGUAGE: Chinese
ABSTRACT:

Yellow **dye**-stuffs in natural plant were extracted from a gardenia, saffron, safflower, amur tree and pagoda. And then they were used to **color** Korean handmade **paper** (Hanji) on using a mordant. The results of the degree of discoloration are as follows. 1. As for a gardenia(Gardenia jasminodes Ellis for. grandiflora Makino), the effects of **coloring** were outstanding in the acid area. But for the preservation, it might be desirable that used a lye in a **dye**-stuff obtained at 40±5 °C. 2. As for saffron(Curcuma longa L.), when used alum as a mordant, it was **colored** to a medium yellow **color** with **green color**. But easily discolored and was not desirable. And, it didn't fit in a **dye**-stuff of Hanji. 3. For safflower(Carthamus tinctorius L.), when pH was in the low acid it was **colored** to the cleaner yellow **color**. It was the distinction of discoloration that the degree of **brightness**'s increase was low. 4. For amur cork-tree(Phellodendron amurense Rupr.), the effects of yellow **coloring** were great in the areas of acidity and alkali. But, when used alum, the degree of the discoloration was high and was not effective. 5. For pagoda tree (Styphnolobium Japonica L.), using a calcium hydroxide as a mordant, enabled the more than average yellow to be gained. The degree of discoloration was good.

CONTROLLED TERM: Acidity; CHINESE; Discoloration; **Dyeing**;
Gardenia; Pagoda tree; Paper; pH; Saffron
Tree

You can type the full command on STN and hit the enter key- STN will prompt for the information it needs.

Helpful HINT

In many cases, the individual indexes may be displayed independently from the rest of the STN record using the display fields:

```
=> D L8 5 TI LA
```

For a list of all individual display fields type:

```
=> HELP DFIELDS
```

Review: Online Search Strategy

Step 1	Determine your search question.	
Step 2	Identify a relevant database.	<ul style="list-style-type: none"> ■ <i>CAS Catalog</i> ■ Database summary sheets
Step 3	Build a search query.	<ul style="list-style-type: none"> ■ Main concepts and synonyms ■ Logic operators (AND, OR)
Step 4	Conduct a preliminary search.	=> FILE PAPERCHEM2 => E PAPER => S PAPER# AND DYE? ◆ Truncation symbols
Step 5	Evaluate answers.	=> D L# n TRIAL => D SCAN
Step 6	Adjust the search strategy.	<ul style="list-style-type: none"> ■ Alternate search terms ■ File-specific terminology
Step 7	Display answers.	=> D L# n format(s)

Skills Practice

1. Use the FROSTI (Food Science and Technology) file to locate information on tamper-resistant packaging for milk.

Concept 1	Concept 2	Concept 3
tamper tampering	package packages packaging container containers	milk dairy

- a) Use D TRIAL to preview several answers.
- b) Use what you learn from D TRIAL displays to modify your query.
- c) Display the titles of the first 5 answers.
- d) Display the BIB and ABS information for two answers of interest.

Skills Practice

2. Find information on flavor or aroma components of blackberries in the FSTA (Food Science and Technology Abstracts) file. Use D TRIAL to evaluate your answers, adjust your search strategy as needed, and display several answers in the answer format of your choice.
3. Search the JICST-Eplus file (Japanese Information Center of Science and Technology and Medicine in Japan) to find information on the use of ultrasonic waves in detection devices used at train crossings. Display titles and company names for the first 10 answers.

HINT Use the display format TI CS.

4. Find information on flame-retardant materials used to insulate electric cables in the COMPENDEX (Computerized Engineering Index and EI Engineering Meetings) file. Display the bibliographic and abstract information for the fifth answer.

HINT Use either the BIB or IBIB answer formats for bibliographic information.

SHARPENING SEARCH STRATEGIES

In this section, you will learn to

- Use proximity operators to control the proximity of search terms in answers
- Relevance rank an answer set
- Sort an answer set
- Refine search results using specialized indexes

Adjusting Search Strategies to Increase Result Precision

Search Question: *Locate records in the CAPLUS file on the preparation and manufacture of skin substitutes.*

Conduct a preliminary search

```
=> FILE CAPLUS

=> S SKIN AND SUBSTITUTE# AND (PREPAR? OR MANUF?)

L1      1702 SKIN AND SUBSTITUTE# AND (PREPAR? OR MANUF?)

=> D SCAN

L1      1702 ANSWERS  CAPLUS  COPYRIGHT 2004 ACS on STN
IC      ICM  C07C065-28
ICS     C07C069-76; C07C235-06; C07C235-42; C07C
        C07C047-575; C07D213-79; C07D213-80; A61
        A61K031-085; A61K031-11; A61K031-165; A61
        A61K031-44
CC      25-1 (Benzene, Its Derivatives, and Condensed
        Section cross-reference(s): 1
TI      Preparation of adamantyl-substituted stilbenes as
        dermatological agents
ST      adamantyl stilbene prepn dermatol agent
IT      Antiproliferative agents
        Antitumor agents
        Skin preparations (pharmaceutical)
        (adamantyl-substituted stilbenes)
IT      Skin preparations (pharmaceutical)
        (prepn. of adamantyl-substituted stilbenes as dermatol.
        agents)
IT      209747-24-0P  209747-26-2P  209747-29-5P  209747-32-0P  209747-35-3P
        209747-38-6P  209747-40-0P  209747-42-2P  209747-44-4P  209747-46-6P
        209747-58-0P  209747-60-4P  209747-62-6P
RL:     BAC (Biological activity or effector, except adverse); RCT
        (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);
        BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of adamantyl-substituted stilbenes as dermatol. agents)
```

This answer is not relevant. Although the terms "skin" and "substituted" appear in the record, the answer has nothing to do with "skin substitutes."

(continued on next page)

IT 209747-25-1P 209747-27-3P 209747-28-4P 209747-30-8P 209747-31-9P
209747-33-1P 209747-34-2P 209747-36-4P 209747-37-5P 209747-39-7P
209747-41-1P 209747-43-3P 209747-45-5P 209747-47-7P 209747-48-8P
209747-49-9P 209747-50-2P 209747-51-3P 209747-52-4P 209747-53-5P
209747-54-6P 209747-55-7P 209747-56-8P 209747-57-9P 209747-70-6P

RL: BAC (Biological activity or effector, except adverse); SPN
(Synthetic preparation); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); USES (Uses)

(prepn. of adamantyl-**substituted** stilbenes as dermatol. agents)

IT 1603-41-4, 2-Amino-5-methylpyridine 3970-21-6 5292-43-3,
tert-Butyl bromoacetate 5552-44-3, Diethyl 2,5-
pyridinedicarboxylate 14295-52-4 24850-33-7, Allyltributyltin
71441-08-2 104224-68-2 135077-79-1

RL: RCT (Reactant)

(prepn. of adamantyl-**substituted** stilbenes as dermatol. agents)

IT 3510-66-5P, 2-Bromo-5-methylpyridine 35005-81-3P 101990-45-8P,
2-Bromo-5-(bromomethyl)pyridine 135077-80-4P 154321-18-3P
173157-78-3P 173157-79-4P 173190-57-3P 178264-57-8P 191933-97-8P
209747-59-1P 209747-61-5P 209747-63-7P 209747-64-8P 209747-65-9P
209747-66-0P 209747-67-1P 209747-68-2P 209747-69-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of adamantyl-**substituted** stilbenes as dermatol. agents)

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

L1 1702 ANSWERS CAPLUS COPYRIGHT 2004 ACS on STN

CC 17-7 (Food and Feed Chemistry)

TI **Preparation** of shark fin **substitute** with gelatin and
sodium alginate

ST shark fin **substitute** gelatin alginate

IT Shark

(fin, **substitutes** for, manuf. of, with gelatin and sodium
alginate)

IT Gelatins, biological studies

RL: BIOL (Biological study)

(shark fin **substitute** manuf. with alginate and)

IT Fin (anatomical)

(shark, **substitutes** for, contg. alginate and gelatin)

IT Hydration, biological

(re-, of shark fin **substitutes**, alginate and calcium chloride
and gelatin effects on)

IT 9005-38-3, Sodium alginate

RL: BIOL (Biological study)

(shark fin **substitute** manuf. with gelatin and)

IT 10043-52-4, Calcium chloride, biological studies

RL: BIOL (Biological study)

(shark fin **substitute** quality response to alginate and
gelatin and concn. of)

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

(continued on next page)

L1 1702 ANSWERS CAPLUS COPYRIGHT 2004 ACS on STN
 IC ICM A61L027-00
 ICS A45D026-00
 CC 63-8 (Pharmaceuticals)
 TI **Preparation** of artificial **skin**
 ST artificial **skin** gum urethane rubber
 IT Rubber, urethane, biological studies
 RL: BIOL (Biological study)
 (artificial **skin** manuf. with gums and)
 IT Gums and Mucilages
 (artificial **skin** manuf. with urethane rubbers and)
 IT Hair **substitutes**
 (bases manufd. with gums and urethane rubbers for, in study of
 depilation process)
 IT Hair
 (removal of, artificial **skin** base for study of)
 IT **Skin**
 (artificial, gums and urethane rubbers in)

This answer is very relevant. Note that the terms "skin" and "artificial" are close together.

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

L1 1702 ANSWERS CAPLUS COPYRIGHT 2004 ACS on STN
 IC ICM C08H001-06
 ICS A61L015-00; A61L027-00
 CC 63-7 (Pharmaceuticals)
 Section cross-reference(s): 34
 TI Collagen derivatives containing thiol group as biomaterial for
preparation of prostheses and implants
 ST collagen thiol deriv biomaterial prosthesis implant; cystein
 Collagen deriv prepn prosthesis implant
 IT Prosthetic materials and Prosthetics
 Solvents
 (collagen derivs. contg. thiol group as biomaterial for prepn. of
 prostheses and implants)
 IT Collagens, biological studies
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (collagen derivs. contg. thiol group as biomaterial for prepn. of
 prostheses and implants)
 IT Solvents
 (aprotic, collagen derivs. contg. thiol group as biomaterial for
 prepn. of prostheses and implants)
 IT **Skin**
 (artificial, collagen derivs. contg. thiol group as biomaterial
 for prepn. of prostheses and implants)
 IT Collagens, reactions
 RL: RCT (Reactant)
 (atelo-, collagen derivs. contg. thiol group as biomaterial for
 prepn. of prostheses and implants)
 IT Collagens, biological studies
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (crosslinked, collagen derivs. contg. thiol group as biomaterial
 for prepn. of prostheses and implants)

(continued on next page)

```

IT  Medical goods
    (dressings, collagen derivs. contg. thiol group as biomaterial
    for prepn. of prostheses and implants)
IT  Pharmaceutical dosage forms
    (implants, collagen derivs. contg. thiol group as biomaterial for
    prepn. of prostheses and implants)
IT  52-90-4, Cysteine, reactions 60-24-2, .beta.-Mercaptoethanol
    501-53-1, Benzylchloroformate 554-68-7 3282-30-2, Pivaloyl
    chloride 3483-12-3, Dithiothreitol 51507-96-1
    RL: RCT (Reactant)
    (collagen derivs. contg. thiol group as biomaterial for prepn. of
    prostheses and implants)
IT  6968-11-2P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
    (collagen derivs. contg. thiol group as biomaterial for prepn. of
    prostheses and implants)

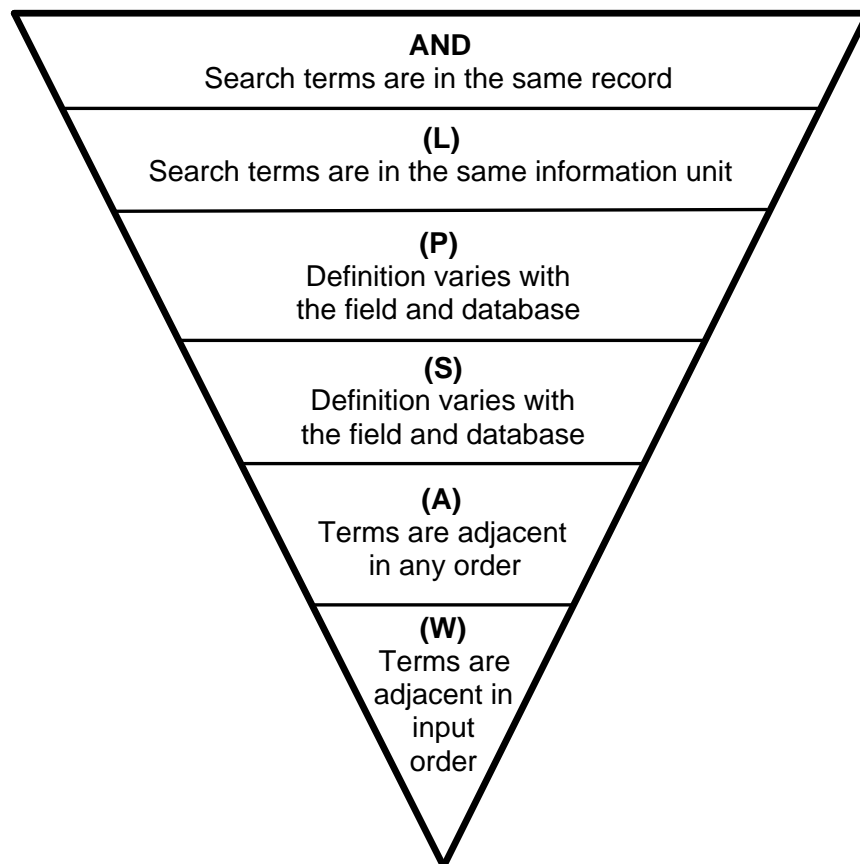
```

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

To exit SCAN mode, type 0 or END.

Proximity Operators

Proximity operators are used to specify the desired proximity of search terms with respect to one another within records. The assumption is that the closer the terms are in the record, the more directly related they are to each other.



note

Some proximity operators work differently in different STN files. Consult the file-specific HELP messages for details:

=> HELP (S)

Search the query with more precise proximity:

Number qualifiers can be used with proximity operators.

For example, the (2A) operator retrieves terms within 2 words or less of each other, in any order.

```
=> S (SKIN OR DERMAL) (2A) (SUBSTITUTE# OR ARTIFICIAL) AND (PREPN# OR PREPARATION# OR MANUF?)
```

```
L2          349 (SKIN OR DERMAL) (2A) (SUBSTITUTE# OR ARTIFICIAL) AND (PREPN# OR PREPARATION# OR MANUF?)
```

```
=> D SCAN
```

```
L2  349 ANSWERS  CAPLUS  COPYRIGHT 2004 ACS on STN
```

```
IC  ICM  A61L027-00
```

```
ICS  A61F002-00
```

```
CC  63-7 (Pharmaceuticals)
```

```
TI  Artificial skin
```

```
ST  artificial skin polymer
```

```
IT  Artificial skin
```

```
      (polymer artificial skin)
```

```
IT  29406-75-5DP, hydrolyzed  52734-28-8DP, Triallylisocyanurate-vinyl acetate copolymer, hydrolyzed
```

```
RL: DEV (Device component use); SPN (Synthetic preparation); THU
```

```
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
```

```
(Uses)
```

```
      (artificial skin)
```

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

(continued on next page)

L2 349 ANSWERS CAPLUS COPYRIGHT 2004 ACS on STN
IC ICM A61F002-10
ICS A61L027-00
CC 63-7 (Pharmaceuticals)
TI **Manufacture** of prosthetic skin with polymeric films and
bioabsorbable substances
ST skin prosthetic polyester synthetic fiber
IT Textiles
(**skin substitute manuf.** from polymeric
film and chem.-treated)
IT Gelatins, biological studies
Rubber, silicone, biological studies
RL: BIOL (Biological study)
(**skin substitute manuf.** with)
IT **Skin**
(**artificial, manuf.** of, polymeric film and fabrics
for)
IT Collagens, biological studies
RL: BIOL (Biological study)
(atelo-, **skin substitute manuf.** with)
IT Synthetic fibers, polymeric
RL: BIOL (Biological study)
(glycolic acid, **skin substitute manuf.**
with)
IT 25038-59-9, Polyethylene terephthalate, biological studies
RL: BIOL (Biological study)
(**skin substitute manuf.** with)

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

Display answers:

=> D L2 1 IBIB ABS

L2 ANSWER 1 OF 349 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:651034 CAPLUS [Full-text](#)
DOCUMENT NUMBER: 141:179703
TITLE: Cultured dermis sheet and its **manufacture**
using female hormone-like substances and
mesenchymal stem cells
INVENTOR(S): Yoshikawa, Takaaki
PATENT ASSIGNEE(S): Tissue Engineering Initiative K. K., Japan;
Seishinkai Koriyama Seiran Hospital
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004222836	A2	20040812	JP 2003-12059	20030121
PRIORITY APPLN. INFO.:			JP 2003-12059	20030121

AB Cultured dermis sheets, useful as **artificial skin**, are **manufd.** By culturing mesenchymal stem cells in a culture medium contg. Female hormone-like substances and impregnating **artificial skin substitute** material such as collagens, atelocollagens, gelatins, etc., with the suspension contg. the activated stem cells or by impregnating the **artificial skin** material with a cell suspension contg. a culture medium, female hormone-like substances, and mesenchymal stem cells and culturing the cells in the materials. Thus, bone marrow cells collected from a patient with bed sore were cultured in MEM medium contg. FBS and estriol. Checkerboard-like cuttings were formed on a collagen sponge sheet (Pelnac), and the sheet was impregnated with the cell suspension. Implanting of the sheet to bed sore of the above patient regenerated granulation tissue and skin after 2 mo.

Relevance Ranking Answers

By default, records in answer sets are organized in reverse chronological order (newest to oldest). This can be changed. Answer sets may be relevance ranked.

FOCUS

The **FOCUS command** is used to rearrange the records in an answer set to bring the most relevant to the top. Relevance is algorithmically determined using

- Occurrence of hit terms, weighted by index
- Proximity of search terms

=> FOCUS

By default, the last L-number is assumed.

PROCESSING COMPLETED FOR L2
L3 349 FOCUS L2 1-

=> D L3 TI 1-5

After using FOCUS, answer 1 is the most relevant while answer 349 is the least.

L2 ANSWER 1 OF 349 CAPLUS COPYRIGHT 2004 ACS on STN
TI **Artificial skin** and its **preparation**

L2 ANSWER 2 OF 349 CAPLUS COPYRIGHT 2004 ACS on STN
TI Skin basement membrane formation promoters containing matrix metalloprotease inhibitors and **manufacture** of **artificial skin** using the promoters

L2 ANSWER 3 OF 349 CAPLUS COPYRIGHT 2004 ACS on STN
TI **Artificial skin** base materials and their **manufacture**

L2 ANSWER 4 OF 349 CAPLUS COPYRIGHT 2004 ACS on STN
TI Hyaluronic acid gel for **artificial skin** **manufacture**

L2 ANSWER 5 OF 349 CAPLUS COPYRIGHT 2004 ACS on STN
TI **Manufacture** of **artificial skin**

Web Resource

FOCUS is available in most bibliographic and full-text files on STN where it is best used with broad, multi-word subject searches. For additional information, see

<http://www.cas.org/training/stncommands/focus.html>

SORT

The SORT command allows you to rearrange answers in field order, based on alphanumeric ranking. Ascending (A) or descending (D) order can be added to the command.

```
=> SORT L1 CS A AU A PY D
SORT ENTIRE ANSWER SET? (Y)/N:y
SORT IS APPROXIMATELY 95% COMPLETE
      3 ANSWERS DID NOT HAVE 'CS' SORT FIELD
     13 ANSWERS DID NOT HAVE 'AU' SORT FIELD
PROCESSING COMPLETED FOR L1
L3      349 SORT L1 CS A AU A PY D
```

Answers that do not contain sort fields are placed at the end of the answer set.

```
=> D L3 6-8
```

```
L3 ANSWER 6 OF 349 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:125258 CAPLUS Full-text
DN 112:125258
TI Modified amino acid copolymers for growth of cells
IN Fujiwara, Yukihiro; Aiba, Seiichi; Minora, Norihiko; Kobayashi,
   Junji; Sato, Yutaka
PA Agency of Industrial Sciences and Technology, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
   CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1
      PATENT NO.          KIND    DATE          APPLICATION NO.          DATE
      -----          -
PI  JP 01048824          A2     19890223      JP 1987-204102          19870819
      JP 03040055          B4     19910617
PRAI JP 1987-204102          19870819
```

```
L3 ANSWER 7 OF 349 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:576399 CAPLUS Full-text
DN 109:176399
TI Methionine-oxyalkylene block copolymers for artificial organs and
   medical devices with high cell-compatibility
IN Minora, Norihiko; Aiba, Seiichi; Fujiwara, Yukihiro
PA Agency of Industrial Sciences and Technology, Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
   CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1
      PATENT NO.          KIND    DATE          APPLICATION NO.          DATE
      -----          -
PI  JP 63132939          A2     19880604      JP 1986-174200          19860724
      JP 03049293          B4     19910729
PRAI JP 1986-174200          19860724
```

(continued on next page)

L3 ANSWER 8 OF 349 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1985:137857 CAPLUS [Full-text](#)
DN 102:137857
TI Amino acid polymer biological membranes
PA Agency of Industrial Sciences and Technology, Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 59201849	A2	19841115	JP 1983-76382	19830430
	JP 63024831	B4	19880523		
PRAI	JP 1983-76382		19830430		

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, review article
- Written in a particular language
- Published within a specific time period

These are just a few examples of the many available search indexes. Consult the Database Summary Sheet for more information.

Specialized indexes are added to a search by qualifying search terms with a forward slash followed by a search field.

For example:

```
=> S 1999/PY
```

Document Type Specialized Index

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

Extend the Search Question...

*What reviews have been published on the preparation
and manufacture of skin substitutes?*

Technique:

The EXPAND command is used to identify the file-specific term used for the document type of interest. Because the Document Type (DT) index contains a relatively small number of possible terms, one way to determine the relevant term is to begin the EXPAND at the start of the index.

```
=> E A/DT
```

```
**** START OF FIELD ****
```

```
E3          0 --> A/DT
E4        255156   B/DT
E5          8440   BIO/DT
E6          8440   BIOGRAPHY/DT
E7        255156   BOOK/DT
E8          35136   BOOK REVIEW/DT
E9          35136   BR/DT
E10       1028925   C/DT
E11          121   COMPUTER MAGNETIC DISK/DT
E12          3     COMPUTER OPTICAL DISC/DT
```

```
=> E
```

```
E13          46099   COMPUTER OPTICAL DISK/DT
E14       1028925   CONFERENCE/DT
E15          348204   D/DT
E16          348204   DISSERTATION/DT
E17          13489   ED/DT
E18          13489   EDITORIAL/DT
E19          11715   ER/DT
E20          11715   ERRATA/DT
E21          1753822   GENERAL REVIEW/DT
E22          1753822   GR/DT
E23       17657885   J/DT
E24       17657885   JOURNAL/DT
```

Use EXPAND to identify the appropriate search term.

Start at the beginning of the index by expanding on A/DT.

Finding "General Review" tells you that it is a valid search term in the DT index. Each document type has an abbreviation, note that "GR" and "General Review" will retrieve the same number of answers.

Refining the answer set to general reviews:

```
=> D HIS FULL
```

```
L1          2616 S SKIN AND SUBSTITUTE# AND (PREPAR? OR MANUF?)
L2          349 S (SKIN OR DERMAL) (2A) (SUBSTITUTE# OR ARTIFICIAL) AND
              (PREPN# OR PREPARATION# OR MANUF?)
L3          349 FOCUS L2 1-
              E A/DT
```

```
=> S L2 AND GENERAL REVIEW/DT
```

```
1587266 GENERAL REVIEW/DT
L4          26 L2 AND GENERAL REVIEW/DT
```

The D HIS FULL command is a convenient way to recall an L-number, with the full query.

=> D L4 2 BIB

L4 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:425648 CAPLUS [Full-text](#)
DN 141:59272
TI Large-area, flexible sensors for electronic artificial skins. A new class of applications of organic transistors
AU Someya, Takao; Sakurai, Takayasu; Kawaguchi, Hiroshi; Sekitani, Tsuyoshi
CS Quantum-Phase Electron. Cent., Sch. Eng., The Univ. Tokyo, Tokyo, 113-8656, Japan
SO Oyo Butsuri (2004), 73(5), 610-614
CODEN: OYBSA9; ISSN: 0369-8009
PB Oyo Butsuri Gakkai
DT Journal; **General Review**
LA Japanese

Language Specialized Index

The Language index (LA) indicates the language of the original source document.

Extend the Search Question Further...

*Limit the general reviews to those published in **English**.*

Technique:

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

```
=> E ENGLISH/LA
```

```
E1      13677082      EN/LA
E2      13677082      ENG/LA
E3      13677082  --> ENGLISH/LA
E4          143      EO/LA
E5          80439     ES/LA
E6          143      ESPERANTO/LA
E7          379      ESTONIAN/LA
E8          379      ET/LA
E9          121      EU/LA
E10       2029       FA/LA
E11       3931       FI/LA
E12       3931       FINNISH/LA
```

EN and ENG are abbreviated forms of the word ENGLISH and are valid search terms in the LA index of CAPLUS.

```
=> S L4 AND E3
```

```
L5          9 L4 AND ENGLISH/LA
```

Restrict the answers to English language documents.

Note: E3 can be used as a search term.

```
=> D L5 1 BIB
```

```
L5  ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2004 ACS on STN
AN  2004:591895  CAPLUS  Full-text
DN  141:185172
TI  What is new in wound healing?
AU  Kumar, Senthil; Wong, Peng Foo; Leaper, David John
CS  The Professorial Unit of Surgery, University Hospital of North Tees,
    Stockton-on-Tees, TS19 8PE, UK
SO  Turkish Journal of Medical Sciences (2004), 34(3), 147-160
    CODEN: TJMEEA; ISSN: 1300-0144
PB  Scientific and Technical Research Council of Turkey
DT  Journal; General Review
LA  English
RE.CNT  60  THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD
        ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

Publication Year Specialized Index

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

Extend the Search Question Further...

Are there any general reviews published in English since 2002?

Publication year information may be in several formats:

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

```
=> S L5 AND PY>=2002
```

```
L6          3 L5 AND PY>=2002
```

```
=> D L6 BIB ABS 1-
```

```
YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):Y
```

```
L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:591895 CAPLUS Full-text
DN 141:185172
TI What is new in wound healing?
AU Kumar, Senthil; Wong, Peng Foo; Leaper, David John
CS The Professorial Unit of Surgery, University Hospital of North Tees,
   Stockton-on-Tees, TS19 8PE, UK
SO Turkish Journal of Medical Sciences (2004), 34(3), 147-160
   CODEN: TJMEEA; ISSN: 1300-0144
PB Scientific and Technical Research Council of Turkey
DT Journal; General Review
LA English
AB A review. Wound biol. is complex. Wounds which were until recently seen
   only as defects in tissues are now increasingly interpreted in cellular
   and mol. terms. Growth factors, cytokines, proteases and adhesion mol.
   which participate in wound healing are discussed in this article. From a
   clin. perspective, conceptual shifts of importance, including moist wound
   healing, wound bed prepn. and wound assessment, are presented.
   The frontiers of therapeutics employed in wound healing continue to
   advance with an increasing array of modalities joining the ranks at a
   regular pace. A range of currently available as well as evolving
   therapies- phys. (topical neg. pressure therapy, warming, elec.
   stimulation), biol. (larva therapy, skin substitutes,
   stem cell therapy, growth factors, gene therapy) and of a misc. variety
   (hyperbaric oxygen, dressings)- are appraised.
RE.CNT 60      THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD
                ALL CITATIONS AVAILABLE IN THE RE FORMAT
```



Skills Practice

1. Find information in the MEDLINE database on job stress in the dental profession. Use proximity operators to adjust the size and focus of your answer set. Relevance rank the answer set.

2. Use the PROMT (Predicasts Overviews of Markets and Technology) file to locate business information on the development of new gourmet coffee flavors. Isolate those documents written between 2002 and 2004. Display using the KWIC format, then display a few answers in the ALL format.

CURRENT AWARENESS ALERTS

In this section, you will learn to set up a current awareness alert in one database.

Automatic Current Awareness Alerts

Current awareness information is valuable for all users of scientific and technical information. Current awareness information allows 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

Search Question: Monitor new research in the area of the preparation and manufacture of skin substitutes.

Current awareness alerts run on a user-defined, periodic basis. Alerts run only on the segment of a database that has been added/updated since the last run.

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

```
=> FILE CAPLUS
```

```
=> SDI L2
```

SDI alerts must be based on a single L-number query.

```
ENTER UPDATE FIELD CODE (UP) OR ?: ED
ENTER SDI REQUEST NAME, (AA001/S), OR END: SKINSUBS/S
ENTER COST CENTER (NONE) OR NONE: RESEARCH DEPT
ENTER TITLE (NONE): SKIN SUBSTITUTES
ENTER METHOD OF DELIVERY (OFFLINE), ONLINE, OR EMAIL: EMAIL
ENTER EMAIL ID (5861C): WCOYOTE@ACME.COM;ROADRUNNER@NIKE.COM.INTERNET
WCOYOTE@ACME.COM;ROADRUNNER@NIKE.COM.INTERNET
RECEIVE DELIVERY NOTIFICATION? (Y)/N: N
ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN? Y/(N): Y
ENTER PRINT FORMAT (BIB) OR ?: IBIB 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 'SKINSUBS/S'
```

Helpful HINT

For more information on update codes specific to the database of interest type:

```
=> HELP UPDATE
```

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

Selecting Setup Options:

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 a record <ul style="list-style-type: none"> ■ First enters a file ■ Is updated
SDI request name	Identify an alert	Syntax: <ul style="list-style-type: none"> ■ Begin with a letter ■ 1-12 characters ■ Contain only letters (A-Z) and numbers (0-9) ■ End with /S for SDI
Cost center	Distinguish SDI charges on STN invoices	
Title	Identify an alert whenever setup parameters are displayed	40-character limit
Method of delivery	Specify the way alert results should be delivered	<ul style="list-style-type: none"> ■ Email — Internet (requires an STNmail id) ■ Offline — postal mail of hard copy ■ Online — storage on STN computer
Email id	Specify the internet or STNmail address where alert results should be delivered	Internet delivery can be in pdf, rtf, or html formats
Delivery notification	Notify the searcher when alert results are being delivered to an address other than their own	
Print format	Specify the answer display format	
Maximum number of hits	Specify the upper limit on the number of records in an alert results set	Up to 5000 answers can be sent
Display currency information	Display the patent currency banner at the time the alert was run, for CAS files only	

Delivery Options

Current awareness results can be delivered via

- E-mail
- Offline print
- Online storage of answer sets
- Intranet, with 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	Email format	Example
E-mail delivery in the following formats (graphics and full-text links included): RTF PDF HTML ASCII text	User@domain	wcoyote@acme.com
E-mail delivery of ASCII text (no graphics)	User@domain.internet	wcoyote@acme.com.internet
Hyperlinks from STN Easy for Intranets (graphics and full-text links included)	STNID@stnalerts.org	ssscas03qxb@stnalerts.org

Verifying SDI setup:

=> D SAVED/S

NAME	CREATED	NOTES/TITLE
SKINSUBS/S	2 SEP 2004	SDI REQUEST FOR FILE CAPLUS

Helpful HINT

To see the complete details of the SDI, including the search query, type

=> D SKINSUBS/S FULL

Web Resource

Additional information about setting up single-file alerts is available:

- <http://www.cas.org/training/stncommands/sdi.html>
- <http://www.cas.org/ONLINE/QR/currentaware.pdf>

MANAGING SEARCH RESULTS

In this section, you will learn to

- Save searches, queries, or answer sets
- Use saved searches, queries, or answer sets
- Work with session transcripts

Managing STN Results

A number of options are available on STN to store and manage

- Answer sets

```
=> SAVE SKINSUBS1/A
```

- Queries

```
=> SAVE SKINSUBS2/Q
```

- L-number lists

```
=> SAVE SKINSUBS3/L
```

for use in a future online session. Information is stored by login ID.

The **SAVE**, **ACTIVATE**, and **DELETE** commands are used together to manage stored STN search results.

Storage Options

There are two options for storage:

To store information	This STN SAVE option is useful:
Long-term	SAVE
From 7-14 days (expires on 2 nd Friday)	SAVE TEMP

Storing STN Search Results

To store and manage STN search results

- Step 1 Save answers.
- Step 2 Recall the saved search results in a future online session.
- Step 3 Re-use the saved results for display.
- Step 4 Maintain saved items for currency, deleting as needed.

Save answers

The following information is required to SAVE an answer set:

- Answer set L-number
- File name
- Title (optional)

The name must begin with a letter, have 1-12 characters, contain only letters or numbers, and end in /A. TITLE must be included on the command line if you wish to add a title.

```
=> SAVE TEMP TITLE
ENTER L#, L# RANGE, ALL, OR (END):L1
ENTER NAME OR (END):SKINSUBS1/A
ENTER TITLE (NONE):PREPARATION OF SKIN SUBSTITUTES
ANSWER SET L1 HAS BEEN SAVED AS 'SKINSUBS1/A'
```


Recall saved results

=> D SAVED

D SAVED gives an inventory of items saved in storage.

NAME	CREATED	NOTES/TITLE
ALLKW/A	15 MAY 2003	161 ANSWERS 158 ANSWERS IN FILE HCAPLUS 3 ANSWERS IN FILE WPINDEX
CAKW/A	15 JUN 2004	309 ANSWERS IN FILE HCAPLUS
CASEQ/A	14 AUG 2003	76 ANSWERS IN FILE HCAPLUS
CASSEP/A	09 NOV 2002	54 ANSWERS IN FILE CAPLUS
NEWHITS/A	14 AUG 2004	6 ANSWERS IN FILE HCAPLUS
SKINSUBS1/A	TEMP	361 ANSWERS IN FILE CAPLUS PREPARATION OF SKIN SUBSTITUTES
WPIKW/A	20 AUG 2004	3 ANSWERS IN FILE WPINDEX

note

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

=> D SAVED/S

Reuse saved results

Stored answer sets can be recalled in a future online session using the ACTIVATE command.

The query is not re-searched. The same answers are in the answer set as when it was saved.

An answer set is not removed from storage when it is activated.

Displaying results in more detail:

=> FILE CAPLUS

=> ACTIVATE SKINSUBS1/A

L3 349 SEA FILE=CAPLUS (SKIN OR DERMAL) (2) (ARTIFICIAL) AND (PREPN# OR PREPARATION# OR MANUF?)

=> D L3 12 BIB ABS

L3 ANSWER 12 OF 349 CAPLUS COPYRIGHT 2004 ACS
AN 2004:212886 CAPLUS

TI Change in cell adhesion property on cytocompatible phospholipid polymer grafted with poly(d,l-lactic acid) segment for tissue engineering

AU Watanabe, Junji; Ishihara, Kazuhiko

CS School of Engineering, Department of Materials Engineering, The University of Tokyo, Tokyo, 113-8656, Japan

SO Science and Technology of Advanced Materials (2003), 4(6), 539-544
CODEN: STAMCV; ISSN: 1468-6996

PB Elsevier Ltd.

DT Journal

LA English

AB Tissue engineering is a multi-disciplinary science that utilizes basic principles from materials engineering and mol. biol. To reconstruct tissues from polymer matrixes and cellular components. **Artificial skins** were well known as one of the concrete examples. Technol. innovation of the tissue engineering must be contributed to improve quality of life. From the viewpoint, design of cytocompatible materials for tissue engineering would be the most important candidate to reconstruct tissue. 2-Methacryloyloxyethyl phosphorylcholine (MPC), Bu methacrylate, and polylactic acid (PLA) macromonomer were polycond. for the **prep.** of cytocompatible interface. The polymer may involve following novel properties: (i) cytocompatibility by phospholipid groups, and (ii) enhancement of cell adhesion by PLA segment. The results of XPS showed the MPC unit and PLA segment on the membrane, which was prep. by dip coating. The surface mobility by contacting water was estd. with static contact angle measurement. The contact angle by water decreased after contact with water due to the chain rearrangement of hydrophilic MPC unit. Fibroblast cells adhesion and protein adsorption on the membranes were studied. The no. of cell adhesion and cell proliferation on the

-
-
-

Answer sets must be activated in the file(s) in which they were created.

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

Searching with saved results:

The activated answer sets can be refined using additional search terms. STN does not update the search in the sense that it does not find answers added to the databases since the answer set was saved. Instead, it locates answers in the saved/activated set that match the additional requirement.

```
=> S L3 AND PY>=1998

        6193571 PY>=1998
L4          181 L3 AND PY>=1998
```

Deleting saved items

The items saved in long-term storage can be removed using the DELETE command.

```
=> D SAVED

NAME                CREATED          NOTES/TITLE
-----            -
ALLKW/A             15 MAY 2003    161 ANSWERS
                  158 ANSWERS IN FILE HCAPLUS
                  3 ANSWERS IN FILE WPINDEX
CAKW/A              15 JUN 2004    309 ANSWERS IN FILE HCAPLUS
CASEQ/A             14 AUG 2003    76 ANSWERS IN FILE HCAPLUS
CASSEP/A            09 NOV 2002    54 ANSWERS IN FILE CAPLUS
NEWHITS/A           14 AUG 2004    6 ANSWERS IN FILE HCAPLUS
SKINSUBS1/A         TEMP           349 ANSWERS IN FILE CAPLUS
                  PREPARATION OF SKIN SUBSTITUTES
WPIKW/A             20 AUG 2004    3 ANSWERS IN FILE WPINDEX

=> DEL SKINSUBS1/A

DELETE SKINSUBS1/A? (Y)/N:Y
```

Offline tools


Working with transcripts

Depending on the interface you use to access STN, there are different ways to save session transcripts.

STN on the Web transcripts are saved during your session. The transcripts are available via the Transcript Assistant for 4 days. Transcripts can be downloaded as PDF, RTF, or HTML files.

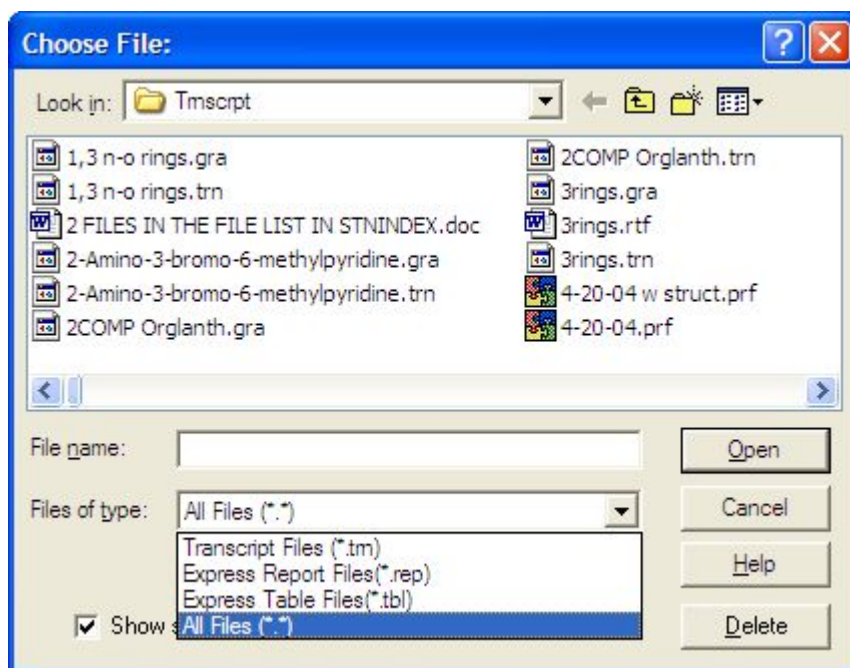
STN Express transcripts can be saved in TRN or RTF formats. The TRN format is the STN Express default transcript format. A TRN file can be saved as an RTF file. STN Express offers several post-processing tools for producing professional looking search reports.

Helpful HINT

For more information on post processing tools in STN Express, click on the Help button  in STN Express.

Reopen a saved transcript in STN Express

From the STN Express main menu, select **Results...Open**. The default TRN files are displayed. To see RTF files, use the pull down menu to select All files.



STN BASICS

SUGGESTED SOLUTIONS TO SKILLS PRACTICE PROBLEMS

MARCH 2005

The solutions presented here are solutions that can be attained using techniques and search tools presented in the accompanying workbook.

Skills Practice (page 34):

Question 1: Use the FROSTI (Food Science and Technology) file to locate information on tamper resistant packaging for milk.

=> FILE FROSTI 

Enter the FROSTI file.


=> S TAMPER? AND (PACK? OR CONTAINER#) AND (MILK OR DAIRY)

2187 TAMPER?
59001 PACK?
25683 CONTAINER#
42628 MILK
41624 DAIRY



Combine the different concepts with the AND operator.
Use the OR operator and parentheses to combine synonyms.

L1 201 TAMPER? AND (PACK? OR CONTAINER#) AND (MILK OR DAIRY)

=> D TRIAL 1-5 

Use D TRIAL to preview answers.

L1 ANSWER 1 OF 201 FROSTI COPYRIGHT 2004 LFRA on STN
TI **Tamper** resistant composite lids for food **containers**.
CT CLOSURES; CONFECTIONERY; **CONTAINERS**; **DAIRY** PRODUCTS;
DESSERTS; DRIED FOODS; FROZEN CONFECTIONERY; FROZEN **DAIRY**
PRODUCTS; FROZEN DESSERTS; FROZEN FOODS; GRANULATED FOODS; ICE CREAM;
PACKAGING CONTAINERS; **PACKAGING** PRODUCTS;
PATENT; POWDERED FOODS; PRESERVED FOODS; **TAMPER EVIDENT**
CLOSURES; **TAMPER EVIDENT CONTAINERS**; **TAMPER**
EVIDENT **PACKAGING** PRODUCTS; **TAMPER RESISTANT**
CLOSURES; **TAMPER RESISTANT CONTAINERS**; **TAMPER**
RESISTANT **PACKAGING** PRODUCTS; US PATENT

L1 ANSWER 2 OF 201 FROSTI COPYRIGHT 2004 LFRA on STN
TI Lid.
CT CLOSURES; **CONTAINERS**; EUROPEAN PATENT; LIDS; **PACKAGING**
CONTAINERS; **PACKAGING** PRODUCTS; PATENT; RECLOSABLE
CLOSURES; RECLOSABLE **CONTAINERS**; **TAMPER EVIDENT**
CLOSURES; **TAMPER EVIDENT CONTAINERS**; **TAMPER**
EVIDENT **PACKAGING** PRODUCTS

L1 ANSWER 3 OF 201 FROSTI COPYRIGHT 2004 LFRA on STN
TI **Tamper** resistant composite lids for food **containers**.
CT CLOSURES; CONFECTIONERY; **CONTAINERS**; **DAIRY** PRODUCTS;
DESSERTS; DRIED FOODS; EUROPEAN PATENT; FROZEN CONFECTIONERY; FROZEN
DAIRY PRODUCTS; FROZEN DESSERTS; FROZEN FOODS; GRANULATED FOODS;
ICE CREAM; **PACKAGING CONTAINERS**; **PACKAGING**
PRODUCTS; PATENT; POWDERED FOODS; PRESERVED FOODS; **TAMPER**
EVIDENT CLOSURES; **TAMPER EVIDENT CONTAINERS**;
TAMPER EVIDENT PACKAGING PRODUCTS; **TAMPER**
RESISTANT CLOSURES; **TAMPER RESISTANT CONTAINERS**;
TAMPER RESISTANT PACKAGING PRODUCTS

From these free displays and from thinking further about the question, additional terms can be added to the question to make it better.

(continued on next page)

L1 ANSWER 4 OF 201 FROSTI COPYRIGHT 2004 LFRA on STN
TI Device for dispensing material into a **container**.
SH CATERING
CT BEVERAGE DISPENSERS; BEVERAGE EQUIPMENT; CATERING EQUIPMENT; DISPENSERS;
DISPENSING EQUIPMENT; EQUIPMENT; HAMPER EVIDENT DISPENSERS; PATENT; PCT
PATENT

L1 ANSWER 5 OF 201 FROSTI COPYRIGHT 2004 LFRA on STN
TI **Packaging** and method for making the same.
CT CHEESE; CHEESE PRODUCTS; **DAIRY** PRODUCTS; EASY OPEN
PACKAGING CONTAINERS; EUROPEAN PATENT;
PACKAGING CONTAINERS; **PACKAGING** PRODUCTS;
PATENT; PROCESSED CHEESE; RECLOSABLE **PACKAGING**

=> S TAMPER? AND (PACK? OR CONTAINER# OR CLOSURE# OR CONNECT? OR SEAL#)
AND (MILK OR DAIRY OR CREAM#)

2499 TAMPER?
66700 PACK?
31033 CONTAINER#
7388 CLOSURE#
4823 CONNECT?
5773 SEAL#
46728 MILK
46112 DAIRY
12146 CREAM#

L2 236 TAMPER? AND (PACK? OR CONTAINER# OR CLOSURE# OR CONNECT?
OR SEAL#) AND (MILK OR DAIRY OR CREAM#)

=> D TI 1-5

L2 ANSWER 1 OF 236 FROSTI COPYRIGHT 2004 LFRA on STN
TI **Tamper** resistant composite lids for food **containers**.

L2 ANSWER 2 OF 236 FROSTI COPYRIGHT 2004 LFRA on STN
TI **Tamper**-evident lid assembly.

L2 ANSWER 3 OF 236 FROSTI COPYRIGHT 2004 LFRA on STN
TI **Tamper**-evident lid assembly.

L2 ANSWER 4 OF 236 FROSTI COPYRIGHT 2004 LFRA on STN
TI Lid.

L2 ANSWER 5 OF 236 FROSTI COPYRIGHT 2004 LFRA on STN
TI **Tamper** resistant composite lids for food **containers**.

=> D L2 1-2 BIB ABS

L2 ANSWER 1 OF 236 FROSTI COPYRIGHT 2004 LFRA on STN
 AN 646081 FROSTI [Full-text](#)
 TI **Tamper** resistant composite lids for food **containers**.
 IN Witt S.H.
 PA Stanpac Inc.
 SO United States Patent
 PI US 6772901 B 20040810
 WO 2002094664
 AI 20020517
 NTE 20040810
 DT Patent
 LA English
 SL English
 AB The invention relates to an improved **tamper**-resistant and **tamper**-evident composite lid for food products. The invention claims to increase consumer confidence in the products by having the capability to resist and render **tampering** and/or contamination of the products readily detectable at the point of sale. It also provides a **closure** manufactured from inexpensive raw materials that can be applied to a **container** utilizing commercially available capping equipment with minor modification. Prior arts do not provide a satisfactory mechanism for clearly indicating any postpackaging **tampering** with the products. The invention is suitable for a wide range of **dairy** products such as ice **cream** and granular or powdered food products.

L2 ANSWER 2 OF 236 FROSTI COPYRIGHT 2004 LFRA on STN
 AN 641149 FROSTI [Full-text](#)
 TI **Tamper**-evident lid assembly.
 IN Marshall N.R.
 PA Huh-Tamaki UK Ltd
 SO European Patent Application
 PI EP 1425228 A2
 WO 2003022703 20030320
 AI 20020912
 PRAI United Kingdom 20010912; 20020308
 DT Patent
 LA English
 SL English
 AB The invention relates to an improved lid assembly with a **tamper**-evident **seal** for **containers** filled with comestibles such as spreads and ice **cream**. The **tamper**-evident lid assembly demonstrates to consumers that the contents inside the **container** have not been exposed to the external environment and/or contaminated following **packaging**. The lid assembly comprises a hinged tab that does not extend outwards from the lid and can be used to assist a consumer in opening the **container**. Removal of the lid is also facilitated after removing or breaking the **tamper**-evident **seal**. Prior arts utilize rigid flanges that have a tendency to break unintentionally during transport and rough handling. Rigid flanges also adversely affect optimal close-**packing** of the **containers**.

Skills Practice (page 35):

Question 2: Find information on flavor or aroma components of blackberries in FSTA (Food Science and Technology Abstracts) file. Use D TRIAL to evaluate your answers, sharpen your search strategy as needed, and display several answers in the answer format of your choice.

=> FILE FSTA

=> E FLAVOR

E1	40	FLAVOPROTEIN/BI
E2	7	FLAVOPROTEINS/BI
E3	3484	--> FLAVOR/BI
E4	1	FLAVORABLE/BI
E5	4	FLAVORAGE/BI
E6	96	FLAVORANT/BI
E7	128	FLAVORANTS/BI
E8	1	FLAVORASE/BI
E9	12	FLAVORCREST/BI
E10	319	FLAVORED/BI
E11	3	FLAVORESE/BI
E12	10	FLAVORFUL/BI

=> E AROMA

E1	1	AROLINA/BI
E2	12	AROM/BI
E3	16054	--> AROMA/BI
E4	1	AROMAAKKUMULATION/BI
E5	1	AROMAAKTIVER/BI
E6	2	AROMAAANALYSE/BI
E7	1	AROMAAANALYSEN/BI
E8	1	AROMAAUSBEUTE/BI
E9	1	AROMAAUSZUEGEN/BI
E10	1	AROMABACTERIA/BI
E11	1	AROMABEEINFLUSSENDER/BI
E12	1	AROMABEEINFLUSSUNG/BI

=> E BLACKBERRY

E1	4	BLACKBELLY/BI
E2	275	BLACKBERRIES/BI
E3	257	--> BLACKBERRY/BI
E4	1	BLACKBERRY/BI
E5	2	BLACKBIRD/BI
E6	1	BLACKBIRDS/BI
E7	2	BLACKBOARD/BI

(continued on next page)

E8 1 BLACKBOX/BI
 E9 2 BLACKBOY/BI
 E10 2 BLACKBUCK/BI
 E11 11 BLACKBURN/BI
 E12 1 BLACKCOCKS/BI

=> S BLACKBERR? AND (FLAVOR? OR AROMA#)

415 BLACKBERR?
 4996 FLAVOR?
 16410 AROMA#

L1 31 BLACKBERR? AND (FLAVOR? OR AROMA#)

=> D TRIAL 1, 4, 11

L1 ANSWER 1 OF 31 FSTA COPYRIGHT 2004 IFIS on STN
 TI **Aroma** extract dilution analysis of cv. Marion (*Rubus* spp. *hyb*)
 and cv. Evergreen (*R. laciniatus* L.) **blackberries**.

CC J (Fruits, Vegetables and Nuts)
 CT **AROMA COMPOUNDS**; BERRIES; **BLACKBERRIES**; CV

The species name for blackberry can be added as a synonym. Note the British spelling of flavour.

L1 ANSWER 4 OF 31 FSTA COPYRIGHT 2004 IFIS on STN
 TI Analysis of volatile fruit components by headspace
 microextraction.

CC J (Fruits, Vegetables and Nuts)
 CT ANALYTICAL TECHNIQUES; FLAVOUR COMPOUNDS; FRUITS; SOLID-PHASE
 MICROEXTRACTION

L1 ANSWER 11 OF 31 FSTA COPYRIGHT 2004 IFIS on STN
 TI **Aroma** compounds of fresh **blackberries** (*Rubus laciniata*
 L.).

CC J (Fruits, Vegetables and Nuts)
 CT **AROMA COMPOUNDS**; BERRIES; **BLACKBERRIES**; FRESH

This answer set contains a significant number of irrelevant answers. With the search tools that you know at this point, there is little more you can do to eliminate irrelevant answers. Later in STN Basics you will learn to use proximity operators to specify the closeness of search terms in answers, and thus improve the number of relevant hits in a search such as this one.

(continued on next page)

=> S (BLACKBERR? OR LACINIAT?) AND (FLAVOR? OR FLAVOUR? OR AROMA#)

415 BLACKBERR?
 11 LACINIAT?
 4996 FLAVOR?
 52824 FLAVOUR?
 16410 AROMA#

L2 82 (BLACKBERR? OR LACINIAT?) AND (FLAVOR? OR FLAVOUR? OR AROMA#)

=> D TI 1-5

L2 ANSWER 1 OF 82 FSTA COPYRIGHT 2004 IFIS on STN
 TI Survival and metabolic activity of microencapsulated Bifidobacterium longum in stirred yoghurt.

L2 ANSWER 2 OF 82 FSTA COPYRIGHT 2004 IFIS on STN
 TI **Aroma** extract dilution analysis of cv. Marion (Rubus spp. hyb) and cv. Evergreen (R. **laciniatus** L.) **blackberries**.

L2 ANSWER 3 OF 82 FSTA COPYRIGHT 2004 IFIS on STN
 TI Preliminary **aroma** comparison of Marion (Rubus spp. hyb) and Evergreen (R. **laciniatus** L.) **blackberries** by dynamic headspace/OSME technique.

L2 ANSWER 4 OF 82 FSTA COPYRIGHT 2004 IFIS on STN
 TI Stability of anthocyanins in pasteurized juice of **blackberry** (Rubus glaucus Benth).

L2 ANSWER 5 OF 82 FSTA COPYRIGHT 2004 IFIS on STN
 TI Alcohol sweetened and sparkling fruit ciders and method for same.

=> D L2 3 ALL

L3 ANSWER 3 OF 82 FSTA COPYRIGHT 2004 IFIS on STN
 AN 2003:J1804 FSTA [Full-text](#)
 TI Preliminary **aroma** comparison of Marion (Rubus spp. hyb) and Evergreen (R. **laciniatus** L.) **blackberries** by dynamic headspace/OSME technique.
 AU Klesk, K.; Qian, M.
 CS Correspondence (Reprint) address, M. Qian, Dep. of Food Sci. & Tech., Oregon State Univ., Corvallis, OR 97331-6602, USA. E-mail michael.qian(a)orst.edu
 SO Journal of Food Science, (2003), 68 (2) 697-700, 28 ref. ISSN: 0022-1147
 DT Journal
 LA English
 AB **Aroma** of **blackberries** from 2 **blackberry** cultivars, namely Marion and Evergreen, was investigated using a purge-and-trap GC-olfactometry/MS technique. 58 **aromas** were identified in total, 30 of which were common to both cultivars and 22 of which had not been previously reported in **blackberry** fruit. Comparison of cultivars showed that the Marion **blackberry** contained more esters, while the Evergreen contained more alcohols. Results suggest that the **aroma** profile of **blackberry** is complex, as no single volatile compound was unanimously described as characteristically **blackberry**.
 CC J (Fruits, Vegetables and Nuts)
 CT **AROMA**; **BERRIES**; **BLACKBERRIES**; CV

Skills Practice (page 35):

Question 3: Search the JICST-Eplus file (Japanese Information Center of Science and Technology, and Medicine in Japan) to find information on the use of ultrasonic waves in detection devices used at train crossings. Display titles and company names for the first 10 answers.

HINT Use the display format TI CS.

```
=> FILE JICST-EPLUS
```



Enter the JICST-Eplus file.

```
=> E ULTRASONIC
```

```
E1          2      ULTRASONIALLY/BI
E2          1      ULTRASONIATED/BI
E3         72123  --> ULTRASONIC/BI
E4          1      ULTRASONICACTUATOR/BI
E5          9      ULTRASONICAL/BI
E6          1      ULTRASONICALIY/BI
E7         491    ULTRASONICALLY/BI
E8          1      ULTRASONICALY/BI
E9          1      ULTRASONICAPPARATUS/BI
E10         1      ULTRASONICATE/BI
E11         33    ULTRASONICATED/BI
E12         1      ULTRASONICATES/BI
```

```
=> E
```

```
E13         1      ULTRASONICATING/BI
E14        161    ULTRASONICATION/BI
E15         1      ULTRASONICATOION/BI
E16         3      ULTRASONICATOR/BI
E17         1      ULTRASONICATORS/BI
E18         1      ULTRASONICCALLY/BI
E19         1      ULTRASONICCORRELATION/BI
E20         1      ULTRASONICDIAGNOSIS/BI
E21         1      ULTRASONICDISSECTION/BI
E22         1      ULTRASONICE/BI
E23         1      ULTRASONICENDOSCOPY/BI
E24         1      ULTRASONICFATIGUE/BI
```

=> S ULTRASONIC? AND DETECT? AND TRAIN# AND CROSSING#

72418 ULTRASONIC?
 200473 DETECT?
 13598 TRAIN#
 9813 CROSSING#

L1 7 ULTRASONIC? AND DETECT?

=> D TRIAL 4 6

L1 ANSWER 4 OF 7 JICST-EPlus COPYRI
 TI Special Features: Safety Assessme
 Devive on a Level **Crossing** Using

CC RC07030B (625.14)

CT railroad **crossing**; obstruction; **detector**;
ultrasonic wave; antenna(electric); snow cover; performance test;
 in-place test

BT **crossing**; object; acoustic wave; elastic wave; wave motion; test

L1 ANSWER 6 OF 7 JICST-EPlus COPYRIGHT 2004 JST on STN

TI Prevention of grade **crossing** accidents and obstruction
detectors.

CC RC07030B (625.14)

CT railroad **crossing**; accident prevention; obstruction;
detector; snow cover; route(land transportation); **train**;
 stopping; **ultrasonic** wave; antenna(electric)

BT **crossing**; preclusion(protection); object; route; rolling stock;
 acoustic wave; elastic wave; wave motion

=> S ULTRASONIC? AND (DETECT? OR SENSOR#) AND (TRAIN# OR RAIL?) AND
 CROSSING#

72418 ULTRASONIC?
 200473 DETECT?
 82778 SENSOR#
 13598 TRAIN#
 39515 RAIL?
 9813 CROSSING#

L2 18 ULTRASONIC? AND (DETECT? OR SENSOR#) AND (TRAIN# OR RAIL?)
 AND CROSSING#

D TRIAL often includes Controlled Terminology used by the database producer and your search strategy should include those terms. In this example, all the answers are relevant, due to the fact that many of the search terms are part of the controlled terminology in the JICST-Eplus database.

=> D L2 TI CS 1-10

Company names are found in the CS (Corporate Source) field and can be displayed using the CS answer format.

- L2 ANSWER 1 OF 18 JICST-EPlus COB
TI **Ultrasonic crossing obstruction detector.**
Maintenance-free by the realization of automatic tracking processing function.
CS Railw. Tech. Res. Inst.
Matsushita Communication Industrial Co., Ltd., JPN
- L2 ANSWER 2 OF 18 JICST-EPlus COPYRIGHT 2004 JST on STN
TI Development of level **crossing obstruction detector** using **ultrasonic sensors** for electrified line.
CS Railw. Tech. Res. Inst.
- L2 ANSWER 3 OF 18 JICST-EPlus COPYRIGHT 2004 JST on STN
TI **Ultrasonic Transducer and Circuitry for Obstacle Detector at Railroad Crossings.**
CS Tokin Corp.
- L2 ANSWER 4 OF 18 JICST-EPlus COPYRIGHT 2004 JST on STN
TI Special Features: Safety Assessment. Obstruction **Detecting** Devise on a Level **Crossing Using Ultrasonic Sensors.**
CS Railw. Tech. Res. Inst.
- L2 ANSWER 5 OF 18 JICST-EPlus COPYRIGHT 2004 JST on STN
TI **Rail** flaw **detection** system by data depot.
CS Tokyu Corp.
- L2 ANSWER 6 OF 18 JICST-EPlus COPYRIGHT 2004 JST on STN
TI The Obstruction **Detecting** Device on a Level **Crossing Using Ultrasonic Sensor.**
CS Railway Technical Res. Inst.
- L2 ANSWER 7 OF 18 JICST-EPlus COPYRIGHT 2004 JST on STN
TI Obstruction **Detector** on a Road-**Railway Crossing** Using **Ultrasonic** Wave.
CS Railway Technical Research Inst.
- L2 ANSWER 8 OF 18 JICST-EPlus COPYRIGHT 2004 JST on STN
TI Prevention of grade **crossing** accidents and obstruction **detectors.**
CS Railway Technical Res. Inst.
- L2 ANSWER 9 OF 18 JICST-EPlus COPYRIGHT 2004 JST on STN
TI **Crossing** obstruction **detector** using **ultrasonic** waves.
CS Railway Technical Res. Inst.
- L2 ANSWER 10 OF 18 JICST-EPlus COPYRIGHT 2004 JST on STN
TI **Crossing** obstruction **detector.**Structure and function of a practical **detector.**
CS Railway Technical Res. Inst.
Kyosan Electric Mfg. Co., Ltd.

Skills Practice (page 35):

Question 4: Find information on flame-retardant materials used to insulate electric cables in the COMPENDEX (Computerized Engineering Index and EI Engineering Meetings) file. Display the bibliographic and abstract information for the fifth answer.

HINT Use either the BIB or IBIB answer formats for bibliographic information.

=> FILE COMPENDEX

=> E RETARDANT

E1	842	RETARDANCY/BI
E2	1	RETARDANE/BI
E3	3235 -->	RETARDANT/BI
E4	1	RETARDANTED/BI
E5	1	RETARDANTES/BI
E6	1	RETARDANTI/BI
E7	1	RETARDANTION/BI
E8	3276	RETARDANTS/BI
E9	1	RETARDANY/BI
E10	2	RETARDARDATION/BI
E11	1	RETARDARTION/BI
E12	2	RETARDATE/BI

Expand on terms to be sure that they are valid and to determine the best use of truncation symbols.

=> E

E13	2	RETARDATES/BI
E14	1	RETARDATEUR/BI
E15	1	RETARDATEURS/BI
E16	1	RETARDATING/BI
E17	1	RETARDATIOINCREASED/BI
E18	5837	RETARDATION/BI
E19	4	RETARDATIONAL/BI
E20	1	RETARDATIONDELTAIS/BI
E21	140	RETARDATIONS/BI
E22	1	RETARDATIONSSPEKTREN/BI
E23	8	RETARDATIVE/BI
E24	2	RETARDATON/BI

=> E INSULATE

E1	1	INSULATD/BI
E2	1	INSULATDRS/BI
E3	392 -->	INSULATE/BI
E4	13498	INSULATED/BI

(continued on next page)

E5	1	INSULATEDCABLES/BI
E6	1	INSULATEDGATE/BI
E7	1	INSULATEDPI/BI
E8	4	INSULATER/BI
E9	105	INSULATES/BI
E10	1	INSULATESIMILAR/BI
E11	1	INSULATGKS/BI
E12	1	INSULATI/BI

=> S FLAME# AND RETARD? AND INSULAT? AND CABLE#

31021 FLAME#
20962 RETARD?
89228 INSULAT?
44129 CABLE#

L1 159 FLAME# AND RETARD? AND INSULAT? AND CABLE#

=> D TRIAL 1-5

L1 ANSWER 1 OF 159 COMPENDEX COPYRIGHT 2004 EEI on STN
TI New **flame retardant** TPVs for electrical applications.
CC 803 Chemical Agents; 914.2 Fires and Fire Protection; 818.2
Elastomers; 535.2 Metal Forming; 815.1.1 Organic Polymers; 704
Electric Components and Equipment
CT ***Flame retardants**; Polyurethanes; Extruders;
Flammability; Hardness; Wear resistance; Elasticity; Vulcanization
agents; Thermoplastic elastomers; Wire; **Cables**; Polyvinyl chlorides;
Electric **insulation**
ST Thermoplastic vulcanizates (TPV); Jacketing; Thermoplastic olefins
(TPO); Heat aging

L1 ANSWER 2 OF 159 COMPENDEX COPYRIGHT 2004 EEI on STN
TI Manufacturing of data communication **cables** using high-speed
backtwist technology, and the impact of fluorinated ethylene
propylene (FEP) on productivity.
CC 535 Rolling, Forging and Forming; 716.2 Radar Systems and Equipment;
722.3 Data Communication (Equipment and Techniques); 804.1 Organic
Components; 701 Electricity and Magnetism; 704 Electric Components
and Equipment
CT ***Cables**; Codes (standards); Specifications; Permittivity;
Electric **insulation**; **Flame retardants**; Fire
protection; Cost effectiveness; Data communication equipment;
Ethylene; Propylene
ST Data communication **cables**; Plenum **cables**;
Flame testing

L1 ANSWER 3 OF 159 COMPENDEX COPYRIGHT 2004 EEI on STN
TI Characterization of polyimide foams after exposure to extreme
weathering conditions.
CC 815.1.1 Organic Polymers; 804 Chemical Products Generally; 421
Strength of Building Materials. Mechanical Properties; 741.1 Light.
Optics; 802.2 Chemical Reactions; 706.2 Electric Power Lines and
Equipment

(continued on next page)

CT *Polyimides; Thermogravimetric analysis; X ray photoelectron spectroscopy; Fourier transform infrared spectroscopy; Raman spectroscopy; Impurities; Hydrogen inorganic compounds; Foams; Weathering; Photooxidation; Degradation; Superconducting **cables**; **Insulation**

ST Polyimide foams; Thermal oxidation; Foam density; Thermomechanical analysis (TMA)

ET H

L1 ANSWER 4 OF 159 COMPENDEX COPYRIGHT 2004 EEI on STN

TI Bringing It All Together.

CC 704.2 Electric Equipment; 704.1 Electric Components; 706.2 Electric Power Lines and Equipment; 902.2 Codes and Standards; 803 Chemical Agents; 914.2 Fires and Fire Protection

CT *Electric appliances; Standardization; Cost accounting; Electric **insulation**; **Flame retardants**; Electric wiring; Electric **cables**; Safety factor; Reliability; Electric connectors

ST Globalization; Original equipment manufacturers (OEM)

L1 ANSWER 5 OF 159 COMPENDEX COPYRIGHT 2004 EEI on STN

TI Effect of various combinations of **flame-retardant** fillers on flammability of radiation cross-linked poly(vinyl chloride) (PVC).

CC 815.1.1 Organic Polymers; 803 Chemical Agents; 914.2 Fires and Fire Protection; 521.4 Flame Research; 802.2 Chemical Reactions

CT *Polyvinyl chlorides; **Flame retardants**; Fillers; Thermal effects; Crosslinking; Flammability

ST **Flame-retardant** fillers

ET O*Sb; Sb2O; Sb cp; cp; O cp; Al*H*O; Mg(OH); Mg cp

For a more comprehensive search, the alternate terms can be added to the query.

=> S (FLAME# OR FIRE#) AND (RETARD? OR RESISTAN? OR PROTECT?)

31021 FLAME#
45896 FIRE#
20962 RETARD?
228777 RESISTAN?
178162 PROTECT?

L2 20576 (FLAME# OR FIRE#) AND (RETARD? OR RESISTAN? OR PROTECT?)

=> S INSULAT? OR JACKET? OR SHEATH?

89228 INSULAT?
3895 JACKET?
7778 SHEATH?

L3 99428 INSULAT? OR JACKET? OR SHEATH?

=> S CABLE# OR WIRE# OR LINE#

44129 CABLE#
65693 WIRE#
313248 LINE#

L4 403908 CABLE# OR WIRE# OR LINE#

=> S L2 AND L3 AND L4

L5 524 L2 AND L3 AND L4

=> D L5 1 IBIB ABS

L5 ANSWER 1 OF 524 COMPENDEX COPYRIGHT 2004 EEI on STN
ACCESSION NUMBER: 2004(37):7304 COMPENDEX [Full-text](#)
TITLE: New **flame retardant** TPVs for
electrical applications.
AUTHOR: Anthony, George (Advanced Elastomer Systems
(AES), Akron, OH, United States); Pfeiffer,
Joseph
SOURCE: Wire Journal International v 37 n 8 August 2004
2004.p 64-68
CODEN: WJINDF ISSN: 0277-4275
PUBLICATION YEAR: 2004
DOCUMENT TYPE: Journal
TREATMENT CODE: Experimental
LANGUAGE: English
AN 2004(37):7304 COMPENDEX
AB The potential of **flame-retardant** (FR) thermoplastic
vulcanizates (TPV) in areas such as wet electrical properties,
physical properties, abrasion **resistance** and cost effectiveness was
investigated. The new grades of FR-TPVs showed advantages over
traditional **wire** and **cable insulation** and **jacketing** materials such
as thermoset rubbers. It was observed that the TPVs had a lower
compression set and, in the case of TPV-2, a lower brittle point
than the thermoplastic polyurethane (TPU). The results show that
TPVs exhibit potential for use in **wire** and **cable insulation**,
especially when lead free formulations are required.(Edited
abstract) 5 Refs.

Skills Practice (page 54):

Question 1: Find information in the MEDLINE database on job stress in the dental profession. Use proximity operators to adjust the size and focus of your answer set. Relevance rank the answer set.

```
=> FILE MEDLINE

=> S DENTAL OR DENTIST?

      266713 DENTAL
      81399 DENTIST?
L1    294305 DENTAL OR DENTIST?

=> S JOB STRESS###

      34181 JOB
      276121 STRESS###
L2    579 JOB STRESS###
      (JOB(W)STRESS###)

=> S L1 AND L2

L3    13 L1 AND L2

=> D TRIAL 1-
YOU HAVE REQUESTED DATA FROM 13 ANSWERS - CONTINUE? Y/(N):Y

L3    ANSWER 1 OF 13      MEDLINE on STN
TI    Perceptions of a dental career among successful applicants for
dentistry compared with those of fifth-year dental
      students.
CT    Check Tags: Comparative Study; Human
      *Attitude
      *Career Choice
      Career Mobility
      Chi-Square Distribution
      Cohort Studies
      Communication
      Confidence Intervals
      Economics, Dental
      Education, Dental
      Great Britain
      Mathematics
      Motor Skills
      Occupational Diseases: ET, etiology
      Problem Solving
      Professional Autonomy
      Questionnaires
```

(continued on next page)

Stress, Psychological: ET, etiology
Students, Dental: CL, classification
***Students, Dental: PX, psychology**
Technology, Dental: ED, education

L3 ANSWER 2 OF 13 MEDLINE on STN
TI [**Job stress** and health in **dentists**].
Werkdruk en gezondheid bij tandartsen.
CT Check Tags: Comparative Study; Female; Human; Male
Adult
***Dentists: PX, psychology**
***Dentists: SN, statistics & numerical data**
English Abstract
*Health Status
Middle Aged
Netherlands: EP, epidemiology
Prevalence
Questionnaires
Sex Factors
*Stress, Psychological: EP, epidemiology
*Stress, Psychological: ET, etiology
*Workload: PX, psychology

L3 ANSWER 3 OF 13 MEDLINE on STN
TI **Dentists'** perceived stress and its relation to perceptions about
anxious patients.
CT Check Tags: Female; Human; Male; Support, Non-U.S. Gov't
Adult
Age Factors
Aged
Appointments and Schedules
*Attitude of Health Personnel
Communication
Confidence Intervals
Denmark
Dental Anxiety: PC, prevention & control
***Dental Anxiety: PX, psychology**
Dental Care: AE, adverse effects
Dentist-Patient Relations
***Dentists**
Mental Disorders: PX, psychology
Middle Aged
*Occupational Diseases: PX, psychology
Odds Ratio
Oral Health
Pain: ET, etiology
Practice Management, Dental
Private Practice
Professional Practice Location
Public Relations
Workload



=> S (JOB# OR WORK OR OCCUPATION?) (2A) STRESS###

37806 JOB#
262480 WORK
173375 OCCUPATION?
276121 STRESS###

L4 3094 (JOB# OR WORK OR OCCUPATION?) (2A) STRESS###

=> S L1 AND L4

L5 88 L1 AND L4

=> FOCUS

PROCESSING COMPLETED FOR L5

L6 88 FOCUS L5 1-

=> D TI 1-5

L6 ANSWER 1 OF 88 MEDLINE on STN
TI **Work stress, job** satisfaction and emotional well-being among Canadian **dental** assistants.

L6 ANSWER 2 OF 88 MEDLINE on STN
TI 'It's difficult being a **dentist**': stress and health in the general **dental** practitioner.

L6 ANSWER 3 OF 88 MEDLINE on STN
TI **Occupational stress** and **job** satisfaction in the community **dental** service of north Wales: a pilot study.

L6 ANSWER 4 OF 88 MEDLINE on STN
TI **Occupational stress** and **dentistry**: theory and practice. Part II. Assessment and control.

L6 ANSWER 5 OF 88 MEDLINE on STN
TI The relationship between **occupational stress** and **job** satisfaction in orthodontics.

Skills Practice (page 54):

Question 2: Use the PROMT (Predicasts Overviews of Markets and Technology) file to locate business information on the development of new gourmet coffee flavors. Isolate those documents written between 2002 and 2004. Display using the KWIC format, then display a few answers in the ALL format.

=> FILE PROMT

=> S (GOURMET OR SPECIALTY) (3A) COFFEE (3A) FLAVO?

30304 GOURMET
306411 SPECIALTY
69384 COFFEE
124654 FLAVO?

L7 228 (GOURMET OR SPECIALTY) (3A) COFFEE (3A) FLAVO?

=> D KWIC 1-5

KWIC display means Keyword in Context- a useful way to look at the record surrounding the hit keywords.

L1 ANSWER 1 OF 228 PROMT COPYRIGHT 2004 Gale Group on STN

AB IRVINE, Calif. -- Gloria Jean's announced the release of their new **specialty-flavored** promotional **coffee**, Dulce de Leche. Available as a blended frozen Chiller or Hotty Toddy, as well as whole coffee beans in quarter-, half- and one-pound bags, Gloria Jean's is among the first specialty coffee chains to offer Dulce de Leche.

THIS IS THE FULL TEXT: COPYRIGHT 2004 Business Wire

TX IRVINE, Calif. -- Gloria Jean's announced the release of their new **specialty-flavored** promotional **coffee**, Dulce de Leche. Available as a blended frozen Chiller or Hotty Toddy, as well as whole coffee beans in quarter-, half- and one-pound bags, Gloria Jean's is among the first specialty coffee chains to offer Dulce de Leche.

L1 ANSWER 2 OF 228 PROMT COPYRIGHT 2004 Gale Group on STN

TX EIGHT O'CLOCK COFFEE 2 Paragon Dr Montvale, NJ 07645 800-869-1991, Fax: 201-930-4574 Products: Coffee (fresh brew. whole bean, **gourmet, flavored**) **coffee** roasters, bulk cappuccino, hot chocolate & gourmet teas Glenn Cooper

NESTLE BRANDS FOODSERVICE CO 800 N Brand Blvd Glendale, CA 91203 818-549-6000, Fax: 818-549-5660 Products: Fresh-brew coffee (regular, decaf, European roasts, specialty **flavors**, Colombian), freeze-dried **coffee** (regular, decaf, **gourmet flavors**), non-dairy creamer (regular, lite, gourmet flavored), hot cocoa mix. Doug Wertz

(continued on next page)

L1 ANSWER 3 OF 228 PROMT COPYRIGHT 2004 Gale Group on STN

TI Red Buffalo Ground Gourmet Coffee - Kauai; Sumatra; Private Blend;
Colombian; Espresso; Whole Bean Gourmet Coffee - Kauai; Sumatra;
Private Blend; Colombian; Espresso; **Gourmet Flavored Coffee** in
Ground, Whole Bean, Ground Decaf and Whole Bean Decaf Versions -
Almond Chocolate Amaretto; Amaretto; Angel Lace Cookie; Apricot
Almond; Banana Foster; MANUFACTURER: Red Buffalo Country CATEGORY:
230 - Coffee.(Brief Article)



=> S L1 AND 2002-2004/PY

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L2 34 L1 AND 2002-2004/PY

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L2 ANSWER 4 OF 34 PROMT COPYRIGHT 2004 Gale Group on STN

AN 2004:234032 PROMT [Full-text](#)
TI Javo Beverage Launches Innovative Coffee House Drink Line; Shelf-
Stable Line to Target Powdered Mixes at Coffee Fest Debut in Las
Vegas.
SO Business Wire, (10 Jun 2004) pp. 5141.
PB Business Wire
DT Newsletter
LA English
WC 394
TX Business Editors

SAN DIEGO--(BUSINESS WIRE)--June 10, 2004

Javo Beverage Co. Inc. (OTCBB:JAVO) announced today that it will introduce Javo Ice(R), a line of shelf-stable concentrated beverage mixes that may be conveniently combined with milk and ice to prepare coffee-house-style blended and over-ice drinks. The products are expected to spur the spread of iced coffee beverages to the more than 1.2 million casual dining restaurants, chain establishments, sandwich shops, bars, resorts, university dining and health care facilities where espresso-based drinks have traditionally been challenging to prepare and serve.

The frozen, blended coffee beverage industry is one of the fastest growing segments in North America, with sales climbing more than 30 percent annually. According to National Coffee Drinking Trends, a report published by the National Coffee Association of U.S.A. Inc., the number of daily iced and blended coffee drinkers increased from 750,000 in 1997 to 48 million people in 2002. Sales of ice-blended and over-ice coffee drinks in restaurants is approaching \$1 billion as chain leaders Dunkin Donuts(R), Au Bon Pain(R), Cinnabon(R) and Krispy Kreme(R) have successfully added caffeinated cold drinks to their menus.

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The new Javo Ice beverages mixers are available in two flavors for over-ice drinks, Espresso Latte and Triple Mocha Latte, and two flavors for ice-blended drinks, Vanilla Cappuccino and Mocha Cappuccino. Also part of the lineup is Javo's Unsweetened Espresso, double the strength of traditionally brewed espresso, for use by operators who wish to hand-prepare specialty coffee drinks without the expense or hassle of espresso brewing equipment. All varieties are packed in 32-ounce aseptic containers and have a nine-month shelf life.

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