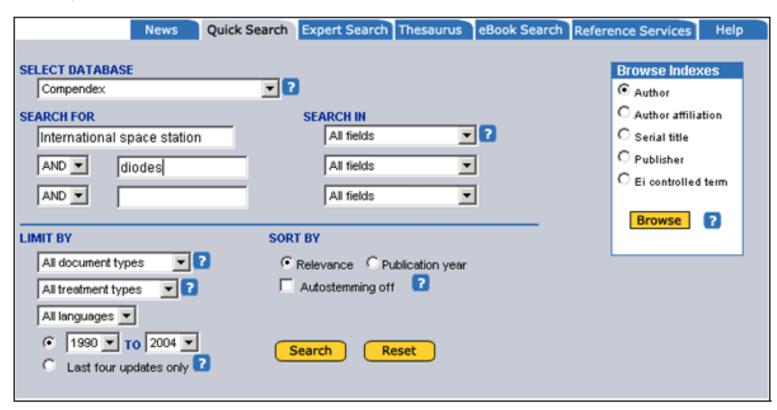
# Expert Search

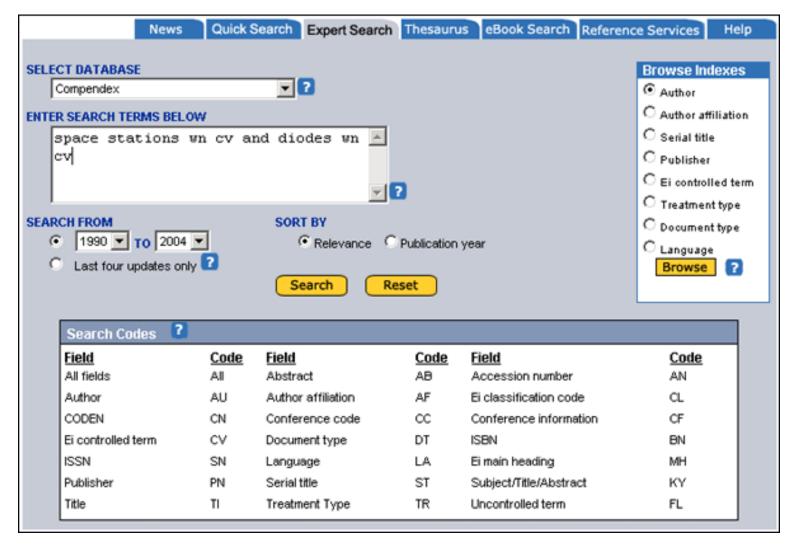
#### Search overview

Engineering Village 2 offers three ways to search the bibliographic databases: Quick Search, Expert Search and Thesaurus.

**Quick Search** is designed for quick, straightforward searches. The interface allows you to search on a variety of fields from pull-down menus.



**Expert Search** provides more power and flexibility. It incorporates advanced Boolean logic and includes more search options than Quick Search.



#### **Thesaurus**

The thesauri are guides to the controlled vocabulary used in indexing articles for Compendex and Inspec. Indexers choose terms from the controlled vocabulary to describe the article they are indexing. The controlled vocabulary is used to standardize the way the articles are indexed. The thesauri are hierarchical in nature. Terms are organized by broader, narrower or related concepts.

#### Search session

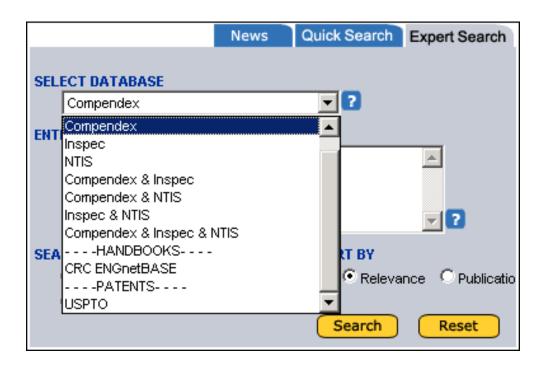
When you begin a session, Engineering Village 2 will keep track of all your session's searches in the Search History. Furthermore, you can maintain a list of records that you select over the course of a session. When your current session ends, you will automatically lose your Search History and Selected Records unless you save them to a Personal Account. Personal Account.

You can end your session by clicking on the "End Session" button at the top right corner of the screen. Otherwise, your session will expire after 20 continuous minutes of inactivity.

#### Select database

Use the SELECT DATABASE pull-down menu to select a database to search.

The database selections you see in the drop-down menu are dependent upon what databases your institution has purchased rights for, or approved access to.



### Compendex

Compendex is the most comprehensive bibliographic database of engineering research available today, containing over seven million references and abstracts taken from over 5,000 engineering journals, conferences and technical reports.

The broad subject areas of engineering and applied science are comprehensively represented. Coverage includes nuclear technology, bioengineering, transportation, chemical and process engineering, light and optical technology, agricultural engineering and food technology, computers and data processing, applied physics, electronics and communications, control, civil, mechanical, materials, petroleum, aerospace and automotive engineering as well as narrower subtopics within all these and other major engineering fields.

Online coverage is from 1969 to the present. Approximately 250,000 new records are added to the database annually from over 175 disciplines and major specialties within engineering. Compendex is updated weekly to ensure access to critical developments in your field.

The Engineering Index Backfile is available covering the information from the printed Engineering Index from 1884-1968. If your institution purchased the Backfile you will be able to search one Compendex database covering 130 years worth of engineering references. This adds about two million additional records to the database.

Compendex and the Engineering Index Backfile are produced by Elsevier Engineering Information, Inc.

#### Inspec

Inspec is the leading bibliographic database providing access to the world's scientific literature in electrical engineering, electronics, physics, control engineering, information technology, communications, computers and computing, and manufacturing and production engineering.

The database contains over seven million bibliographic records taken from 3,500 scientific and technical journals and 1,500 conference proceedings. Approximately 330,000 new records are added to the database annually.

Online coverage is from 1969 to the present, and records are updated weekly.

Inspec is produced by the Institution of Electrical Engineers.

#### **NTIS**

The National Technical Information Service (NTIS) is the premier source for accessing unclassified reports from influential U.S. and international government agencies. The database contains access to over two million critical

citations from government departments such as NASA, the U.S. Department of Energy and the U.S. Department of Defense.

The database also includes audiovisual training materials in such areas as foreign languages, workplace safety and health, law enforcement, and fire services.

The database is updated weekly. The NTIS database was created in 1964 but the material cited in it can date back as far as 1899

#### **CRC ENGnetBASE**

Your institution's add-on subscription to ENGnetBASE allows you access to some of the world's leading engineering handbooks published by CRC Press. As of February 2004 ENGnetBASE has more than 200 titles available online with many more on the way as new books are published or updated. For a complete list of ENGnetBASE handbooks. Please see http://www.engnetbase.com

ENGnetBASE is produced by CRC Press, LLC.

#### **USPTO Patents**

The United States Patent and Trademark Office (USPTO) offers access to its full text patent database. Full text patents are available from 1790 to date, with weekly updates.

Further information on this database is available at the USPTO Web site, http://www.uspto.gov/patft/index.html

# esp@cenet

esp@cenet provides access to patents produced by national patent offices in Europe as well as the European Patent Office (EPO), the World Intellectual Property Organization (WIPO) and Japan. Further information on this database is available at http://ep.espacenet.com.

Most of the patent data goes back to 1970. Some of the patenting agencies provide patent images going back to 1920.

esp@cenet is produced by the European Patent Office.

### **GlobalSpec**

GlobalSpec is a leading business-to-business Web site, www.globalspec.com, that connects engineers and technical buyers with products and services they need. GlobalSpec leverages the Internet, searchable database technology, and engineering specifications to provide extensive search capabilities for engineers and technical buyers worldwide.

### **Scirus**

Scirus is the most comprehensive science-specific search engine available on the Internet. Driven by the latest search engine technology, it enables scientists, students and anyone searching for scientific information to pinpoint data, locate university sites and find reports and articles quickly and easily.

Use Scirus to retrieve results from all science and science related sites on the Worldwide Web, including access-controlled sites. Scirus covers science-related Web pages, as well as sources such as Science Direct, MEDLINE on BioMedNet, Beilstein on ChemWeb, US Patent Office, E-Print ArXiv, Chemistry Preprint Server, Mathematics Preprint Server, CogPrints and NASA.

Scirus is produced by Elsevier.

#### EEVL

EEVL is a guide to Internet resources concentrating on engineering, mathematics and computer science. More information about EEVL can be found at: www.eevl.ac.uk

The EEVL service is based at Heriot Watt University in Edinburgh, UK, and has input from partner institutions: the University of Birmingham, Cranfield University and the University of Ulster. It is funded by the Joint Information Systems Committee (JISC) as part of the Resource Discovery Network (RDN). Imperial College of Science, Technology and Medicine, Nottingham Trent University, University of Sheffield, LTSN Maths, Stats and OR Network also contribute to the service and technical input is provided by the Institute for Computer Based Learning (ICBL).

#### Search basics

A single textbox is provided in Expert Search. To execute a search within a specific field, use the "within" command, wn, and a field code. Field codes for each database are displayed below the textbox.

"light weight steel autobody" wn AB (seatbelts OR seat belts) wn TI

# **Boolean operators**

The search clauses are linked using Boolean operators (AND, OR, NOT).

Gilbert, Barrie wn AU AND Analog Devices wn AF finds articles written by Barrie Gilbert who is affiliated with Analog Devices.

To broaden a search, combine terms using OR (results contain any specified term). rapid transit OR light rail OR subways

To narrow the scope of a search, combine terms using AND (results contain all specified terms). prosthetics AND biocontrol

To eliminate terms from a search, use the NOT operator. A search for mining might be done as: mined or mining wn ky NOT "data mining" wn ky

You can use parentheses to specify the order of operation. Terms and operations within the parenthesis are executed before terms and operations outside the parenthesis. Multiple parentheses can be used.

(International Space Station OR Mir) AND gravitational effects AND (French wn LA OR German wn LA OR English wn LA)

Results from this search will contain either International Space Station OR MIR AND all the records will contain gravitational effects. All of the results will be in French, German or English.

If you do not use parentheses to specify the order of operation, then the operations will be preformed from left to right

For expedient combining of multiple terms use the Combining Previous Searches feature, by clicking on the Search History tab in the top navigation.

### **Stemming**

Stemming allows you to retrieve variants of a word using the word root as the stemming basis.

Stem terms using \$

\$management returns managing, managed, manager, manage, managers etc.

### **Truncation**

The asterisk (\*) is the right-hand truncation symbol.

The truncation command retrieves all the words that start with the same letters as the truncated term, up to the point that the truncation symbol is used.

comput\* returns computer, computerized, computation, computational, computability, etc.

To avoid unexpected results, truncation should be used with care. E.g. color\* will retrieve color and colored and colors and Colorado.

Truncation cannot be used within quotation marks or braces.

### **Exact Phrase Searching**

Phrases entered without braces or quotation marks will return good results because of the relevance sort, but to guarantee that the phrase is an exact match, braces or quotation marks should be used. "International Space Station"

{solar energy}

Truncation and stemming cannot be used with exact phrase searching.

# **Stop Words**

If you need to search for a phrase that contains stop words (and, or, not, near) place the phrase within braces or quotation marks.

{block and tackle}
"water craft parts and equipment"
{near earth objects}

**Special characters:** (anything other then a-z, A-Z, 0-9, ?, \*, #, ( ) or { })

Most special characters are ignored by the search engine.

Operators (?, \*, #, () or {}) have meaning in Engineering Village 2 and should not be entered as part of a search. For example to search for AU(III) enter the search as AU III.

To include special characters within the search phrase, place the term within braces or quotation marks, they will be ignored but the spacing will be maintained.

 $\{M/G/I\}$ 

### Case sensitivity

The Engineering Village 2 interface is not case sensitive. Text can be entered in upper or lower case.

# **Sorting**

Search results for Compendex, Inspec and NTIS can be sorted by either relevance or publication year.

**Relevance:** The relevance sort is based on an algorithm that takes into account the following:

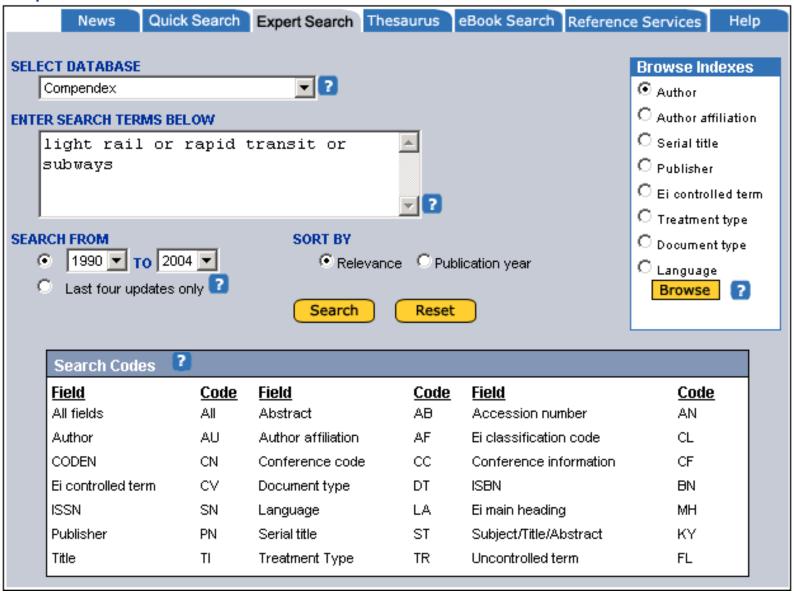
- Whether the words are found as an exact phrase or separately
- When words are found separately, closer proximity ranks higher
- The number of times that the word/phrase appears in the record
- The word's location within the document (words found at the beginning of the field rank higher than words found towards the end)
- Whether the words are found within fields designated as particularly relevant, i.e., the title field
- How often the word appears in the database as a whole (words used often are less relevant than words that are less common)

**Publication Year:** Records are sorted by year. Most recent years are displayed first. 2003, 2002, 2001 etc.

#### Reset

When starting a new search within a search session, click the reset button to clear the previous search. Clicking on reset ensures that no traces of the old search remain to affect the results of the new search and resets all the options to the default settings.

# Compendex



**Compendex** is the most comprehensive bibliographic database of engineering research available today, containing over seven million references and abstracts taken from over 5,000 engineering journals, conferences and technical reports.

The broad subject areas of engineering and applied science are comprehensively represented. Coverage includes nuclear technology, bioengineering, transportation, chemical and process engineering, light and optical technology, agricultural engineering and food technology, computers and data processing, applied physics, electronics and communications, control, civil, mechanical, materials, petroleum, aerospace and automotive engineering as well as narrower subtopics within all these and other major engineering fields.

Online coverage is from 1969 to the present. Approximately 250,000 new records are added to the database annually

from over 175 disciplines and major specialties within engineering. Compendex is updated weekly to ensure access to critical developments in your field.

The Engineering Index Backfile is available covering the information from the printed Engineering Index from 1884-1968. If your institution purchased the Backfile you will be able to search one Compendex database covering 130 years worth of engineering references. This will add about two million additional records to the database.

### Search fields

The following fields are searchable in Compendex.

#### All fields

Searching "All Fields" retrieves results from any of the following fields: Abstract, Title, Translated Title, Author, Author affiliation, Serial title, Volume title, Monograph title, CODEN, ISSN, ISBN, Publisher, Accession number, Ei classification (CAL) code, Conference code, Conference name, Conference date, conference location, Sponsor, Ei controlled term, Ei main heading, Uncontrolled term, Language, Document type.

"All Fields" is the default for Compendex.

#### Abstract

Searching "Abstract" finds terms in the abstract field.

To search for an exact phrase, enclose term within braces or quotation marks. For example: "solar energy" {avalanche diodes}

### **Accession number**

The accession number is a unique number assigned to each record in Compendex. It is only displayed in the detailed record format.

93081058927 wn AN

The following fields are only available for the Engineering Index Backfile since patents have not been covered in Compendex since 1970.

#### Assignee

The person or organization that has been assigned a patent.

### **Author**

Since author names may be cited in a variety of formats, use of the Author Browse Index is highly recommended, e.g. Berryman, Alan A. or Berryman, A.A. Ei cites authors' names as they appear in the original document. Surnames appear first, usually followed by a comma and the remainder of the name as it appears in the original document.

If the document is cited by initials and a surname, but a full name is indicated somewhere in the original publication, such as in the table of contents, then all the known information is provided. Titles such as Sir and Mister and educational degrees are not included in the current Compendex database. They may appear in the Salutation field in the Engineering Index Backfile.

Since 1976, if no personal author name appears on the document then the institutional author is added to the author affiliation field. The word Anon will then appear in the author field.

Author names can be truncated by using an asterisk (\*) as the truncation symbol:

Smith, A\* will retrieve Smith, A., Smith A.A., Smith A.B., Smith, A. Brandon, Smith, Aaron, Smith, Aaron C. etc.

Be aware that this strategy may lead to false hits because there are many authors with the same last name and first

initial.

Note that only authors whose names are presented in the format given will be retrieved.

Searching on Smith, A. B. will not retrieve articles with the author cited as Smith, A.

If a single word surname is entered as the author's last name, all of the forms of that name will be retrieved.

Bers will retrieve:

Bers, A.

Bers, D. M.

Bers, and D.M. etc.

Bers, D\* will retrieve:

Bers, D. M. Bers, D.M. Bers, Donald M. etc.

Editors and compilers are also listed in the author field. They are distinguished from authors by the notations (ed.) or (compiler) in parentheses following the name.

To search on the name of a person who could be an author, an editor or a compiler of a document, truncate after the known part of the name. This will allow for retrieval of the notations (ed.) or (compiler).

When records are displayed, author names are hyperlinked. Click on an author hyperlink to retrieve records by that author from the entire date range of the database (1969-present or 1884 to present if you have the Engineering Index Backfile).

#### Author affiliation

Prior to 2001, the official Compendex policy was to provide the institutional affiliation of the first author or editor, if it could be determined from the source document.

In 2001, this policy changed. The affiliation of the corresponding author is now given instead.

In addition to this policy change, in some given affiliations (if it can be determined from the source document) more than one level of the organization is now cited.

The formats and abbreviations used in author affiliations have changed over the years.

For example in the 1970's, an affiliation might be cited as follows:

Nippon Telegr & Teleph Public Corp,

Ibaraki Electr Electr Commun Lab

In the 1980's:

Inst of Electrical Engineers of Japan,

Committee on Electrical Insulating Materials,

Jpn, Insulating Materials, (Jpn)

1990's to current:

Sch. of Electrical and Computer Eng., Purdue University,

1285 Electrical Engineering Building,

West Lafayette, IN 47907, United States

Commonly used abbreviations include:

Academy Acad Assoc Association Bureau Bur Center/re Cent College Coll Company Co Corporation Corp Department Dep Division Div Incorporated Inc Institute Inst Institution Inst International Int Laboratory Lab Limited Ltd National Natl Published Pub **Publisher** Pub School Sch Society Soc University Univ

Corresponding non-English terms (e.g., Akademy) may also be abbreviated.

Other variations in affiliation names may occur for some of the following reasons:

An organization's name may be given in different forms in different source documents. Variations may be due to language, for example:

Goteborg Univ. or Gothenburg Univ.

An organization's name may change over the course of time.

Mobil was renamed Exxon Mobil

### **Ei Classification Code**

The Compendex classification scheme, available in print form in the Ei Thesaurus, is a numerical hierarchy of general subject categories. These subject categories are used to place a term into context when the meaning can vary depending on usage. As an example, windows can refer to building materials or software. The classification codes for building materials (42\*) and computer and data processing (72\*) will limit the search to the proper area. Classification codes can be found in the detailed record and also in thesaurus records.

Searching by classification code is an excellent way to retrieve a large, relevant set of results without using synonyms.

#### CODEN

CODEN are six character representations of serial titles. They can be used to limit results to a specific journal. Refer to the print "PIE: Publications In Engineering," for a list of journal CODEN. You can also find a journal's CODEN at

the abstract and detailed level of a record.

#### **Conference Code**

A Conference Code is a number assigned to a conference proceedings record and every paper from that conference covered by Compendex. This allows you to locate every paper from a conference once you have found one paper. The conference code can be found in the detailed record format. The conference code was first used in 1982. Conferences covered in Compendex prior to 1982 will not contain conference codes.

#### **Conference Information**

Conference information includes the name, date, location and sponsor of a conference as well as the conference code number.

#### **Ei Controlled Term**

The controlled vocabulary used to index records in Compendex can be found in the Ei Thesaurus. The 4th edition of the Ei Thesaurus contains 18,000 terms, 9,000 of those preferred terms and 9,000 entry terms. 220 new preferred terms were added for the 4th edition as well as 200 new entry terms. The terms can now be identified by using the thesaurus function from the navigation bar.

Ei's controlled vocabulary is a list of subject terms used to describe the content of a document in the most specific and consistent way possible. These terms can be browsed in the Ei controlled term Browse Index in Engineering Village 2 as well.

These terms also appear hyperlinked in the abstract and detailed record format. Clicking on any of these will retrieve records spanning the date range of the original search. In 1993, Ei updated the format of its controlled vocabulary. Pre-1993 records retained their format.

The former heading-subheading organization was abandoned. Each index term now stands alone. Old heading-subheading controlled terms have been updated in several different ways:

waves - Absorption

is now indexed as:

Electromagnetic wave absorption

The aspect of Electromagnetic waves called Absorption, is now part of the main heading

Electronic circuits, Frequency dividing

Is now

Frequency dividing circuits

The main heading subheading structure is converted to natural language.

Electron tube - Reliability

Is now:

Electron tubes and Reliability

The two aspects represented in this main heading, subheading are separated as individual terms.

Light-Coherent

is now

Coherent Light

When a subheading modifies, or adds additional explanation to the main heading, the order is now reversed presented as a single term.

Users searching on controlled terms for material published before 1993 will find it helpful to use both the Ei controlled term look-up indexes and the online thesaurus as an aid in determining all the appropriate terms.

Each Compendex record is assigned a heading that serves to represent the major subject aspect of the document

(Main Heading). The subject terms that follow describe additional concepts dealt with in the article.

# **Country of Application**

The country or countries where a patent was applied for.

### Document type

Document types are used to describe the type of source publications from which indexed papers are taken. The document can be selected from a drop down menu. The document type field was added in 1985. Please note that limiting a search to a particular document type will exclude items added prior to 1985.

The document types used in Compendex are:

All document types (default)

Journal article - An independent section of text, usually with its own title and author statement, appearing in an issue of a journal, a journal being a periodical appearing at regular intervals (generally more frequently than annually) and intending to be continued indefinitely

Conference article - A conference paper issued as part of a proceedings whether published in a conference proceedings or in a journal

Conference proceeding - Publication containing papers presented at a symposium or other meeting and constituting the official publication of those proceedings as a whole

Monograph chapter - An individual section of a monograph with its own title and author statement

Monograph review - A systematic and complete thretise on a particular subject, published either complete in one volume or in a finite number of volumes.

Report chapter - An individual section of a report with its own title and author statement

Report review - An official or formal record of research results, research-in-progress, or other technical studies, generally published non-commercially by, and obtainable through, the agency conducting the research

Dissertation - A lengthy or formal treatise or thesis usually written for advanced academic degrees

Unpublished paper - Unpublished papers submitted by authors, or papers published in advance of being presented

The Engineering Index Backfile will also have a document type for Patent (before 1970).

### Filing Date

The date the patent was submitted to the patent office

### International Standard Book Number (ISBN)

ISBNs are 13 character representations of monograph titles. They can be used to find chapters from the same monograph or papers from the same conference. The ISBN will be given at the abstract or detailed level of a record.

0-87339-255-8 wn BN

### **International Standard Serial Number (ISSN)**

ISSNs are nine character alphanumeric representations of serial titles formatted as two sets of four numbers separated by a hyphen. The last digit can be an X. They can be used to limit results to a specific journal. You can find a journal's ISSN at the abstract and detailed level of a record as well as in the Serial Title Browse Index.

# Language

In Expert Search, language can be searched directly or selected from the Language Browse Index, e.g. Turkish wn la.

A complete list of available languages within the Compendex database is in the Language Browse Index in Expert Search.

The language of the document is given at the end of the citation if it is other than English

If more than one language is given, they are separated by a comma, for example: French, German

# Ei Main Heading

Most Compendex records are assigned a heading that serves to represent the major subject aspect of the document (Main Heading). The subject terms that follow describe additional concepts dealt with within the article. All Main Headings are controlled vocabulary terms.

#### **Patent Issue Date**

The date the patent was issued.

#### **Patent Number**

The number assigned to a patent

#### **Publisher**

Search on the "Publisher" field to identify publishers, or find the journals published by a particular publisher. Be sure to look for all versions of a publisher's name. To do so, it is helpful to refer to the Publisher Browse Index.

American Institute of Physics is also referred to as:

AIP, AIP Press, Am Inst Phys, American Inst Phys

#### Serial title

Search on the "Serial Title" field if you want to identify serial titles, e.g., journals, monographs or conference proceedings, from your area of study.

Searching for polymers in the "Serial title" field will retrieve citations whose sources will include:

Polymers for Advanced Technologies

Polymers Paint Colour Journal, etc.

To search for a specific serial title, enclose the title in braces or quotation marks.

{X-Ray Spectrometry} wn ST

"Journal of X-Ray Science and Technology" wn ST

As variations of serial title names sometimes appear, it is a good idea to use the Serial Title Browse Index. The lookup index also includes serial monograph and conference titles. The Serial Title Browse Index also allows you to limit the search to an exact title match, e.g. "Science."

# Subject/Title/Abstract

Searching "Subject/Title/Abstract" retrieves results from any of the following fields: Abstract, Title, Translated title, Ei controlled terms, Ei main heading, and Uncontrolled terms.

To search for an exact phrase, enclose term within braces or quotation marks. For example:

{international space station}

"linear induction motors"

### Title

If you want to search for specific terms within the title, search on the "Title" field. Words in a title are often an indication of the importance of those terms in the article.

"Radio frequency" in the title will likely find articles where "radio frequency" is an important aspect of the article.

For English language documents, the original title is reproduced word for word. However, specific rules exist for foreign language titles:

- If the document is written in a language other than English, but uses the western alphabet, an English language translation is provided, as well as the title in the original language.
- For languages not using the Roman alphabet, the title is translated into English, and a transliterated title may appear.
- If the original language of the title is English, and the text of the articles is published in a non-English language, the English language title is used and a non-English language title is not created.

### **Treatment type**

The treatment type is used to specify the slant or approach taken in the document. In Expert Search, the document type can be selected from the Treatment Type Browse Index or searched directly, e.g. HIS wn tr.

Treatments types were added to Compendex records in 1985. Therefore, a search with a treatment limit is restricted to post-1985 records only.

A record may have one or more Treatment Types. However, not all records have been assigned Treatment Types.

The following treatments are used in Compendex:

Applications - Used for documents describing the actual or potential use of a material, device, concept, computer program, instrument, system, technique, or other innovation. This code is also used for product reviews/technical disclosures.

Biographical- Used for documents containing or consisting of the facts or events in a person's life.

Economic- Used for documents focusing on an overview or analysis of a topic from an economic, cost data, or marketing perspective. Includes market studies.

Experimental - Used for documents pertaining to, or based on, experimental method, including descriptions of experimental methods, apparatus, or results.

General Review - Used for documents providing an overall view of the subject, discussing its development, current research/status, state of the art, etc.

Historical - Used for documents which consider a subject in its origin and/or subsequent historical developments.

Literature Review - Used for documents containing or consisting of extensive references, bibliographies or other summaries of literature relevant to the topic of the document.

Management Aspects - Used for documents that deal with some management aspect of a topic, and/or management methods in general. The management sciences and technology applicable to research, development, design and production are included. This treatment type is also assigned to documents concerning socio-economic impacts of technology on society

Numerical - Used for documents which include numeric data compilations and/or statistical analysis. The numeric information contained may be physical properties, production, consumption or socio-economic statistical data. This treatment type will be assigned to documents reporting statistics of production, exports, imports, growth, etc., for various materials, commodities, products or industries.

Note: this code is not used for mathematical analysis involving numerical techniques.

Theoretical - Used for documents whose emphasis is on theory involving mathematical, deductive or logical analysis. Mathematical analysis using numerical methods for determining the solution is also included in this category.

### **Uncontrolled term**

Uncontrolled terms, also known as free language terms, are additional subject terms assigned by indexers. These terms are not selected from the Ei Thesaurus. New terms and terminology are used in this field. These terms allow for further specificity in indexing that is not available using controlled vocabulary. Uncontrolled terms may subsequently become part of Ei's Controlled Vocabulary.

"Auger ionization" wn FL

#### **Browse Indexes**

The Browse Indexes help you select appropriate terms for your search. Compendex Expert Search has indexes for author, author affiliation, serial title, publisher, Ei controlled term, treatment type, document type and language.

From the Browse Indexes box (located on the right hand side of the page), select the index you wish to use by clicking on the radio button next to it and then clicking on "Browse."

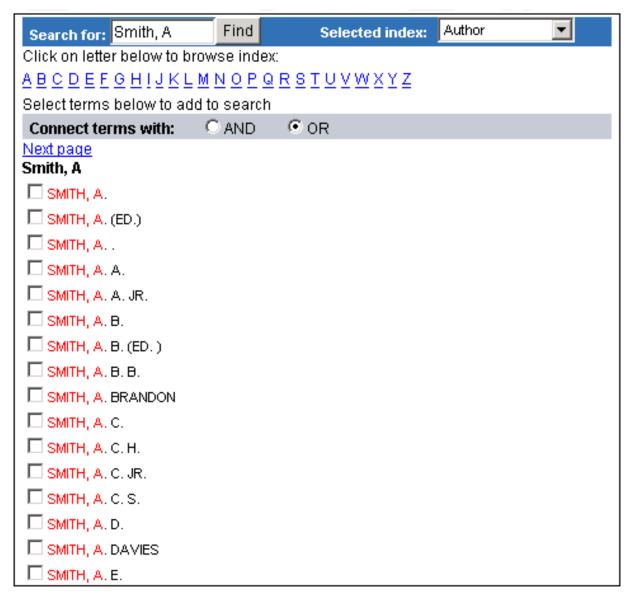
Once the index is loaded, you can navigate by either selecting the first letter(s) of the term you wish to search for or by typing in the first few letters of the term in the SEARCH FOR box and clicking on "Find."

In Expert Search, when you select a term from the index, it is automatically pasted into the textbox with the wn (within) command and the field code. You can select as many terms as needed, e.g. (({SMITH, JOHN}) WN AU) OR (({SMITH, JOHN A.}) WN AU) OR (({SMITH, JOHN ALLEN}) WN AU) OR (({SMITH, JOHN ALLEN}) WN AU).

The Author Browse Index is useful for searching on author names, especially for searching for authors with very common surnames. For example:

Searching on author Alan Smith, as Smith, A\* will retrieve records by other authors such as Smith, Albert or Smith, Alex.

<sup>&</sup>quot;stationary phase methods" wn FL



### **Limit by Date**

### Last four updates

Selecting this option allows you to limit your search to the four most recent weekly database updates.

If you do not find what you need, broaden your search by selecting the date range limit and expanding the range of your search to the last year, the last 2 years, etc.

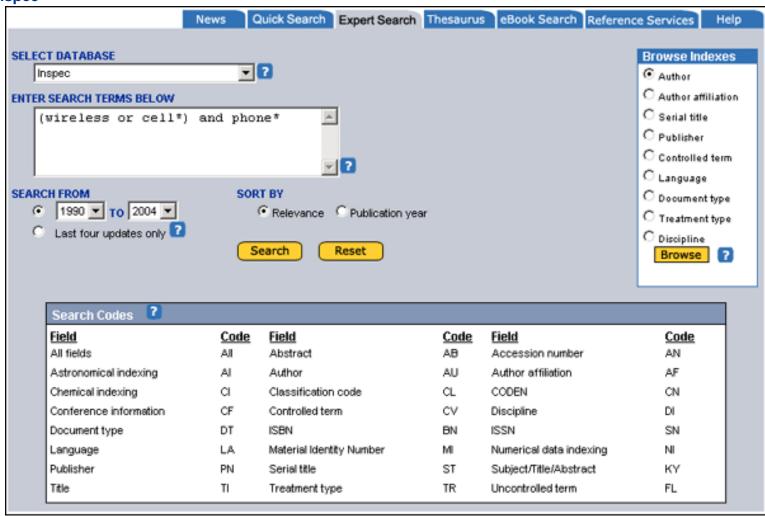
2003 TO 2003

2002 TO 2003

2001 TO 2003

Alternately, to focus your results to a single year, select the same year in both date range drop-down boxes. 2002 TO 2002

#### Inspec



**Inspec** is the leading bibliographic database concentrating on electrical and electronic engineering, physics, information technology, computer and control systems, and manufacturing and production engineering. Online coverage is from 1969 to the present, and new records are updated weekly. Inspec grows by about 330,000 records per year.

### Search fields

#### All Fields

Searching "All Fields" retrieves results from any of the following fields: Abstract, Author, Author Affiliation, CODEN, Conference information, Document type, ISBN, ISSN, Material identity number, Monograph Title, Publisher, Serial Title, Accession number, Numeric indexing, Chemical indexing, Astronomical indexing, Controlled Terms, Uncontrolled terms and Title.

"All Fields" is the default for Inspec.

#### **Abstract**

Searching "Abstract" finds terms in the abstract field.

To search for an exact phrase, enclose term within braces or quotation marks. For example: "solar energy" wn AB {avalanche diodes} wn AB

#### Accession number

The accession number is a unique number assigned to each record in Inspec. It is only displayed in the detailed record format.

6038693 wn AN

# **Astronomical Object Indexing**

Astronomical Object designations have been indexed in the Astronomical Object back to 1995. It allows named or numbered objects to be retrieved more efficiently. Three types of designations exist:

Name-based acronyms, i.e., LMC (Large Magellanic Cloud), R Sct (object in constellation. e.g., HDW

Catalog-based acronyms including their catalog entry name. This number may be sequential (NGC 204) or represent a position in the sky, (PRS 1913+16).

e.g., "HR 3237" wn Al

Positional information only,. e.g., "4U 0115+63" wn Al

Detailed information about Astronomical Object indexing can be found at the IEE Web site at: http://www.iee.org/publish/support/inspec/document/astron/

#### **Author**

The Inspec database does not use authors' first names, but only their initials. The database also includes any suffixes appended to the name. To search on an author name, enter last name, comma, then a space, initial(s) and suffix (if any).

White, A. A. wn AU Brown, A.C., Jr. wn AU

Author names can be truncated by using an asterisk (\*) as a truncation symbol.

Jones, A\* will retrieve Jones, A. A, Jones, A. B., Jones, A. C, Jones, A. D. III, Jones, A. D. R., Jones, A. D. W., Jones, A. D., Jones A. E, etc.

Be aware that this strategy may lead to false hits because there are many authors with the same last name and first initial.

Use of the Author Browse Index is strongly recommended in order to make selections from all the possible variations on an author's name.

Note that only authors whose names are presented in the format given will be retrieved.

Searching on Templeton, D. D. will not retrieve articles with the author cited as Templeton, D.

If a single term is entered as an author name, all forms of that name will be retrieved, e.g., entering Fisch will retrieve articles by all of the following:

Fisch, A.

Fisch, A. M.

Fisch, B.

Fisch, B. J.

Fisch, C.

Fisch, C. B.

Fisch, D.

Fisch, D. E.

Fisch, E. Fisch, E. A. Fisch, E. E.

Fisch, E. F.

To further refine this search add the truncation symbol after the first initial.

Fisch, E\* will retrieve:

Fisch, E.

Fisch, E. A.

Fisch, E. E.

Fisch, E. F.

When records are displayed, author names are hyperlinked. Click on an author hyperlink to retrieve records with that author from the entire date range of the database (1969-present).

#### **Author affiliation**

The institutional affiliation at the time of publication is given for the first author of each record as given in the journal if it can be determined from the source document. The affiliation information includes the name and city, state, and country of the organization where applicable. In some cases, more than one level of the organization is cited as well.

As variations and abbreviations may have been used, it is a good idea to use the Author Affiliation Browse Index.

"Nippon Steel" wn AF

# **Chemical indexing**

The Chemical Indexing field is a system of controlled indexing for inorganic substances and material systems.

Every significant substance in a record is given one of three basic role indicators:

element (el), e.g., {Si/el} wn CI

binary (bin), e.g., {Al/bin} wn CI

system (ss), e.g., {Ga/ss} wn CI

Some substances may be assigned special rolls. These are:

interface system (int)

surface or substrate (sur)

adsorbate (ads)

dopant (dop)

Detailed information about Chemical Indexing can be found at the IEE Web site at:

http://www.iee.org/publish/support/inspec/document/ChemNum/

#### Classification code

The Inspec Classification is divided into five areas.

A (Physics)

B (Electrical & Electronic Engineering)

C (Computers & Control)

D (Information Technology)

E (Manufacturing and Production Engineering)

The single letter and following four digits indicate the levels of classification. The letter (A B C D or E) represents the discipline area. The most general level is represented by the first digit. The second level is represented by the second digit, etc.

A4000 Fundamental areas of phenomenology

A4200 Optics

A4255 Lasing processes

A4255N Fibre lasers and amplifiers

#### CODEN

CODEN are six character representations of serial titles. They can be used to limit results to a specific journal. Refer to the print "List of Journals 2001/2002," for a list of journal CODEN. You can also find a journal's CODEN at the abstract and detailed level of a record.

### **Conference information**

Conference information includes the name, date, location and sponsor of a conference.

### Inspec controlled term

The controlled vocabulary used to index records in Inspec can be found in the Inspec Thesaurus available online. These terms can also be browsed in the Inspec Controlled Term Browse Index. These terms can now be identified by using the thesaurus from the navigation bar.

actinides wn CV

These terms also appear hyperlinked in the abstract and detailed record format. Clicking on any of these will retrieve records spanning the date range of the original search.

### **Disciplines**

You can limit your search to one of five main subject areas covered by Inspec. Disciplines are:

**Physics** 

Electrical/electronic engineering

Computers/control engineering

Information technology

Manufacturing and production engineering

#### **Document type**

Document types are used to describe the type of source publications from which indexed papers are taken. In Expert Search, the document type can be searched directly or selected from the Document Type Browse Index, e.g. JA wn dt.

The document types used in Inspec are:

All document types (default)

Journal article

Conference article

Conference proceedings

Monograph chapter

Monograph review

Report chapter

Report review

Dissertation

Patent (1969-1976)

### **International Standard Book Number (ISBN)**

ISBNs are 13 character representations of monograph titles. They can be used to find chapters from the same monograph or papers from the same conference. The ISBN will be given at the abstract and detailed level of a journal record.

0-13-489089-2 wn BN

# **International Standard Serial Number (ISSN)**

ISSNs are nine character alphanumeric representations of serial titles formatted as two sets of four numbers separated by a hyphen. The last digit can be an X. They can be used to limit results to a specific journal. You can find a journal's ISSN at the abstract and detailed level of a record as well as in the Serial Title look-up index.

#### Language

In Expert Search, language can be searched directly or selected from the Language Browse Index, e.g. Turkish wn la.

A complete list of available languages within the Inspec database is in the Language Browse Index in Expert Search.

The language of the document is given at the end of the citation if it is other than English.

If more than one language is given, they are separated by a comma, for example: French, German

### **Material identity number**

This field contains an internal Inspec code uniquely identifying the publication issue for serials or simply the publication for non-serials. This field was created in 1996. It can be used to find papers from a specific issue of a journal once at least one paper from that issue is located. It can also be used to find all the papers from a conference proceedings or chapters from a book.

"O646-2002-002" wn MI

# **Numerical data indexing**

Numerical data indexing standardizes the way values are expressed by the authors within their papers.

For example, 32 megawatts may be cited as: 32 M Wor 32000 kW, or 32 MWatt, etc.

Numeric data indexing is composed of three elements:

Quantity, e.g. temperature, wavelength, frequency, {power 3.5E+07 W} wn NI

Unit, e.g. meter, hertz, Kelvin "7.151E-10 M" wn NI

Value, range expressed in floating point format "Temperature 9.5E+01" wn NI

Detailed information about Numerical Data Indexing can be found at the IEE Web site at:

http://www.iee.org/publish/support/inspec/document/ChemNum/

#### **Publisher**

Search on the "Publisher" field to identify publishers, or find the journals published by a particular publisher. Be sure to look for all versions of a publisher's name. To do so, it is helpful to refer to the Publisher Browse Index.

American Institute of Physics is also referred to as:

AIP, AIP Press, American Inst. Phys

#### **Serial Title**

Search on the "Serial Title" field if you want to identify serial titles, e.g., journals, monographs or conference

proceedings, from your area of study.

Searching for polymers in the "Serial title" field will retrieve citations whose sources will include:

Polymers for Advanced Technologies

Polymers Paint Colour Journal, etc.

To search for a specific serial title, enclose the title in braces or quotation marks.

{X-Ray Spectrometry} wn ST

"Journal of X-Ray Science and Technology" wn ST

As variations of Serial Title names sometimes appear, it is a good idea to use the Serial Title Browse Index. The lookup index also includes serial monographs and conference titles. The Serial Title Browse Index will also allow you to search on an exact title match, e.g. "Science."

### Subject/Title/Abstract

Searching for Subject/Title/Abstract retrieves results from any of the following fields: Abstract, Title, Controlled Terms or Uncontrolled terms.

You can enter one or more terms in the textbox. Enter words or phrases, omitting punctuation, articles or prepositions.

"Nonradiative transitions" wn KY

Power utilization

# Title

If you want to search for specific terms within the title, search on the "Title" field. Words in a title are often an indication of the importance of those terms in the article.

"Radio frequency" in the title will likely find articles where "radio frequency" is an important aspect of the article.

If you prefer to search for specific terms within the title, again search on the "Title" field. Words in a title are often an indication of the importance of those terms in the article.

All titles in the Inspec database are in English.

### **Treatment Type**

Treatment types indicate the slant of the article. The treatment types available for Inspec are:

All treatment types

Applications - when document describes use or implementation of an instrument device, etc.: where an application is involved

Bibliography - anything with 50 or more referenced

Economic - where document deals with economic commercial aspec-cost, pricing, market forcasts, etc.

Experimental - anything dealing with a test, trial, tentative procedure or policy

General review - overall view of subject. General approaches, state of the art reviews, overviews, etc. Useful to researchers who want overview of a field- when the field is not of their own. Often laymen's language or non-technical

New developments - anything new or novel in patentable sense

Practical - practical use - hands on approachProduct review = subset of practical, introduced in 1985, includes product comparison tables and buyer's guides

Theoretical - analysis of a set of facts and their relationship to one another

In Expert Search, the document type can be searched directly or selected from the Treatment Type Browse Index, e.g. GEN wn tr.

A record may have one or more Treatment Types. However, not all records have been assigned Treatment Types.

#### Uncontrolled term

Uncontrolled terms, also known as free language terms, are additional subject terms assigned by indexers. These terms are not selected from the Inspec Thesaurus. New terms and terminology are used in this field. These terms allow for further specificity in indexing that is not available using controlled vocabulary. Uncontrolled terms may subsequently become part of Inspec's controlled vocabulary.

{irregular media} wn FL "stationary phase methods" wn FL

### **Browse Indexes**

The Browse Indexes help you select appropriate terms for your search. Inspec Expert Search has indexes for author, author affiliation, serial title, publisher, controlled term, treatment type, document type, language and discipline.

From the Browse Indexes box (located on the right hand side of the page), select the index you wish to use by clicking on the radio button next to it and then clicking on "Browse"

Once the index is loaded, you can navigate by either selecting the first letter(s) of the term you wish to search for or by typing in the first few letters of the term in the SEARCH FOR box and clicking on "Find."

In Expert Search, when you select a term from the index, it is automatically pasted into the textbox with the wn (within) command and the field code. You can select as many terms as needed, e.g. (({SMITH, J.}) WN AU) OR (({SMITH, J.A.S.}) WN AU).

The Author Browse Index is useful for searching on author names, especially for searching for authors with very common surnames.

Search for: Smith, a	Find	Selected index:	Author	▼
Click on letter below to brow	wse index	· ·		
<u>ABCDEFGHIJKLM</u>	NOPQ	RSTUVWXYZ		
Sa Sb Sc Sd Se Sf Sg Sh	<u>Si Sj Sk S</u>	<u>SI Sm Sn So Sp Sq Sr</u>	Ss St Su Sv	Sw Sx Sy Sz
Select terms below to add	to search			
Connect terms with:	O AND	OR		
smith, a				
SMITH, A				
☐ SMITH, A.				
SMITH, A., JR.				
SMITH, A., SR.				
☐ SMITH, AM.				
SMITH, A.A.				
SMITH, A.A., JR.				
SMITH, A.A.R.				
SMITH, A.A.W.				
SMITH, A.B.				
SMITH, A.B. III.				
☐ SMITH, A.B., III				
☐ SMITH, A.B., III.				
☐ SMITH, A.C.				
SMITH, A.C., JR.				
SMITH, A.C.A.				
SMITH, A.C.D.				
SMITH, A.C.H.				

# **Limit by Date**

# Last four updates

Selecting this option allows you to limit your search to the four most recent weekly database updates.

If you do not find what you need, broaden your search by selecting the date range limit and expanding the range of your search to the last year, the last 2 years, etc.

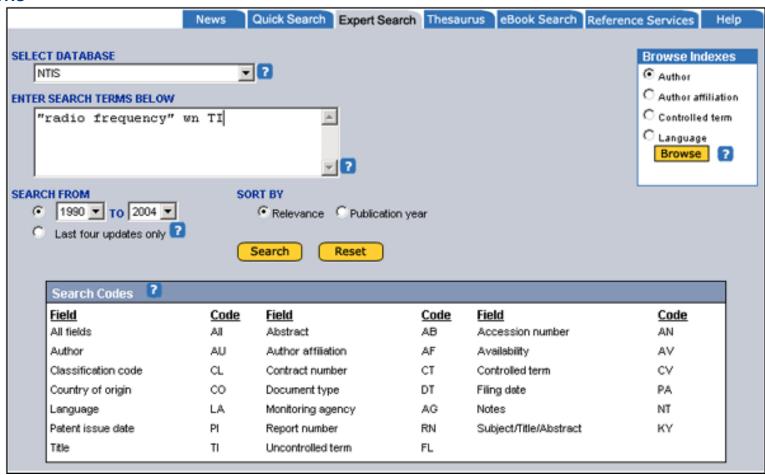
2003 TO 2003

2002 TO 2003

2001 TO 2003

Alternately, to focus your results to a single year, select the same year in both date range drop-down boxes. 2002 TO 2002

#### **NTIS**



The National Technical Information Service (NTIS) is the premier source for accessing unclassified reports from influential U.S. and international government agencies. The database provides access to over two million critical citations from government departments such as NASA, the U.S. Department of Energy and the U.S. Department of Defense.

The database also includes audiovisual training materials in such areas as foreign languages, workplace safety and health, law enforcement, and fire services.

The following fields are available for searching:

#### Search fields

#### All fields

Searching All fields will retrieve records from the abstract, author, author affiliation, classification code, contract number, country of origin, monitoring agency, accession number, controlled term, report number, sponsor, title, availability, language, notes, patent application date, patent issue date and uncontrolled term.

### **Abstract**

Searching "Abstract" finds terms in the abstract field.

To search for an exact phrase, enclose term within braces or quotation marks. For example: "solar energy" wn AB {avalanche diodes} wn AB

### **NTIS Accession Number**

This is a unique NTIS order number. The formats vary. e.g. PB2003-123456 N2003-12345/6

#### **Author**

The format of the authors' names varies in the NTIS database. In some instances, the name will appear with the last name, first name and middle name. In some cases it will be the last name and initial. It might be just the last name. Using the Author Browse Index will help you identify the possible variations.

### **Author Affiliation**

This is the organization where the work was performed. Since 1980, NTIS has maintained a related index of author affiliation codes. The organizational names may vary. Use of the Author Affiliation Browse Index is recommended.

### **Availability**

Information about obtaining the document will be found in this field. This field may also contain notes about the document format or availability of the hard copy. An example of the field is: Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)605-6900; and email at orders@ntis.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

This field is displayed only in the detailed record format.

#### Classification Code

NTIS uses two sets of classification codes, COSATI and NTIS Subject Category Classification. Since 1986 only the NTIS Subject Category Codes have been used. They can be found in Appendix B of the NTIS help document at http://grc.ntis.gov/grcdbg.pdf

### **Contract Number**

This field contains the contract or grant number issued by the federal agency sponsoring the research.

### **NTIS Controlled Terms**

The controlled terms are assigned by indexers. At least three different sets of terms are used in the NTIS database. They include the subject lists from the US Department of Energy, the Department of Defense Technical Information Center and NASA.

Controlled terms can be identified by using the NTIS Controlled Term Browse Index.

### **Country of Origin**

This is the country where the publication or patent originated.

### **Document Type**

The document types are not entered into the NTIS database in standard formats. Some examples of common document types are:

Technical reports

Final reports

Journal articles

Conference papers

Computer products

Dissertations

Note: This list of more common enumerations is not inclusive of the hundreds of variant document types in the database.

### Filing Date

This is the date the patent application was filed.

#### Language

In Quick Search, you can limit your search to any language listed in the drop-down menu: All languages, English, Chinese, French, German, Italian, Japanese, Russian or Spanish.

In Expert Search, language can be searched directly or selected from the Language Browse index, e.g. Turkish wn la.

A complete list of available languages within the NTIS database is in the Language Browse Index in Expert Search. The language of the document is given at the end of the citation if it is other than English.

If more than one language is given, they are separated by a comma, for example: French, German

### **Monitoring Agency**

This field contains the acronym of the sponsoring organization and may contain a report number as well.

#### **Notes**

The NTIS database provides several notes field which might include information about the title, a description of the document type or format.

### **Patent Issue Date**

This is the date the patent was issued.

### **Report Number**

This is the number assigned by the sponsoring agency. It is usually a series of alpha numeric numbers. e.g. EPA/600/J-94/280

# Subject/Title/Abstract

This field will retrieve records from the abstract, title, controlled and uncontrolled terms.

# Title

If you want to search for specific terms within the title, search on the "Title" field. Words in a title are often an indication of the importance of those terms in the article.

"Radio frequency" in the title will likely find articles where "radio frequency" is an important aspect of the article.

### **Uncontrolled Terms**

Uncontrolled terms are indexing terms that do not come from the controlled vocabulary lists. They are assigned by indexers when there is no appropriate term available in the controlled vocabulary. Often they describe new technology.

### NTIS price codes

The detailed records for NTIS have a field with the NTIS price codes. These indicate the cost of ordering the document from NTIS. The link can be found at http://www.ntis.gov/pdf/pricode.pdf Price codes are not searchable.

#### **Browse Indexes**

The Browse Indexes help you select appropriate terms for your search. NTIS Expert Search has indexes for author, author affiliation, NTIS controlled term, and Language.

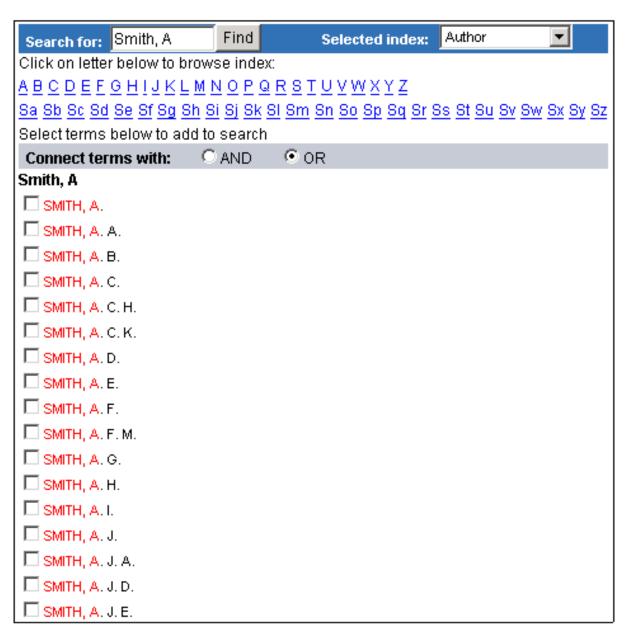
From the Browse Indexes box (located on the right hand side of the page), select the index you wish to use by clicking on the radio button next to it and then clicking on "Browse."

Once the index is loaded, you can navigate by either selecting the first letter(s) of the term you wish to search for or

by typing in the first few letters of the term in the SEARCH FOR box and clicking on "Find."

In Expert Search, when you select a term from the index, it is automatically pasted into the textbox with the wn (within) command and the field code. You can select as many terms as needed.

The Author Browse Index is useful for searching on author names, especially for searching for authors with very common surnames.



### **Limit by Date**

### Last four updates

Selecting this option allows you to limit your search to the four most recent weekly database updates.

If you do not find what you need, broaden your search by selecting the date range limit and expanding the range of your search to the last year, the last 2 years, etc. 2003 TO 2003 2002 TO 2003 2001 TO 2003

Alternately, to focus your results to a single year, select the same year in both date range drop-down boxes. 2002 TO 2002

# **Combined Searches (Compendex, Inspec, NTIS)**

Combined searches allow you to search databases simultaneously and remove duplicate records. The databases available will be determined by the subscriptions held by your institution. The possible combinations are: Combined Compendex & Inspec, Combined Compendex & NTIS, Combined Inspec & NTIS and Combined Compendex, Inspec & NTIS.



### Search fields

In Expert Search, all fields are searchable but results may be limited to specific databases, e.g. a search for Main Heading will only return results from Compendex. The available fields are listed below the search box with the relevant databases indicated.

C Compendex I Inspec N NTIS					
<u>Field</u>	<u>Code</u>	Field	<u>Code</u>	<u>Field</u>	<u>Code</u>
All fields (C, I, N)	ΑJI	Abstract (C, I, N)	AB	Accession number (C, I, N)	AN
Assignee (C)	PE	Astronomical indexing (I)	Al	Author (C, I, N)	AU
Author affiliation (C, I, N)	AF	Availability (N)	ΑV	Chemical indexing (I)	CI
Classification code (C, I, N)	CL	CODEN (C, I)	CN	Conference code (C)	CC
Conference information (C, I)	CF	Contract number (N)	CT	Controlled term (C, I, N)	CV
Country of application (C)	PU	Country of origin (N)	CO	Discipline (I)	DI
Document type (C, I, N)	DT	Filing date (C, N)	PA	ISBN (C, I)	BN
ISSN (C, I)	SN	Language (C, I, N)	LA	Ei main heading (C)	MH
Material identity number (I)	MI	Monitoring agency (N)	AG	Notes (N)	NT
Numerical indexing (I)	NI	Patent issue date (C, N)	PI	Patent number (C)	PM
Publisher (C, I)	PN	Report number (N)	RN	Serial title (C, I)	ST
Subject/Title/Abstract (C, I, N)	KY	Title (C, I, N)	TI	Treatment Type (C, I)	TR
Uncontrolled term (C, I, N)	FL				

It is important to remember that the different databases have different policies for similar fields. For Example, author names in Compendex may contain the author's first and middle name, in Inspec, only initials are used. The controlled terms for Compendex, Inspec and NTIS may not be the same. Each database has its own classification codes.

The field descriptions for each database should be consulted.

Compendex search fields Inspec search fields NTIS search fields

### **Browse indexes**

The Browse Indexes help you select appropriate terms for your search.

The Browse Indexes provided are restricted to indexes common to combined databases.

The Browse Indexes for each database should be consulted.

Compendex browse indexes Inspec browse indexes NTIS browse indexes

The Browse Indexes for combined searches have the database containing terms indicated after each entry.

Search for: communicatio Find Selected index: Controlled term					
Click on letter below to browse index:					
<u>ABCDEFGHIJKLMNOPQRSTUVWXYZ</u>					
Ca Cb Cc Cd Ce Cf Cg Ch Ci Cj Ck Cl Cm Cn Co Cp Cq Cr Cs Ct Cu Cv Cw Cx					
<u>Cy Cz</u>					
Select terms below to add to search					
Connect terms with: O AND O OR					
communications					
COMMUNICATIONS (Compendex, NTIS)					
COMMUNICATIONS AND RADIO SYSTEMS (NTIS)					
COMMUNICATIONS APPLICATIONS (NTIS)					
COMMUNICATIONS APPLICATIONS OF COMPUTERS (Inspec)					
COMMUNICATIONS APPLICATIONS OF CONTROL (Inspec)					
COMMUNICATIONS CENTRAL (NTIS)					
COMMUNICATIONS CENTRALS (NTIS)					
COMMUNICATIONS COMPUTER CONTROL (Inspec)					
COMMUNICATIONS COMPUTING (Inspec)					
COMMUNICATIONS COUNTERMEASURES (NTIS)					
COMMUNICATIONS DEVICE (NTIS)					
COMMUNICATIONS EQUIPMENT (NTIS)					
COMMUNICATIONS INDUSTRY (NTIS)					
COMMUNICATIONS INFRASTRUCTURE (NTIS)					
COMMUNICATIONS INTELLIGENCE (NTIS)					

# Limit by date

### Last four updates only

Selecting this option allows you to limit your search to the four most recent weekly database updates.

If you do not find what you need, broaden your search by selecting the date range limit and expanding the range of your search to the last year, the last 2 years, etc.

2003 TO 2003

2002 TO 2003

2001 TO 2003

Alternately, to focus your results to a single year, select the same year in both date range drop-down boxes.

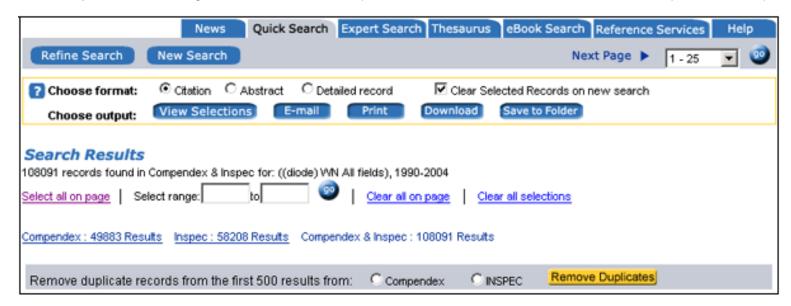
2002 TO 2002

# Remove duplicate records

Duplicate records can be removed from search done in the Combined Compendex & Inspec database. Using either

of the two radio buttons provided in the blue bar running before the search results, select the database (Compendex or Inspec) you want the duplicates removed from. Then hit the yellow "Remove Duplicates" button.

Since there is virtually no duplication between NTIS and Compendex or Inspec there is no duplicate removal function for NTIS. If you are searching all three databases, duplicate records can still be removed from Compendex or Inspec.



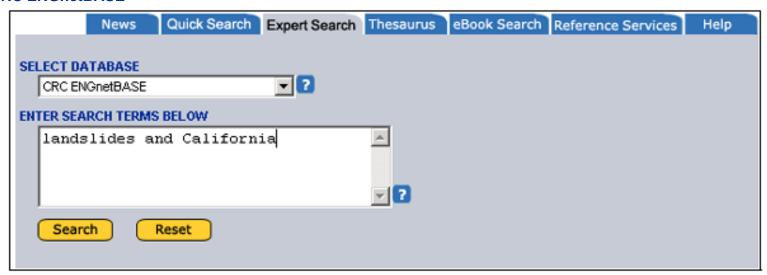
The system quickly removes duplicates from the first 500 search results.

Once the duplicates are removed, you can easily recall them by clicking on the yellow Recall Duplicates button in the blue bar above the de-duplicated search results.

The search results for combined searches, will give the total number of records as well as a breakdown of the number of records from each database. By clicking on the hyperlink of the individual databases, the results from that database will be displayed. Once, you are viewing the results from a single database, you can select one of the other databases or return to the combined search results.

Search Results 5849 records found in Compendex, Inspec & NTIS for: ((diodes) WN All fields), 2003-2004					
Select a	I on page   Select range: to Clear all on page   Clear all selections				
Compen	dex : 3460 Results Inspec : 2351 Results NTIS : 38 Results Compendex, Inspec & NTIS : 5849 Results				
Remo	we duplicate records from the first 500 results from: Compendex CINSPEC Remove Duplicates				
	A theoretical study of differing active region doping profiles for W-band (75-110 GHz) InP Gunn diodes <u>Dunn, G.M.</u> (Department of Physics, King's College, University of Aberdeen); <u>Kearney, M.J.</u> Source: Semiconductor Science and Technology, v 18, n 8, August, 2003, p 794-802 <b>Database:</b> Compendex				
Abstract / Links   Detailed Record / Links  2. Perveance Characteristics of Intense Electron Beams in High Power Cylindrical Diodes  Sung, Kew Yong, Jeon, Wook; Chun, Seung Hun; Song, Ki Baek; Jung, Yoon; Choi, Mung Chul; Choi, Eun Ha; Uhm, Han Sup  Source: IEEE International Conference on Plasma Science, 2003, p 241					
	Batabase: Compendex  Abstract / Links   Detailed Record / Links				

#### **CRC ENGnetBASE**



Your institution's add-on subscription to ENGnetBASE allows you access to some of the world's leading engineering handbooks published by CRC Press. As of February 2004 ENGnetBASE has more than 200 titles available online with many more on the way as new books are published or updated.

Your query is sent to the CRC Press ENGnetBASE site, where the results are presented by the number of times the search term(s) appear within a particular chapter of an individual handbook. You can then review the matching handbook document results (available in PDF format).

#### All fields

The full text of the online CRC handbooks is searched to find a match on your search term(s). Enter words or phrases.

{Timber bridges}

thermodynamics

"Computer analysis of nonlinear hybrid systems"

{advances in chemical propulsion}

"Avionics Handbook"

Detailed help in using ENGnetBASE is available from the ENGnetBASE Web page, http://www.engnetbase.com/

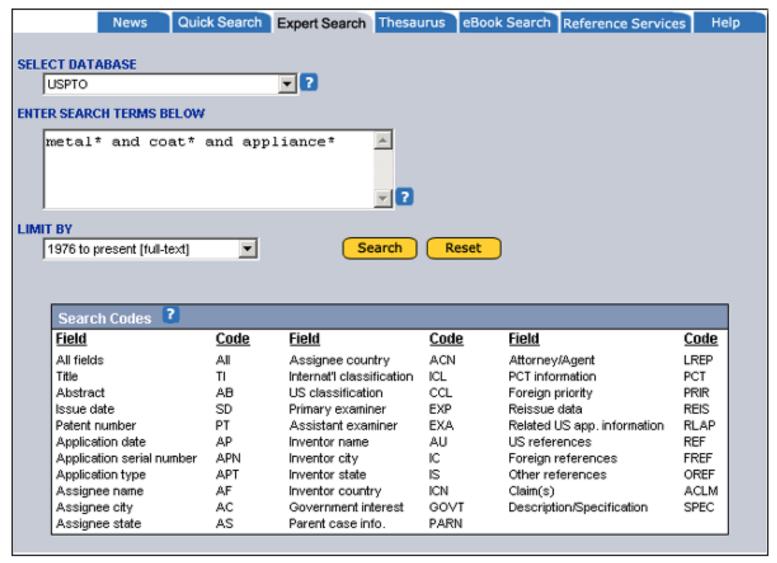
#### **Scirus**

Scirus is the world's most comprehensive search engine specifically designed for finding highly relevant scientific information. Scirus distinguishes itself from existing search engines by concentrating on scientific content only and by searching both Web and journal sources.

Scirus searches both free and journal sources by covering science-related Web pages, as well as from sources such as ScienceDirect, MEDLINE on BioMedNet, Beilstein on ChemWeb, Neuroscion, BioMed Central, US Patent Office, E-Print ArXiv, Chemistry Preprint Server, Mathematics Preprint Server, CogPrints and NASA.

For more information on using Scirus, see http://www.scirus.com/help/

### **USPTO Patents**



USPTO provides access to a full text patent database, which currently contains over six million patents. Records cover the period from 1790 to the most recent weekly issue date. Patents from 1790-1975 can be searched and retrieved by patent number or current US classification code only.

Further information about this database can be found at the USPTO Web site, http://www.uspto.gov/. This site also contains information about the plug-ins that might be necessary to view and download the full-text of the patents with images.

### Selecting fields to search

In Quick Search, you can specify what parts of the record to search by selecting one of the following options from the SEARCH IN pull-down menus beside each search box:

Title
Abstract
Issue date
Patent number
Application date
Application serial number
Application type
Assignee name

All fields

Assignee city

Assignee state

Assignee country

International classification

U.S. classification

Primary examiner

Assistant examiner

Inventor name

Inventor city

Inventor state

Inventor country

Government interest

Attorney/Agent

PCT information

Foreign priority

Reissue data

Related US Application data

**US** references

Foreign references

Other reference

Claim(s)

Description/Specification.

In Expert Search, the search fields are listed below the search box.

Complete information on the contents of all USPTO fields and how to search them can be found at: http://www.uspto.gov/patft/help/helpflds.htm

### Format for names

Names should be entered as: last name first name initial.

e.g. Yeh George

Clark George C

#### Format for dates

You can use several formats to search any of the date fields:

### yyyymmdd

For example, use 20020604 to retrieve June 4, 2002. Truncation can be used. For example, 200206\* will retrieve documents from June 2002.

### Month-Day-Year

Month can be the number of the month, the full name of the month, or an abbreviation (i.e. 6, June or Jun).

Day must be a number between 1 and 31.

Year must be a four-digit year (2002).

For example, use 6-4-2002, Jun-4-2002 or June-4-2002 to retrieve documents from June 4, 2002.

### **Publication year**

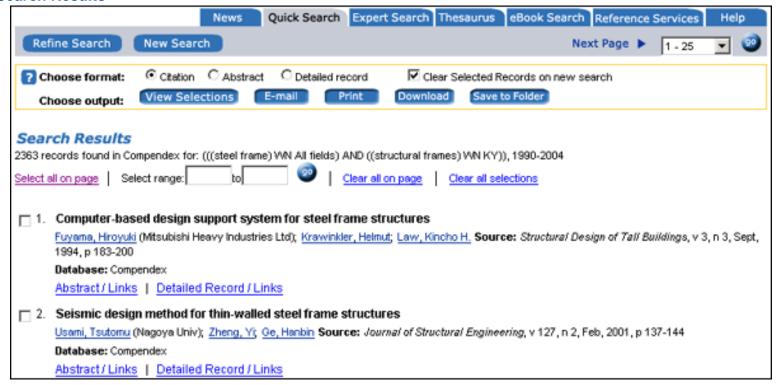
Records cover the period from 1790 to the most recent weekly issue date. Patents from 1790-1975 can be searched and retrieved by patent number or current US classification code only. To limit a search by publication year, select the range of years from the pull-down menu. 1976-present is the default for USPTO on Engineering Village 2.

### esp@cenet

esp@cenet provides access to patents produced by national patent offices in Europe as well as the European Patent Office (EPO), the World Intellectual Property Organization (WIPO) and Japan.

For esp@cenet help documentation, click on the question mark in the left hand navigation bar at: http://ep.espacenet.com

#### **Search Results**



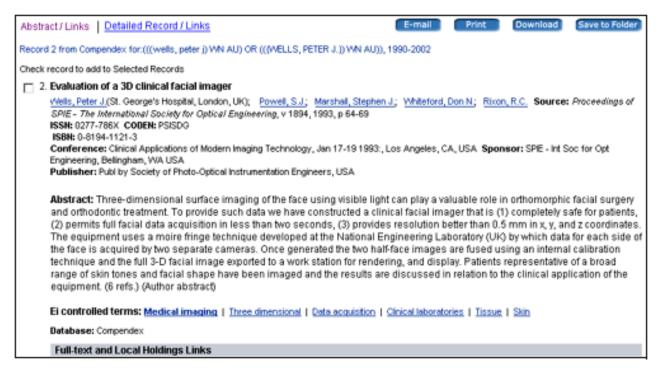
#### **Individual Abstract and Detailed record formats**

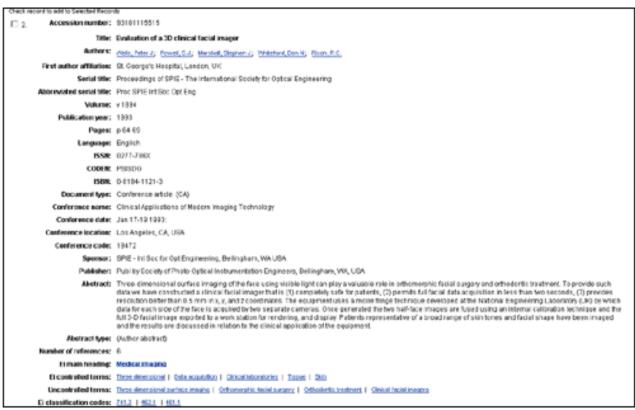
Search results from the bibliographic databases are initially presented in the citation format. This provides enough information to identify the source publication. To view a record in its abstract or detailed format click on the Abstract/Links, or Detailed Record/Links hyperlinks beneath each individual citation.

If you want to e-mail, download or save an individual citation, abstract or detailed record you can mark the individual record, choose a format and then pick an output option. See Working with Selected Records for more information on outputting records.

When records are displayed in the abstract format, Ei, Inspec and NTIS controlled terms, and author names are hyperlinked. By clicking on a controlled term, the system will retrieve all records within Compendex, Inspec or NTIS indexed with that term from the date range specified in your original search. By clicking on an author name, the system will retrieve all records within Compendex, Inspec or NTIS with that author from the beginning of the database.

The Detailed Record format also includes hyperlinked classification codes, CODEN, ISSN, ISBN, Conference Code (Compendex), Materials Identity Number (Inspec) and uncontrolled vocabulary terms, Contract number (NTIS), Project number (NTIS) and Monitoring agency (NTIS). Clicking on any of these retrieves records from the date range specified in the original search indexed with that term.





### **Refining Your Search**

You can choose to further refine your search from the search results page. A Refine Search button appears near the upper left corner of the search results page. Clicking on this Refine Search button positions you at the Refine Search box at the bottom of the search results page.

Your current search will appear in the Refine Search box. Make the changes you wish to the search and click the Search button.

### **Working with Selected Records**

### **Selecting Records**

You can select particular records from the search results in one of three ways. You can individually mark the check boxes next to their corresponding records; you can click on the hyperlinked phrase "Select all on page" (this will select up to 25 records on an individual page of results); or you can select a range of records by entering the first and last record numbers to be included within the range and then clicking on the GO button.

The records are then transferred to a Selected Records page. You can add up to 400 records to work with in Selected Records. Click on the Selected Records icon in the top navigation bar to work with your Selected Records.

Only 45,000 results can be retrieved from any search. The display will indicate the number of results that were located but only the first 4,000 will be available to be selected. For example, a Compendex search for "engineering" in Quick Search will give the following statement before the Search Results: 846675 records found in Compendex for: ((engineering) WN All fields), 1990-2002. You will not be able to select records above 45,000.

# **Selecting an Output Format**

Once you have selected the desired records, you can then choose the format you wish to view them in (citation, abstract or detailed).

You can now select the output action you want for your Selected Records (view selections, e-mail, print, download, save).



### **View Selected Records**

From Choose output, select View Selections. This allows you to view the records you have selected in the format you have chosen (citation, abstract, detailed).

### **E-mail Selected Records**

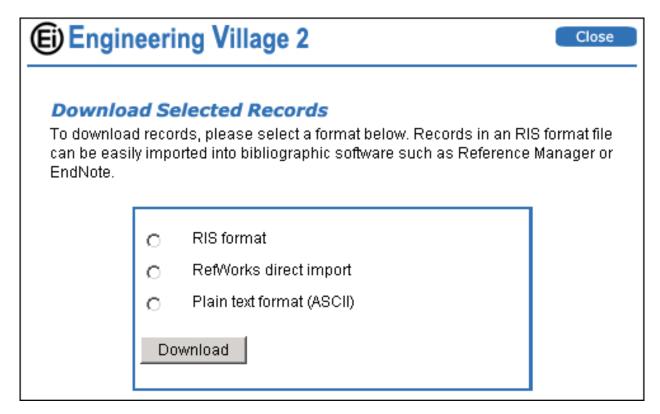
By clicking on the e-mail output option, you can e-mail the results to yourself or others. An e-mail form will appear that allows you to enter the e-mail address of the recipient, as well as any message you wish to add to the e-mail.

#### **Print Selected Records**

Selecting the print option will format the Selected Records in a clean format suitable for printing. All links to full-text and local holdings are removed. The records appear in a new window in a printer friendly format. Click on the Print icon in the new window to start printing.

### **Download Selected Records**

By selecting the download option, you can choose to download the records in RIS, RefWorks or ASCII format. You will be asked to choose the format you wish. The RIS format is compatible with EndNote, ProCite and Reference Manager. However, it is necessary to have one of these products installed on your computer in order to import your Selected Records to that utility.



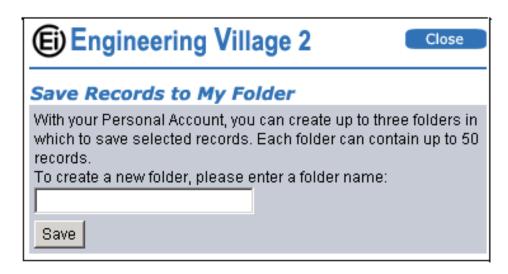
#### **Save Selected Records**

You can create folders and save search results by using the Personal Account function. If you click on the "Save to Folder" option, you will get a screen asking you to login to your Personal Account. If you do not have a Personal Account, you can create one. (See instructions for registering for a Personal Account).

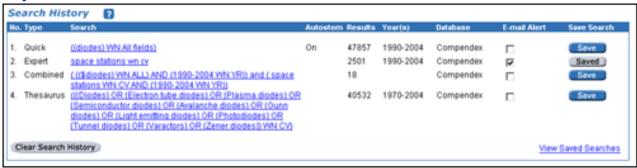
Once you are registered and logged in, you can select a folder to save the results to, or create a new folder. A "Records Saved" message will appear in a pop-up window when your records are successfully saved. This message also states which folder the records were saved to, as well as offering you the option to view the contents of that folder.

You are allowed to create up to three Personal Folders. You can edit your Personal Folders (rename folders, delete folders, create folders, view folders) by clicking on the My Folders icon on the top navigation bar (accessible from most Engineering Village 2 pages). You can save up to 50 records within each folder.

In addition, you can delete individual records, or all the records within individual folders while viewing the contents of an individual folder.



### Search history



A Search History appears for each search done in Engineering Village 2. The Search History appears before the Refine Search Box. It can also be accessed from the top navigation bar on most Engineering Village 2 pages. The Search History indicates the search number, whether the search was done in Quick, Expert or Thesaurus mode, the search strategy, whether autostemming was on or off, the number of results, and the database the search was performed in and the years searched.

You can click on any search in the Search History to re-run the search.

The Search History displays the previous three searches by default. To view all the previous searches, click on View Complete Search History.

From the Search History, you can choose to save the search or create an E-mail Alert from an individual search.

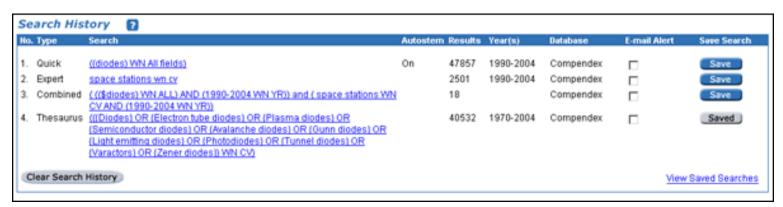


#### **Save Searches**

To save a search strategy, perform a search and go to the Search History. Click the Save button. The button will change to Saved. You can save up to 25 searches.

If you are not logged into the Personal Account feature, you will be prompted to do so. If you are not registered for a Personal Account, you will be prompted to register now (see instructions for registering for a Personal Account).

To view searches that have been saved, click on Saved Searches from the top navigation bar on any Engineering Village 2 page. You can delete individual Saved Searches by clicking on the Remove button. You can delete all your Saved Searches by clicking on the Clear Saved Searches button.

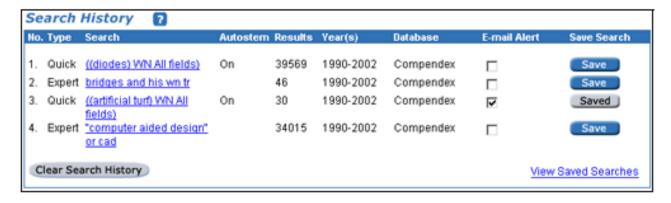


Click on any of the Saved Searches to execute the search.

#### Create E-mail Alerts

Create E-mail Alerts You can create up to 15 weekly E-mail Alerts from the Search History. Use the top navigation bar at the top of any Engineering Village 2 page to select Search History. Select the box next to the search you wish to set up as an alert. If you are not logged into the Personal Account feature, you will be prompted to do so. If you are not registered for a Personal Account, you will be asked if you want to register now. (See instructions for registering for a Personal Account).

You can also set up E-mail Alerts from the Saved Searches page if you are logged into your Personal Account.



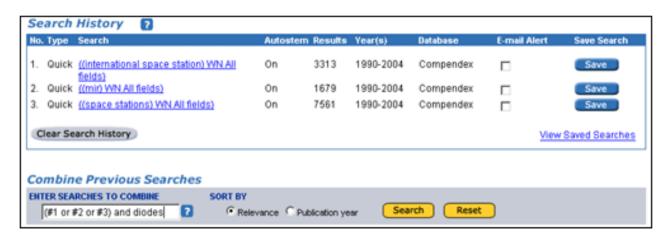
Up to 25 records are sent within an E-mail Alert. If more records were retrieved from the update, a hyperlink will appear in the body of the E-mail Alert linking you to the Engineering Village 2. The full update retrieval set will appear when you click on the link. You can also link from e-mail alerts to individual records by clicking an Abstract/Links or Detailed/Links hyperlink.

### **Combining Previous Searches**

You can combine previously done searches from the Search History function. Use the navigation bar at the top of most pages to select Search History.

Use the box under the Combine Previous Searches heading to enter the item numbers of the searches you wish to combine. The item number must be preceded by a hash mark, #.

#1 and #2



You can combine the searches using AND, OR, NOT. When combining searches, use parenthesis to specify an order of operation.

(#1 or #2) and #3

It is also possible to add additional search terms here, e.g. #1 and diodes wn KY.

Only searches queried on the same database, or combination of databases, are combinable. However, within the same database, or combination of databases, any combination of Quick, Expert or Thesaurus searches can be performed.

### **Accessing full text**

Links to electronic full-text are available for many publishers' journals through the CrossRef service. Only citation, abstract and detailed level records with a verified DOI (digital object identifier) associated with them will show a link to the electronic full-text. Please also note that a link will appear only if the publisher has made the journal or article available online, and then if the CrossRef service provides links to that particular publisher's holdings.

Even if all the above criteria are met, access to the full text will still only be granted if your institution carries an electronic subscription to the item.

A list of publishers and journals that participate in the CrossRef service can be found at http://www.crossref.org/.

The full-text will appear in a new browser window.

If your institution does not want the full-text link to display within your subscription, please contact Ei Customer Support.

### **Link to Local Holdings**

Libraries have the option to link records to their online public access catalog or other library intranet pages. If your institution's library participates in this service, a link will appear below the blue bar called Full-text and Local Holdings Links.

### **OpenURL Link Resolvers**

Likewise, if your institution maintains an OpenURL compliant link resolver such as Endeavor LinkFinder Plus, Ex Libris SFX, Serials Solutions Article Linker, and Innovative Interfaces Web Bridge a link will appear in the same area that presents you with full-text options available to you from your institution.

# **Linda Hall Library Document Delivery Service**

The full texts of most documents in Compendex are available from the Linda Hall Library. You can click on the "Linda Hall Library document delivery service" link beneath the Full-text and Local Holdings Links options bar in the abstract or detailed format of an article. How the transaction is handled from this point will depend on whether or not your organization has a deposit account with Linda Hall Library and what type of account it is. Individuals can order documents on their credit cards.

### **CISTI** document delivery

Engineering Village 2 allows users of CISTI document delivery services the option to send document delivery requests directly from our abstract to the CISTI office. CISTI, the Canada Institute for Scientific and Technical Information, is one of the world's major sources for information in all areas of science, technology, engineering and medicine. Whether you need an article from a journal, an in-depth literature search, or a referral to an expert, CISTI can provide the information you need. For more information on CISTI and it's services, please visit http://cisti-icist.nrc-cnrc.gc.ca/cisti\_e.shtml

### **Personal Account**

When you register for a Personal Account, you will be able to save records and searches, as well as receive weekly E-mail Alerts. E-mail Alerts are messages that contain any new records that match a saved search when updates are added to the database.

### **Account registration**

To register, go to the Personal Account registration form. You will be asked for your name, e-mail address and to choose and confirm a password between 6 and 16 characters long.

Ei Engineering Village 2			
Create Your Personal Account			
To obtain your FREE personal account, please complete the form below. Your account will allow you to save searches, save records, and create E-mail Alerts.  * indicate required fields			
Title:	Select Title <u>▼</u>		
*First Name:			
*Last Name:			
*E-mail address:			
Specify a password between 6 and 16 characters. *Password:			
*Confirm Password:			
Yes, Please send me information about Engineering Village 2 or related products from time to time. The information I have provided here is confidential and it will not be released to a third party.  Submit Reset			

# **Account login**

You will be prompted to login to your Personal Account whenever you try to save searches, save records, or create E-mail Alerts. At the login prompt, enter the e-mail address and password that you provided when you registered for your Personal Account.

If you forget your password, you can submit your e-mail address and have the password sent to you.

If you have not registered for a Personal Account, click on the link to the Personal Account Registration page on the Quick Search or Thesaurus pages or from the Personal Account login pop-up window.

# **Update account information**

Once you login to your Personal Account, you may edit your account information by clicking on the Edit Account button located at the top right corner of the screen. You may also delete your account from here as well.

#### **Further assistance**

### Reference services

If you have searched Engineering Village 2 and cannot find the information you need, we provide the following services:

# Ask an Engineer

You may post questions to a Village Engineer. You will receive a response via e-mail. A list of the engineers and their expertise is provided on the Reference Services page. Village Engineers will provide information that may include Web sites, e-mail addresses, or even phone numbers that point to companies, consultants, research institutes, or other information resources.

#### Ask a Librarian

Ei's librarian can help you formulate a search in Engineering Village 2, identify and locate a source for a book or an article, or find Internet resources on a specific topic.

To access either of these services, click on the "Reference Services" tab.

# **Privacy policy**

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