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## Content Sources

### Compendex

Compendex is the most comprehensive bibliographic database of engineering research available today, containing over nine 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 500,000 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.

### Geobase

GEOBASE is a multidisciplinary database supplying bibliographic information and abstracts for the Earth sciences, ecology, geomechanics, human geography, and oceanography. The database covers approximately 2,000 international journals, including both peer-reviewed titles and trade publications.

The material covered includes refereed scientific papers; trade journal and magazine articles, product reviews, directories and any other relevant material. GEOBASE has a unique coverage of non-English language and less readily available publications including books, conference proceedings and reports, making this the best resource available for multidisciplinary searches of international literature.

### Engineering Index Backfile

The Engineering Index Backfile is available covering the information from the printed Engineering Index from 1884-1969. If your institution purchased the Backfile, you will be able to search one Compendex database covering 120 years worth of engineering references. This adds about 1.7 million additional records to the database.

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

### Ei Patents

The patents databases on Engineering Village include US and European patents grants and applications. Currently, there are over 10 million patents that are being offered.

European Grants:	770,811
European Applications:	2,036,793
US Grants:	4,090,503
US Applications:	1,049,799

#### United States Patents - Applications (US)

Coverage	Data	Countries
2001-present	Bibliographic text	United States

#### United States Patents - Granted (US)

Coverage	Data	Countries
1790-present	Bibliographic text	United States

#### European Patents - Applications (EP-A)

Coverage	Data	Countries
1978-present	Bibliographic text	22

#### European Patents - Granted (EP-B)

Coverage	Data	Countries
1978-present	Bibliographic text	22

### 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, computing, and manufacturing and production engineering. The database contains over eight 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.

### Inspec Archive

The Inspec Archive provides access to historical scientific records in the fields of physics, electrical engineering, electronics computing and control engineering. With the digitizing of the entire collection of Science Abstracts Journals, which were the precursors to the Inspec database, librarians, academics and students are provided access to over 873,000 abstract records spanning the years 1898 through 1968.

### NTIS

The National Technical Information Service (NTIS) database from the U.S. Department of Commerce 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. More information is available from <http://www.ntis.gov/products/types/databases/ntisdb.asp?loc4:4-3>.

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.

### Referex Engineering (eBooks)

Referex Engineering provides access to the broadest and deepest available coverage of engineering reference titles in eBook format. Collections within engineering include the following topic areas: Materials and Mechanical, Electronics and Electrical, and Chemical, Petrochemical and Process. Over 350 titles are currently available.

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## Additional Search Sources

### 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 November 2004, ENGnetBASE has more than 471 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: [www.engnetbase.com](http://www.engnetbase.com)

ENGnetBASE is produced by CRC Press, LLC.

### EEVL (Edinburgh Engineering Virtual Library)

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](http://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).

### 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, <http://www.globalspec.com>, which 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. Visit the GlobalSpec website for more information on this resource.

### 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 ScienceDirect, MEDLINE on BioMedNet, US Patent Office, E-Print ArXiv, Chemistry Preprint Server, Mathematics Preprint Server, CogPrints and NASA.

Scirus is produced by Elsevier.

## 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>

## IHS Standards

IHS Global allows you to search the world's largest collection of technical standards from over 460 standard developing organizations. Over 500,000 standards are available for electronic download. Standards are searchable by document number, title, keyword or standard developing organization. Standards can be ordered by credit card. Users should check with their library to determine if the standards are already available.

## LexisNexis News

LexisNexis provides press releases related to engineering. The site is updated daily. Use the search box to find articles containing specific words or phrases. You can search for a single word or phrase, or use the connectors AND or OR to join search words and identify the relationship between them. Titles are hyperlinked. Clicking the hyperlink will retrieve the press release.

## ReedLink

ReedLink is the manufacturing product search engine of Reed Business Information, the premier provider of product information for the manufacturing industry for more than 30 years!

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# Search Options

## Search Overview

Engineering Village offers four ways to search the bibliographic databases: **Easy Search**, **Quick Search**, **Expert Search** and **Thesaurus**. Referex Books are available from the eBook Search tab.

## Easy Search

Easy Search is designed for very simple basic keyword searching. Search terms are entered into a single search box. Easy Search searches all databases your institution may subscribe to without limits applied.

Enter search terms in the search box. A search is performed on all indexed fields of all subscribed bibliographic databases, including Compendex, Engineering Index Backfile, Inspec, Inspec Archive, Ei Patents and NTIS. No limits are placed on the search.

The screenshot displays the 'Easy Search' interface. At the top, there is a navigation bar with tabs: 'Easy Search' (selected), 'Quick Search', 'Expert Search', 'Thesaurus', 'eBook Search', 'Ask an Expert', and 'Help'. Below the navigation bar, a search box contains the text 'nanotechnology'. To the right of the search box is a yellow 'Search' button and a blue '? Help' link. Below the search box, there are several checkboxes for selecting databases: 'All' (unchecked), 'Compendex' (checked), 'Inspec' (checked), 'NTIS' (checked), 'US Patents' (unchecked), and 'EP Patents' (unchecked). A horizontal blue line is positioned below the checkboxes.

## Quick Search

Quick Search is designed for quick, straightforward searches. The interface allows you to select databases and search on a variety of fields from pull-down menus. Limits can be applied to restrict searches.

Enter search terms in one or more of the three **Search For** search boxes. You may search in a specific field by selecting the field from the **Search In** pull-down menu to the right of the search box. See the help sections of the individual databases for a description of the search fields available. When searching more than one database, the search fields showing in the drop down menu are limited to the common fields of all databases selected.

[Easy Search](#)
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**SELECT DATABASE**  
☐ All
 ☒ Compendex
 ☒ Inspec
 ☒ NTIS
 ☒ US Patents
 ☒ EP Patents
 [?](#)

**SEARCH FOR**  
  
 AND   
 AND

**SEARCH III**  
 All fields [?](#)  
 All fields  
 Subject/Title/Abstract  
 Abstract  
 Author/Inventor  
 Author affiliation/Assignee  
 Title

**Browse Indexes** [?](#)  
[Author/Inventor](#)  
[Affiliation/Assignee](#)

**LIMIT BY**  
 Document type not available [?](#)  
 Treatment type not available [?](#)  
 Discipline type not available [?](#)  
 All languages [?](#)  
☒ 1884 [?](#) TO 2006 [?](#)  
☐ 1 [?](#) Updates [?](#)

**SORT**  
☒ Relevance [?](#)
☐ Publication year [?](#)  
☐ Autostemming off [?](#)

## Expert Search

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

A single search box 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 search box.

[Easy Search](#)
[Quick Search](#)
[Expert Search](#)
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[eBook Search](#)
[Ask an Expert](#)
[Help](#)

**SELECT DATABASE**  
☐ All
 ☒ Compendex
 ☒ Inspec
 ☒ NTIS
 ☐ US Patents
 ☐ EP Patents
 [?](#)

**ENTER SEARCH TERMS BELOW**

**SEARCH FROM**  
☒ 1884 [?](#) TO 2006 [?](#)  
☐ 1 [?](#) Updates [?](#)

**SORT BY**  
☐ Relevance [?](#)
☒ Publication year [?](#)  
☒ Autostemming off [?](#)

**Browse Indexes** [?](#)  
[Author](#)  
[Author affiliation](#)  
[Controlled term](#)  
[Language](#)  
[Serial title](#)  
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[Treatment type](#)  
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**Search Codes** [?](#)  
 C Compendex I Inspec N NTIS U US Patents E EP Patents

Field	Code	Field	Code	Field	Code
All fields (C, I, N, U, E)	ALL	Discipline (I)	DI	Patent application country (U, E)	PCO
Abstract (C, I, N, U, E)	AB	Document type (C, I, N)	DT	Patent authority code (U, E)	PAC
Accession number (C, I, N)	AN	Patent application date (C, N, U, E)	PA	ECLA code (E)	PEC
Astronomical indexing (I)	AI	ISBN (C, I)	BN	Patent filing date (U, E)	PFD
Author/Inventor (C, I, N, U, E)	AU	ISSN (C, I)	SN	Patent application number (U, E)	PAM
Affiliation/Assignee (C, I, N, U, E)	AF	Language (C, I, N)	LA	Patent attorney name (U, E)	PAN
Availability (N)	AV	Ei main heading (C)	MH	Publisher (C, I)	PN
Chemical indexing (I)	CI	Material identity number (I)	MI	Patent priority information (U, E)	PRN
Classification code (C, I, N)	CL	Monitoring agency (N)	AG	US classification (U)	PUC
Original classification code (I)	OC	Notes (N)	NT	Report number (N)	RN
CODEN (C, I)	CN	Numerical indexing (I)	NI	Serial title (C, I)	ST
				Subject/Title/Abstract (C, I, N, U, E)	ST

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	CODEN (C , I)	CN	Numerical indexing (I)	NI	Serial title (C , I)	SI	
					Subject/Title/Abstract (C , I , N , I)	KY	

"overload" wn AB  
 ((seatbelt\* OR (seat belt\*)) wn TI

In Quick and Expert search modes, **More Search Sources** appears on the left side of the screen, to allow you quick access to Referex eBooks, CRC ENGnetBASE, Scirus, etc.

## Thesaurus Search

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.

## eBook Search

eBook Search retrieves results from the Referex Engineering eBook collections only.

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# Search Tips

## Select Database

In **Quick** and **Expert** searches (optional in **Easy Search**) Use the **Select Database** list of check boxes to select a database(s) to search.

The database selections you see in the list are dependent upon which databases your institution has purchased rights for, or approved access to. Referex Engineering eBook searching is located from the eBook Search tab.

Detailed information on specific databases can be found at [Content Sources](#).

## Boolean Operators

Boolean operators allow you to combine terms using the AND, OR, or NOT. To broaden a search, or to allow for variant spellings, combine terms using OR (results contain any specified term).

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

Use the NOT operator to eliminate terms from a search.

In **Quick Search**, terms are searched in the order of entry -- terms entered within the first box are searched first, and so on.

a AND b OR c will be searched as (a AND b) OR c  
 a OR b AND c will be searched as (a OR b) AND c  
 a OR b NOT c will be searched as (a OR b) NOT c

If you need to combine more terms within your search, use **Expert Search** or, alternately, use the **Combine Previous Searches** feature, by clicking on the **Search History** tab in the top navigation.

In Expert Search, the search terms are linked using Boolean operators and searched from left to right.

*Gilbert, Barrie wn AU AND Analog Devices wn AF*

"Rapid transit" wn ALL or "light rail" wn ALL and signals wn TI

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:  
*(mines or mining) wn ky NOT "data mining" wn ky*

In **Expert Search**, 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 plus 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 performed from left to right

Remember that if you enter a phrase without quotation marks, braces or parenthesis, AND is assumed.

## Autostemming

Stemming uses an algorithm that determines the suffixes of words and allows you to search for the term as entered, the root word and other words formed with other possible suffixes. For example, if you enter the term controllers, you will get results for:

- controllers
- control
- controlling
- controlled
- controls, etc.

Stemming will provide you with much broader search results automatically. You would not need to search for all the variations of the word.

Stemming will not find variants between British and American spellings. For example *color* will not find *colour* or *coloured*. But *colour* will find *colourful* or *colours*. To be inclusive, in this case you would need to search for *color* or *colour*.

The system automatically Autostems all key words except for Author names and words in quotations and/or braces. If you would like to avoid this, you can choose to select 'Autostemming off'.

In the example below, the phrase "micro computer" was put into the system, while the word 'Micro' was stemmed and "Computer" was not.

**SELECT DATABASE**

☐ All ☒ Compendex ☒ Inspec ☒ NTIS ?

**SEARCH FOR**

\$micro computer

AND

AND

**SEARCH III**

All fields  ?

All fields

All fields

**LIMIT BY**

Document type not available  ?

Treatment type not available  ?

**SORT BY**

☐ Relevance ? ☒ Publication year

☒ Autostemming off ?

When Autostemming is OFF, the system will retrieve only stemmed variations of the word "MICRO" leaving "COMPUTER" as it appears in the search; *Resulting in a smaller set of results.*

**SELECT DATABASE**

☐ All ☒ Compendex ☒ Inspec ☒ NTIS ?

**SEARCH FOR**

\$micro computer

AND

AND

**SEARCH III**

All fields  ?

All fields

All fields

**LIMIT BY**

Document type not available  ?

Treatment type not available  ?

**SORT BY**

☐ Relevance ? ☒ Publication year

☐ Autostemming off ?

When Autostemming is ON, the system will retrieve both variants of the word "MICRO" and the word "COMPUTER"; *Resulting in a larger set of results.*

## Proximity/Near Operator



Proximity/Near allows you to search for terms that are near or adjacent to each other within the text of the record.

Search for terms that are within 0-x terms of one another in any order:

*laser NEAR/4 diode*

Search for terms that are within 0-x terms of one another and searched in the order entered:

*laser ONEAR/5 diode*

Search for terms that are near and within the same index:

*laser NEAR/4 diode wn AB*

*laser ONEAR/5 diode wn TI*

Search for terms that are adjacent:

Space NEAR/0 stations

If no number of words is specified, four is assumed.

laser NEAR diode is the same as laser NEAR/4 diode

The near and onear commands do not work with truncation, wildcards, parenthesis, quotes or braces.

Proximity operators only work with Compendex, Inspec, NTIS and Referex. They do not work with CRC ENGnetBASE or USPTO.

## Wildcard and Truncation

### Wildcard (?)

A wildcard will replace a single character.

wom?n finds woman, women

t??th finds tooth, teeth, truth, tenth

### Multi-Character Wildcard (\*)

A multi-character wildcard can be used to replace 0-x number of characters anywhere in a word.

h\*emoglobin finds *hemoglobin, haemoglobin, hemidemiphosphorylmontotremoglobin*

### Truncation (\*)

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\** will return *computers, computing, computerize* etc.

### Left Truncation (\*)

The left truncation command retrieves all terms ending with the same letters as the truncated term.

Example: *\*sorption* returns *adsorption, absorption, desorption*

To avoid unexpected results, truncation should be used with care.

*color\** retrieves *color, colored, colors, Colorado*.

Truncation and wild cards cannot be used within quotation marks or braces or used with the near or onear command.

Using truncation or wildcards will turn off the stemming feature.

Wildcards and internal truncation only work with Compendex, Inspec, NTIS and Referex. They do not work with CRC ENGnetBASE or USPTO.

## 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}*

Proximity/Near can be used in this case as well.

*International ONEAR/0 space ONEAR/0 station*

Truncation and stemming cannot be used within quotation marks or braces but stemming can be used with the proximity operators, if all of the terms are stemmed. For example, \$electric ONEAR/0 \$guitars will find "electric guitar" or "electric guitars" but might also find "electrical guitars."

## Sorting from the Search Form

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 record (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 in descending order. Most recent years are displayed first: 2006, 2005, 2004, etc.

See also [Search Results, Post Search Sorting](#).

## Limits

### Document type

Document types are used to describe the type of source publications from which indexed papers are taken. Users should refer to the individual database help sections for a fuller description of the document types available in each database.

[Compendex Document Type](#)

[Inspec Document Type](#)

[Ei Patents Document Type](#)

### Treatment type

The treatment type is used to specify the slant or approach taken in the document. Users should refer to the individual database help sections for a fuller description of the treatment types available in each database

[Compendex Treatment Type](#)

[Inspec Treatment Type](#)

### Discipline (Inspec only)

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

### Language

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

To search for more than one language, or to search for additional languages not listed in the Quick Search pull-down menu, use Expert Search. A complete list of available languages within the Compendex, Inspec and NTIS databases - over 30 in all - is in the Language Browse Index in Expert Search.

## Date Limits

### Year Limits

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 five years, etc.

### Updates

Selecting this option allows you to limit your search by the 1, 2, 3, or 4 most recent weekly database updates.

## Browse Indexes

Search for:  Find Selected index: Ei controlled term ▼

Click on letter below to browse index:

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

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Select terms below to add to search

Connect terms with: ☐ AND ☒ OR

[Next page](#)

**electron**

- ☐ ELECTRON
- ☐ ELECTRON ABSORPTION
- ☐ ELECTRON BEAM
- ☐ ELECTRON BEAM BRAZING
- ☐ ELECTRON BEAM COMPUTED TOMOGRAPHY
- ☐ ELECTRON BEAM CUTTING
- ☐ ELECTRON BEAM FURNACES
- ☐ ELECTRON BEAM GENERATED
- ☐ ELECTRON BEAM LITHOGRAPHY
- ☐ ELECTRON BEAM MELTING
- ☐ ELECTRON BEAM PUMPING
- ☐ ELECTRON BEAM WELDING
- ☐ ELECTRON BEAMS
- ☐ ELECTRON CYCLOTRON RESONANCE
- ☐ ELECTRON DENSITY MEASUREMENT
- ☐ ELECTRON DEVICE MANUFACTURE
- ☐ ELECTRON DEVICE TESTING

From the Browse Indexes box (located on the right side of **Quick** and **Expert Search**), select the index you wish to use by clicking on the link.

Search for:  Find Selected index: Author ▼

Click on letter below to browse index:

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[Ka](#) [Kb](#) [Kc](#) [Kd](#) [Ke](#) [Kf](#) [Kg](#) [Kh](#) [Ki](#) [Kj](#) [Kk](#) [Kl](#) [Km](#) [Kn](#) [Ko](#) [Kp](#) [Kq](#) [Kr](#) [Ks](#) [Kt](#) [Ku](#) [Kv](#) [Kw](#) [Kx](#) [Ky](#) [Kz](#)

Select terms below to add to search

Connect terms with: ☐ AND ☒ OR

**kawato**

- ☐ KAWATO, AKINORI
- ☐ KAWATO, AKITSUGU
- ☐ KAWATO, EIZO
- ☐ KAWATO, ERATO
- ☐ KAWATO, HIROMI
- ☐ KAWATO, HIROSHI
- ☐ KAWATO, HITOSHI
- ☐ KAWATO, JUNJI
- ☐ KAWATO, KEN'ICHI
- ☐ KAWATO, KOUJI
- ☐ KAWATO, KOUSUKE
- ☐ KAWATO, M.
- ☐ KAWATO, MITSUO
- ☐ KAWATO, NOBUAKI
- ☐ KAWATO, S.
- ☐ KAWATO, SAKAE
- ☐ KAWATO, SHIN'ICHI
- ☐ KAWATO, SHINJIRO

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 **Quick Search**, when you select a term from the index, it is automatically pasted into the first available search box. The SEARCH IN box will also be changed to the appropriate field. Un-selecting the term from the index will remove it from the search box. If you select more than three terms, the fourth term will overwrite the term in the third search box.

You can also choose to have the second and third index terms pasted from the indexes with either a Boolean AND or OR connecting them.

In **Expert Search**, when you select a term from the index, it is automatically pasted into the search box 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. For example:

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

### Ei Patents Indexes

When searching the patents databases alone, two indexes are available:



**Inventor** - This field contains the inventor(s) names of patented item. You can search the index for a specific inventor by typing in the first letters of the name and clicking find. Next to each name, the patent database will be indicated in brackets i.e. US patent or European patent.

Search for: 

Selected index:

Click on letter below to browse index:

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)  
[Ya](#) [Yb](#) [Yc](#) [Yd](#) [Ye](#) [Yf](#) [Yg](#) [Yh](#) [Yi](#) [Yj](#) [Yk](#) [Yl](#) [Ym](#) [Yn](#) [Yo](#) [Yp](#) [Yq](#) [Yr](#) [Ys](#) [Yt](#) [Yu](#) [Yv](#) [Yw](#) [Yx](#) [Yy](#) [Yz](#)

Select terms below to add to search

Connect terms with: ☐ AND ☒ OR

[Next page](#)

**yamazaki**

- ☐ **YAMAZAKI** (US Patents, EP Patents)
- ☐ **YAMAZAKI** AKIHIRO (US Patents)
- ☐ **YAMAZAKI** C (US Patents)
- ☐ **YAMAZAKI** CHIKAYASU (US Patents)
- ☐ **YAMAZAKI** E (US Patents)
- ☐ **YAMAZAKI** EIICHI (US Patents)
- ☐ **YAMAZAKI** H (US Patents)
- ☐ **YAMAZAKI** HAYAO (US Patents)
- ☐ **YAMAZAKI** HIDEO (US Patents)
- ☐ **YAMAZAKI** HIROSHI (US Patents)
- ☐ **YAMAZAKI** ISAMU (US Patents)
- ☐ **YAMAZAKI** ISSEI (US Patents)
- ☐ **YAMAZAKI** J (US Patents)
- ☐ **YAMAZAKI** K (US Patents)
- ☐ **YAMAZAKI** KAORU (US Patents)
- ☐ **YAMAZAKI** KAZUHIKO (US Patents)
- ☐ **YAMAZAKI** KAZUKIYO (US Patents)

**Patent Assignee** - This field contains the name of the individual or entity to which ownership of the patent was assigned at the time of patent issue. You can search the index for a specific assignee by typing in the first letters of the name and clicking find. Next to each name, the patent database will be indicated in brackets i.e. US patent or European patent.

## Stop Words

Stop words are words that have significance within Engineering Village's search engine, and therefore require special handling to search. 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

Most special characters, anything other than a-z, A-Z, 0-9, ?, \*, #, ( ) or { }, are ignored by the search engine.

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

*{M/G/I}*

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

## Case Sensitivity

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

## 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.

## Session Information

When you begin a session, Engineering Village 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. (See instructions for registering for a [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.

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# Searching by Fields and Limits

## Compendex and Engineering Index Backfile Search Fields

The following fields are searchable in Compendex and Engineering Index Backfile.

### 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, Treatment type and Patent information (Assignee, Country of publication, Filing date, Issue date, Patent number, Engineering Index Backfile only).

*All Fields* is the default for Compendex.

### Abstract

Searching *Abstract* finds terms in the abstract field.

*(gold or au) wn AB*

### Accession number

The accession number is a unique number assigned to each record in Compendex. It is only displayed in the detailed record format. Accession number can be searched in All Fields in **Easy**, **Quick** or **Expert Searches** or by itself in **Expert Search**.

*93081058927 wn AN*

### 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 and 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, Donald M. etc.*

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

*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 names.

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 additional 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. Since 2001, the affiliation of the corresponding author has been 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 varied 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 present:

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

*1285 Electrical Engineering Building,*

*West Lafayette, IN 47907, United States*

Some commonly used abbreviations are :

Academy

Acad

Association

Assoc

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.*  
*Gothenburg Univ.*

An organization's name may change over the course of time, e.g.:

*Mobil* is now named *Exxon Mobil*

### 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 its 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. The Classification Code field is not searchable in the Engineering Index Backfile.

72\* wn CL  
"804.2" wn CL

Click [here](#) to view complete Compendex classification scheme. The first column contains the classification codes, the second column contains the related description.

### CODEN

CODEN are six character representations of serial titles. They can be used to limit results to a specific journal. CODEN can be found in *PIE: Publications in Engineering*, *Ulrich's Periodicals Directory* and *CASSI: Chemical Abstracts Service Source Index*. You can also find a journal's CODEN at the abstract and detailed level of a record.

MMPRE8 wn CN

### 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 do not contain conference codes.

13969 wn CC

### Conference Information

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

"Salt Lake City" wn CF

### 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 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 former 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:

*Electromagnetic 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.

In **Expert Search**, use CV to search for controlled terms:

*Geochemistry wn CV*

*"environmental impact" wn CV*

*{gold ore treatment} wn CV*

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.

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 in the article.



**ISBN (International Standard Book Number)**

ISBN 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 appears at the abstract or detailed level of a record. An ISBN is searchable in All Fields for **Easy**, **Quick** or **Expert Search** or individually according to the specific search code in **Expert Search**.

*0-87339-255-8 wn BN*

**ISSN (International Standard Serial Number)**

ISSN 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.

*0747-9812 wn SN*

**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 discussed in the article. All Main Headings are controlled vocabulary terms.

"ammonium compounds" in MH

**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. For example, *American Institute of Physics* is also referred to as:

*AIP*  
*AIP Press*  
*Am Inst Phys*  
*American Inst Phys*

In **Expert Search**, use PN to search this field:

*Elsevier wn PN*  
*"American institute of physics" wn PN*  
*{AIP Press} wn PN*

**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 *polymer\** in the "Serial title" field will retrieve citations whose sources will include:

*Polymers for Advanced Technologies*  
*Journal of Applied Polymer Science*, 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 look-up 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* by incorporating the ISSN.

**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.

This is an effective way to maximize the relevance of your search results.

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

*{international space station}*  
*"linear induction motors"*

**Title**

If you want to search for specific terms within an article's 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.

*Diffusion wn TI*  
*"radio frequency" wn TI*  
*{radio frequency} wn TI*

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, only the English language title is used; a non-English language title is not created.

### 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.

These are searchable in *All Fields* for **Easy**, **Quick** or **Expert Search** or individually according to the specific search code in **Expert Search**.

*"Auger ionization" wn FL*

*{stationary phase methods} wn FL*

## Engineering Index Backfile-specific fields

The following fields are only available for subscribers of the Engineering Index Backfile since patents have not been covered in Compendex since 1970. These are searchable in All Fields for **Easy**, **Quick** or **Expert Search** or individually according to the specific search code in **Expert Search**.

### Assignee

The person or organization that has been assigned a patent.

*"rainbow plastics" wn PE*

### Country of Application

The country or countries where a patent was applied for.

*"united states" wn PU*

### Filing Date

The date the patent was submitted to the patent office

*1967 wn PA*

### Patent Issue Date

The date the patent was issued.

*1968 wn PI*

**Patent Number** The number assigned to a patent

*3406416 wn PN*

## Compendex and Engineering Index Backfile Search Limits

### Document Type

Document types are used to describe the type of source publications from which indexed papers are taken. The document type field was added in 1985. Please note that limiting a search to a particular document type will exclude items added from 1969 to 1985.

In **Quick Search**, Document Type can be applied as a limit in the Document Type pull-down box.

In **Expert Search**, the document type can be selected from the Document Type Browse Index or searched directly:

*ca wn dt*

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 treatise 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 prepared in advance of formal publication

The Engineering Index Backfile also has a document type for **Patent** (before 1970).

### Treatment Type

The treatment type is used to specify the slant or approach taken in the document.

In **Quick Search**, Treatment Type can be applied as a limit in the Treatment Type pull-down box.

In **Expert Search**, the treatment type can be selected from the Treatment Type Browse Index or searched directly:

*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 Type. 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 that 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 that 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.

This treatment type 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.

### Language

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

To search for more than one language, or to search for additional languages not listed in the **Quick Search** pull-down menu, use **Expert Search**. A complete list of available languages within the Compendex database - over 30 in all - 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 Patents

## Ei Patents Search Fields

### 1 Search for Fields

As you select your databases, note that the field list changes accordingly.

When you search patents the following searching fields will be available:

**All Fields** - search all available fields

**Subject/title/abstract** - search in the patents' subject (controlled vocabulary terms), title and abstract

**Abstract** - search the patents' abstracts

**Inventor** - This field contains the inventor(s) names of patented item.

**Patent Assignee** - This field contains the name of the individual or entity to which ownership of the patent was assigned at the time of patent issue

**Title** - This field contains the title of the patent

**Patent Number** - This field contains the unique number assigned to applications that have issued as patents.

**Publication date** - This field contains the date the patent was officially issued by the US Patent and Trademark Office

**Application number** - This field contains the identification number assigned by the US Patent and Trademark Office to applications which have received a filing date.

**Priority number** - This field contains data indicating in which foreign country an application claims priority. The number is the foreign patent number that was assigned to the patent when first issued.

**International patent classifications** - This field contains the International classification(s) to which the patent has been assigned.

**USPTO classification** - This field contains the original and cross-reference classes in which the patent was classified at the time of the most recent PTO Master Classification File.

## Ei Patents Search Limits

### 2 Limits

When searching only the patents databases the 'limit by' option presents the following field only:

#### Document Type

"Application" is the request for a patent officially accepted by the patent authority

**European application** - limits your search to retrieve European patent applications only.

**US applications** - limits your search to retrieve US patent applications only

"Grants" are patents that have been officially granted by the patent authority.

**European Grants** - limits your search to retrieve European patent grants only.

**US grants** - limits your search to retrieve US granted patents only.  
Other search limitations available are:

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

**Year**  
limits your search for a certain year range. In the patents search, the earliest year available is 1790.

**Update**  
limits your search to 1-4 latest database updates. The patents databases are updated weekly.

## Inspec and Inspec Archive Search Fields

### Inspec and Inspec Archive 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, Title, Classification code, Translation Serial title, Discipline, Language and Treatment type.

*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.

*"solar energy"*  
*{graphical user interface}*  
*(gold or fe) 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. Accession number is searched in All Fields in **Easy**, **Quick** or **Expert Searches** or by itself in **Expert Search**:

*8195544 wn AN*

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

Name-based acronyms:  
*LMC wn AI* (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).  
*"HR 3237" wn AI*

Positional information only:  
*"4U 0115+63" wn AI*

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**  
Inspec 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.*  
*Brown, A.C., Jr.*

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

*Jones, A\* retrieves*  
*Jones, A. A*  
*Jones, A. B.*  
*ones, 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. For instance, 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.

#### 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 includes the name, 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.

#### 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 and Electronic Engineering)  
 C (Computers and 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

The following [table](#) contains the Outline of Inspec Classification scheme.

#### CODEN

CODEN are six character representations of serial titles. They can be used to limit results to a specific journal. CODEN can be found in Inspec's List of Journals 2004, Ulrich's Periodicals Directory and CASSI: Chemical Abstracts Service Source Index. 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.

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

### ISBN (International Standard Book Number)

ISBN 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 record. An ISBN is searchable in All Fields for **Easy**, **Quick** or **Expert Search** or individually according to the specific search code in **Expert Search**.

*0-13-489089-2 wn BN*

### ISSN (International Standard Serial Number)

ISSN 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.

### Material Identity Number (1996 - present)

This field contains an internal Inspec code uniquely identifying the publication issue for serials or the entire publication for non-serials. 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.

*"0646-2002-002" 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 W*  
*32000 kW*  
*32 MWatts*, 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. For example, *American Institute of Physics* can appear 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 *polymer\** will retrieve citations whose sources will include:

*Polymers for Advanced Technologies*  
*Journal of Applied Polymer Science*, etc.

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

*{X-Ray Spectrometry}*  
*"Journal of X-Ray Science and Technology"*

As variations of serial title names sometimes appear, it is a good idea to use the Serial Title Browse Index. The look-up index also includes serial monographs and conference titles. The Serial Title Browse Index also allows you to search on an exact title match, e.g. *Science*, by including the ISSN.

### Subject/Title/Abstract

Searching for Subject/Title/Abstract retrieves results from any of the following fields: *Abstract*, *Title*, *Controlled terms* or *Uncontrolled terms*. It is helpful for maximizing the relevance of your search results.

### Title

If you want to search for specific terms within a document's title, search on the *Title* field. Words in a title are often an indication of the importance of those terms in the article. For example, "radio frequency" in the title will likely find articles where *radio frequency* is an important aspect of the article.

All titles in Inspec are in English.

### 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, but can reflect new expressions and terminology used in a particular discipline. 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*

## Inspec and Inspec Archive Search Limits

### Disciplines

You can limit your search to one of five main subject areas covered by Inspec. In **Quick Search**, the Discipline is a limit and can be selected from a drop-down menu. In **Expert Search**, it is searchable. 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 **Quick Search**, the document type is a limit and can be selected from a drop-down menu. In **Expert Search**, it is searchable.

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 (before 1976)

### Language

In **Quick Search**, language can be applied as a limit from the language pull-down.

In **Expert Search**, language can be searched directly or selected from the Language Browse Index

*chinese 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*

### Treatment Type

Treatment types indicate the slant of the article. In **Quick Search**, Treatment Type can be applied as a limit in the Treatment Type pull-down box.

In **Expert Search**, the document type can be selected from the Treatment Type Browse Index or searched directly

*ECO wn tr*



Inspect treatment types:

**All treatment types**(default)

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

**Bibliography** - anything with 50 or more references

**Economic** - where document deals with economic commercial aspects: cost, pricing, market forecasts, 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 an unfamiliar field. Often layman's language or non-technical

**New developments** - anything new or novel in patentable sense

**Practical** - practical use; hands on approach

**Product 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

A record may have one or more treatment types. However, not all records have been assigned treatment types.

## NTIS

### NTIS 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, Title, Availability, Language, Notes, Patent filing date, Patent issue date, Uncontrolled term and Document type.

#### Abstract

Searching *Abstract* finds terms in the abstract field.

#### Accession Number

This is a unique NTIS order number. Formats vary. It is searchable in *All Fields* for **Easy**, **Quick** or **Expert Search** or individually according to the specific search code in **Expert Search**.

*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.*

#### 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.

#### Controlled Terms

The controlled terms are assigned by indexers to describe the subject of the document. 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 is only a partial list, and does not include the hundreds of document type variations found in the database.

**Filing Date**

This is the date the patent application was filed.

**Monitoring Agency**

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

**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.

**Notes**

The NTIS database provides several notes fields that 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 alphanumeric numbers, e.g. *EPA/600/J-94/280*

**Subject/Title/Abstract**

This field will retrieve records from the abstract, title, controlled and uncontrolled terms. This is helpful for maximizing the relevance of your search results.

**Title**

If you want to search for specific terms within a document's title, search on the *Title* field. Words in a title are often an indication of the importance of those terms in the article. For instance, "*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. They often describe new technology and terminology.

**NTIS Search Limits****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

*turkish wn la*

A complete list of languages available in the NTIS database is available 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*

**Geobase****Geobase Special Index Fields****Regional descriptor**

This data element is used for regional descriptors assigned to the record.

e.g. *United States - Arizona - Grand Canyon*

*Atlantic Ocean - Mid - Atlantic Ridge*

**Species descriptor**

Species are controlled against an authority list introduced in 1999. Taxonomic groups higher than genera (e.g. family names) are also indexed, though less commonly.

e.g. *Oscillatoria bourellyi*

*Gerris buenoi*

## Combined Databases

### Searching both patents and bibliographic information

When you select patent database(s) and bibliographic database(s) you will notice the following changes in your search screen:

The screenshot shows the Engineering Village search interface. At the top, there are tabs for 'Easy Search', 'Quick Search', 'Expert Search', 'Thesaurus', 'eBook Search', 'Ask an Expert', and 'Help'. The 'Easy Search' tab is active. Below the tabs, there is a 'SELECT DATABASE' section with checkboxes for 'All', 'Compendex', 'Inspec', 'NTIS', 'US Patents', and 'EP Patents'. The 'SEARCH FOR' section has three input fields with 'AND' operators. The 'LIMIT BY' section has dropdowns for 'Document type not available', 'Treatment type not available', 'Discipline type not available', and 'All languages', along with date ranges (1884 to 2006) and 'Updates'. The 'SEARCH IN' dropdown menu is open, showing options: 'All fields', 'Subject/Title/Abstract', 'Abstract', 'Author', 'Author affiliation', 'Title', and 'Controlled term'. A red arrow labeled '1' points to the 'Subject/Title/Abstract' option. The 'Browse Indexes' panel on the right shows links for 'Author', 'Author affiliation', and 'Controlled term'. A red arrow labeled '2' points to this panel.

**1 Search In Fields:** this option will now have the following fields available for searching:

**Subject/title/abstract** - search key words in the records subject field, title or abstracts.

**Abstract** - search key words in the abstract only

**Author (inventor)** - use a key word search for an author name or inventor name

**Author affiliation (assignee)** - use a key word search for an author affiliation or assignee (institution or company the author belongs to)

**Title** - search key words in titles

**Controlled term** - use a key word search for a controlled term (index term)

**2 Indexes** - the indexes presented in a combined search are author / inventor, author affiliation/ assignee. When searching these indexes you will be able to conduct a search on author and inventor names as well as assignee and affiliation names. These indexes accommodate both patent data and bibliographic data.

### Facets change

When you search patents and bibliographic information together, the facets for refining your search change accordingly and will accommodate data retrieved from the different databases. The facets that will change are:

#### Databases

This facet reveals how many records were retrieved from each of the databases that you selected for your search. You can refine your search by selecting one or more databases and including or excluding them from your search. The number in brackets identifies how many records were retrieved.

**Author/inventor** In a combined patent / bibliographic search, this facet will now contain the most prominent authors as well as inventors.

**Author/Inventor**

- ☐ Vaidyanathan, P. P. (547)
- ☐ Swamy, M. N. S. (529)
- ☐ Mitra, S. K. (456)
- ☐ Venetsanopoulos, A. N. (375)
- ☐ Kailath, T. (328)
- ☐ Antoniou, A. (327)
- ☐ Neuvo, Y. (302)
- ☐ Tay, B. K. (284)
- ☐ Hinamoto, T. (275)
- ☐ Ramachandran, V. (269)

**Notes:**

When selecting an author/ inventor whose publications are found within one type of database (i.e. patents or bibliographic), the facets will automatically change accordingly. For example, if you select an author that only appears in the Compendex database and doesn't have any patents records, the facets on your search result screen will show only those that are applicable to Compendex omitting any facet that is derived from the patents databases.

In order to go back and see the patents' facets, you will have to delete that author/s from your search by clicking the red 'x' sign next to the added author/s name/s.

**Author affiliation/ assignee**

In a combined patent / bibliographic search, this facet will now contain the most prominent institutions and companies publishing patents or other scientific documents on the searched topic.

**Author affiliation/Assignee**

- ☐ Canon Kabushiki Kaisha (3771)
- ☐ Siemens Aktiengesellschaft (3681)
- ☐ Matsushita Electric Industrial Co., Ltd. (3634)
- ☐ The Procter & Gamble Company (3288)
- ☐ Eastman Kodak Company (3200)
- ☐ Nec Corporation (3045)
- ☐ Sony Corporation (2700)
- ☐ International Business Machines Corporation (2534)
- ☐ Kabushiki Kaisha Toshiba (2340)
- ☐ Hitachi, Ltd. (2137)

In order to discover if the institution or company published mostly patents or other publications, select the name/s and include them in your search. From the search results page you will be able to sort by 'source'. The source will contain either the bibliographic database/s or the patent database/s.

**Document type**

This facet reveals what types of documents were mostly published on the topic. The number in brackets is the number of records retrieved for each from the document type. From this list you can isolate certain types of documents to be searched by selecting them and including them in your search. You can select more than one document type to be included or excluded from your search.

**Document Type**

- ☐ Patent (479789)
- ☐ Journal article (265304)
- ☐ Conference article (182994)
- ☐ Conference proceeding (3994)
- ☐ Report review (1228)
- ☐ Monograph chapter (661)
- ☐ Monograph review (396)
- ☐ Dissertation (376)
- ☐ Report chapter (112)
- ☐ Standard (50)

## Combined Search Fields

**Easy Search** **Quick Search** **Expert Search** **Thesaurus** **eBook Search** **Ask an Expert** **Help**

**SELECT DATABASE**

☐ All ☒ Compendex ☒ Inspec ☒ NTIS ?

**SEARCH FOR**

diode

AND

AND

**SEARCH IN**

All fields ?

All fields

All fields

All fields

Subject/Title/Abstract

Abstract

Author

Author affiliation

Controlled term

Title

**LIMIT BY**

Document type not available ?

Treatment type not available ?

Discipline type not available ?

All languages

1884 TO 2006

**Search** **Reset**

**Browse Indexes** ?

[Author](#)

[Author affiliation](#)

[Controlled term](#)

Combined searches allow you to search multiple databases simultaneously and remove duplicate records. The databases available are determined by the subscriptions held by your institution.

The fields available depend on the databases selected. Only fields that are common to all available databases will be searchable in **Quick Search**. For example, CODEN is not available in NTIS so will not appear in the **Search In** drop-down menu for any combination of databases containing NTIS.

In **Expert Search**, the Search Codes box contains an amalgamated list of all search codes from all databases, with a letter identifying the source database: C for Compendex, I for Inspec and N for NTIS. These help identify which fields are available in each database; e.g. *Accession number (C,I,N)* for a field common to all three, or *Monitoring agency (N)* to designate a field unique to NTIS, which would return zero hits in Compendex and Inspec.

[Easy Search](#)
[Quick Search](#)
[Expert Search](#)
[Thesaurus](#)
[eBook Search](#)
[Ask an Expert](#)
[Help](#)

**SELECT DATABASE**  
☐ All
 ☒ Compendex
 ☒ Inspec
 ☒ NTIS ?

**ENTER SEARCH TERMS BELOW**  
 polymers wn TI and fuel cells wn  
 CV

**SEARCH FROM**  
☒ 1884 TO 2006  
☐ 1 Updates ?

**SORT BY**  
☐ Relevance ?
 ☒ Publication year  
☒ Autostemming off ?

[Search](#)
[Reset](#)

**Browse Indexes ?**  
[Author](#)  
[Author affiliation](#)  
[Controlled term](#)  
[Language](#)  
[Serial title](#)  
[Publisher](#)  
[Treatment type](#)  
[Document type](#)  
[Discipline](#)

**Search Codes ?**  
 C Compendex I Inspec N NTIS

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

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

The field descriptions for each database should be consulted.

- [Compendex and Engineering Index Backfile](#)
- [Inspec and Inspec Archive](#)
- [NTIS](#)
- [Ei Patents](#)

#### Combined Search Limits

The limits provided are restricted to limits common to combined databases, e.g. publication year, language, etc..

The search limits for each database should be consulted.

- [Compendex and Engineering Index Backfile](#)
- [Inspec and Inspec Archive](#)
- [NTIS](#)
- [Ei Patents](#)

#### Browse Indexes

Search for:  Find Selected index:

Click on letter below to browse index:

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[Fa](#) [Fb](#) [Fc](#) [Fd](#) [Fe](#) [Ff](#) [Fg](#) [Fh](#) [Fi](#) [Fj](#) [Fk](#) [Fl](#) [Fm](#) [Fn](#) [Fo](#) [Fp](#) [Fq](#) [Fr](#) [Fs](#) [Ft](#) [Fu](#) [Fv](#) [Fw](#) [Fx](#) [Fy](#) [Fz](#)

Select terms below to add to search

Connect terms with: ☐ AND ☒ OR

[Next page](#)

**fuel**

- ☐ **FUEL** (Inspec, NTIS)
- ☐ **FUEL** ADDITIVE (NTIS)
- ☐ **FUEL** ADDITIVES (Compendex, NTIS)
- ☐ **FUEL** ADDITIVES (NTIS)
- ☐ **FUEL** ADJUSTMENT MECHANISMS (NTIS)
- ☐ **FUEL** AIR EXPLOSIVES (NTIS)
- ☐ **FUEL** AIR MIXTURES (NTIS)
- ☐ **FUEL** AIR RATIO (NTIS)
- ☐ **FUEL** ALTERNATIVES (NTIS)
- ☐ **FUEL** ANALYSES (NTIS)
- ☐ **FUEL** ANALYSIS (NTIS)
- ☐ **FUEL** ASSEMBLIES (NTIS)
- ☐ **FUEL** ASSEMBLY DISMANTLING (NTIS)
- ☐ **FUEL** ASSEMBLIES (NTIS)
- ☐ **FUEL** BEHAVIOR (NTIS)
- ☐ **FUEL** BLENDING (NTIS)
- ☐ **FUEL** BLENDS (NTIS)

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 combined searches have the database containing terms indicated after each entry.

The field preference takes precedence over the database preference. If, for example you select 'Full text' from the field preference and 'Compendex' from the Database preference and there are no full text records in Compendex, the system will retrieve full text records from Inspec although Compendex was your preferred database.

## Removing Duplicate Records

### Deduplication Feature

Deduplication is available for Compendex and Inspec databases only.

You will see the duplication removal option only when you select more than one database for your search.

**Search Results**

705889 records in Compendex, Inspec, NTIS & EP Patents for 1790-2006

[+\(\(filters\) WN All fields\)](#) [Remove Duplicates](#) - [Save Search](#) - [Create Alert](#) - [RSS](#) [?](#)

Once the remove duplicates link is chosen, a new screen will open. This screen contains several options for duplicates removal:

## Remove Duplicates

Duplicate records will be removed from the first 1000 records in the result set. Use the form below to choose the fields and the database that you prefer to see results from.

### Field Preferences: ?

- ☒ No field preference  
☐ Has Full Text  
☐ Has Abstract  
☐ Has Index Terms

### Database Preferences: ?

Compendex ▼

Continue

Select the type of records that you will prefer to see. Choose from full text, abstract or index terms. In this option you are given the flexibility to decide which types of records you prefer to see in the deduplicated set of results. For example, if you click 'Has Full Text' the system will remove duplicates that do not have a full text and leave those that do.

Select which database you prefer to see results from. For example, if you chose "Compendex", the system will remove the duplicates from Inspec and leave the unique records from Compendex and vice versa.

After selecting your preferences, click 'continue'.

The new results page, featuring a deduplicated set will appear.

**Deduplication Summary**

Deduplication criteria	Full Text Preferred; Compendex Preferred
Original search	705889 Total records for ((filters) VN All fields), 1790-2006
Duplicates removed	2 Total (0 Compendex, 2 Inspec)
Deduplicated set	998 Total (319 Patents, 346 Compendex, 309 Inspec, 24 NTIS)

☐ 1. **Multitasking during Web search sessions**  
[Spink, Amanda](#) (School of Information Sciences, University of Pittsburgh, 610 IS Building); [Park, Minsoo](#); [Jansen, Bernard J.](#); [Pedersen, Jan](#) Source: *Information Processing and Management*, v 42, n 1 SPEC. ISS, January, 2006, p 264-275  
 Database: Compendex  
[Abstract](#) - [Detailed](#) - [Full-text](#)

Callouts in the image:  
 1: Points to the Deduplication criteria.  
 2: Points to the Original search.  
 3: Points to the Duplicates removed.  
 4: Points to the Deduplicated set.

**1** Deduplication criteria are presented for your review.

**2** The original search is presented.

**3** The total number of records removed in the deduplication process is presented. In brackets you can see how many records were removed and from which database.

**4** The total number of original deduplicated records from each database is displayed along with the number remaining from each data source.

**D** This sign indicates that a duplicate record was removed.

Clicking this sign will open a new window containing the record's detailed format and the database it was removed from.

For example, if Compendex was the preferred database, and a duplicate record, appearing in Inspec was removed from your set, this sign will show you the record in Inspec. This feature keeps you informed about the specific records that were removed and gives you a possibility to look at the record although you chose to remove it.

**Note:** Once the deduplication button is pressed, Faceted Search Results will no longer appear on the screen.

## CRC ENGnetBASE Search



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 November 2004, ENGnetBASE has more than 229 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 at <http://www.engnetbase.com/>

Proximity operators, wildcards and internal truncation do not work with CRC ENGnetBASE.

If your organization does not subscribe to CRC ENGnetBASE, you can still search and locate information, but will not be able to view the full text online.

**USPTO Search**

USPTO provides access to a full text patent database, which currently contains over six million patents recorded at the U.S. Patent and Trademark Office. 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, at <http://www.uspto.gov/>. This site also contains information about the plug-ins that may be necessary to view and download the full-text of the patents with images.

**Selecting fields to search**

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

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

- All fields
- Title
- Abstract
- Issue date
- Patent number
- Application date
- Application serial number
- Application type
- Assignee name
- 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
- Parent case info
- Attorney/Agent
- PCT information
- Foreign priority
- Reissue data
- Related US Application data
- US references
- Foreign references
- Other reference
- Claim(s)
- Description/Specification.

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, with no punctuation:

Yeh George  
Clark George C

### Date Formats

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: 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).

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.

## Ei Patents

### Search Results

1

**Device and methods for subdividing and filtering gel material and extracting molecules therefrom**

[Amshey, Joseph W.](#); [Bogoev, Roumen A.](#); [Whitney, Scott E.](#) **Assignee:** Invitrogen Corporation

**Publication Number:** US6916423 **Publication date:** 07/12/2005 **Kind:** Utility Patent Grant (with pre-grant publication)

**Database:** US Patents

[Abstract](#) - [Detailed](#) - [Patent Refs](#) (13) - [Other Refs](#) (5) - [Full-text](#)

**TRIAZINE COMPOUNDS AND THEIR USE IN FORMING MULTIDIMENSIONAL LIBRARIES FOR AFFINITY CHROMATOGRAPHY**

[HUSSAIN, Abid](#); [PEARSON, James C.](#); [BURTON, Steven James](#); [Prometic Biosciences Ltd](#) **Publication Number:** EP1569918 **Publication date:** 09/07/2005 **Kind:** Application with Search Report

**Database:** EU Patents

[Abstract](#) - [Detailed](#) - [Full-text](#)

1 Records retrieved from a patents search have the inventor/s name hyperlinked from the search results screen. When clicking the name a new search will be performed on the inventor's name, retrieving only patents that were invented by that person whether alone or collaborating with others.

Check record to add to Selected Records

☐ 5. **Publication Number:** US6919002

**Patent number:** 6919002

**Patent country:** US

**Kind:** B2 - Utility Patent Grant (with pre-grant publication)

**Title:** Nanopore system using nanotubes and C60 molecules

**Inventors:** [Chopra, Nasreen G.](#) (US)

**1** → **Assignee:** [Agilent Technologies, Inc.](#)

**Primary examiner:** [Noguerola, Alex](#)

**Publication date:** 07/19/2005

**Publication year:** 2005

**Application number:** 20030215376

**Application date:** 11/20/2003

**Application number:** 150672

**Undstandardized application number:** 10150672

**application country:** US

**Abstract:** A nanopore system, and manufacturing method therefor, is provided with a substrate having a support material over the substrate. A nano-structure in the support material forms a nanopore.

**1** To perform search on the assignee to discover other patents issued by it, click on the detailed record view. The assignee name is hyperlinked within this view.

[Back to top ^](#)

## Search Results

### Record Attributes

Easy Search Quick Search Expert Search Thesaurus eBook Search Ask an Expert Help

Refine Search New Search Next Page 1-25

**Results Manager**

Select all on page - Select range:  to  - Clear all on page - Clear all selections

Choose format: ☒ Citation ☐ Abstract ☐ Detailed record ☒ Clear selected records on new search

View Selections E-Mail Print Download Save to Folder

**Search Results**

481194 records in Compendex & Inspec for 1884-2006 Remove Duplicates - Save Search - Create Alert - RSS ?

+(filters) WN All fields

Sort by: Relevance Date Author Source Publisher

- ☐ **Suppression of NO and SO<sub>2</sub> cross-sensitivity in electrochemical CO<sub>2</sub> sensors with filter layers**  
[Hong, Hyun Seok](#) (Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology); [Kim, Jun Woong](#); [Jung, Sang Jiny](#); [Park, Chong Ook](#) Source: *Sensors and Actuators, B: Chemical*, v 113, n 1, Jan 17, 2006, p 71-79  
 Database: Compendex  
[Abstract](#) - [Detailed](#) - [Full-text](#) - [Test China Linking Service](#) - [Test all fields](#)
- ☐ **Using wettability and interfacial tension to handle droplets of magnetic beads in a micro-chemical-analysis system**  
[Shikida, Mitsuhiro](#) (EcoTopia Science Institute, Nagoya University); [Takayanagi, Kentaro](#); [Inouchi, Kohta](#); [Honda, Hiroyuki](#); [Sato, Kazuo](#) Source: *Sensors and Actuators, B: Chemical*, v 113, n 1, Jan 17, 2006, p 563-569  
 Database: Compendex  
[Abstract](#) - [Detailed](#) - [Full-text](#) - [Test China Linking Service](#) - [Test all fields](#)
- ☐ **Speciation of Pb, Cu and Zn determined by sequential extraction for identification of air pollution sources in Syria**  
[Al-Masri, M.S.](#) (Department of Protection and Safety, Atomic Energy Commission of Syria); [Al-Kharfan, K.](#); [Al-Shamali, K.](#) Source: *Atmospheric Environment*, v 40, n 4, February, 2006, p 753-761

**Refine Results** ? Help

Include Exclude

**Database**

☐ Compendex (230229)  
☐ Inspec (250965)

**Author**

☐ Swamy, M. N. S. (526)  
☐ Vaidyanathan, P. P. (514)  
☐ Mitra, S. K. (449)  
☐ Venetsanopoulos, A. N. (374)  
☐ Antoniou, A. (325)  
☐ Neuvo, Y. (302)  
☐ Tay, B. K. (283)  
☐ Hinamoto, T. (275)  
☐ Ramachandran, V. (269)  
☐ Kollath, T. (238) [more...](#)

**Author affiliation**

☐ Univ Of California (919)  
☐ Jet Propulsion Lab., California Inst. Of Technol., Pasadena, Ca (446)  
☐ Dept. Of Electr. Eng., Nat. Taiwan Univ., Taipei (441)  
☐ Dept. Of Electr. Eng., Texas Am Univ., College Station, Tx (373)  
☐ Massachusetts Inst Of Technology (365)

Search results from the bibliographic databases appear by default in the citation format, which provides enough information to identify the source publication. To view a record in its abstract or detailed format, click on the Abstract or Detailed Record hyperlinks beneath each individual citation.

To e-mail, print, download or save one or more individual citations, abstracts or detailed records, mark it with a checkbox, choose a format and then pick an output option from within the Results Manager box. See **Working with Selected Records** for more information on outputting records.

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

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Record 28 from Inspec for:(((steel frame) WN All fields) AND ((structural frame) WN KY)), 1884-2006

Check record to add to Selected Records

☐ 28. **Investigation on demagnetization of residual magnetization in architectural components using 3-D magnetic field analysis**  
[Yamazaki, K.](#) (Res. & Dev. Inst., Takenaka Corp., Chiba, Japan); [Kato, K.](#); [Hirotsato, S.](#); [Muramatsu, K.](#); [Shimizu, T.](#); [Sato, T.](#); [Haga, A.](#); [Fujiwara, K.](#) **Source:** *IEEE Transactions on Magnetics*, v 41, n 5, May 2005, p 1976-9  
**ISSN:** 0018-9464 **CODEIN:** IEMGAQ  
**Publisher:** IEEE, USA

**Abstract:** In order to investigate an effective method for removing the residual magnetization in the **steel structure** of a building by a demagnetizing coil, a method for estimating the distribution of residual magnetization by means of a three-dimensional nonlinear eddy-current analysis was proposed. The tendency of the result obtained from the proposed method was in good agreement with the experimental result. Moreover, it was found that the demagnetizing coil should be set perpendicular to the **steel structure** (2 refs.)

**Inspec controlled terms:** [demagnetisation](#) | [eddy currents](#) | [finite element analysis](#) | [magnetisation](#) | **steel** | **structural engineering**

**Database:** Inspec

**Full-text and Local Holdings Links**

[Test China Linking Service](#) | [Test all fields](#) | [test new lockform](#) | [Cross Ref](#) | [Test email](#)

[Full-text](#)

The Detailed Record format also includes hyperlinked classification codes, CODEN, ISSN, ISBN, Conference Code (Compendex), Materials Identity Number (Inspec) 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.

[Easy Search](#) [Quick Search](#) [Expert Search](#) [Thesaurus](#) [eBook Search](#) [Ask an Expert](#) [Help](#)

[Search Results](#) [New Search](#) [Previous Page](#) [Next Page](#)

[Abstract](#) | [Detailed Record](#) | [Full-text](#) [Blog This](#) [E-Mail](#) [Print](#) [Download](#) [Save to Folder](#)

Record 28 from Inspec for:(((steel frame) WN All fields) AND ((structural frame) WN KY)), 1884-2006

Check record to add to Selected Records

☐ 28. **Accession number:** 8441521  
**Title:** Investigation on demagnetization of residual magnetization in architectural components using 3-D magnetic field analysis  
**Authors:** [Yamazaki, K.](#); [Kato, K.](#); [Hirotsato, S.](#); [Muramatsu, K.](#); [Shimizu, T.](#); [Sato, T.](#); [Haga, A.](#); [Fujiwara, K.](#)  
**First author affiliation:** Res. & Dev. Inst., Takenaka Corp., Chiba, Japan;  
**Serial title:** IEEE Transactions on Magnetics  
**Abbreviated serial title:** IEEE Trans. Magn. (USA)  
**Volume:** 41  
**Issue:** 5  
**Publication date:** May 2005  
**Pages:** 1976-9  
**Language:** English  
**ISSN:** [0018-9464](#)  
**CODEN:** [IEMGAQ](#)  
**Document type:** Journal article (JA)

In the Citation, Abstract and Detailed Record formats, links to full text or local holdings may be provided by your library. The links can provide access to full text at the publisher site, direct you to the copy from within your library's local OPAC, or provide a document delivery or interlibrary loan form for ordering the found document.

**View the patents' records:**

**Abstract view** - this option will show the patent abstract

The screenshot shows the Engineering Village search results page. At the top, there's a navigation bar with links like 'Search History', 'Selected Records', 'My Profile', and 'My Alerts'. Below this is a search bar with tabs for 'Easy Search', 'Quick Search', 'Expert Search', 'Thesaurus', 'eBook Search', 'Ask an Expert', and 'Help'. The main content area displays search results for 'Record 1 from US Patents for: ((filter) VN All fields), 1959-2006'. It includes a checkbox to 'Check record to add to Selected Records' and a list of search results. The first result is '1. Prosthesis comprising an expansible or contractile tubular body' by 'Wallsten, Hans I.' with 'Publication Number: US4655771' and 'Publication date: 04/07/1987'. The abstract describes a prosthesis for transluminal implantation. Below the abstract, there are links for 'Full-text' and 'Local Holdings Links'. The page also shows 'IPC Code: A61F2/06' and 'US Classifications: 623/66 - 128/334R - 623/1 - 604/282 - 604/281 - 128/335 - 623/12 - 128/343'. The database is identified as 'US Patents'.

From this window you can navigate through different views by clicking any of the hyperlinked options at the top of the page i.e. detailed, patent references, non patent references, cited by or full text.

**Other features:**

The key words searched are highlighted in red.

The initial search string is showing at the top of the record.

**Detailed view**

The detailed view of the patents shows the bibliographic information associated to the patent. This includes:

The screenshot shows the detailed view of a patent record. It includes a checkbox to 'Check record to add to Selected Records' and a list of search results. The first result is '5. Publication Number: US6919002'. The patent number is '6919002' and the patent country is 'US'. The kind is 'B2 - Utility Patent Grant (with pre-grant publication)'. The title is 'Nanopore system using nanotubes and C60 molecules', with 'molecules' highlighted in red. The inventors are 'Chopra, Nasreen G. (US)'. The assignee is 'Agilent Technologies, Inc.', with a red arrow pointing to it from a yellow circle containing the number '1'. The primary examiner is 'Noguerola, Alex'. The publication date is '07/19/2005' and the publication year is '2005'. The application number is '20030215376' and the application date is '11/20/2003'. The application number is also '150672' and the undstandardized application number is '10150672'. The application country is 'US'. The abstract describes a nanopore system and manufacturing method therefor, provided with a substrate having a support material over the substrate. A nano-structure in the support material forms a nanopore.

**Publication Number** - patent number with the appropriate patent authority ( i.e. US or EU).

**Patent number** - Patent number excluding the country code.

**Patent country** - in which country was the patent issued

**Kind** - These codes indicate the version or the level of examination of a patent. Kind codes are issued by different patents authorities and are country specific. The bibliographic information provides you with the kind code and its description (i.e. A- Utility Patent Grant). [Full list of Kind codes by country](#)

**Title** - Patent title is presented with the key words highlighted in red when applicable.

**Inventor/s** - presents the name of the person/s who invented the patent. All the names are hyperlinked. In order to perform a search on an author, you can click the name.

**Assignee** - the person or entity to which the patent was issued is hyperlinked within the record. To perform search on the assignee to discover other patents issued by it, click on the name that appears in the detailed record.

**Primary Examiner** - a patent office official who is appointed to determine the patentability of applications.

**Attorney, Agent or Firm** - (may be referred to as a practitioner or representative) - an individual who is a member in good standing of the bar of any United States court or the highest court of any State and who is registered to practice before the Office. An agent (may be referred to as a practitioner or representative) - one who is not an attorney but is authorized to act for or in place of the applicant(s) before the Office, that is, an individual who is registered to practice before the Office.

**Publication date** - a patent publication date

**Publication year** - a patent publication year

**Application Number** - The unique number assigned to a patent application when it is filed. The application number includes a two digit series code and a six digit serial number

**Unstandarized Application Number** - Application serial number

**Abstract** - an abstract as it appears on the patent's cover sheet

**Field of search** - what technological field/s were searched by the examiner when checking application patentability.

**Document type** - states whether the patent is an US or EU application or grant

**Int. patent classification** - The International Patent Classification (IPC) is a hierarchical system in which the whole area of technology is divided into a range of sections, classes, subclasses and groups. This system is indispensable for the retrieval of patent documents in the search for establishing the novelty of an invention or determining the state of the art in a particular area of technology. For more information see [http://www.wipo.int/classifications/fulltext/new\\_ipc/](http://www.wipo.int/classifications/fulltext/new_ipc/)

**US patent classification** - patents are classified (*organized*) in the U.S. by a system using a 3 digit class and a 3 digit subclass to describe every similar grouping of patent art. A single invention may be described by multiple classification codes. To find out more about classification numbers see the Manual of Patents Classification at: <http://www.uspto.gov/web/patents/classification/>

ECLA Codes - European classification codes. For more information see <http://v3.espacenet.com/eclasrch><http://v3.espacenet.com/eclasrch>

**Database:** from which patent database was the patent retrieved.

**Other features:** The key words searched are highlighted in red.  
The initial search string is showing at the top of the record.

## Patent References



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[Easy Search](#) [Quick Search](#) [Expert Search](#) [Thesaurus](#)

[Search Results](#) [New Search](#)

[Abstract](#) - [Detailed](#) - [Patent Refs](#) (9) - [Cited by](#) (670) - [Full-text](#)

There are 9 patent references for the following patent:

**Prosthesis comprising an expansible or contractile tubular body**  
[Wallsten, Hans I.](#) Assignee: Shepherd Patents S.A. Publication Number: US4655771 Publication date: 04/07/1987 Kind: Utility Patent Grant  
 Database: US Patents

**References**

[E-Mail](#) [Print](#) [Download](#) - Select range:  to  [99](#) - [Select all on page](#) - [Clear all on page](#)

☐ 1. **Vascular graft**  
[Kaster, Robert L.](#) Publication Number: US4441215 Publication date: 04/10/1984 Kind: Utility Patent Grant  
 Database: US Patents  
[Abstract](#) - [Detailed](#) - [Patent Refs](#) (18) - [Cited by](#) (120) - [Full-text](#)

☐ 2. **Method for performing aneurysm repair**  
[Choudhury, M. Hasan](#) Publication Number: US4140126 Publication date: 02/20/1979 Kind: Utility Patent Grant  
 Database: US Patents  
[Abstract](#) - [Detailed](#) - [Patent Refs](#) (11) - [Other Refs](#) (2) - [Cited by](#) (348) - [Full-text](#)

In the patent references view you can see all the patents that are being cited in the patent. (i.e. There are 9 patents references for the following patent)

These references are considered a part of the 'prior art' that the inventor must refer to when applying for a patent grant.

Prior art is a broad term that describes all information that has been disclosed to the public in any form before a given date. However, under United States patent law, secret prior art, such as secret sales, qualifies as prior art in certain circumstances. In Europe, prior art does not include information kept secret, whether from trade secrecy or just a simple lack of interest in publication.

A list of all the referenced patents is shown.

The records will be automatically selected.

The records can be emailed, printed or downloaded.

### Other References

There are cases in which a patent will cite literature that is not patent such as conferences proceedings or articles. These references are listed in the 'Other References' list.

**Engineering Village** [Search History](#) - [Selected Records](#) - [My Profile](#) - [My Alerts](#) [End Session](#)

[Easy Search](#) [Quick Search](#) [Expert Search](#) [Thesaurus](#) [eBook Search](#) [Ask an Expert](#) [Help](#)

[Search Results](#) [New Search](#)

[Abstract](#) - [Detailed](#) - [Patent Refs](#) (6) - [Other Refs](#) (2) - [Full-text](#)

There are 2 other references for the following patent:

**Filter network combining non-superconducting and superconducting filters**  
[Hey-Shipton, Gregory L.](#) Assignee: Superconductor Technologies, Inc. Publication Number: US6686811 Publication date: 02/03/2004 Kind: Utility Patent Grant (with pre-grant publication)  
 Database: US Patents

**Other References**

- Source: Pfitzenmaier, Gerhard, Synthesis and Realization of Narrow-Band Canonical microwave Bandpass Filters Exhibiting Linear Phase and Transmission Zeros, IEEE Transactions on Microwave Theory and Techniques, vol. MTT-30, No. 9, Sep. 1982; pp. 1300-1311.
- Source: Matthaei, George L., Design of HTS, Lumped-Element, Manifold-Type Microwave Multiplexers; IEEE Transactions on Microwave Theory & Techniques, vol. 44, No. 7, Jul. 1996.

### Cited by Patents (when available)

If a patent is cited by other patents, a list of all the citing patents will appear in the 'cited by' list. Each patent can be viewed by clicking on 'abstract' or 'detailed' view. An additional view of the patent references is also available. When clicking on "Cited by Patents" the facets will change according to the new patent set showing information related to the citing patents



## Search Results

2 records in US Patents &amp; EP Patents for 1959-2006

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### +Patents that cite US6631033

**Sort by:** [Relevance](#) ▼ [Date](#) [Author](#) [Cited by Patents](#)

#### ☐ 1. Fabry-perot etalon with independently selectable resonance frequency and free spectral range

[Turner, III, Nelson C.](#) **Assignee:** Research Electro-Optics, Inc. **Publication Number:** US6947218 **Publication date:** 09/20/2005 **Kind:** Utility Patent Grant (with pre-grant publication)

**Database:** US Patents
[Abstract](#) - [Detailed](#) - [Patent Refs](#) (32) - [Other Refs](#) (3) - [Full-text](#)

#### ☐ 2. Dichroic neutral density optical filter

[Taylor, Andrew T.](#); [Gaslioli, Paul J.](#); [Bierhuizen, Serge J.](#) **Assignee:** Optical Coating Laboratory, Inc. **Publication Number:** US6859323 **Publication date:** 02/22/2005 **Kind:** Utility Patent Grant (no pre-grant publication)

**Database:** US Patents
[Abstract](#) - [Detailed](#) - [Patent Refs](#) (13) - [Other Refs](#) (1) - [Full-text](#)

## Refining Search Results

### Refine Within Easy Search

#### Search Form

You can refine your search from the **Search Results** page. **Easy Search** provides a search box above the results set that allows searching within results, or allows you to start a new search by selecting all content from the drop down menu.

The screenshot displays the 'Easy Search' interface. At the top, there are tabs for 'Easy Search', 'Quick Search', 'Expert Search', 'Thesaurus', 'eBook Search', 'Ask an Expert', and 'Help'. Below these is a 'Refine Search' section with a search box and a 'Within results' dropdown. The main area shows 'Search Results' for 481194 records in Compendex & Inspec. It lists three results with details like author, source, and database. On the right, there's a 'Refine Results' sidebar with sections for 'Database', 'Author', and 'Author affiliations', each showing a list of terms and their associated record counts.

### Refine by Results Facets

You can easily refine or narrow your results set by clicking on any of the supplied clusters of terms and other data elements (publication years, languages, etc.) derived from the records in your result set. These terms appear on the right hand side of the **Search Results** screen. Numbers in parentheses adjacent to each term indicate the number of records found for each within the search already created. Click "More" to expand each list up to 60 terms that will be displayed for each cluster.

Clicking on a term or other data element in **Refine Results** creates a search path, or "breadcrumb" above the search results list, and further limits your original search set, resulting in a smaller, more focused answer set. Terms that are added in this way are "AND"-ed together.

New "breadcrumb" terms will appear at the top of each new **Search Results** screen with a red "X" icon. To eliminate a breadcrumb term from a query, simply click its red X.

For example, a large answer set on diodes, with thousands of citations, can easily be reduced to a more manageable size by clicking on additional terms from the **Refine Results** list at right; click to add a publication year (2004), an additional controlled term (*semiconductor lasers*), etc.

If you click on a hyperlinked term in the "breadcrumb," all terms after it will be deleted from the "breadcrumb."

**Note:** Not every field has been used consistently over the years. For example, publisher name was not always given for journal articles, so a publisher may be under-represented in the clusters. Also, items in clusters may be represented in more than one format, for example, a publisher may be clustered

as IEEE, Institute of Electrical and Electronic Engineers, Publ by IEEE, Publ by Institute of Electrical and Electronic Engineers, Publ by Inst of Electr and Electron Eng, etc.

### Refining within Quick Search or Expert Search or Thesaurus Search

After performing an initial search, a list of facets will appear on the right side of the search results screen.

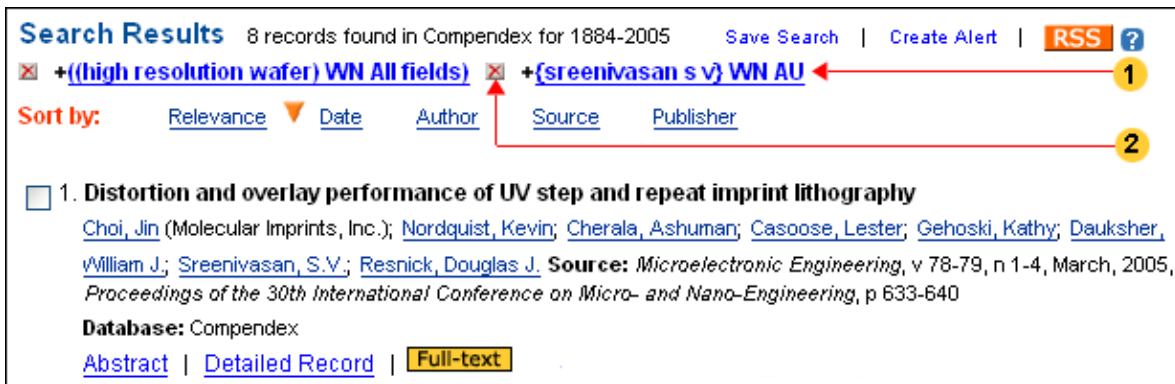
These facets (categories) include: Databases, Author, Controlled vocabulary, Classification code, Document type, Language, Year, and Publisher. Under each facet, a list of the most recurring terms in that category will appear in descending order. For example, in the selected databases, under **"Authors"** a list of most published authors related to the search term will appear;

**Example:** A search for "High resolution wafer" will results in a list of terms under different categories with the number of record they hold in brackets.

- 1 Include / Exclude:** Terms in the facets can be included or excluded from your initial search.
- 2 The list of facets includes:** Databases, Author, Author Affiliation, Country, Controlled vocabulary, Classification code, Document type, Language, year, and publisher.
- 3** Each facet displays the first 10 items that are relevant for your search. Click on **more** to find further information within each facet.



The result of including terms to the initial search will look as the example below:



**1** When you check one or more boxes under the Author facets and click 'include', the author/s that you selected will be added to your initial search terms, therefore refining the results set. This is similar to doing an AND search with these terms.

**2** When using faceted search, every term receives an 'x' marked in red which can be removed to change your search strategy. As can be seen in the example above, the initial search resulted in 1627 hits, while limiting it to one author, resulted in 8 records only.

A number of search terms can be added to the same search, i.e. combining author, year and publication or any other combination which is most appropriate to the search.

When clicking on the 'x' mark next to the terms, the search removes these terms from your search query. In the example below, removing the term "high resolution wafer" actually expanded the search to include all of the author's publications, resulting in 58 records.



### Author affiliation

This facet presents the most prominent institutions which published literature on the searched subject. Next to each name, in brackets, are the number of records associated with each institution.

### "Add a Term" Option

Add a term

electronic

This option allows you to add your own terms for search refinement and can be combined with other terms in the faceted list.

In our example, adding the key word "electronic" to our search will result in further refinement of the search, yielding only 4 records with all the terms that were added.

If you are using command language in Expert search, you can use the 'Add Term' box to add or exclude terms within a certain field. For example, the phrase 'electronic WN ti' can be entered into this box and then included or excluded from the initial search.

### Faceted Searching options:

- ☒ Search within results  
☐ Search all content

**Search Within results:** The option of searching within results gives you the flexibility to add your own term and/or others terms from the facets to a search that you have a set of results for.

**Search all content:** You can also perform a new search using either faceted terms or terms that were freely added.

### How does faceted searching works?

You can mix terms from more than one category in a single refining step.

### Including or excluding terms from different facets

If you select terms from different facets these are treated as AND. They are either included or excluded from your search. When you use Include this is shown as '+' sign in the search path. See example below:

When **including** an author and document type the system will search for the original term **AND** the author **and** the document type selected.

In the example below we first searched for "acid", then we included an author and a document type which resulted in a query that uses a '+' sign between the initial key word and the added terms from the facets.

### Search Results

447953 records in Compendex, Inspec & NTIS for 1884-2006

[Remove Duplicates](#) - [Save Search](#) - [Create Alert](#) - [RSS](#) [?](#)

☒ [+\(\(acid\) WN All fields\)](#) ☒ [+\({kricheldorf hans r} WN AU\) AND \({ja} WN DT\)](#)

Sort by: [Relevance](#) [Date](#) [Author](#)

1

2

3

1 Original Term

2 Added term - Author

3 Added term - Document type

When you exclude terms from the facets these are shown in the search path as '-' sign. See example below

For example, when **excluding** an author and document type the system will search for the original term **NOT** the author and the document type selected, meaning that both selected terms will be excluded from the new search.

### Search Results

447953 records in Compendex, Inspec & NTIS for 1884-2006

[Remove Duplicates](#) - [Save Search](#) - [Create Alert](#) - [RSS](#) [?](#)

☒ [+\(\(acid\) WN All fields\)](#) ☒ [-\({kricheldorf hans r} WN AU\) AND \({ja} WN DT\)](#)

Sort by: [Relevance](#) [Date](#) [Author](#)

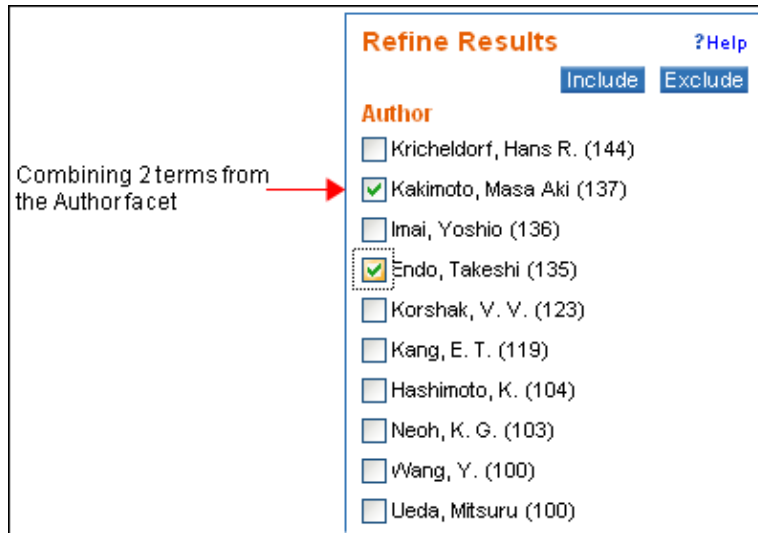
1

2

3

- 1 Original term
- 2 Excluded term - Author
- 3 Excluded term - Document type

#### Including or excluding terms within facets



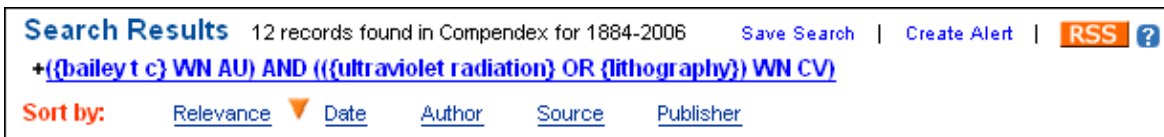
The results will look like this:



- 1 Original term
- 2 Included term 1 from Author facet
- 3 Included term 2 from Author facet

The same applies for exclusion - terms selected from the same facet are excluded from a search.

#### AND / OR combinations within and between facets



When selecting an author from the 'Author' facet and combining it with 2 terms from the 'Controlled vocabulary' facets, the system will combine the 2 control vocabulary terms with an "OR" and use the AND operator to combine them with the selected author term as shown above.

To continue refining your search, you can choose one of the following options:

- Continue refining your search using the facets presented on the right side of the screen
- Click on "Refine Search" button on the upper left side of the screen to use Boolean command language. This will bring up the Expert Search screen.

See example below:

Easy SearchQuick SearchExpert Search

SELECT DATABASE

☐ All
☒ Compendex
☐ Inspec
☐ NTIS ?

ENTER SEARCH TERMS BELOW

{{{low resolution wafer} WN ALL)}}
AND {{{brueck s r j} WN AU} AND
{{{masks} WN CV)}}

SEARCH FROM

☒ 1884 TO 2006
☐ 1 Updates ?

SORT BY

☐ Relevance ?
☒ Publication year
☒ Autostemming off ?

SearchReset

### Faceted Searching on Patent Information

Use facets to refine a patent search.

When searching patents alone the following facets will be available:

**Database** - Refine your search to either US or European patents.

Note that patents in the database facet include both applications and grants.

**Database**

- [US Patents](#) (461190)
- [EP Patents](#) (312179)

### Patent type

Refine your search to either US or European grants or applications. Here you can chose to focus your search on different types of patents

**Patent type**

- [US Granted](#) (385943)
- [European Applications](#) (238547)
- [US Applications](#) (75247)
- [European Granted](#) (73632)

**Inventor** - Select one or more inventors. In brackets, are the number of records found for each inventor.

**Inventor**

- ☐ Berg, Lloyd (223)
- ☐ Ishizaki, Toshio (213)
- ☐ Keller, Arnold (202)
- ☐ Roe, Donald Carroll (173)
- ☐ Yamada, Toru (167)
- ☐ Koch, Rudolf (165)
- ☐ Palumbo, Gianfranco (163)
- ☐ Carlucci, Giovanni (162)
- ☐ Steer, Peter Leslie (156)
- ☐ Brown, Richard I. (156)

**Assignee** - Refine your search by assignee. In brackets, are the number of records found for each assignee.

**Assignee**

- ☐ Canon Kabushiki Kaisha (3668)
- ☐ Siemens Aktiengesellschaft (3617)
- ☐ Matsushita Electric Industrial Co., Ltd. (3530)
- ☐ The Procter & Gamble Company (3240)
- ☐ Eastman Kodak Company (3130)
- ☐ Nec Corporation (3010)
- ☐ Sony Corporation (2618)
- ☐ International Business Machines Corporation (2475)
- ☐ Kabushiki Kaisha Toshiba (2302)
- ☐ Hitachi, Ltd. (2100)

**Classification Codes**

When placing your mouse on each of the classification codes (including US, IPC and ECLA classification codes), a full description of the classification codes will be presented. The description includes the subclasses (appearing after the / sign). The main class is bolded.

<input type="checkbox"/> <b>422/101</b> (1633)
<ul style="list-style-type: none"> <li>• CHEMICAL APPARATUS AND PROCESS DISINFECTING, DEODORIZING, PRESERVING, OR STERILIZING</li> <li>• ANALYZER, STRUCTURED INDICATOR, OR MANIPULATIVE LABORATORY DEVICE</li> <li>• Miscellaneous laboratory apparatus and elements, per se</li> <li>• <b>Including means for separating a constituent; e.g., filter, condenser, extractor, etc.</b></li> </ul>
<input type="checkbox"/> 422/101 (1633)

**Country**

Refine your search by country. The number in brackets specifies how many related patents were issued in a certain country.

**Country**

- ☐ United States (140196)
- ☐ Japan (42610)
- ☐ Germany (20643)
- ☐ France (8338)
- ☐ United Kingdom (7932)
- ☐ Canada (6199)
- ☐ Korea, Republic Of (4295)
- ☐ Taiwan (3647)
- ☐ Sweden (3604)
- ☐ Netherlands (3359)

**Year** - Refine your search by year of publication. In this list you can see how many related patents were granted or applied in a certain year

Year
<input type="checkbox"/> 2005 (28356)
<input type="checkbox"/> 2004 (41923)
<input type="checkbox"/> 2003 (39482)
<input type="checkbox"/> 2002 (34986)
<input type="checkbox"/> 2001 (25546)
<input type="checkbox"/> 2000 (21143)
<input type="checkbox"/> 1999 (20191)
<input type="checkbox"/> 1998 (19915)
<input type="checkbox"/> 1997 (17465)
<input type="checkbox"/> 1996 (16796)

## Post Search Sorting

Results can be sorted by relevance, date (publication year), author, source or publisher. Choose a sort option from the *Sort by* options at the top of the **Search Results** list. To change the sort order - i.e., date descending, with newest publications appearing first - click the hyperlink for the sort you wish to use. The arrow will change from pointing up to pointing down and the results will be re-sorted.

Relevance "direction" cannot be changed.

Records that do not contain author names or cited as Anon will be placed after records that contain author names if Author, ascending is used as the sort for the Author field.

Records that do not contain publisher information will be placed after records that contain publishers if Publisher, ascending is used as the sort.

Records sorted by date will be sorted first by year and then by an internal weekly load number.

The screenshot shows the Engineering Village search results page. At the top, there are tabs for 'Easy Search', 'Quick Search', 'Expert Search', 'Thesaurus', and 'e'. Below these are 'Refine Search' and 'New Search' buttons. The 'Results Manager' section includes options to 'Select all on page', 'Select range' (with input fields and a 'go' button), 'Clear all on page', and 'Clear all selections'. It also has a 'Choose format' section with radio buttons for 'Citation' (selected), 'Abstract', and 'Detailed record', and a checkbox for 'Clear selected records on new search'. Action buttons include 'View Selections', 'E-Mail', 'Print', 'Download', and 'Save to Folder'.

The 'Search Results' section shows '91289 records found in Compendex for 1884-2006'. It includes links for 'Save Search', 'Create Alert', and 'RSS'. A search filter '+(diode) WN All fields' is applied. The 'Sort by:' section has links for 'Relevance' (with a downward arrow), 'Date', 'Author', 'Source', and 'Publisher'.

The first result is:
 

- ☐ 1. **Lamina unveils record-breaking LED white light**
- Anon **Source:** *American Ceramic Society Bulletin*, v 84, n 3, March, 2005, p 19
- Database:** Compendex
- Links: [Abstract](#) | [Detailed Record](#)

## Ei Patents Sort Options

You can sort your search results by date, author or 'Cited by patents'

**Search Results**  
 275064 records in US Patents for 1959-2006 [Save Search](#) - [Create Alert](#) - [RSS](#) [?](#)  
[+\(\(filters\) WN All fields\)](#)  
**Sort by:** [▼ Relevance](#) [Date](#) [Author](#) [Cited by Patents](#)

☐ 1. **Filter sector for rotarydisc filters**  
[Hagg, Conny;](#) [Ek, Bo](#) **Assignee:** GL & V SWEDEN AB **Publication Number:** US20050082217 **Publication date:** 04/21/2005 **Kind:** Utility Patent Application  
**Database:** US Patents  
[Abstract](#) - [Detailed](#) - [Full-text](#)

☐ 2. **Filter network combining non-superconducting and superconducting filters**  
[Hey-Shipton, Gregory L.](#) **Assignee:** Superconductor Technologies, Inc. **Publication Number:** US6686811 **Publication date:** 02/03/2004 **Kind:** Utility Patent Grant (with pre-grant publication)  
**Database:** US Patents  
[Abstract](#) - [Detailed](#) - [Patent Refs](#) (6) - [Other Refs](#) (2) - [Full-text](#)

Clicking on 'Cited by patents' will arrange the results by the most cited patents to the least cited ones.

**Search Results**  
 467171 records in US Patents & EP Patents for 1959-2006 [Save Search](#) - [Create Alert](#) - [RSS](#) [?](#)  
[+\(\(filter\) WN All fields\)](#)  
**Sort by:** [Relevance](#) [Date](#) [Author](#) [▼ Cited by Patents](#)

☐ 1. **Prosthesis comprising an expansible or contractile tubular body**  
[Wallsten, Hans J.](#) **Assignee:** Shepherd Patents S.A. **Publication Number:** US4655771 **Publication date:** 04/07/1987 **Kind:** Utility Patent Grant  
**Database:** US Patents  
[Abstract](#) - [Detailed](#) - [Patent Refs](#) (9) - [Cited by](#) (670) - [Full-text](#)

☐ 2. **Silicon semiconductor wafer for analyzing micronic biological samples**  
[Pace, Salvatore J.](#) **Assignee:** E. I. Du Pont De Nemours & Co. **Publication Number:** US4908112 **Publication date:** 03/13/1990 **Kind:** Utility Patent Grant  
**Database:** US Patents  
[Abstract](#) - [Detailed](#) - [Patent Refs](#) (7) - [Other Refs](#) (10) - [Cited by](#) (486) - [Full-text](#)

## Results Manager

**Results Manager**

[Select all on page](#) | Select range:  to  [go](#) | [Clear all on page](#) | [Clear all selections](#)

[?](#) **Choose format:** ☒ Citation ☐ Abstract ☐ Detailed record ☒ Clear selected records on new search

[View Selections](#) [E-Mail](#) [Print](#) [Download](#) [Save to Folder](#)

### Selecting Records

You can select particular records from the search results (**Compendex, Inspec or NTIS only**) 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); 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 5,000 results can be retrieved from any search. The display will indicate the number of results that were located but only the first 5,000 will be available to be selected.

### 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**

Read the records you have selected on screen in the format you have chosen (citation, abstract, detailed).

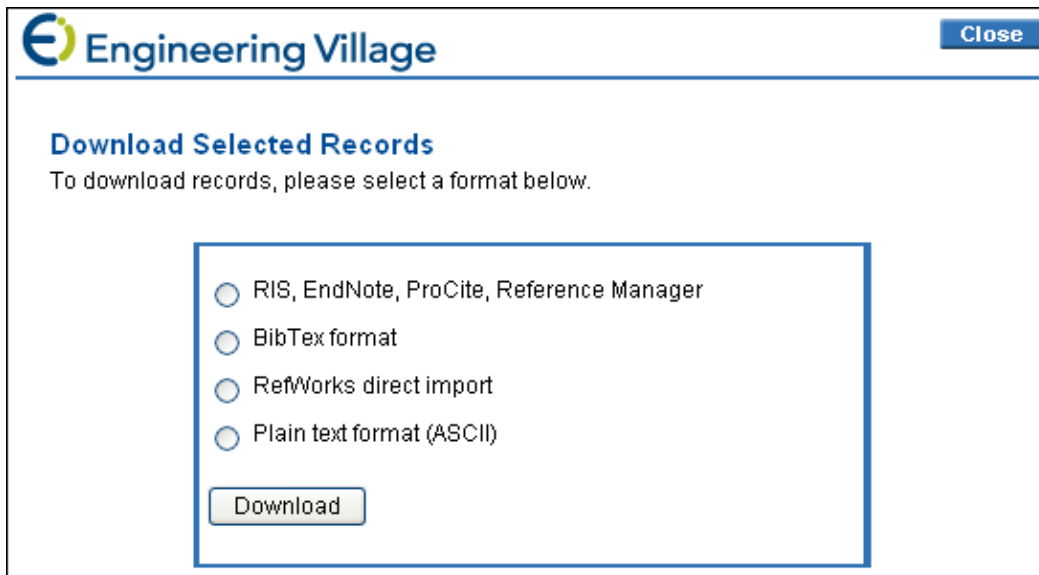
**E-mail Selected Records**

The screenshot shows a web interface for Engineering Village. At the top left is the Engineering Village logo, and at the top right is a 'Close' button. Below the logo is the title 'Email Selected Records' in blue. Underneath is the instruction 'Enter the e-mail address where you would like to have your results sent.' A large rectangular box contains the email form fields: 'To:' with an empty text input, 'From:' with the value 'email\_service@ei.org', 'Subject:' with an empty text input, and 'Message:' with a large text area and vertical scrollbars. Below these fields is a 'Send E-mail' button.

E-mail your search results to yourself or others. An e-mail form appears, allowing you to enter the e-mail address of the recipient and yours, as well as any message you wish to add.

**Print Selected Records**

Format the selected records in a neat, printer-ready format. The printer-ready records will appear in a new browser window with all full-text and local-holdings notations removed. Click on the Print icon in the new window to start printing.

**Download Selected Records**

The screenshot shows a web interface for Engineering Village. At the top left is the Engineering Village logo, and at the top right is a 'Close' button. Below the logo is the title 'Download Selected Records' in blue. Underneath is the instruction 'To download records, please select a format below.' A large rectangular box contains four radio button options: 'RIS, EndNote, ProCite, Reference Manager', 'BibTex format', 'RefWorks direct import', and 'Plain text format (ASCII)'. Below these options is a 'Download' button.

Download the records in RIS, RefWorks, BibTex or ASCII text format. RIS is compatible with EndNote, ProCite and Reference Manager. *Important:* You must 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

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 its contents.

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 Profile link at the top right of all pages. Within the My Profile page is a link called "View/Update My Folders." Records can be viewed or removed from this page. 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.

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## RSS

RSS stands for Really Simple Syndication or Rich Site Summary. It is an XML-based format for content syndication. RSS is a way of publishing and distributing content from one Web site to another. It's an easy way for you to keep updated automatically on web sources that you follow.

You need to have an RSS reader or aggregator to make use of RSS. RSS reader will display information feeds from your selected sites on your computer without visiting each Web site. You will automatically receive the most current information whenever these sources are updated. It will also allow you to share information with others in your research or study group.

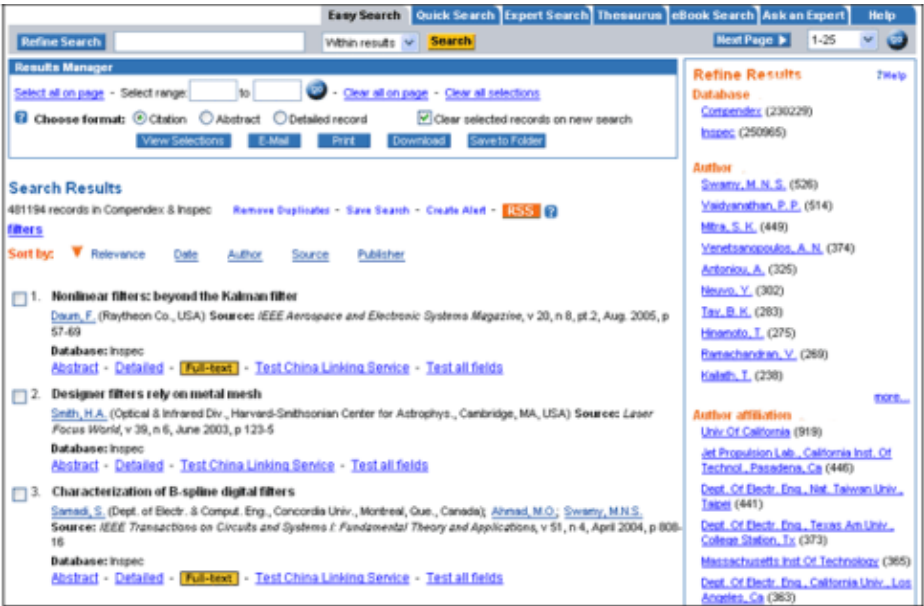
With an RSS aggregator, you will be able to find technical information from Engineering Village, latest news from your library (if your library is providing an RSS feed), or latest technology news from the New York Times.

There are several types of RSS readers. Some are Web-based, such as My Yahoo, Bloglines or NewsGator, some are extensions of Web browsers such as Mozilla Firefox and some are desktop readers like FeedDemon or Awasu. You can find a list of RSS reader and other information about RSS at the RSS Compendium.

Engineering Village provides RSS feeds of your search queries. Once you have executed a search, you can post the latest updated records that match your query to your RSS aggregator and share the results with others within your institution. Engineering Village RSS feed includes titles of the records and links back to Engineering Village for the detailed record. You need to be in an IP authenticated environment that has access to Engineering Village to view the detailed record. You won't be able to view the detailed record if you are accessing to Engineering Village through a proxy.

This feature will allow you to get automatic weekly updates of your search queries' results within your RSS readers.

To use the RSS feeds from Engineering Village, execute and refine your search until you have the search strategy that you wish to use as your feed.



When you click on the RSS feed button you will get a pop up message that will look like the example below.

[http://www.engineeringvillage2.org/controller/servlet/Controller?CID=openRSS&SYSTEM\\_PT=t&queryID=fa5ff310900a8de20M4a8eprod3data2](http://www.engineeringvillage2.org/controller/servlet/Controller?CID=openRSS&SYSTEM_PT=t&queryID=fa5ff310900a8de20M4a8eprod3data2)

Copy and paste the link to your RSS reader. Each week when the database is updated any new results matching your query will be displayed in your RSS reader. Up to 400 titles will be delivered with each update.

For more information on RSS see the Help section.

If you use a common RSS reader, you may click your choice below to subscribe.



You can then copy and paste the link to your RSS reader. Each week when the database is updated any new results matching your query will be delivered to your RSS reader. Up to 400 titles will be delivered with each update.

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## Blog This

<a href="#">Abstract</a>	<a href="#">Detailed Record</a>	<a href="#">Full-text</a>	<a href="#">Blog This</a>	<a href="#">E-Mail</a>	<a href="#">Print</a>	<a href="#">Download</a>	<a href="#">Save to Folder</a>
--------------------------	---------------------------------	---------------------------	---------------------------	------------------------	-----------------------	--------------------------	--------------------------------

Record 3 from Compendex for:((diode) WN All fields), 1884-2006

Check record to add to Selected Records

☐ 3. **Waveguide analysis of organic light-emitting diodes fabricated on surfaces with wavelength-scale periodic gratings**

[Revelli, Joseph F.](#) (Research and Development Laboratories, Eastman Kodak Company); [Tutt, Lee W.](#); [Kruschwitz, Brian E.](#) **Source:** *Applied Optics*, v 44, n 16, Jun 1, 2005, p 3224-3237

**ISSN:** 0003-6935 **CODE:** APOPAI


**Publisher:** Optical Society of America

**Abstract:** Numerical techniques for the analysis of multilayer waveguide structures were used to study the modes that exist in organic light-emitting diode (OLED) devices. The analysis revealed that waveguide modes of the OLED

### What is a Blog?

A 'blog' is a short form for web log; a personal journal published on the Web. This is a frequent, chronological publication of personal thoughts and Web links. More information on blogs can be found at [Wikipedia](#). There are numerous blog hosts on the internet such as Blogger.com ([www.blogger.com](http://www.blogger.com)), Blogcity ([www.blog-city.com](http://www.blog-city.com)), and others.

Click the "Blog This" button and select the content that is showing in the box and paste it in your post. Once you publish your post the title of the record will appear in your blog.


Close

Use Blog This to create a link and share the abstract of this record on your Blog or website.

Copy and paste the text below into your blog or website.

```
<a
href="http://www.engineeringvillage2.org/control1
er/servlet/Controller?
CID=blogDocument&MID=cpx_7ced01104e4d22bf9M585819
255120119&DATABASE=cpx">Lamina unveils record-
breaking LED white light</a><table border="0"
```

Select Content

Below is a sample of a how a record looks like in a blog.

FRIDAY, JULY 08, 2005

## Engineering Village

Corona discharge effects on some parasitical insects of cultured plants



POSTED BY MYEV AT 7:44 AM 



---

0 COMMENTS :

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## Facets' Graphs & Export

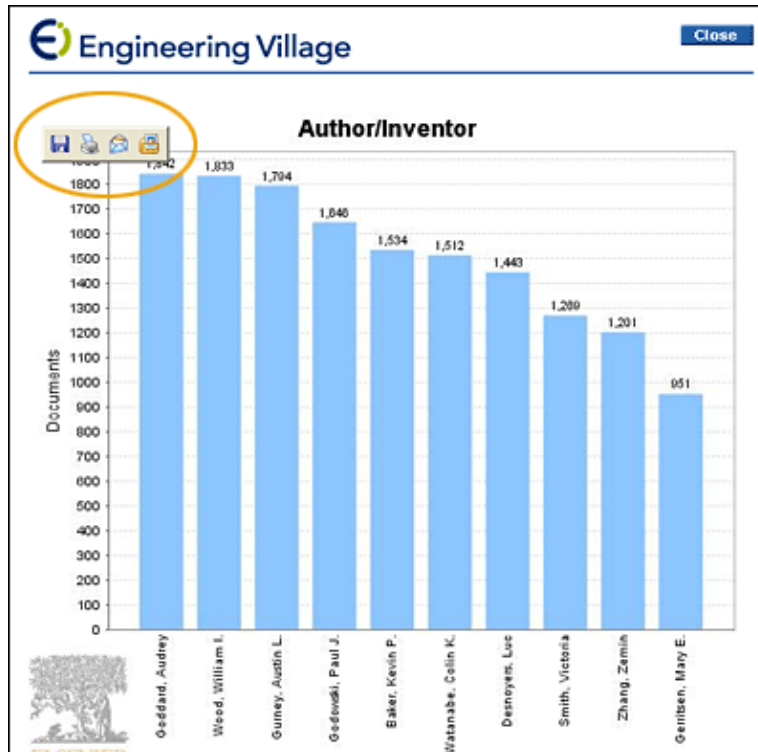
The **graph and export** icons appear next to each facet on the search results screen. They are functional elements which allow you to view your faceted results as a bar graph or download a text file that can be exported to other software.


**Author affiliation/Assignee**   1

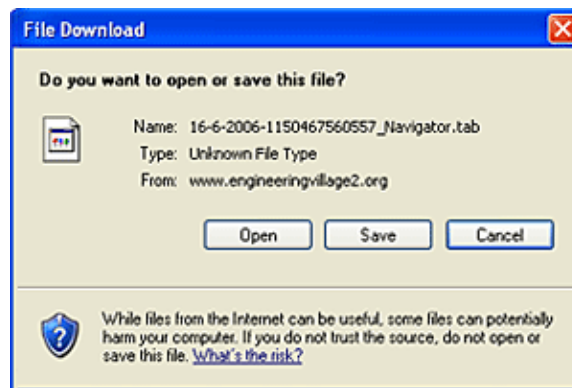
- ☐ International Business Machines Corporation (5765)
- ☐ Kabushiki Kaisha Toshiba (4596)
- ☐ Fujitsu Limited (3058)
- ☐ Nec Corporation (2976)
- ☐ Mitsubishi Denki Kabushiki Kaisha (2616)
- ☐ Texas Instruments Incorporated (2551)
- ☐ Siemens Aktiengesellschaft (2473)
- ☐ Micron Technology, Inc. (2440)
- ☐ Hitachi, Ltd. (2423)
- ☐ Matsushita Electric Industrial Co., Ltd. (2325)

[more...](#)

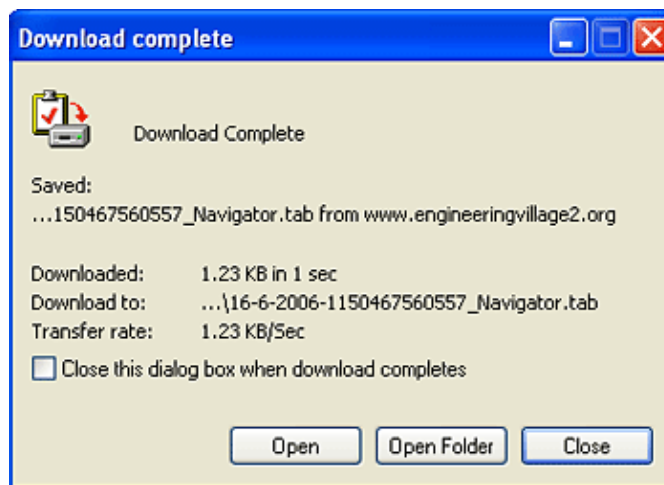
**1** When clicked, the bar graph sign  will open a new window where an image of the top 10 results in the facet will appear. The bar graph will show the current results in the facet. For example, when you click on 'more', adding 10 more terms are added to the facet, the graph will show the terms that appear on the list that you are viewing. You can save, print or email this image using the windows images utility functions as can be seen below.



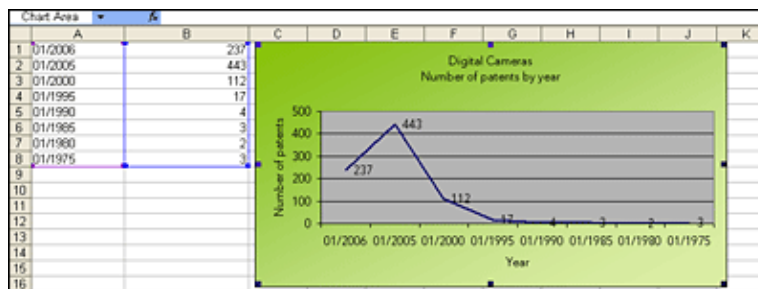
The Export icon  lets you save or open the terms and records counts as a tab file which can be opened with any software. All the terms in a facet are exported at once regardless of the view.



When you click on the icon, a download window will appear. Save or open the tab file. You can select in which software you would like the file to open.



For example, you can export the file to Excel and use the data to create many graphs and charts



[Back to top ^](#)

## Search History

Search History ?								
No.	Type	Search	Autostem	Sort	Results	Year(s)	Database	E-mail Alert
1.	Quick	<a href="#">((diode) WN All fields)</a>	On	▼ Relevance	219436	1884-2005	Compendex, Inspec & NTIS	<input type="checkbox"/>
2.	Expert	<a href="#">space stations wn CV</a>		▼ Relevance	3042	1884-2005	Compendex	<input type="checkbox"/>
3.	Quick	<a href="#">(((diode) WN All fields) AND ((space stations) WN All fields))</a>	On	▼ Relevance	163	1884-2005	Compendex & Inspec	<input type="checkbox"/>
<div>Clear Search History</div> <div>View Saved Searches</div>								
					Save Search			
					Save			
					Save			

## Overview

A **Search History** appears for each search done in Engineering Village. The **Search History** appears only after clicking the Search History link in the top middle of all pages. The Search History indicates the search number, whether the search was done in **Easy**, **Quick**, **Expert** or **Thesaurus** mode, the search strategy, whether autostemming was on or off, the sort chosen, the number of results, the database the search was done in and the years searched.

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

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

## Combining Previous Searches

You can combine previously done searches from the Search History function. Click Search History from the top of all pages.

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 Boolean AND, OR, NOT operators. When combining searches, use nesting parentheses to specify the order of processing.

(#1 or #2) and #3

You can also add additional search terms with item numbers:

#1 and diodes wn KY

(#1 and #2 ) and Elsevier wn PU

Only searches run in the same database, or combination of databases, are combinable. However, within the same database, or combination of databases, any combination of **Easy**, **Quick**, **Expert** or **Thesaurus** searches can be performed.

## Saving Searches

To save a search strategy, select the query you want to keep from the **Search History** and click **Save**. The button will change to **Saved**. You can save up to 125 searches. Searches can also be saved by clicking the **Save Search** link near each search statement in **Easy**, **Quick**, **Expert** or **Thesaurus** Search.

Search History ?									
No.	Type	Search	Autostem	Sort	Results	Year(s)	Database	E-mail Alert	Save Search
1.	Quick	<a href="#">((diode) WN All fields)</a>	On	▼ Relevance	219436	1884-2005	Compendex, Inspec & NTIS	<input type="checkbox"/>	<a href="#">Save</a>
2.	Expert	<a href="#">space stations wn CV</a>		▼ Relevance	3042	1884-2005	Compendex	<input type="checkbox"/>	<a href="#">Save</a>
3.	Quick	<a href="#">(((diode) WN All fields) AND ((space stations) WN All fields))</a>	On	▼ Relevance	163	1884-2005	Compendex & Inspec	<input type="checkbox"/>	<a href="#">Saved</a>
<a href="#">Clear Search History</a> <a href="#">View Saved Searches</a>									

A Personal Account is required to save searches. If you are not already logged into your Personal Account, 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 saved searches, click on the My Profile link located on the top right on any Engineering Village page. In **My Profile**, click **View/Update Saved Searches**. You can delete individual Saved Searches by clicking the **Remove** button; or, you can delete all your Saved Searches by clicking on the Clear All button.

## Create E-mail Alerts

Create up to 125 weekly E-mail Alerts from the **Search History**. A Personal Account is required to set up e-mail alerts.

Search History ?									
No.	Type	Search	Autostem	Sort	Results	Year(s)	Database	E-mail Alert	Save Search
1.	Quick	<a href="#">((diode) WN All fields)</a>	On	▼ Relevance	219436	1884-2005	Compendex, Inspec & NTIS	<input type="checkbox"/>	<a href="#">Save</a>
2.	Expert	<a href="#">space stations wn CV</a>		▼ Relevance	3042	1884-2005	Compendex	<input checked="" type="checkbox"/>	<a href="#">Saved</a>
3.	Quick	<a href="#">(((diode) WN All fields) AND ((space stations) WN All fields))</a>	On	▼ Relevance	163	1884-2005	Compendex & Inspec	<input type="checkbox"/>	<a href="#">Save</a>
<a href="#">Clear Search History</a> <a href="#">View Saved Searches</a>									

From the top of any Engineering Village page, click **Search History**. Select the box next to the search you wish to set up as an alert. If you are not already logged into your Personal Account, 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.

E-mail alerts can also be setup by clicking the **Create e-mail** link near each search statement in **Easy**, **Quick**, **Expert** or **Thesaurus** Search.

Up to 25 records are sent within an e-mail alert. If more records were retrieved from the weekly update, a hyperlink appears in the body of the e-mail alert linking you to Engineering Village. 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 or Detailed Record hyperlink.

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## Full-text Access

### Full-text Links

Your library may choose to display links to electronic full-text available for many publishers' journals through the CrossRef service. These links display as yellow **Full Text** graphics. Only citation, abstract and detailed level records with a verified DOI (digital object identifier) associated with them can show a link to the electronic full-text. *Note:* A link will appear only if the publisher has made the journal or article available online, and if the CrossRef service provides links to that particular publisher's holdings.

Easy Search Quick Search Expert Search Thesaurus eBook Search Ask an Expert Help

Search Results New Search Previous Page Next Page

Abstract Detailed Record **Full-text** Blog This E-Mail Print Download Save to Folder

Record 20 from Inspec for:((space stations) WN All fields), 1884-2006

Check record to add to Selected Records

☐ 20. **Status of the superconducting magnet for the Alpha Magnetic Spectrometer**  
 Harrison, S. (**Space** Cryomagnetics Ltd., Abingdon, UK); Milward, S.; Allen, R.S.; McMahon, R.; Hofer, H.; Ulbricht, J.; Viertel, G.; Ting, S.C.C. Source: *IEEE Transactions on Applied Superconductivity*, v 15, n 2, pt.2, June 2005, p 1244-7  
 ISSN: 1051-8223 CODEIT: ITASE9  
 Publisher: IEEE, USA

**Abstract:** The Alpha Magnetic Spectrometer (AMS) is a particle physics experiment based on the International **Space Station** (ISS). At the heart of the detector is a large superconducting magnet, cooled to a temperature of 1.8 K by superfluid helium. The magnet and cryogenic system are currently under construction by **Space** Cryomagnetics Ltd of Culham, England. This paper describes the current status of the design and manufacture of the magnet system-including test results from the fourteen superconducting coils-and outlines the remaining work required to complete the project (6 refs.)

**Inspec controlled terms:** [aerospace instrumentation](#) | [magnetic resonance spectrometers](#) | [superconducting coils](#) | [superconducting magnets](#)

**Database:** Inspec

**Full-text and Local Holdings Links**

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**Full-text**

Even if all these criteria are met, access to the full text can 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/>.

Full-text documents appear in a separate browser window.

### Ei Patents Full-text Access

The 'full text' link will open the full text of the patent in PDF format.

### 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 or graphic can appear to the right of the Detailed Record link in the citation and below the blue bar called Full-text and Local Holdings Links in the Abstract and Detailed format views.

### 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, or Innovative Interfaces Web Bridge, a link or graphic will appear to the right of the Detailed Record link in the citation and below the blue bar called Full-text and Local Holdings Links.

### Linda Hall Library Document Delivery Service

The full texts of most documents in Compendex and Inspec are available from the Linda Hall Library of Science, Engineering and Technology in Kansas City, Missouri. 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. For more information, see <http://www.lhl.lib.mo.us>.

### CISTI Document Delivery



Engineering Village 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 its services, please visit [http://cisti-icist.nrc-cnrc.gc.ca/cisti\\_e.shtml](http://cisti-icist.nrc-cnrc.gc.ca/cisti_e.shtml)

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## Personal Account

### Account Registration

You can set up a Personal Account for greater control over your searches in Engineering Village. With a Personal Account, you can save records and searches and receive weekly e-mail alerts. E-mail alerts are messages sent after every weekly database update that contain any new records that match a saved query.

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:

\*First Name:

\*Last Name:

\*E-mail address:

Specify a password between 6 and 16 characters.

\*Choose a 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.

To set up a Personal Account, click **Register** and enter your name and e-mail address; choose and confirm a password between 6 and 16 characters long.

### Account Login

You must login to your Personal Account whenever you want 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.

Personal Account Login

You must login to your personal account to save searches, save records, and create E-mail Alerts.

E-mail address:

Password:

If you have forgotten your password, click [here](#) and we will send you your password.

If not, [Register Now](#). It's FREE and allows you to:

- Get Weekly Email Alerts
- Save Records
- Save Searches
- Create Folders

If you forget your password, you can submit your e-mail address that you used creating your personal account and have the password sent to you.

If you have not already set up a Personal Account, click on the **Register Now** link within the Personal Account Login box on any **Quick**, **Expert**, **eBook**, or **Thesaurus Search**.

## Update Account Information

Once you login to your Personal Account, you can edit your account information by clicking on the **My Profile** link located on the top right on any Engineering Village page. In the **My Profile** page, click **Edit/Remove Account**. You can modify your name or e-mail address, or change your password; you can delete your account as well.

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## Thesaurus Search

### Overview

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 content of the articles they index. The controlled vocabulary is used to standardize the way the articles are indexed, and ensures consistency and accuracy in search retrieval.

The Compendex and Inspec thesauri are hierarchical in nature. Terms are organized by broader, narrower or related concepts. Articles are indexed using the most specific controlled vocabulary terms available. For example, an article about metal testing in general is indexed in Compendex under *metal testing* rather than *materials testing*. Articles specifically about steel testing are indexed under *steel testing* instead of *metal testing*.

### Select Database

The thesauri can be accessed by clicking on the **Thesaurus** tab at the top of any Engineering Village page. If you have access to both Compendex and Inspec, you need to choose the thesaurus you wish to search by clicking on the radio button beneath **Select Database**. This is because the controlled vocabulary for each database is different, and a subject term that is useful for one database may yield unexpected results (or none at all) in the other. If you do not have access to Inspec, only Compendex will appear.

Terms selected from the Compendex thesaurus will be searched in the Compendex database, terms selected from the Inspec thesaurus will be searched in the Inspec database.

Terms chosen from the thesaurus automatically appear in a **Search Box** so that they can be included in a query.

If you switch from one thesaurus to another, the selections in the Search Box will be deleted. Some terms are common to both databases, but many controlled terms are unique to Compendex or Inspec. Because of this, each thesaurus must be searched separately.

### Locating Terms

There are several ways to identify controlled vocabulary terms. Type a term in the search box and click either **Search**, **Exact Term** or **Browse**, then click **Submit**.

#### Search

This looks for the term you have entered anywhere in a controlled vocabulary term as well as for broader, narrower and related controlled vocabulary terms, either as full terms or fragments of longer ones. The terms appear in alphabetical order.

The screenshot shows the 'Thesaurus' search interface. At the top, there are several tabs: 'Easy Search', 'Quick Search', 'Expert Search', 'Thesaurus' (which is highlighted), 'eBook Search', 'Ask an Expert', and 'Help'. Below the tabs, there are two main sections. The first section, 'SELECT DATABASE', contains two radio buttons: 'Compendex' (which is selected) and 'Inspec' (with a question mark icon next to it). The second section, 'ENTER TERM', contains a text input box and three radio buttons: 'Search' (selected), 'Exact Term', and 'Browse' (with a question mark icon next to it). A yellow 'Submit' button is located to the right of the 'Browse' radio button.

If you enter a term that is not in the controlled vocabulary list, the system will suggest alternate spellings. If any of the suggestions match what you are looking for, check the radio button at that suggestion and click on **Search again**. The system then searches the thesaurus for that term. You can also click the hyperlinked term and brings you to its thesaurus record.

#### Exact Term

If you know the exact subject heading you are looking for, and want to see its broader, narrower or related terms directly, you can use the **Exact Term** function. This takes you directly to the main record for the term, which can also show broader, narrower or related terms to illustrate the heading's context in the controlled vocabulary. For example, the main record for *mine ventilation* shows the broader term *ventilation* and the related terms *mines* and *mining*.

Easy Search		Quick Search		Expert Search		Thesaurus		eBook Search		Ask an Expert		Help	
<b>SELECT DATABASE</b>				<b>ENTER TERM</b>									
<input checked="" type="radio"/> Compendex <input type="radio"/> Inspec <a href="#">?</a>				<input type="text" value="diodes"/>									
				<input type="radio"/> Search <input checked="" type="radio"/> Exact Term <input type="radio"/> Browse <a href="#">?</a> <input type="button" value="Submit"/>									
<b>Exact Term: diodes</b>													
<b>Diodes</b> <input type="checkbox"/> (Select) <a href="#">i</a>													
<b>Broader Terms</b>				<b>Select</b>		<b>Related Terms</b>				<b>Select</b>		<b>Narrower Terms</b>	
Electronic equipment				<input type="checkbox"/>		Diode amplifiers				<input type="checkbox"/>		Electron tube diodes	
						Diode transistor logic circuits				<input type="checkbox"/>		Plasma diodes	
						Electric rectifiers				<input type="checkbox"/>		Semiconductor diodes	
						Electron tube rectifiers				<input type="checkbox"/>			

Some Narrower Terms and Related Terms can also have narrower terms of their own. If you wish to do a comprehensive search on a subject, it may be beneficial to explore all likely paths. Here, a comprehensive search for diodes should include all of the narrower terms, each of which should be explored: *semiconductor diodes* has the following narrower terms: *avalanche diodes*, *gunn diodes*, *light emitting diodes*, *photodiodes*, *tunnel diodes*, *varactors* and *zener diodes*. These terms cannot be selected from the diodes record. To find and select these narrower terms click on the hyperlink for *semiconductor diodes*. The narrower terms should also be selected for a comprehensive search.

If you try to do an **Exact Term** search for a term that is not a controlled vocabulary term, the thesaurus will suggest alternate spellings. Click any of the hyperlinked suggestions to go to the thesaurus record.

### Browse

Easy Search		Quick Search		Expert Search		Thesaurus		eBook Search		Ask an Expert		Help	
<b>SELECT DATABASE</b>				<b>ENTER TERM</b>									
<input checked="" type="radio"/> Compendex <input type="radio"/> Inspec <a href="#">?</a>				<input type="text" value="browse"/>									
				<input type="radio"/> Search <input type="radio"/> Exact Term <input checked="" type="radio"/> Browse <a href="#">?</a> <input type="button" value="Submit"/>									
<b>Browse: browse</b>													
<b>Terms</b>												<b>Select</b>	
Bronze plating												<input type="checkbox"/>	
Brown coal													
Brownian motion													
Brownian movement												<input type="checkbox"/>	
Browsers, Web													
Brush conductors												<input type="checkbox"/>	
Brushes												<input type="checkbox"/>	
BSS													
BTU content													
Bubble chambers												<input type="checkbox"/>	
<a href="#">Previous Page</a>   <a href="#">Next Page</a>													

The **Browse** command is like using an index in a printed thesaurus. Selecting **Browse** takes you to the section of the Thesaurus where the term would appear alphabetically. Use **Previous Page** or **Next Page** to scroll through the entire thesaurus alphabetically.

### Selecting Terms

All controlled terms present in the database have a **Select** box. Checking **Select** posts the term in the Search Box. Lead-in terms that have never been used as controlled vocabulary terms cannot be selected.

**Easy Search** **Quick Search** **Expert Search** **Thesaurus** **eBook Search** **Ask an Expert** **Help**

**SELECT DATABASE**  
☒ Compendex ☐ Inspec ?

**ENTER TERM**  
 diode  
☒ Search ☐ Exact Term ☐ Browse ? **Submit**

**Search: diode**  
 21 matching terms found

Terms	Select
Amplifiers (electronic)	<input type="checkbox"/>
<i>Amplifiers, Diode*</i>	<input type="checkbox"/>
<i>Amplifiers, Tunnel diode*</i>	<input type="checkbox"/>
Diode amplifiers	<input type="checkbox"/>
<i>Diode lasers</i>	<input type="checkbox"/>
Diode logic circuits	<input type="checkbox"/>
Diode transistor logic circuits	<input type="checkbox"/>
Diodes	<input type="checkbox"/>
Electron tube diodes	<input type="checkbox"/>
<i>Electron tubes, Diode*</i>	<input type="checkbox"/>

[ 1 ] | [2](#) | [3](#) | [Next](#)

**LIMIT BY**  
 All document types ?  
 All treatment types ?  
 All languages ?  
☒ 1884 TO 2006  
☐ 1 Updates ?

**SEARCH BOX**

**COMBINE SEARCH WITH**  
☐ AND ☒ OR

**SORT BY**  
☒ Relevance ? ☐ Publication year

**Search** **Reset** **Remove**

You can remove terms from the Search Box by de-selecting the Select box in the results set, highlighting the term in the Search Box and clicking on **Remove**, or resetting the Search Box.

### Executing the Search

Once terms have been selected and placed into the Search Box, you can search them in the database. The terms can be combined with OR (any term may be present) or AND (all terms must be present); OR is the default.

The limits that are available in **Quick Search** are also available in the Thesaurus.

### Lead-in and Prior terms

In thesaurus pages, subject terms are hyperlinked; clicking on a term will bring you to its thesaurus record. Terms that appear in italics are **"lead-in terms,"** which are either synonyms that are not part of the controlled vocabulary or prior terms that were formerly used for indexing and are still in the database in older records, but have been replaced by newer controlled terms. Any database search that involves the entire range of years should include both current and older controlled vocabulary. Prior terms are identified by an asterisk. Lead-in terms that are synonyms only, and that are not prior indexing terms, do not have a **Select** option.

### Top Terms

Inspec thesaurus entries include a top term. Top terms are the highest or most general terms in the hierarchy.

### Scope Notes

[Close](#)

## Diodes

**Introduced:** January 1993

**Related classification codes:** (714.1) : Electron Tubes; (714.2) : Semiconductor Devices & Integrated Circuits

Scope notes are available in the thesaurus record for most controlled terms. The scope notes may include the dates that the term was in use (or introduced), plus related Classification Codes. Scope notes may also include usage notes.

The scope notes can be found by clicking on the orange "i" icon on the thesaurus record.

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## Referex eBook Search

### Referex Overview

**CHOOSE COLLECTION**
☒ All Referex collections  
☐ Materials & Mechanical  
☐ Electronics & Electrical  
☐ Chemical, Petrochemical & Process

**SEARCH FOR**  
  

[Search](#)
[Reset](#)
[Advanced Search](#)

**SEARCH IN**  

Keyword ?  
Keyword  
Author  
ISBN  
Publisher  
Subject  
Title

Enter search terms in the **Search For** search box. You can search a term in a specific field by selecting the field from the **Search In** pull-down menu to the right of the search box. *Keyword*, the default search, searches the text of the book and returns sections of the book in the search results set. Searching by author, ISBN, publisher, subject or title, returns books sorted by title and in alphabetical order.

You can then read a description of the book, the book itself in PDF format, or do further searches for additional work by the authors or publishers. In order to read the PDFs you need to install Adobe Acrobat.. Viewing the PDF also requires a subscription to the entire range of books or to the collection containing the book.

### eBook Search Options

#### Advanced Search

Enter search terms in one or more of the three **Search For** search boxes. You may search a term in a specific field by selecting the field from the **Search In** pull-down menu to the right of the search box. Note: keyword searches can only be combined with other keyword searches. If one or more of the **Search In** boxes has keyword selected, author, ISBN, publisher, subject or title, cannot be searched. Non-keyword search terms can be combined.

#### Browse eBooks

Browse eBooks allows the user to navigate to three broad collections (Materials & Mechanical, Electronics & Electrical, and Chemical, Petrochemical & Process) or specific subjects by clicking on controlled vocabulary used in indexing eBooks for Referex.

## BROWSE BOOKS BY COLLECTION OR SUBJECT

**Materials & Mechanical** (118)

[Aeronautical Engineering \(7\)](#)  
[Aircraft Design \(6\)](#)  
[Automotive Engineering \(10\)](#)  
[Biomedical Engineering \(1\)](#)  
[Chemical Engineering \(6\)](#)  
[Chemical Health and Safety \(1\)](#)  
[Chemistry \(1\)](#)  
[Civil Engineering \(2\)](#)  
[Computer Aided Design \(2\)](#)

[More...](#)

**Electronics & Electrical** (110)

[Audio Electronics \(4\)](#)  
[Biomedical Engineering \(2\)](#)  
[Circuit Design \(17\)](#)  
[Circuit Theory and Analysis \(6\)](#)  
[Communications and Signal Processing \(32\)](#)  
[Computer Interfacing \(5\)](#)  
[Computing for Engineers \(3\)](#)  
[Control Engineering \(6\)](#)  
[Control of Electrical Systems \(8\)](#)

[More...](#)

**Chemical, Petrochemical & Process** (93)

[Biomedical Engineering \(1\)](#)  
[Chemical Engineering \(44\)](#)  
[Chemical Health and Safety \(13\)](#)  
[Chemistry \(16\)](#)  
[Civil Engineering \(1\)](#)  
[Control Engineering \(3\)](#)  
[Control of Electrical Systems \(3\)](#)  
[Design Engineering \(3\)](#)  
[Electromagnetics \(1\)](#)

[More...](#)

To view a particular collection or subject, simply click its hyperlink under **Browse Books by Collection or Subject**, or click the hyperlinked collection or subject name in a Book Description record. The search results will contain a complete list of titles by collection or subject, sorted by alphabetical order.

## Referex Search Fields

The following fields are searchable in Referex:

### Keyword

**Keyword** is the default for Referex. Searching *keyword* finds terms in the text of the eBook. Keyword searching includes section or chapter names and more importantly, the words on the pages of the eBook. Results are returned by 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 section of an eBook
- The word's location within the section (words found at the beginning of the section rank higher than words found towards the end)
- How often the word appears in the database as a whole (words used often are less relevant than words that are less common)

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

"solar energy"  
{avalanche diodes}

### Author

Referex cites author, editor or contributors' names as they appear in the eBook. Surnames appear first, followed by a comma and the remainder of the name as it appears in the publication.

Editors and contributors are also listed in the author field.

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

*carpenter, p\**

When records appear, author names are hyperlinked. Click on an author hyperlink to retrieve additional eBooks by that author from the Referex database.

### ISBN (International Standard Book Number)

ISBN are ten-character alphanumeric representations of book titles. The ISBN can be used to limit results to a specific book. You can find a book's ISBN at the citation and Book Description level of a record:

0884156516

### Publisher

Search on the "Publisher" field to identify publishers, or find the eBooks published by a particular publisher.

Note: if you want to limit a search to a publisher name fragment, e.g. Elsevier instead of *Elsevier Newnes* or *Elsevier Academic Press*, enclose it in quotations or brackets:

"elsevier"  
{elsevier}

### Subject

Referex contains controlled vocabulary represented as a list of subject terms used to describe the content of an eBook in the most specific and consistent way possible. You can see them in the **Browse eBooks** section of the eBook search. You can also search for them by entering a term and selecting Subject from the **"Search In"** pull-down menu. Subject terms also appear hyperlinked in the Book Description format. Clicking on a subject term will retrieve additional records from within the collection(s) included in the original search.

For example, clicking on *Aircraft design* in a book description record retrieves more books on this subject.

### Title

If you want to search for specific terms within the title of the eBook, search on the Title field:

"air cushion craft"  
{petrochemical plant}

## eBook Search Results

### Overview

eBook search results are initially presented in citation format. This includes title, author, ISBN and publisher, plus a cover art image, and provides enough information to identify the book or book section. To view a record in its detailed format click on the Book Description or Table of Contents links or click the cover art beside each individual citation. To view the PDF of a book section, click the **Read the Section** link. To view the PDF of an entire book, click the **Read the Book** link. Note: **Read the Book** and **Read the Section** links are only available to subscribers of one or more Referex collections.

The screenshot displays the Engineering Village eBook search results interface. At the top, there are navigation tabs: Easy Search, Quick Search, Expert Search, Thesaurus, eBook Search, Ask an Expert, and Help. Below these are buttons for Refine Search and New Search, and a Next Page button with a dropdown menu showing 1-25. The main heading is 'Search Results', followed by the text '1446 section(s) found in Referex for: ((laser) WN KY), All Referex collections'. A link for 'Viewing Requirements' is also present. The results are listed in two entries:

- Part 1: Laser Sources**  
Fujiwara, Masahiko Dutta, Niloy Dutta, Achyut Book Title: WDM Technologies: Active Optical Components  
ISBN: 0122252616; 2002 Publisher: Elsevier Academic Press  
Links: [Book Description](#) | [Read the Section](#) | [Read the Book](#)  
A link for [Table of Contents](#) is also available below the book cover image.
- Laser safety**  
Crisp, John Book Title: Introduction to Fiber Optics  
ISBN: 0750650303; 2001 Publisher: Elsevier Newnes  
Links: [Book Description](#) | [Read the Section](#) | [Read the Book](#)

When records are displayed in the Book Description format, collection and subject terms, plus author and publisher names, are hyperlinked. By clicking on a collection, the system will retrieve all eBooks within Referex included within that collection name. By clicking on a subject term, the system will retrieve all eBooks within the originally selected collection(s) associated with that subject term. By clicking on an author or publisher name, the system retrieves all eBooks within Referex associated with that publisher or written by that author.

The Book Description format also includes hyperlinked table of contents. Clicking on any of these links will take you to the requested section of the eBook in PDF. Note: table of contents links are only available to subscribers of one or more Referex collections. A **Buy the Book** link is also available if you want to acquire the printed edition of the book from Elsevier.

### 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 it takes you at to **Refine Search** box at the bottom of the Search Results page.

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

*Note:* keyword searches can only be joined with other keyword searches. If one or more of the SEARCH IN boxes has keyword selected, author, ISBN, publisher, subject, or title, cannot be searched. Non-keyword search terms can be combined.

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## Customization Options

### Overview

Subscribers of Engineering Village have many customization options to choose from. To have any of these customizations added for your library's usage, please have the account administrator contact Ei Customer Support at [eicustomersupport@elsevier.com](mailto:eicustomersupport@elsevier.com).

### Ask an Expert

Your library can have **Ask a Librarian** questions sent to local reference staff instead of to Ei librarians. This option facilitates communication between local reference staff and the end-user via Engineering Village. Customers who prefer that the **Ask an Expert** tab be removed completely can have this done as well.

### Autostemming in Quick Search

Customers can request this default to be on or off.

### Default Database

Customers can choose which database or combinations of databases to have as a default search page. This includes Compendex, Inspec, NTIS, Ei Patents or a combination search to be the default search screen.

### Default Home Page

Customers can now choose **Easy Search**, **Quick Search**, **Expert Search**, **eBook Search** or **Thesaurus** as the default search page.

### Default Sorting

Customers can have Ei set their pre-search default to Date or Relevance.

### Document Delivery

Ei can display links to your preferred document delivery service or to Linda Hall Library and/or CISTI at the Abstract or Detailed Records.

### Full Text Links

Links to full text supplied by Engineering Village in Compendex and Inspec can be displayed at the citation, abstract and detailed record level. This feature can be disabled by request.

### Limit by Year Default

Customers can have Ei set their default beginning search year to the earliest supported in the subscribed database(s).

### Linking Options (external)

Customers can provide text or graphical Local Holdings, Document Delivery, or OpenURL (LinkFinder Plus, SFX, etc.) links to Ei for deployment at citation, abstract and detailed views.

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## Further Assistance

### Ask a Librarian

An Ei or local staff librarian can help you formulate a search in Engineering Village, 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 **Ask an Expert** tab. All **Ask an Expert** services are complementary with the Engineering Village subscription.

### Ask an Engineer

You may post questions to a professional engineer. You will receive a response via e-mail. A list of the engineers and their expertise is provided on the **Ask an Expert** page. Professional 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.

### Training

Elsevier Engineering Information's librarians provide regular training sessions via the Internet to customers and end users of Engineering Village. To sign up for a training session please contact [eicustomersupport@elsevier.com](mailto:eicustomersupport@elsevier.com).

These training sessions are given live online and hosted by the Ei librarian. You must have simultaneous access to an Internet connection using either Internet Explorer or Netscape browsers and a voice phone line to carry the audio. Calls from within the United States and Canada are toll free.

Internet based training on Engineering Village is provided as a complementary service and is included in the library's subscription to the service

### Feedback

Click on the **Feedback** link at the bottom of each page for a feedback form. We look forward to receiving your comments. Your input is used to help us create better products for our customers.

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