APSC 400
Technology, Engineering and Management (TEAM)

Information Resources
Michael White & Nasser Saleh
September 28, 2009

Agenda

- Overview of Information Resources in Engineering
- Library Website and QCAT
- Reference books
- Standards and codes
- Patents
- Articles in Engineering
- Articles in multidisciplinary fields
- Industry and Company information
- Case Studies
- Resources in Law
- Refworks
- Questions
- Groups and hand-on exercise
APSC 400 Library Course Guide

Subject Guide: Chemical Industry

Chemical Industry - Prices and Statistics
# Quick Facts

## Reference Books

- **Fundamentals**: definitions, formulas, graphics, properties, overviews …

- **Electronic and print**
E-books at Queen's

- Books24x7 - ITPro Collection
- Safari Tech Books Online
- Springer e-Books
- And others ...

Resources - E-books

- ACM Digital Library
- ASHRAE Handbook Online
- Boek 24/7 - ITPro Collection
- CSA Online
- CEngEBASE
- Electric Engineering
- Environmental Resources Online
- Historical Mathematical Monographs
- IEEE Xplore
- IET Engineering
- IET Engineering Online
- IET Science Online
- Springer E-books
- Telecommunications E-books
Demo on Knovel

Databases/Articles

• How to find articles
  – Use an index
  – Use Federated/Meta Searching tools: Scholars Portal or Google Scholar
  – Follow GetIt!@Queen’s link for electronic or print
  – If Queen’s doesn’t own it—order it through ILL (RACER)
Example: Engineering Village

Get it @ Queen's

Refine your Search

Results Manager

CHARTING PATHS TO DISCOVERY

Academic Search Complete

CHARTING PATHS TO DISCOVERY
Business Source Complete

1. Effects of Process Conditions on Depolymerization and Devolatilization of Crude Oil
   By: Xu, Xinyu; Yang, Jinyu; Zhong, Yi; Gao, Shengyong. Petroleum Science & Technology, Feb 2006, Vol. 24 Issue 11, p1397-1402, 6p, 5 charts, 8 graphs; DOI: 10.1080/01944062.2006.10427968
   Database: Academic Search Complete

2. Study of the First Isolation and Cloning of Human Cargo CHYD5 Gene Function
   By: Sarah Tanwir, Shuhai Yang, Xinmei Yan, Jinhua Li, Zhiping Yu. Industrial and Engineering Chemistry Research, Aug 2009, Vol. 48 Issue 18, p7489-7492, 7p; (AY: M4407472)
   Database: Academic Search Complete
Get it @ Queen’s

Outside Queen’s ..
http://proxy.queensu.ca
Standards

- What are standards?
- Who creates standards?

Resources for Standards

- Describe the important features of a product, service or system
- Identifying standards
  - Index
  - Standards Writing Organizations
What is a Patent?

- Intellectual property
- Grant from a government to an inventor: right to exclude others from making, using, selling, etc.
- 20 year term
- New and useful inventions and improvements of an existing invention
  - 90% of patents are improvements on existing inventions*

Forms of Intellectual Property

Trademark
Name, logo and colour

Industrial Design
Shape, ornamentation

Patent
Construction

Trade Secret
Material composition

Patentable Inventions

New machine, device or appliance

New chemical substance, material or alloy

Genetically modified plant or animal (U.S.)
(Canada allows microbes)

Business Method (U.S.)

New Design
Locating a Patent Number

Look for patent numbers on product packaging, labels or the product itself.

Patent Number Format

CC 1,234,567 KK

country code  document number  kind code

Country Codes
CA Canada
CH Switzerland
DE Germany
EP European Patent Office
FR France
JP Japan
US U.S.
WO International application PCT

Kind Codes
  Canada = App.
B 2nd Level  US = Patent
C 3rd Level  Canada = Patent
Limitations of Google Patents

- U.S. patents only
- Not updated frequently
- Lacking classification data
- OCR data not complete

http://ep.espacenet.com
Searching for Patents

http://ep.espacenet.com/

Production of polyalkenyl succinimides useful as fuel and lubricant additives comprises using an alcohol or phenol to reduce foaming

Also published as:

- WO2003036445 (A1)
- EP1329169 (A2)
- US2004107593 (A1)
- WO2003036462 (A1)
- EP1398480 (A1)
- CN1633085 (A)
- EP1393490 (B1)
- ES2082812T (T3)

Chinese, English and Spanish translations.
Machine Translations

Searching for a Patent
Step 2: Locate Initial Class

http://ep.espacenet.com
Step 2: Initial Classification

Step 3: Scan Schedule
Step 4: Search Classification

2. Search terms

Enter keywords (English):

- Keyword(s) in title (in English): plastic AND bicycle
- Keyword(s) in title or abstract (in English): hair
- Publication number: WO03075629
- Application number: DE19971011696
- Priority number: WO1996U18935
- Publication date: yyyy-mm-dd
- Applicant: Instal Pasteur
- Inventor: Smith
- European classification (EPC): A01M22/10
- International Patent Classification (IPC): H03H1/10

SEARCH  CLEAR

Step 4: Scan Patents

A01N23/10 as the ECLA classification
(Results are sorted by date of upload in database)
The result is not what you expected? Get assistance.

1. MOUSE TERMINATOR
   - Inventor: SETO DAVID C.T. (CA); SETO DAVE W C (CA)
   - Ex.: A01N23/10
   - Publication info: CA2277858 - 2005-07-25

2. Animal trapping apparatus and method
   - Inventor: CARRIS JAMES L (US)
   - Ex.: A01N23/04; A01N23/22
   - Publication info: US2002159039 - 2002-10-03

3. TRAP FOR SMALL ANIMALS
   - Inventor: MALEVZJEAN-MARC (CH)
   - Ex.: A01N23/10; A01N23/22
   - Publication info: EP1106429B - 2002-04-17

4. No English title available
   - Inventor: MALEVZJEAN-MARC (CH)
   - Ex.: A01N23/10; A01N23/22
   - Publication info: A72423414 - 2003-07-15

5. Reusable, odourless rodent trap
   - Inventor: EDWARDS RICHARD M (US)
   - Ex.: A01N23/10
   - Publication info: US200212019 - 2002-04-10
Step 5: Read Patents
Step 6: Check References

- **References**
  - **U.S. PATENT DOCUMENTS**
    - 7,604,023
    - 7,323,239
    - 6,948,023
    - 6,498,238
    - 6,006,657
    - 5,942,760
    - 5,868,648
    - 5,866,779
    - 5,861,223
    - 5,781,768
    - 5,767,744
    - 5,720,151
    - 5,590,129

- **FOREIGN PATENT DOCUMENTS**
  - 2,398,091

- **OTHER PUBLICATIONS**

**ABC**

An apparatus for trapping and killing rodents, the apparatus including a container having an aperture, the opening being oriented such that the opening faces upward, thereby enabling ingestion of rodents in said container. The apparatus also includes a substantially cylindrical member slightly rounded around the opening of the container. The cylindrical member provides a suitable support for rodents, thereby causing rodents positioning themselves in the cylindrical member to fall into said container. A portion of the cylindrical member includes a structure for attracting rodents to position themselves on the cylindrical member. A container contains a substance for killing rodents and disabling the container from the decomposition of rodents.

12 Claims, 2 Drawing Sheets

Manage your resources and write your report
RefWorks is a web-based bibliographic management tool (often called a "citation manager").

It will help you save references from database and library catalogue searches, produce bibliographies, and create personal (or group) databases of citations.

http://library.queensu.ca/libguides/refworks.htm

Example

RefWorks

Go to Page: 1 2

Book Title: Controlled low-strength materials
Authors: Anderson, P.A.; Tappeh, J.C.; Fletcher, R.H.
Source: 1994, Elsevier

Book Title: Computational Fluid Mechanics and Heat Transfer
Authors: Anderson, P.A.; Tappeh, J.C.; Fletcher, R.H.
Source: 1994, Elsevier

Title: Circuits of power in creating digital standards: shaping an international information systems security standard
Authors: Ersig, D.
Source: MIS quarterly, 2006, 30, 413, University of Minnesota, MIS Research Center

Title: The first brain of apelike organisms: exposure to lead and latent overexpression of amyloid precursor protein and beta-amyloid in the aging brain
Authors: Baten, M.E.; Win, W.; Bakht, S.; Benitez, M.; Siddiqui, E.; Cao, Y.W.; Lathe, D.K.; Zappa, M.H.
Build a list of references

RefWorks

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Bibliography

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ASME American Society of Mechanical Engineers

Format Paper and Bibliography

Document to Format

Browse

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Why bother? (1.48 sec.)
Logging into RefWorks (1.26 min.)
Navigating Around RefWorks (20.2 min.)
Adding Your References to RefWorks (1.2 sec.)
Direct Import from an Online Databases Service (3.19 min.)
Importing Text Files (4.53 min.)
Entering References Manually (6.49 min.)
Searching Online Information Within RefWorks (2.51 min.)
Organizing Your References (3.00 min.)
Building Your Bibliography (51 sec.)
Quick Bibliography (5.49 min.)
Using Write-N-Cite (5.53 min.)
Using Our List/Cite View (7.37 min.)
Test Drive RefWorks (2.94 min.)
Additional Services

• If you feel that your team needs any specific resource that we do not have in our collection, please email any of us as soon as possible, please refer APSC400.

• If your project team needs more help in identifying/locating more resources for your project, email us to schedule a meeting.

Hands-on Exercise

• Project 1-15: Nasser

• Project 16-31: Mike
Questions?

Contact Information

Web: http://library.queensu.ca/webeng/

Reference Desk
Phone: 533-2610
E-mail: engsci@queensu.ca

Circ/Reserve Desk
Phone: 533-6981

Hours, 2009-2010

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