### The Patent Searchers' Dilemma:

- Where is the value?
  - How to manage costs conducting patent searches for competitive intelligence
    - Ron Simmer, PATSCAN
    - Service of PATEX Research and Consulting Itd
    - www. patex.ca.



PATSCAN was established in 1986 to assist Tech Transfer Process by providing access to patents at the University of BC

Since UBC terminated their patent services in 2003, the PATSCAN Trademark was purchased by Patex Research and Consulting ltd. operated and owned by Ron Simmer

PATSCAN provides professional patent and trademark research services to the private sector in Canada and the USA

ron@patex.ca

# IP Data is Special 3 Functions in a Corporation

- Corporate asset protecting price & market share.
- 2. Insurance against legal action.
- 3. Poker chips in strategic alliance game.

### Why do your own patent searching?

- Amazing competitive intelligence opportunities in patent data.
   Besides the information you know you don't know there is always the information you don't know you don't know.
- Aside from free Internet databases there are modestly priced but powerful patent Databases subscription services: Delphion, Micropatent and Lexis Nexis.

### Competitive Intelligence For R&D Decisions

- Analyzing the technology component of:
  - Mergers & Acquisitions
  - Bids and Proposals
  - Lawsuits & Infringement proceedings
  - Marketing Plans
  - Entry Strategies

### CI Examples using patent data

- Statistical analysis of industry sectors
- Patent portfolio analysis
- Human capital studies
- Analysis of patent quality

### Statistical Analysis Using Patent Data

### Manipulate any patent data fields to extract trends:

- Rank assignees or inventors to identify trends
- Compare trends in patent filings over time
- Map density/activity of filing for competitors
- Chart a patent portfolio by classification
- View industry technological trends internationally
- Examine history of technology by citation analysis

#### g03b/ic and digital:(3n)camera:

\*SEARCHING..

OCCURS TERM

76336 G03B/IC

205841 DIGITAL:

94835 CAMERA:

**55 2 RESULT (416)** 

55 37

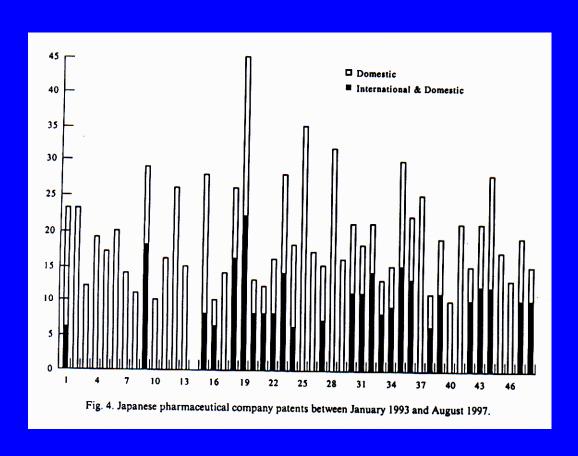
get rank pa top 15

#### \*PROCESSING....

THERE ARE 160 UNIQUE VALUES.
OCCURRENCES PERCENT TERM

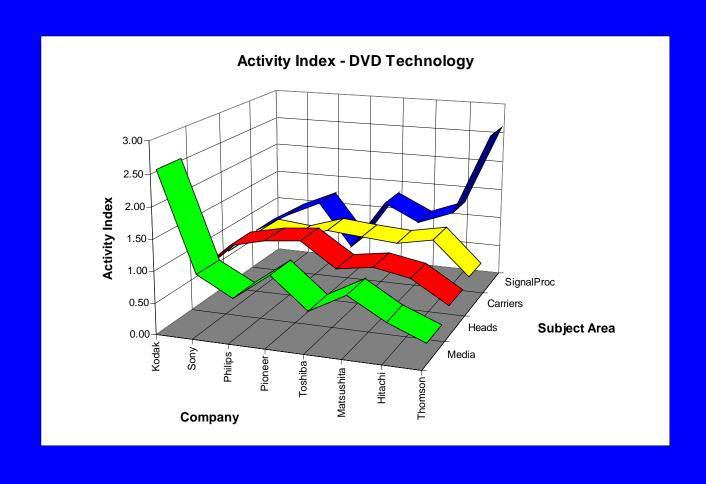
- 64 15.38% CANON KK
- 26 6.25% MINOLTA CAMERA KK
- 24 5.76% RICOH KK
- 21 5.04% SANYO ELECTRIC CO LTD
- 18 4.32% FUJI PHOTO FILM CO LTD
- 16 3.84% ASAHI OPTICAL CO LTD
- 15 3.60% EASTMAN KODAK CO
- 15 3.60% KONICA CORP
- 14 3.36% ASAHI KOGAKU KOGYO KK
- 12 2.88% CASIO COMPUTER CO LTD
- 11 2.64% NIKON CORP
- 8 1.92% SONY CORP
- 8 1.92% VEB PENTACON DRESDEN KAMERA
- 7 1.68% KYOCERA CORP
- 6 1.44% HITACHI LTD

# Japanese Pharmaceutical Patent Portfolio International vs. Domestic Filings

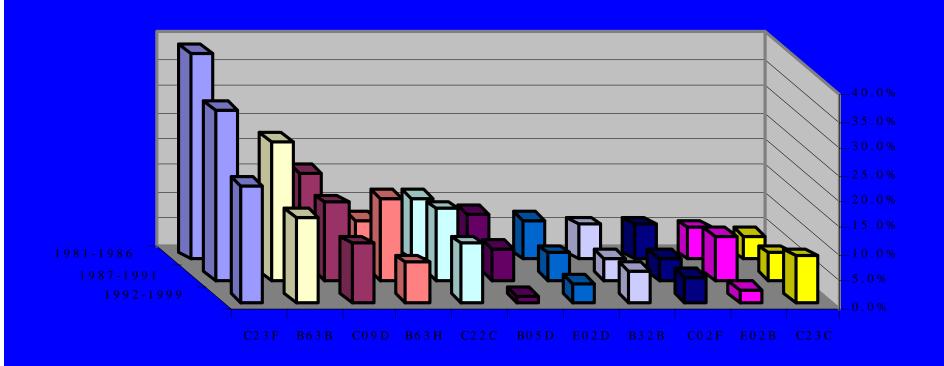


### Activity Index Plot for 8 companies and 4 technologies

DVD Technology Study - PAY: 1985 Thru 1995



## Saltwater Corrosion Active Areas (by IPC Codes)



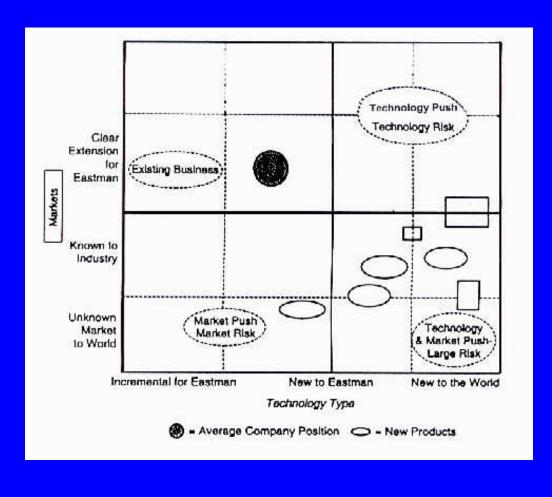
## Measuring the Portfolio Against the Competition

New technologies being substituted?

 Citation searching reveal competitors "Patenting Around"?

Is IP protection a major factor in the market?

## Portfolio analyzed into 4 technology risk quadrants



### Analyzing the Strength of an IP Portfolio

- 1. Geographic coverage indicates market strategies
- Review size & assess trends age, filing frequency, product life cycles
- 3. Kinds of Patents and degree of protection for core technologies
- 4.Technology licensed or assigned in/out
- 5. Aggressive filing provisionals

### Assessing the Human Capital Factor in Corporate IP

- 1. Stable R & D team with low turnover?
- 2. Inventors with high industry reputation?
- 3. University/Gov't research links?
- 4. Reputable literature published and cited?

#### Inventors on Richardson Vicks Patents

SS 5? get in

THERE ARE 125 UNIQUE VALUES. OCCURRENCES PERCENT TERM

19 15.32%	DECKNER GE/IN
14 11.29%	SHAH NB/IN
11 8.87%	DHABHAR DJ/IN
10 8.06%	SCHMIDT NF/IN
7 5.64%	LASKA EM/IN
7 5.64%	SIEGEL CE/IN
7 5.64%	SUNSHINE A/IN
6 4.83%	KELLEHER WJ/IN
5 4.03%	DECKNER G/IN

### Patent Assignees on G. E. Deckner's Patents

SS 5?

Deckner GE/IN SS 5 RESULT (40)

SS 6?

get pa

THERE ARE 7 UNIQUE VALUES.

OCCURRENCES PERCENT TERM

- 19 47.50% RICHARDSON VICKS INC
- 13 32.50% CHARLES OF THE RITZ
- 9 22.50% PROCTER & GAMBLE CO
- 3 7.50% DECKNER GE
- 1 2.50% CIOTTISL
- 1 2.50% THAMAN L A
- 1 2.50% WOODIN F W

### Analyzing Patent Quality at a Glance

- 1. Reputable corporate or institutional source?
- 2. Several Inventors?
- 3. Prosecuted by solid law firm?
- 4. How much prior art cited?
  Any literature cited?
- 5. Patent Co-operation Treaty Filing?

# Patent Quality Deeper Analysis Using Patent Databases

- 1. How many recent patents cite patents in question?
- 2. How many foreign equivalents/counterparts?
- 3. Speedy prosecution?
- 4. Claims valid, supported and broad?
- 5. Infringement suits, Re-examinations?

### Free Internet Intellectual Property Databases:

- •
- What are they good for?
- Sampling data, answers to easy questions,
- state of the art searches.
- Verifying results from other databases.
- Free patent copies.
- What are their limits?
- Assignee and status info unreliable.
- Slow and ineffective search tools.
- Poor titles, abstracts, indexing.
- How reliable is the data?
- May be incomplete, dated and inaccurate.

### Best Free Internet Sites for Patent Searching

- Espacnet 30 million docs, many in PDF
- Depatis.net International coverage in English
- USPTO Site full text searchable
- SurfIP Asian dbases from Singapore
- WIPO database of PCT applications
- CIPO site on Strategis

### Patent Classification – The Classical Tools are Free!

International Patent Classification

Application Oriented - Wide use

European Classification (ECLA) valuable extension of IPC

**US Patent Office Classification** 

- Continuous updates with finer detail than IPC -
- Function Oriented

### Commercial Sources of Patent Data

The Usual Big Vendors

Second Tier Database Providers

- Dialog
- STN (Chem Abs.)
- Questel-Orbit
- Lexis Nexis
- Derwent

- Delphion
- Micropatent
- ICO Patent Search
- Minesoft

# Patent Data Issues - inconsistent language, spelling, classification Quality

How good is title and abstract information?

Eg Derwent has enhanced titles and abstracts.

#### Reliability

Error checking by Vendor?

Missing data?

Classification revisions?

#### Currency

How Frequent and thorough are updates?

### **Subscription Patent Databases**

What is the range of costs for patent searching?
From US\$95 a month (Delphion) to hundreds of dollars an hour (Derwent, Chem. Abs.)

How is the data better? The assignee, patent family and status data is more likely to be current.

When do they need to be used?

When critical questions need answering.

#### **The Value Tradeoffs**

- Time is Money \$\$\$\$\$\$\$
   Subscription databases have tools to greatly speed up search process
  - -Snapshots on Delphion
  - -Keyword in Context on Lexis Nexis
  - Several vendors offer flat monthly rates for unlimited use
  - Find appropriate sources for your technology

### The Value Triage Exercise

- 1. Use free databases for quick answers and to verify results from other sources.
- 2. Use mid-range fixed subscription databases. for general high volume searching.
- 3. For critical project verify and check results on best possible sources and bear the costs.

### Patent Family Query Comparison

- INPADOC philosophy includes all patents related to a common priority filing date. (\$)
- Derwent practice is more inclusive, pulling in more related patents.(\$\$\$\$)
  - Assignee data by country.
- Both systems victims of national patent office data distribution.
- CIPO a problem. Significant missing CA docs

### Patent status query comparison

INPADOC database provides reliable status data for only 42 of 69 jurisdictions

- Little Canadian status included.

Derwent patent status not reliable

IFI and Lexis Nexis provide excellent

USPTO legal status data.

CIPO status service poor.

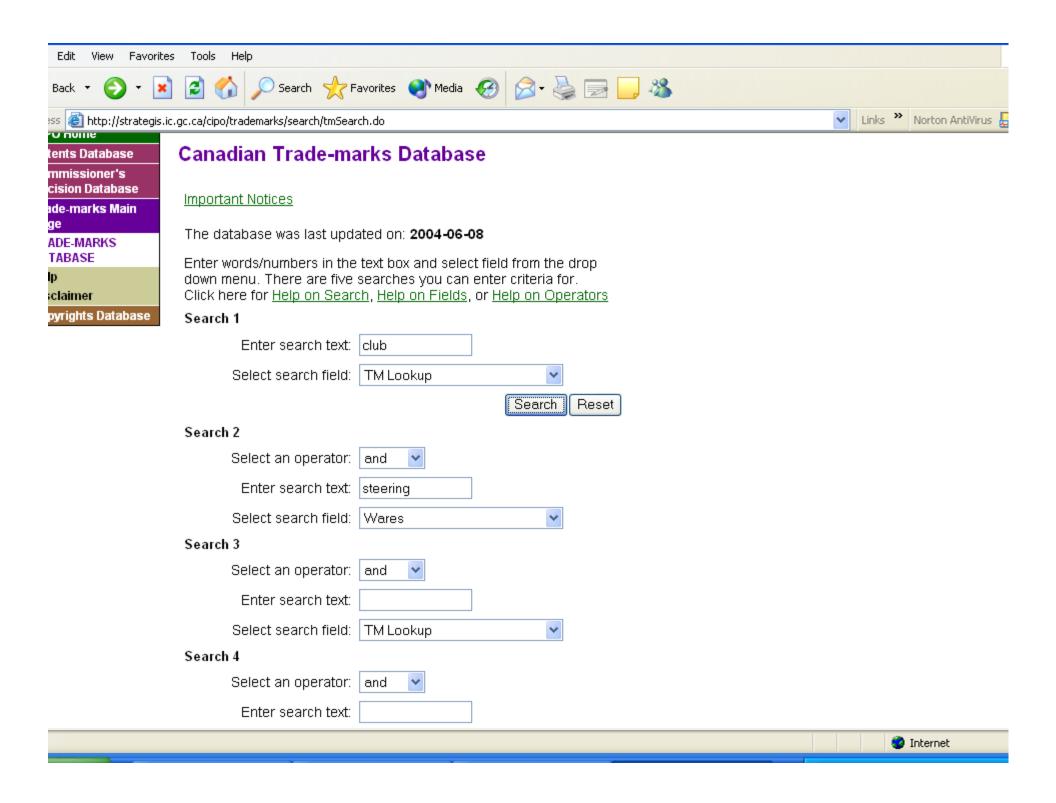
## A Competitive Intelligence Example using IP

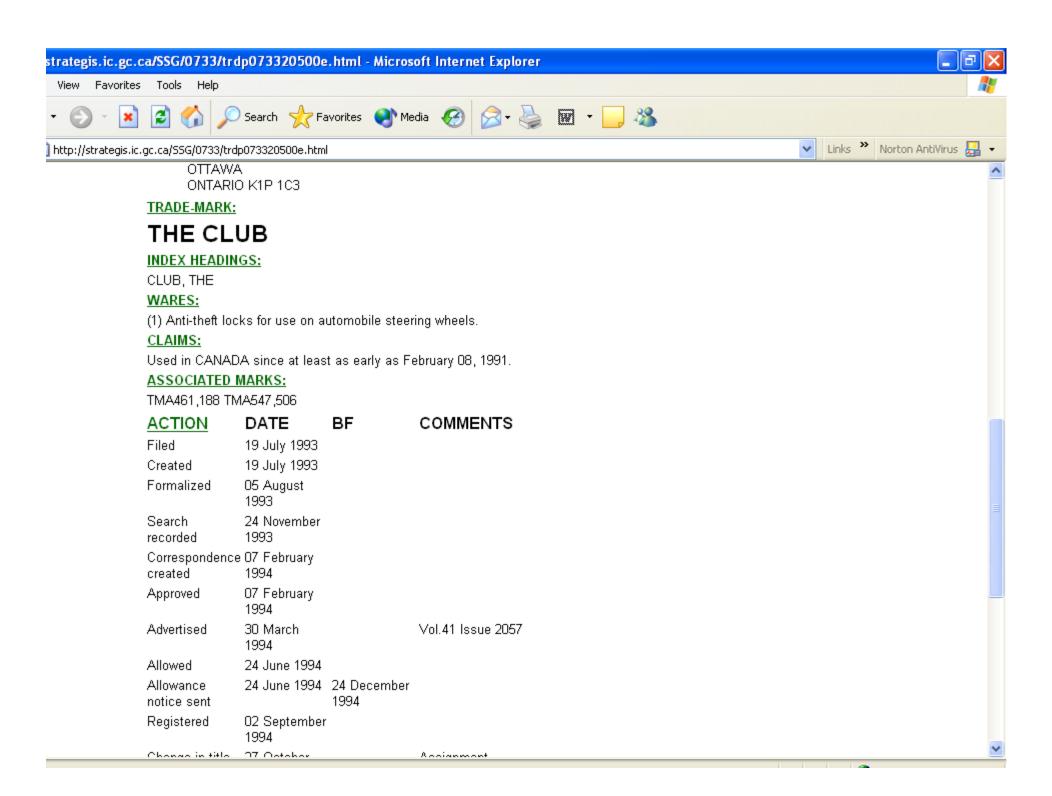
### Perform a 10 minute Cl search on a product known as "The Club" to find:

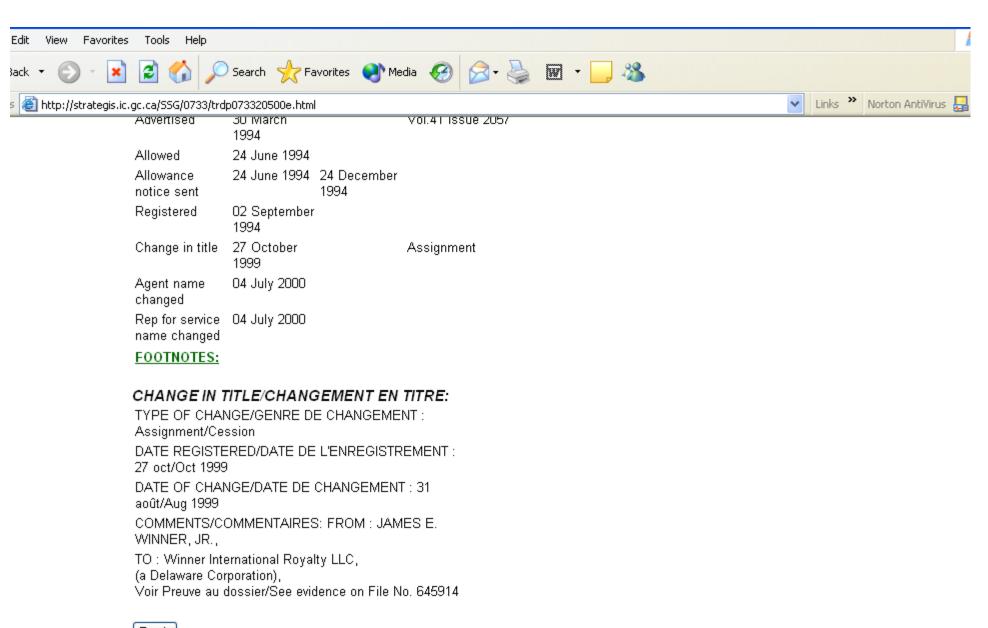
- 1. Who owns it?
- 2. How many US patents cover it?
- 3. Are there Canadian counterpart patents
- 4. How aggressive are they in defending their IP?

### "The Club" May be a Registered Trademark

- Search it on the best available trademark database on the Internet
- Access to Canadian marks offered by CIPO on Strategis
- In theory the Company owning the Trademark will own the patent



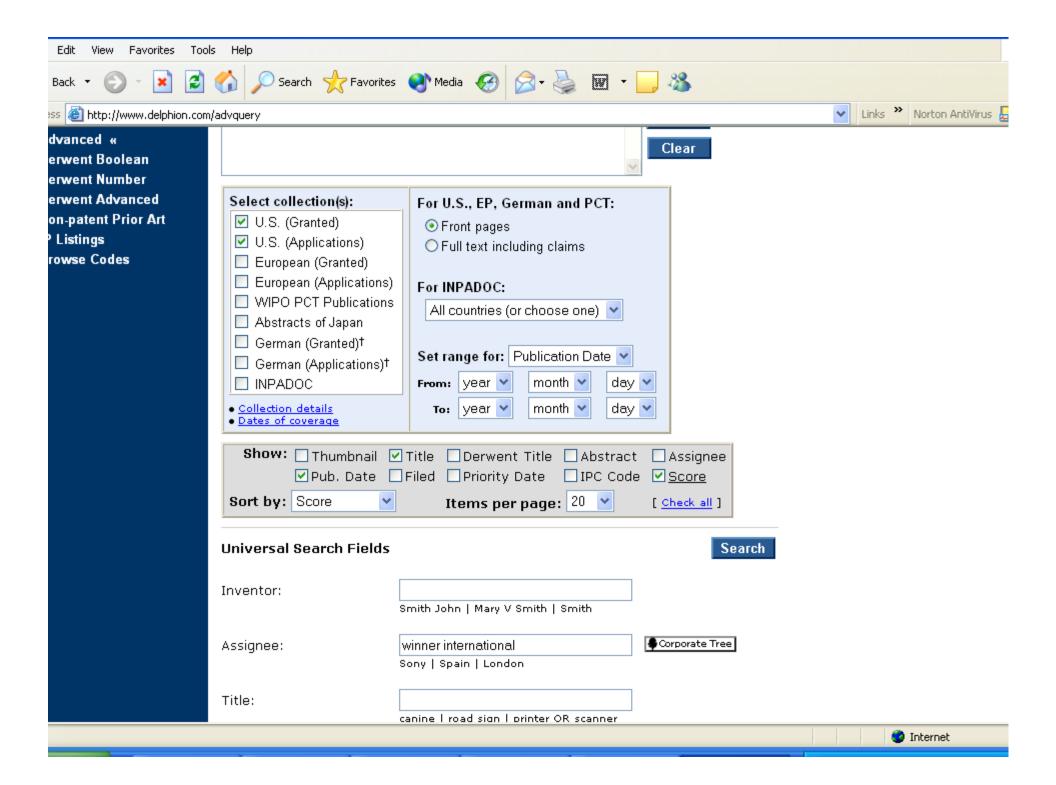


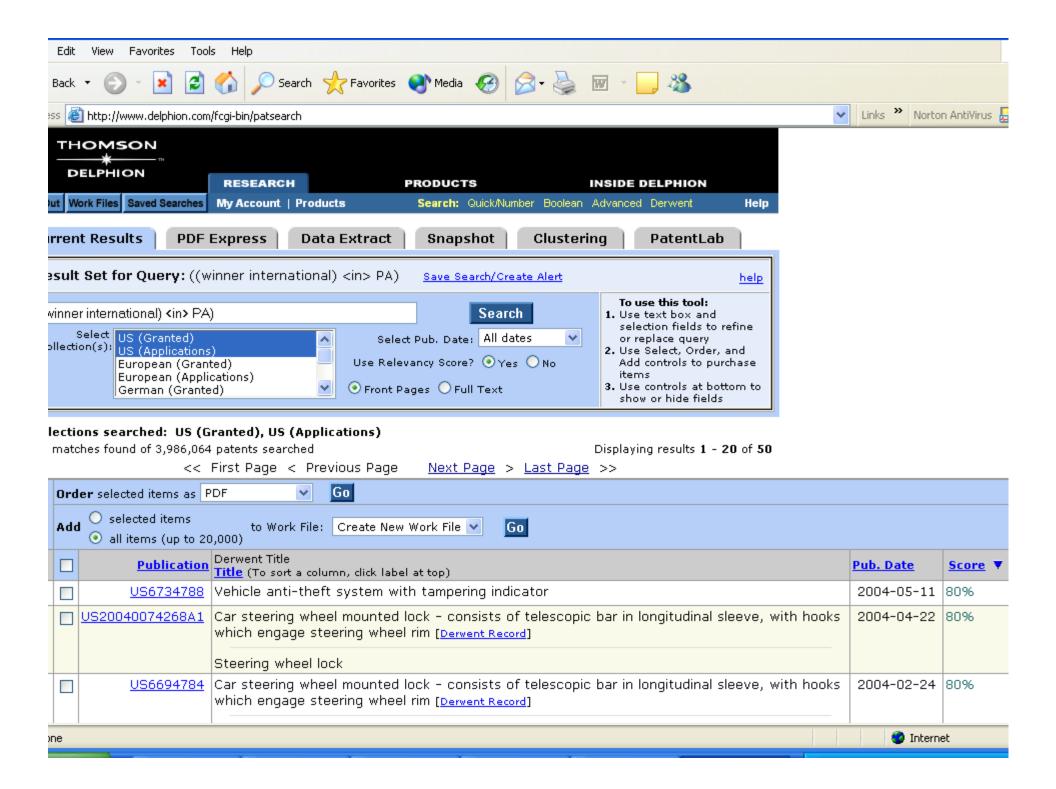


Back

Last Modified: February 18, 2003

Important Notices



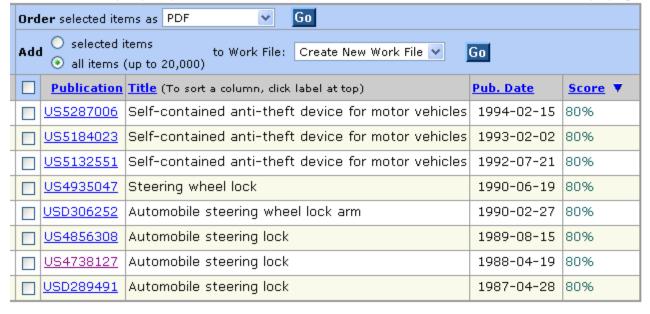


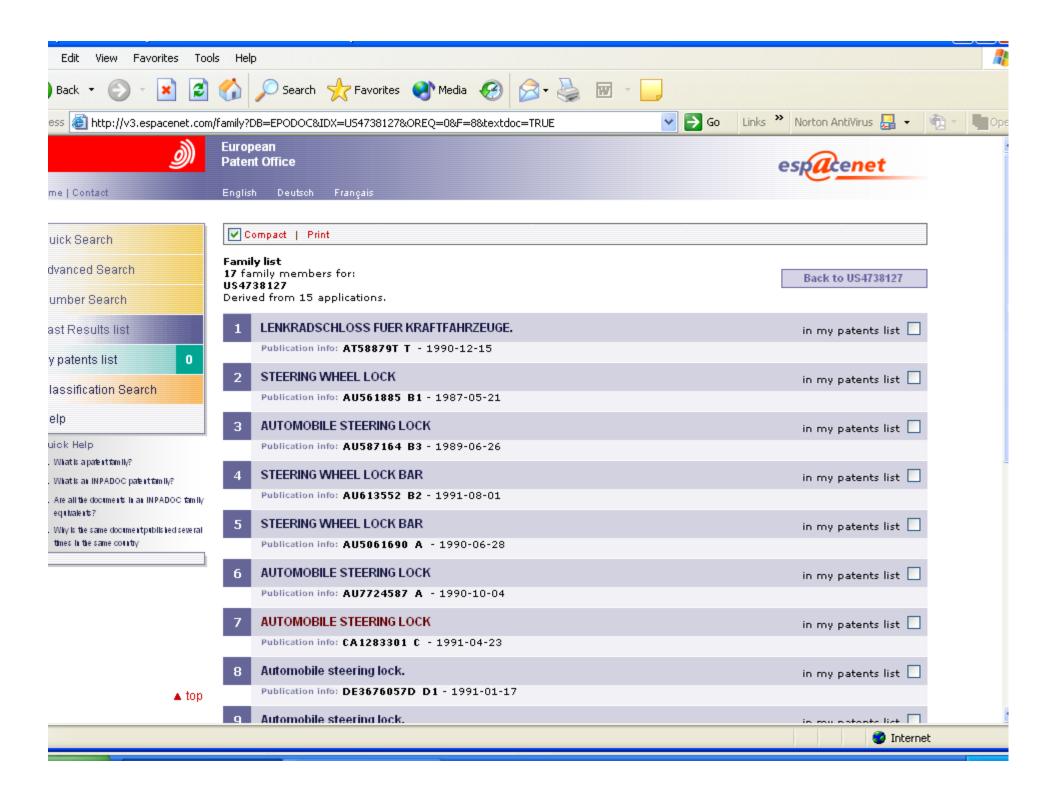


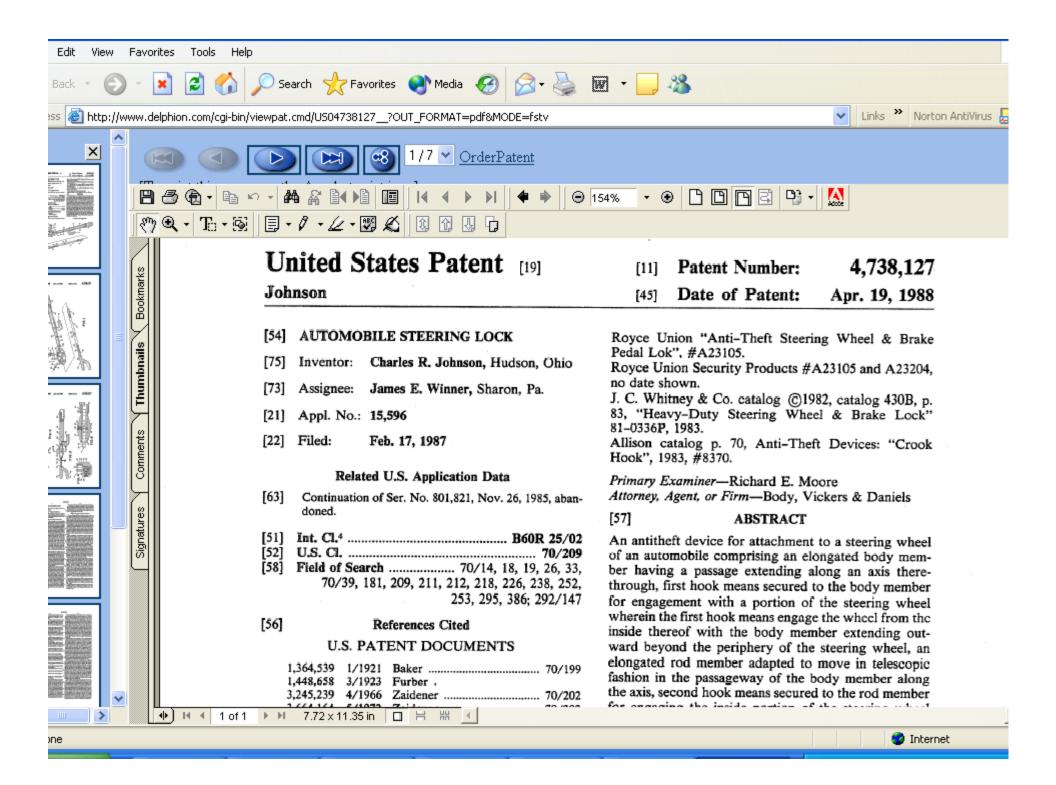
#### lections searched: US (Granted), US (Applications)

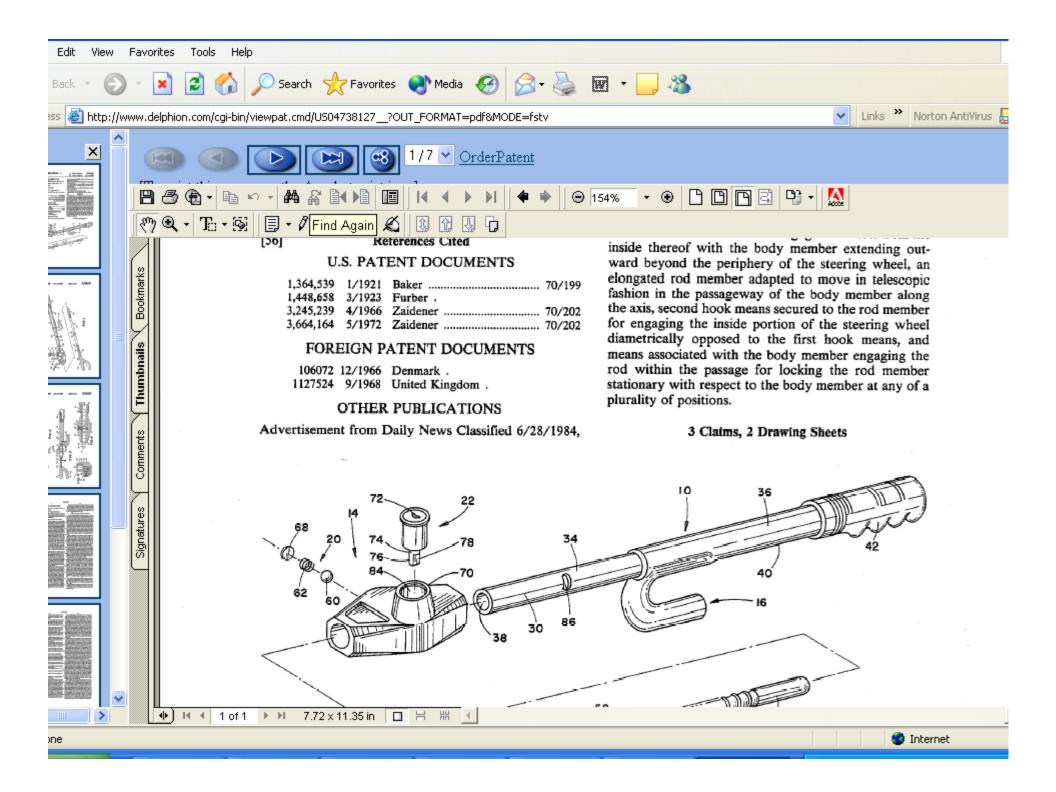
natches found of 3,986,064 patents searched

Displaying results 1 - 8 of 8

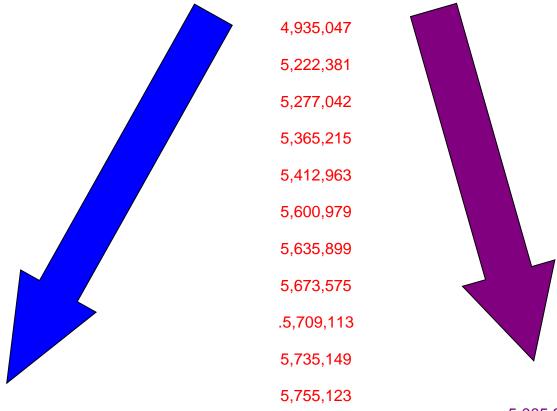








#### 4,738,127 4,856,308 WINNER INTERNATIONAL ROYALTY CORPORATION



5,022246 All Ship Enterprise Co. Ltd

5,040,388

5,042,278

5,107,692

5,138,853

5,284,037

5,005,389

Cheen lu Industry Co Ltd

5,031,429

5,163,310

5,179,849







nner International LLC Files Action Against O-Mega and its Owners and Requests liminary Injunction (5/8/00)

nner International Files Lawsuit Against Master Lock and Asks for Preliminary Injunction 5/00)

ner International Royalty Corporation Wins Appeal In United States Court of Appeals, Ieral Circuit (2/7/00)

ne

#### NNER INTERNATIONAL LLC FILES ACTION AGAINST O-MEGA AND ITS OWNERS AND REQUESTS PRELIMINARY INJUNCTION

aron, PA) - Winner International LLC ("Winner") filed a legal action in U.S. District Court, Southern District of California on April 27, 2000, against O-Mega Innovations,

- Panata Openiana, and Lilia Openiana aricina from the unlawful manufacturing, ucing and calling defendants' vehicle anti-theft device known as the "Clawbar" which

#### **Some Patent Search URLS**

Patent Info Users Group <a href="https://www.piug.org/">www.piug.org/</a>

European Patent Office <u>www.european-patent-office.org/index.en.php</u>

Mayall's IP Links www.mayallj.freeserve.co.uk/

**British Library** 

www.bl.uk/collections/patents/search.html

PATSCAN www.patex.ca