

Defendants' Exhibit 4b

Electronic Patent Searching and Navigating the USPTO Internet Site

Why search?

- To see if any Prior Art related to your invention exists
- Helps determine if you want to file an application
- Helps to determine the appropriate claim scope when drafting claims

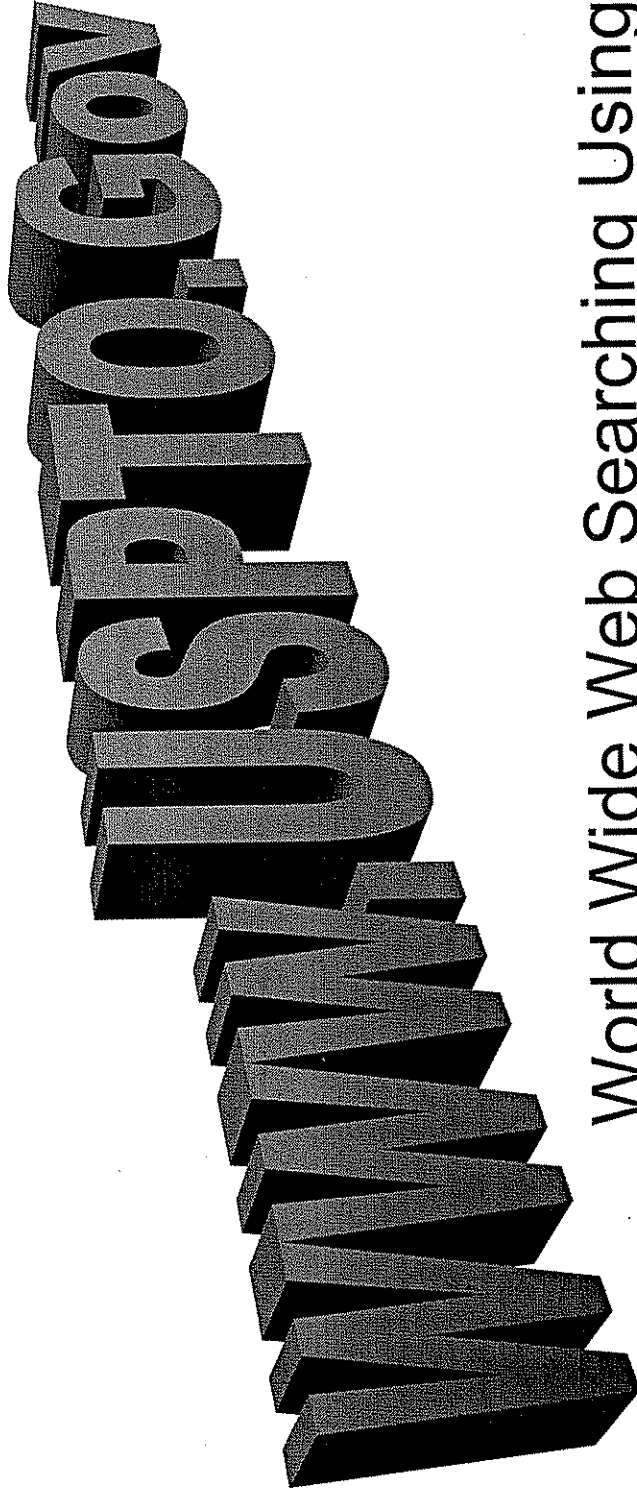
What Documents are Available to be Searched?

- US Patents and US Published Applications
- Foreign Patent Documents (e.g., EPO and JPO)
- Non-Patent Literature (any published documents publicly available other than Patents or Published Patent Applications)
 - Internet Searches (Goggle, Yahoo, etc.)
 - Trade Publications and Databases (e.g., ACM, IEEE, CHEMnetBASE, MechanicalEngineeringnetBASE)

Where Can Patent Searches Be Performed?

- The USPTO Public Search Room
- Patent and Trademark Depository Libraries (PTDL's)
 - Located in 50 states, Washington D.C. and Puerto Rico
- World Wide Web Search Engines
 - USPTO (www.uspto.gov)
 - EPO (<http://ep.espacenet.com>)
 - JPO (<http://www.jpo.go.jp>)
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www.uspto.gov

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Overview of Website

Welcome to the only official Website of the

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 An Agency Of The United States Department Of Commerce

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Site Overview - New Users Search Go



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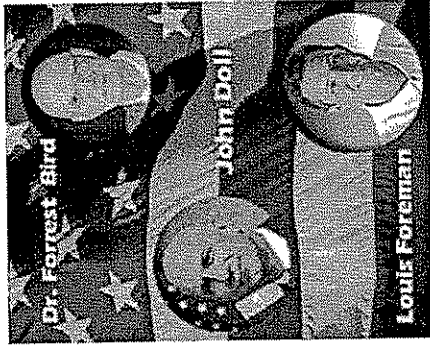
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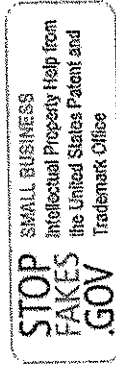
Hall of Fame Inventor Forrest Bird to Speak at Independent Inventor Conference
 Space Unlimited...Register Now

Dr. Forrest Bird, whose invention of the "Baby Bird" respirator has saved the lives of millions of infants over the years, has joined the roster of speakers for the Chicago Regional Inventors Conference on July 28-29. Dr. Bird was inducted into the National Inventors Hall of Fame in 1995.

The Conference is co-sponsored by the United States Patent and Trademark Office (USPTO), Northwestern University School of Law and the National Inventors Hall of Fame. It will be held at the Northwestern School of Law, 375 E. Chicago

Avenue.

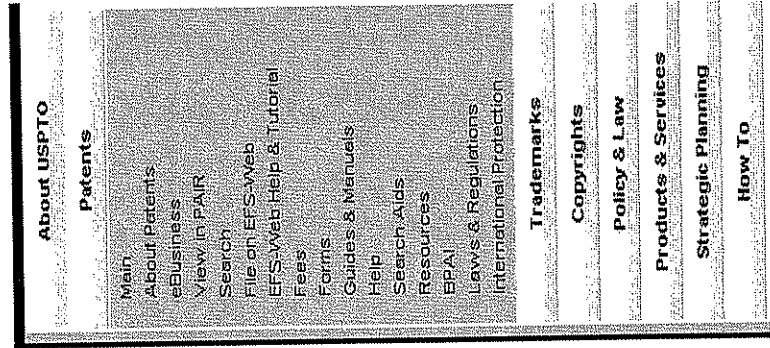
Other speakers at the event include Commissioner for Patents John Doll and Louis Foreman, CEO of Enventys, a product design and manufacturing firm. Foreman is also executive producer of the upcoming PBS series, "Everyday Edisons." The series, which features the inventions of 14 independent inventors, will premiere in September.



Department of Commerce

Overview of Website

- Downloading Forms from the Website
- Click on “Patents”, then click on “Forms”



Downloading Forms

| Form Number (PDF) | Last Updated | Title |
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| PTO 2038 | 2000/06 | Credit Card Payment Form and Instructions |
| <i>Patent Related Forms</i> | | |
| PTO/SB/01 | 2001/03 | Declaration for Utility or Design Patent Application [2 pages]. To appoint an attorney or agent, use form PTO/SB/81 |
| PTO/SB/01a | 2000/10 | Declaration (37 CFR 1.63) for Utility or Design Patent Application Using An Application Data Sheet (37 CFR 1.76). To appoint an attorney or agent, use form PTO/SB/81 |
| PTO/SB/02 | 2000/11 | Declaration (Additional Inventors) [2 pages] |
| PTO/SB/03 | 2001/03 | Plant Patent Application (35 USC 161) Declaration [2 pages]. To appoint an attorney or agent, use form PTO/SB/81 |
| PTO/SB/03a | 2000/10 | Declaration (37 CFR 1.63) for Plant Application Using An Application Data Sheet (37 CFR 1.76). To appoint an attorney or agent, use form PTO/SB/81 |
| PTO/SB/04 | 2001/03 | Supplemental Declaration for Utility or Design Patent Application [2 pages]. To appoint an attorney or agent, use form PTO/SB/81 |
| PTO/SB/05 | 2001/03 | New Utility Patent Application Transmittal |
| PTO/SB/06 | 2000/08 | Patent Application Fee Determination Record |
| PTO/SB/07 | 2000/08 | Multiple Dependent Claim Fee Calculation Sheet |
| PTO/SB/08 | 2000/08 | Information Disclosure Statement by Applicant [2 pages]. Click Here for a listing of kind codes used on U.S. patent documents |
| PTO/SB/09 | 1997/12 | No longer required, therefore deleted: Verified Statement Claiming Small Entity Status (37 CFR 1.9 (i) & 1.27(b))--Independent Inventor. See Simplified Small Entity Status , 37 CFR 1.27 |

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Patent Electronic Business Center > Patent Full-Text and Full-Page Image Databases

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Searching US Patents

- Three Types of Searches
 - Quick
 - Advanced
 - Patent Number Or Application Number

- Two Different Databases to Search
 - Issued patents
 - Published Applications

Quick Search

USPTO PATENT FULL-TEXT AND IMAGE DATABASE

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Query [\[Help\]](#)

Term 1: "tennis racket" in Field 1: Title

Term 2: ball\$

Select years [\[Help\]](#)

[1975 to present [full-text]]

AND
AND
OR
ANDNOT

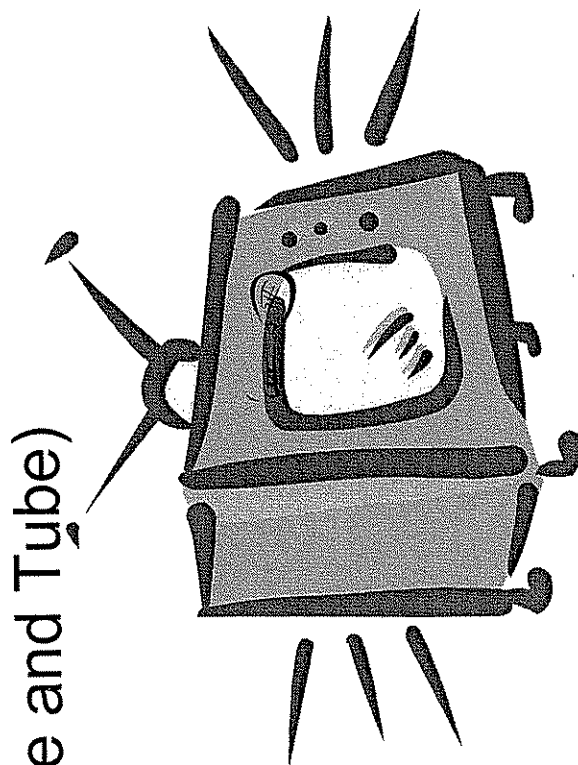
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Data current through 07/19/2005

Patents from 1790 through 1975 are searchable only by Patent Number and Current US Classification!

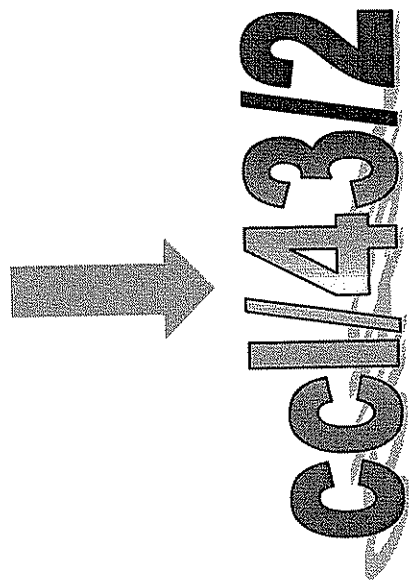
Advanced Search

- Query Search
 - Nested Boolean
 - Television or (Cathode and Tube)
 - Phrase Searching
 - “Tennis Racket”
 - Right Truncation
 - El ec\$



Advanced Search

- Fields and Indexes
 - Examples are:
 - Patent Number (PN)
 - Class (CCL)
 - Title (TTL)
 - Abstract (ABST)
- Enables Retrieval of Patents Based on a Selected Portion of the Patent



Performing a Text Search

Query [\[Help\]](#)

Examples:
 ttl{(tennis and (racquet or racket))
 isd/1/8/2002 and motorcycle
 in/newmar-julie

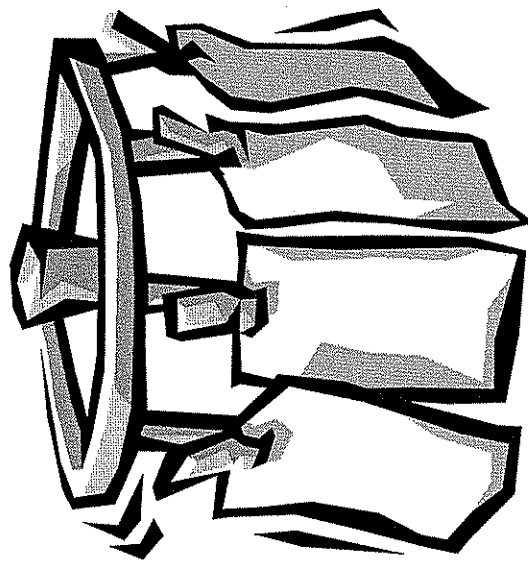
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Patents from 1790 through 1975 are searchable only by Patent Number and Current US Classification!

| Field Code | Field Name | Field Code | Field Name |
|------------|------------------------------|------------|--------------------|
| PN | Patent Number | IN | Inventor Name |
| ISD | Issue Date | IC | Inventor City |
| TTL | Title | IS | Inventor State |
| ABST | Abstract | ICN | Inventor Country |
| ACLM | Claim(s) | LREP | Attorney or Agent |
| SPEC | Description/Specification | AN | Assignee Name |
| CCL | Current US Classification | AC | Assignee City |
| ICL | International Classification | AS | Assignee State |
| APN | Application Serial Number | ACN | Assignee Country |
| APD | Application Date | EXP | Primary Examiner |
| PARN | Parent Case Information | EXA | Assistant Examiner |
| RLAP | Related US App. Data | REF | Referenced By |
| REIS | Reissue Data | FREE | Foreign References |

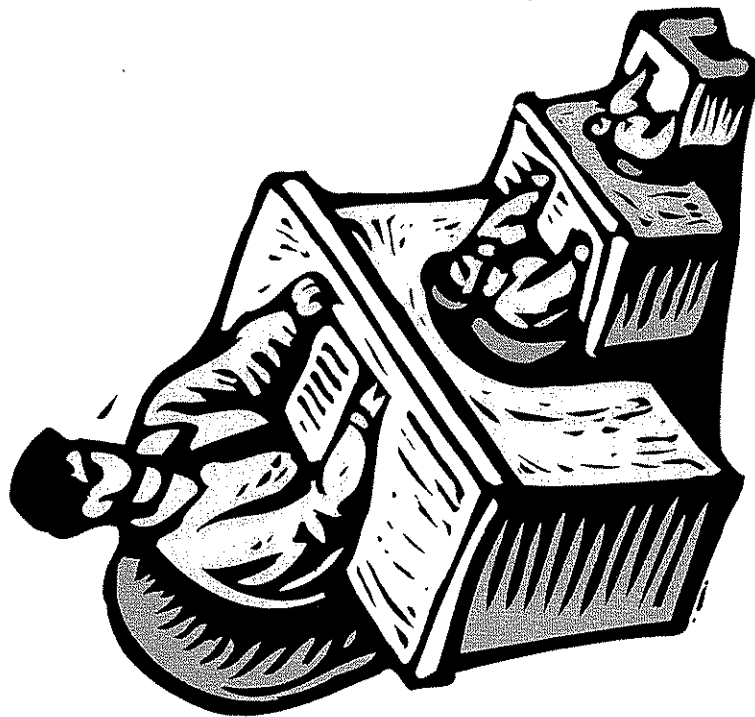
Classification Overview

- The USPC provides for the storage and retrieval of every U.S. patent document that a patent examiner needs to review when examining patent applications



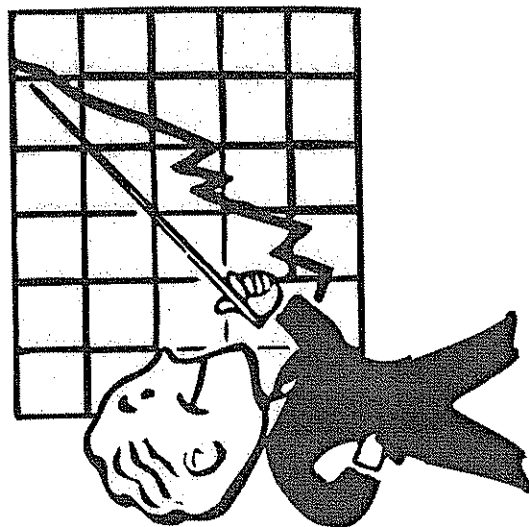
Patent Classification

- Hierarchical Structure
- Technology divided into three major disciplines:
 - Chemical
 - Electrical
 - Mechanical



Patent Classification

- Each Discipline is Further Divided into Sub-Technologies
 - Electrical
 - Com munications
 - Com puters
 - Phys ics, Optics
 - Syst em Components



Patent Classification

- Each Sub-Technology is Divided into Classes
 - Electrical
 - Communications
 - Class 379 Telephony
 - Class 382 Image Analysis
 - Class 455 Telecommunications
 - Class 348 Television

Patent Classification

- Each Class is Broken Down into Subclasses which are the Smallest Division
- Class 348 Television has Subclasses such as
 - TV Displays
 - Bandwidth Compression
 - Transmitters
 - Receivers
 - Etc.

Advantages of the MOC

- The Title and Definition of each Class and Subclass are Text Searchable
- Benefit of Organized Classification System
 - Text Searching can be Tightly Focused
 - Combination of Word Searching and Class/Subclass Searching Yields Better Results

Manual of Classification

- To get to the Manual of Classification on the Website, click on “Guides and Manuals” on the top left half of the Home Page
- On the following screen, click on “Manual of Patent Classification”

Manual of Classification

| | |
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|---|--|

Manual of Classification (Web)



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Site C

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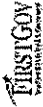
1. Enter a US Patent Classification...
 /
 Class (required)/Subclass (optional)
 e.g., 704/1 or 482/1
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B. Search

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Search for:

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Searching the Manual of Classification

- Text search through the Manual of Classification to find the Class and subclass number of the subject matter
- For example, to search for “fishing nets”:
 - Type “fishing nets” in the “Search For” box on the right hand side of the page
 - Click “Search”
 - The result returns Class 43 “Fishing, Trapping and Vermin Destroying”

Search for "fishing nets"

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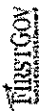


C. Classification Information

- Information on E-Subclasses
- Documents and Reports Related to the Manual of Classification
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B. Search

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"Fishing Nets" Results



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"fishing nets" site: <http://www.uspto.gov/go/classification>

Search

Advanced Search
Search Tips

Search powered by Vivisimo

1 results for "fishing nets" site: <http://www.uspto.gov/go/classification> (Details)

Web results by MSN Search

Class Definition for Class 43 - FISHING, TRAPPING, AND VERMIN ... [\[new window\]](#) [\[preview\]](#)

SECTION I - CLASS DEFINITION. This class includes inventions which deal with the trapping of wild animals, the catching of fish, especially food fish, and the destruction of all animal life obnoxious or ... www.uspto.gov/go/classification/uspc013/defs013.htm · Cached · More from Patent and Trademark Office

"fishing nets" site: <http://www.uspto.gov/go/classification>

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“Fishing Nets” Example

- Clicking on the hyperlink to Class 43 shows all the subclasses in this Class
- Note that subclasses 7 through 14 are directed to “Fishing Nets”
- Clicking on the red “**P**” on any subclass to automatically retrieve all the US patents in the chosen subclass, known as a Classification Search (not limited)
 - Allows for a complete search of all patents issued in a particular subclass
 - The only way to view patents that were issued prior to 1976

Class 43

7

7

Nets:
This subclass is indented under subclass 4. Those open fabrics of twine or equivalent material, woven or tied with meshes of any size, designed and used for capturing fish or other aquatic animals in their native element and improvements closely allied to nets, such as net-stakes, and not provided for in other subclasses.

SEE OR SEARCH THIS CLASS, SUBCLASS:

43.1+, for floats and sinkers.
100+, for fish traps constructed largely of netting and for fish traps which are towed like certain nets.

SEE OR SEARCH CLASS:

87, Textiles: Braiding, Netting, and Lace Making, subclasses 1 through 13 for such fabrics, particularly subclasses 3+ and subclass 12 for intertwisted strand and knotted mesh types.
114, Ships, subclass 241 for nets used to protect ships from torpedoes, mines, etc.
245, Wire Fabrics and Structure, appropriate subclasses, for wire-netting.
428, Stock Material or Miscellaneous Articles, subclasses 175+, 190, 193, and 196+ for a stock material product in the form of a web or sheet embodying mechanically interengaged strands or strand-portions (e.g., weave, knit).
442, Fabric (Woven, Knitted, or Nonwoven Textile or Cloth, etc.), subclasses 181+ and 304+ for a woven or knit fabric and especially subclasses 43+ and 58 for a coated or impregnated net or open mesh.

8

8

Handling apparatus:

This subclass is indented under subclass 7. Devices special to the art of fishing for handling, hoisting, pulling, and otherwise manipulating fish nets where the invention lies in the handling apparatus by itself and not in the net.

(1) Note. Where the invention resides in the net chiefly, appropriate subclasses below should be searched.

SEE OR SEARCH THIS CLASS, SUBCLASS:

15, for apparatus for manipulating fishing-lines.

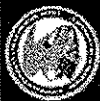
SEE OR SEARCH CLASS:

54, Harness for Working Animal, subclasses 80.4+ for animal protecting nets.
242, Winding, Tensioning, or Guiding, subclasses 370+ and 520+ for apparatus for winding a web material which may include a net.
254, Implements or Apparatus for Applying Pushing or Pulling Force, subclasses 264+ for cable-pulling devices which are in some instances disclosed as pulling in nets or purse lines, but have no special structure adapting them to handle the nets or controls adapting them to manipulate the nets or lines for fishing purposes.
414, Material or Article Handling, especially subclasses 137.7+ for means for loading or unloading a marine vessel directly from the sea, generally.

Class Number and Titles

- To view all the classes in the Manual of Classification, click on “Class Number and Titles” in the upper left hand corner of the page
- A list of all the classes will appear below

Class Numbers and Titles

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- [Class Schedule \(PDF\)](#)
- [Class Definition \(PDF\)](#)

2. Select a class or Search within this page with your browser.

| Class Number and Title |
|--|
| <input type="button" value="Go"/> 002 Apparel |
| <input type="button" value="Go"/> 004 Baths, closets, sinks, and spittoons |
| <input type="button" value="Go"/> 005 Beds |
| <input type="button" value="Go"/> 007 Compound tools |
| <input type="button" value="Go"/> 008 Bleaching and dyeing; fluid treatment and chemical modification of textiles and fibers |
| <input type="button" value="Go"/> 012 Boot and shoe making |

Class Numbers and Titles

- Clicking on the “Go” button for Class 2 will show all the subclasses under Class 2 “Apparel”

Class 2 "Apparel"

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Class 2 APPAREL

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- 1 MISCELLANEOUS
- 455 GUARD OR PROTECTOR
 - 456 . Body cover
 - 457 .. Hazardous material body cover
 - 458 .. Thermal body cover
 - 2.11 .. Astronaut's body cover
 - 2.12 ... Having relatively rotatable coaxial coupling component
 - 2.13 ... Having convoluted component
 - 2.14 .. Aviator's body cover
 - 2.15 .. Underwater diver's body cover
 - 2.16 ... Having an insulation layer
 - 2.17 ... Having a garment closure (e.g., zipper, velcro, etc.)
 - 459 . Shoulder protector
 - 460 .. Strap protector
 - 461 .. Both shoulders
 - 462 ... Vest type
 - 463 . Chest protector
 - 464 . Abdomen protector
 - 465 . Side impact torso protector

Performing a Text Search An Example of Searching

U.S. Patent Feb. 3, 1998 Sheet 1 of 4 5,715,323

Radio Sunglasses

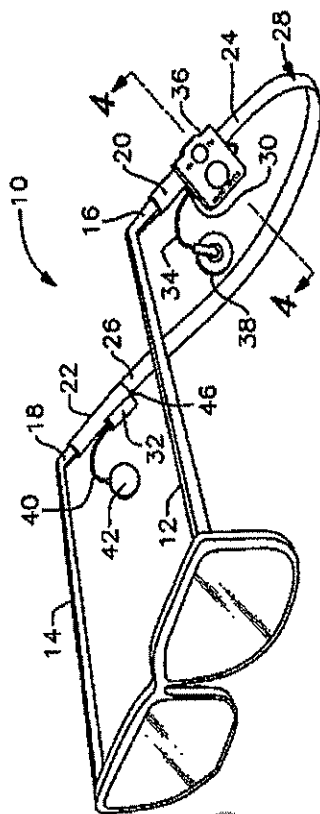


Fig. 1

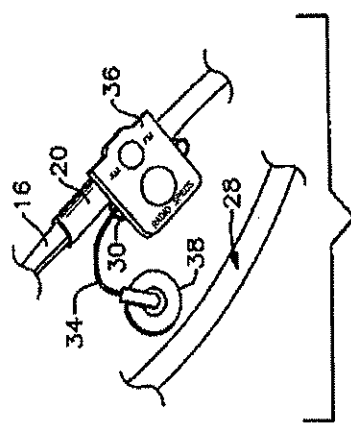
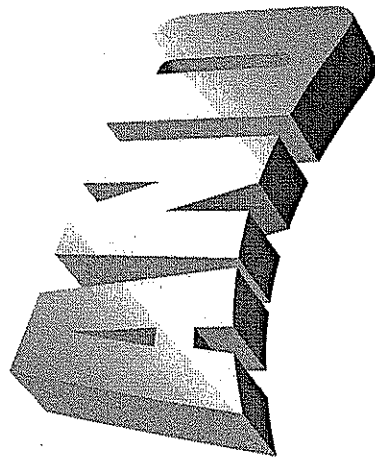


Fig. 2

Performing a Text Search

- Logic for Advanced Search
 - Search “Radio” and “Sunglasses”
Concepts Separately
(“Building Block” Method)
 - “AND” Together Results



Performing a Text Search

- First Search Statement:
 - radio or receiver or tuner
- Use Synonyms (with the “or” operator)
- Search Returns 346,000* + Patents

* as of August, 2006

Performing a Text Search

- Second Search Statement
 - `sunglass$ or eyeglass$ or spectacl$`
- Use Synonyms and Truncation
- Search returns ~13,000* + Patents

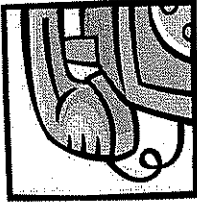

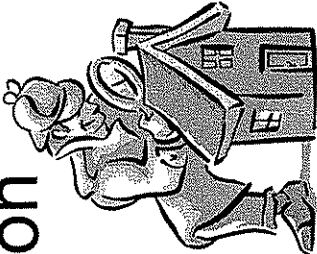
* as of August, 2006

Performing a Text Search

- “AND” together the first and second searches
- Returns 1559* Patents
- This represents the intersection between the two ideas
- The result set contains all the patents that have the two concepts in the same patent

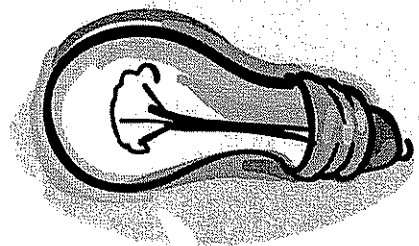
* as of August, 2006

Performing a Text Search

- Scan Titles of the Patents
- Note Class/Subclass of the Pertinent Patents
- Three Classes Regularly Appear:
 - Class 381 Audio 
 - Class 455 Telecommunications 
 - Class 351 Eye Examination and Vision Correction 

Performing a Text Search

- Consult Manual of Classification and Patent Class Definitions for Class 381, 455 and 351
- Do Additional Word Searching in the Pertinent Class/Subclasses Identified
- Check Cited References of Pertinent Patents Found



Summary -Text Searching Tips

- Combination of the Following Yields Good Results:
 - Use Synonyms
 - Use Truncation
 - Use Selected Fields/Indexes
 - Use Manual of Classification Class/Subclasses

More Text Searching Tips

- Constantly Evaluate Your Results
- Remember: Text Searching is an Iterative Process
- Start with a “Big Net” and Refine Your Results Step-by-Step

