Patents, Trademarks and Copyrights

- Patents – grants a property right to the inventor for an invention.
- Trademark – protects a word, name or symbol used to represent a product and blocks potentially confusing words, names or symbols from being used by others.
- Copyright – protects original works of authorship such as books, music, art, software.

Patents

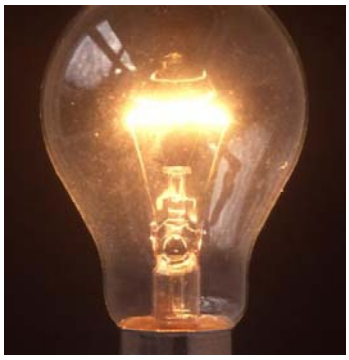
- Contract between inventor and government
- Inventor agrees to disclose invention to public
- In turn, the Government (Patent Office) grants exclusivity in invention to inventor if certain tests are met:

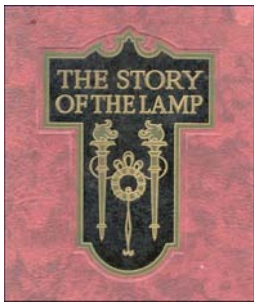
  Utility

  Novelty

  Non-obviousness

Patents, Trademarks an Copyrights





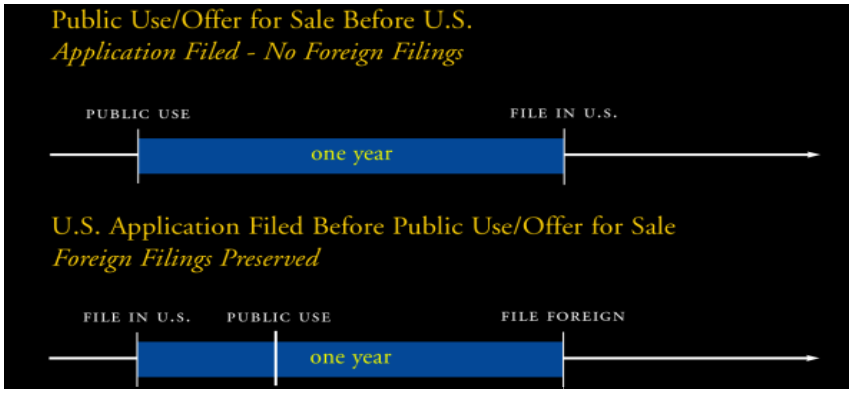
Patents

- Three types of US patents
  - Utility Patent: Inventions that function in a unique manner to produce a utilitarian result (e.g. Velcro, drugs, electronic circuits)
  - Design Patent: Covers unique, ornamental shape or design of a non-natural object
  - Plant Patent: Plants from grafts or cuttings.

Requirements For Patentability

- Utility
- Novelty & non-obviousness determined by comparing claimed invention to "prior art"
- Prior art
  - Prior publications
  - Prior patents
  - Prior public uses
  - Prior commercial offers to sell

Requirements For Patentability



Rights Granted by a Patent

- Utility patents expire 20 years after the "filing" of a patent application.
  - No rights during pendency of application
- Patent exclusivity geographically limited to the country of issue.

Rights Granted by a Patent

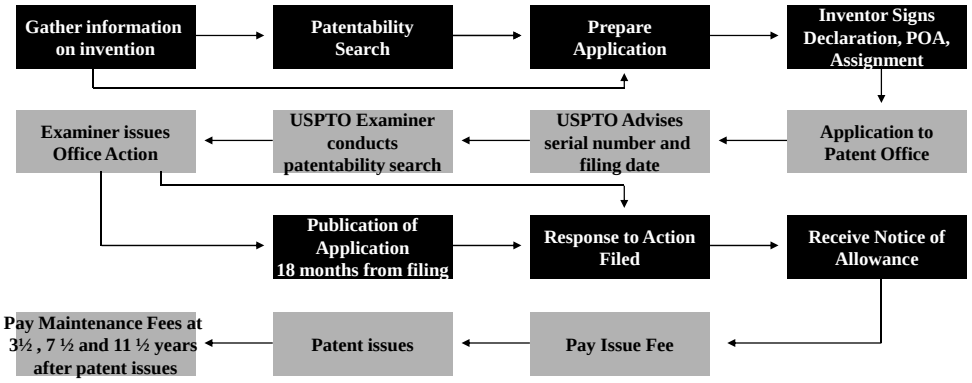
- Patents grant their owner the right to "exclude others from:"
  - Making the invention
  - Using the invention
  - Selling the invention
  - Offering the invention for sale
  - Importing the invention

Rights Granted by a Patent

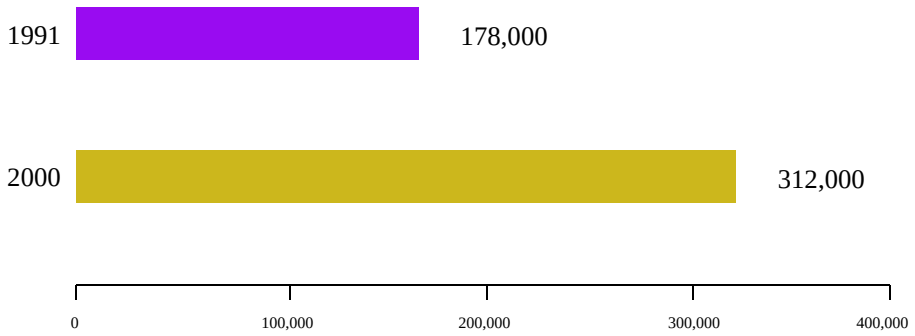
- A patent doesn't necessarily grant the owner the right to make, use and sell the patented invention

Patent owner may be subject to a third-party dominating patent

The Process for US Utility Patents

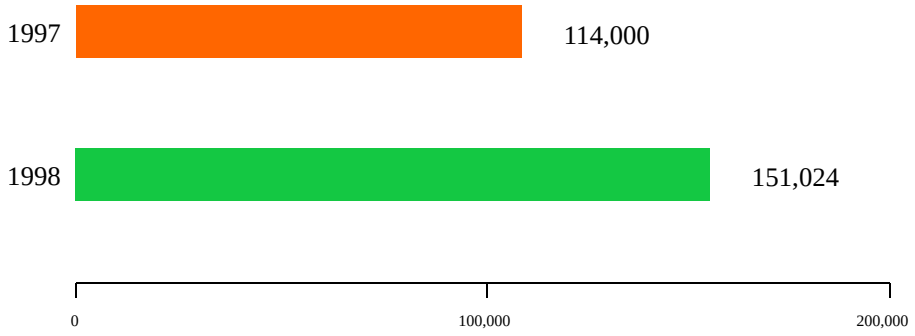


Applications Filed



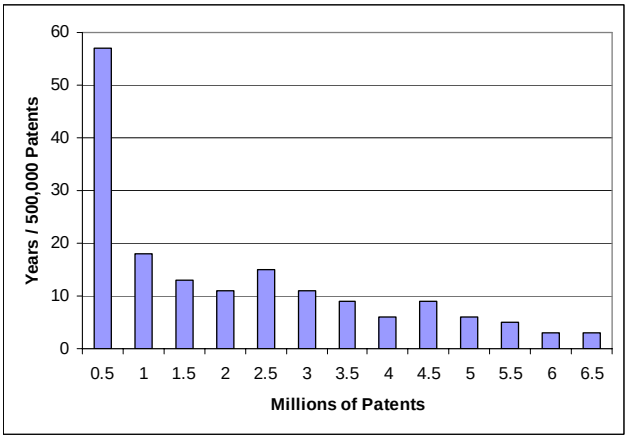
an increase of 76%

Number of Patents Issued



an increase of 33%

Number of Patents



Provisional Patent Application

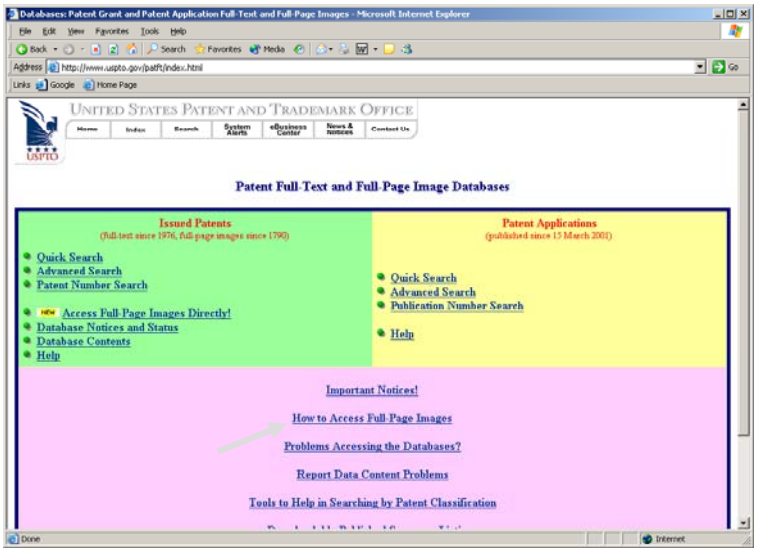
- No specific Patent Office format required
  - No claims or formal drawings
- Not examined in Patent Office
- Requires complete description of invention and best mode
- Cheaper and quicker to file than utility application
- “Patent Pending”
- File utility application within one year or provisional becomes abandoned.

Provisional Patent Application Benefits

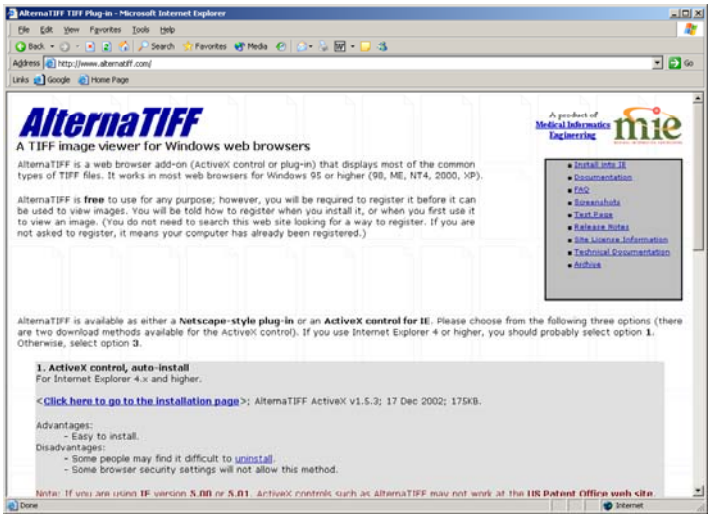
- It gets you started
- It is fast
- It helps long-term planning
- It preserves the right for foreign policy
- It gets you “in line”
- It increases your boundaries (by being first)

www.uspto.gov

Viewing Patents



www.alternatiff.com



Installation allows you to view patent images on your browser.

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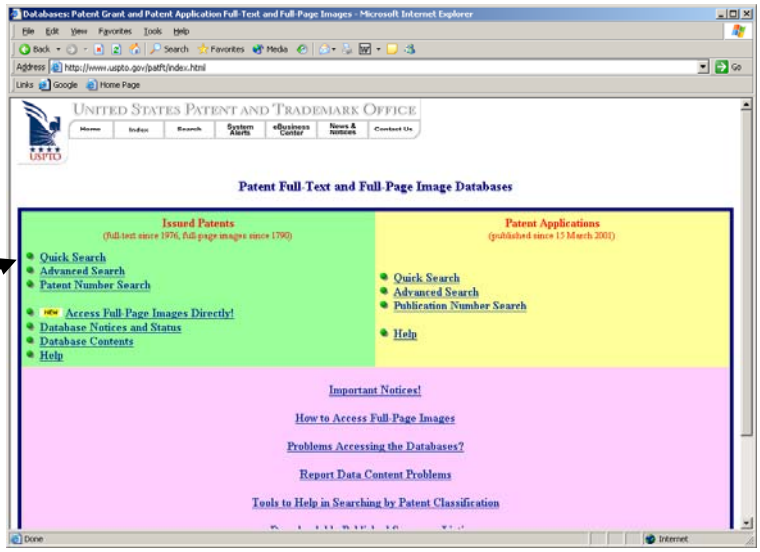
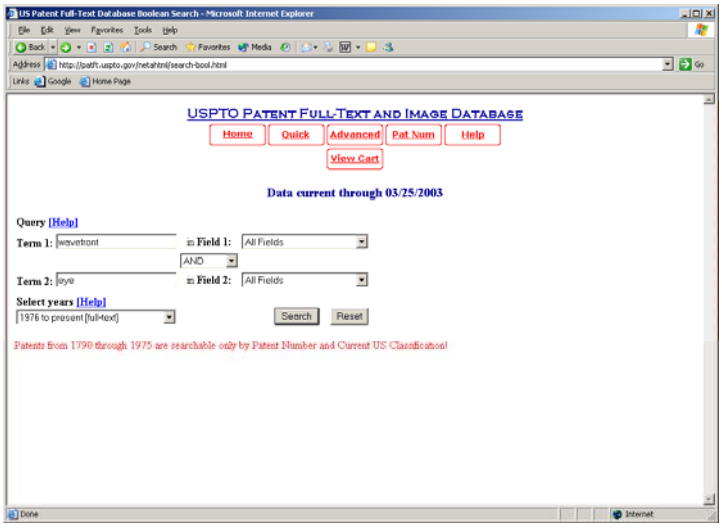
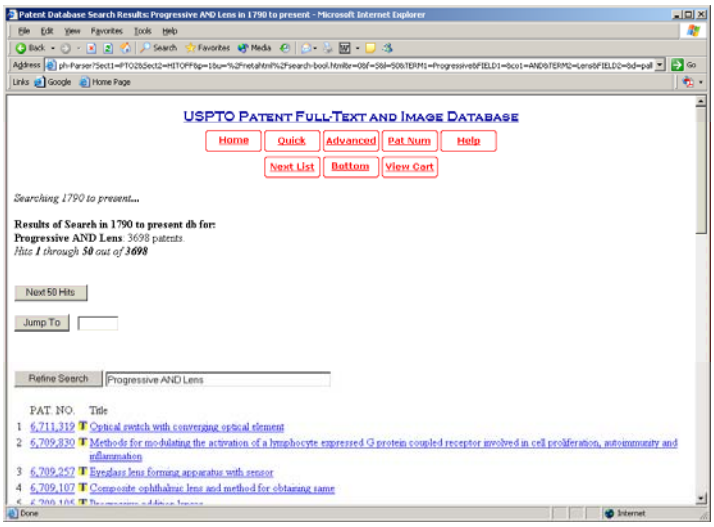
Patent Search



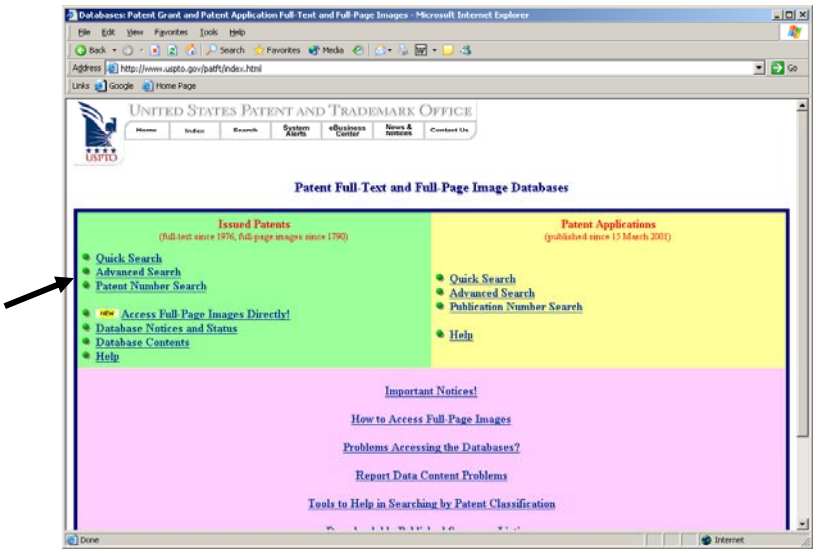
Searching Patents



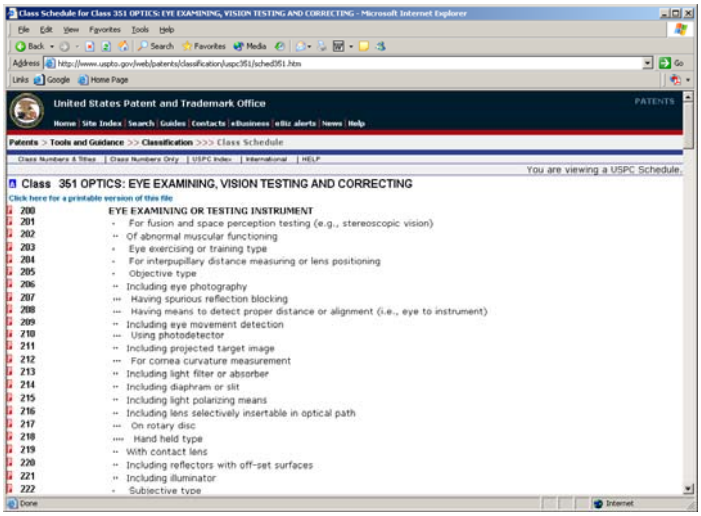
Search Results



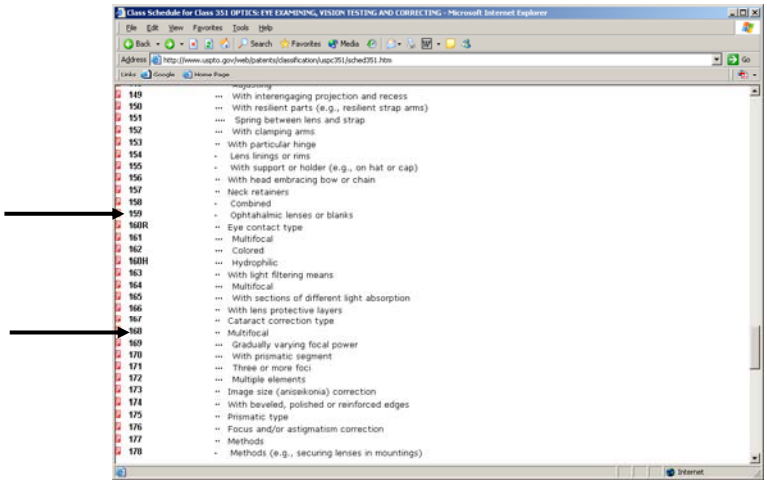
Patent Search



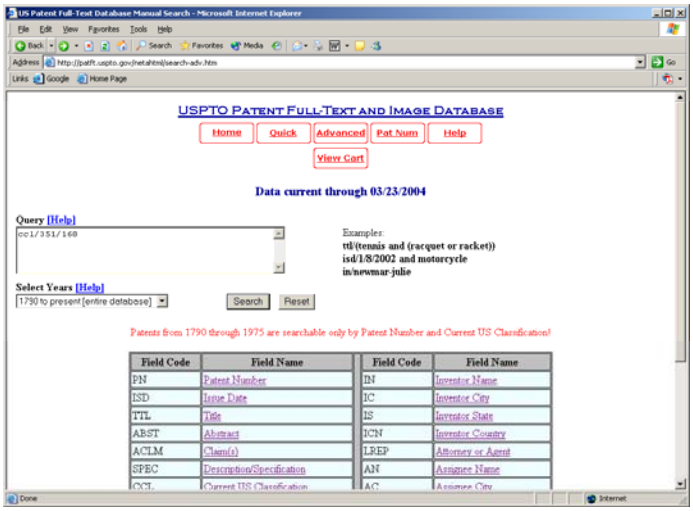
Patent Classification



Patent Classification



Advanced Search



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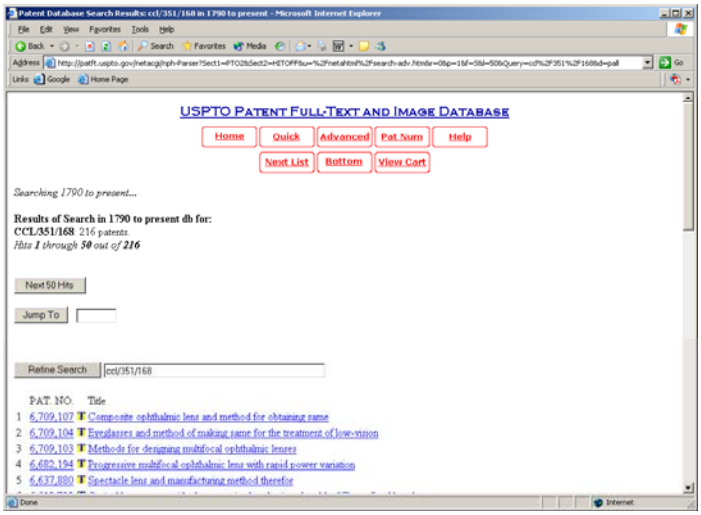
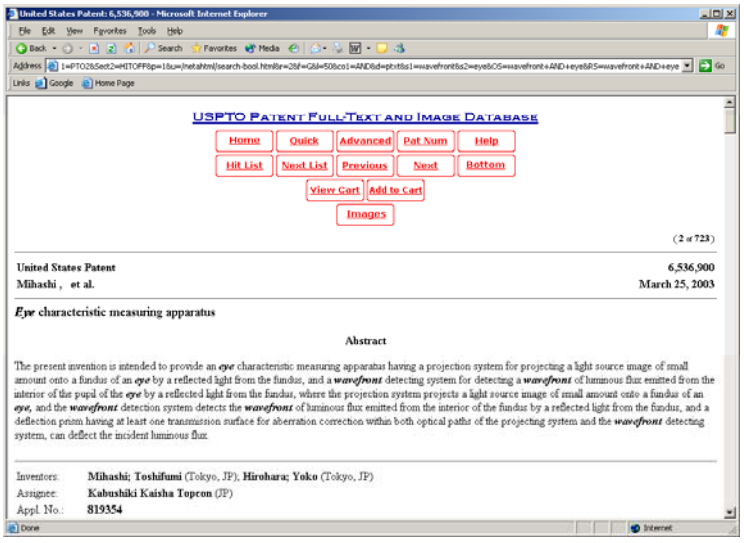
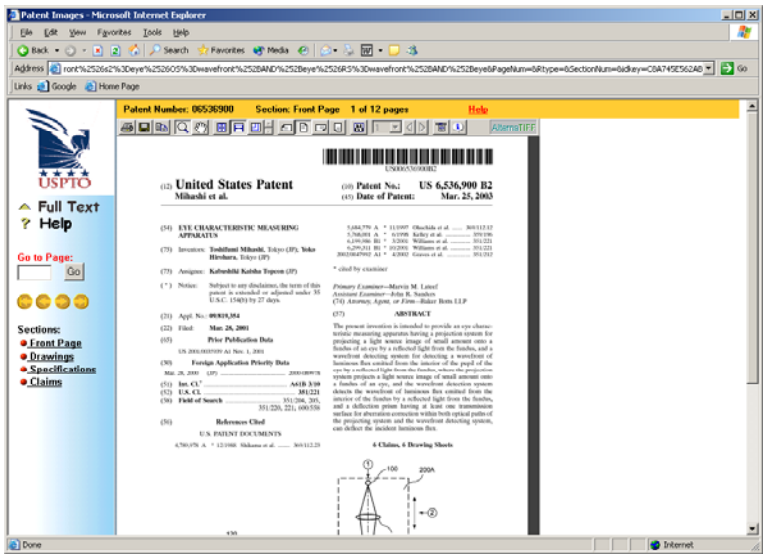


Full Text Version



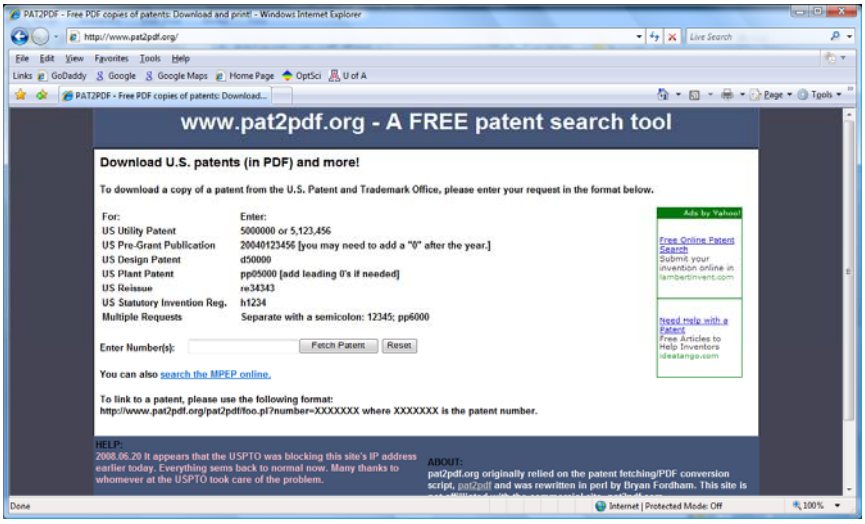
Patent Images



Saving Patent Images

- Can save images of patent for later viewing.
- Advantages
  - Free
- Downsides
  - Only one page shown at a time.
  - Images saved as individual tiff files.
  - Lots of users slows download times.

Obtaining Patents in PDF



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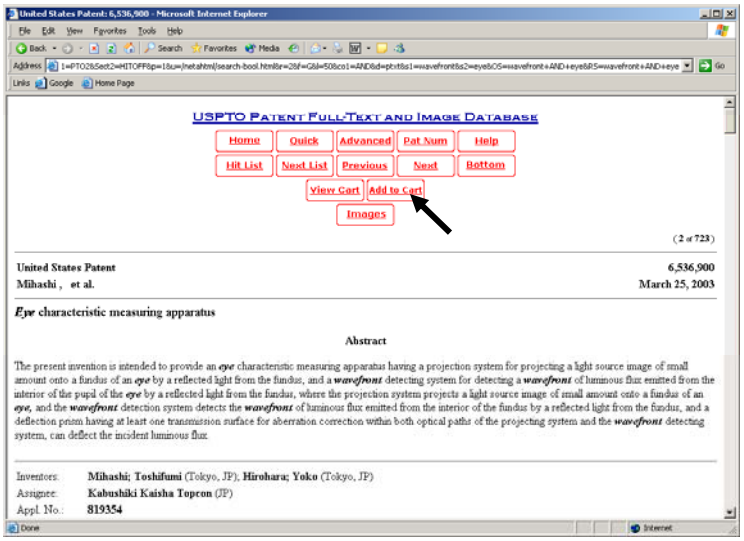
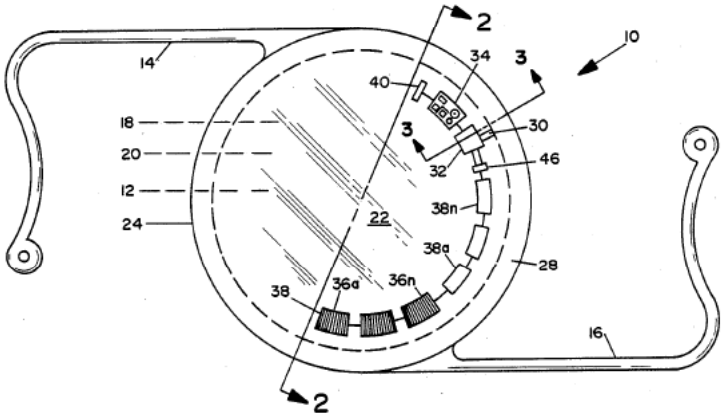


Parts of a Patent

- Drawings
- Specification
  - Title, References, Statements
  - Background
  - Summary
  - Drawing Description
  - Description
  - Operation - Main and alternative embodiments
  - Conclusion
- Claims
- Abstract

Patents Drawings



Specification - Background

- Short description of the state of the general field the inventions pertains to.
- Describes the problems to be solved.
- Describes prior art (i.e. what's already out there to address this problem.
- Criticism of relevant prior art.

Specification - Summary

- Describes how your invention addresses the previously stated problem.
- Describes why your invention is useful.
- Positive aspects of the invention (relative to criticisms of prior art).

Specification - Drawing Description

BRIEF DESCRIPTION OF THE DRAWINGS

Other objects of the present invention and many of the attendant advantages of the present invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings, in which like reference numerals designate like parts throughout the figures thereof and wherein:

FIG. **1** illustrates a plan view of an intraocular lens system, the present invention:

FIG. **2** illustrates a sectional view taken along line **2—2** of FIG. **1**;

FIG. **3** illustrates a sectional view taken along line **3—3** of FIG. **1**;

FIG. **4** illustrates an alternative embodiment;

FIG. **5** illustrates a partial cross-sectional view taken along the line **5—5** of FIG. **6**, showing a diaphragm pump according to the invention having ball-check valves at the inlet and outlet ports;

FIG. **6** illustrates a top view of the diaphragm pump shown in FIG. **5**;

FIG. **7** illustrates a partial cross-sectional view taken along line **7—7** of FIG. **8**, showing a diaphragm pump according to the invention having diaphragm valves at the inlet and a ball-check valve at the outlet port;

FIG. **8** illustrates a top view of the diaphragm pump shown in FIG. **7**;

FIG. **9** illustrates a partial cross-sectional view taken along lines **9—9** of FIG. **10**, showing a diaphragm pump according to the invention having diaphragm valves at the inlet and outlet ports;

FIG. **10** illustrates a top view of the diaphragm pump of FIG. **9**;

- Brief description of each of the drawings.

Specification - Description & Embodiments

- Thoroughly describes the theory and process for the invention.
- Describes figures in full detail and the function of the labeled items.
- Describes the preferred embodiment (i.e. what's the best way to make the invention).
- Describes alternative embodiments.
- A person "reasonbly skilled in the art" must be able to make or implement the invention based on this description.

Specification - Conclusion

- Summarizes utility and novelty of the device.
- Summarizes advantages of the invention over prior art.
- Statement that the invention is not limited to the physical form shown in the description.

Claims

- Precise statements about the invention.
- Regardless of what is stated in the description, only the concepts within the Claims are protected by law.
- Claims should be as broad as possible to prevent competition from working around the patent.
- Claims then should specify ranges and/or materials to be more specific.
- Claims are sometimes repeated several times with different wording to prevent misinterpretation.

Homework

- Get a copy of US Patent 3,751,138 “Variable Anamorphic Lens and Method for Constructing Lens” invented by William E. Humphrey.
- Read Patent for Thursday’s class.
- Identify the different sections of the patent discussed today.