Patents

Fear & Loathing in Dayton, Ohio
A Savage Journey to the Heart of the American Dream

First Hybrid Car
1909
#913,846
Covering...

- Minutiae (Reality Check)
- The Patent
- Patent Search - Prior Art
  - keyword searching is dangerous
- Search: CPC and keyword with a purpose
- Questions
Intellectual Property

Trade Secrets

Copyright

Trademarks

Patents

I stole these images off the internet
The Process

- Creation
  - The idea: turning it into “property”

- Screening and Clearance
  - What dangers lurk in the marketplace?

- Protection
  - Seeking protection, country by country

- Maintenance and Protecting
  - It is up to you!

Title: “Miss Zoe” Copyright 2013 M.J. Raider
Patentable?

- Software
- Coffee
- Chimera
- Totino’s pizza
- Mouse
- Swinging on swing

Pat. #6368227
Patent and Trademark Resource Center

Welcome to the Patent and Trademark Resource Center

This is a guide of recommended information resources for patent and trademark research.

Wright State University Libraries maintain a Patent and Trademark Resource Center (PTRC) in the Paul Laurence Dunbar Library. As an official PTRC of the United States Patent and Trademark Office (USPTO), we have a formal agreement to provide assistance to the general public in the use of patent and trademark resources provided by the USPTO.

Recognizing that intellectual property research is a complex endeavor with important legal and financial implications, our services are designed to support the individual or corporate legal researcher's efforts to conduct self-directed and preliminary research.

Library staff cannot offer legal advice, conduct searches, assist in writing applications, guarantee completeness of searches, or advise on ideas. All final research, regarding intellectual property determinations, should be done in consultation with proper intellectual property legal professionals.

The Reference staff will make every effort to protect the confidentiality and privacy of researchers.

https://libraries.wright.edu/
I started a little inventor’s notebook and I would jot down ideas from time to time.
—Chester Carlson, inventor of xerography and founder of Xerox. He began his inventor notebook when he was 10 years old.
What is a patent: A Weapon

- Limited Monopoly Grant from the US government
- Access to Federal Courts
- Exclusion
  - Import
  - Manufacture
  - Sell
  - Distribute

Negative Right - "the right to exclude others from making, using, offering for sale or selling the invention throughout the United States or importing the invention into the United States"
Who Wants to be a Millionaire

- 587,544 ↓ patent applications (2015)
- 299,365 ↓ patent grants (2015)
- 290,354 apps abandoned (2014)
- 565,811 ↓ backlog apps (Dec. 2015)
- 2-3% (Fortune magazine uses 5% for all product development)
- Pendency rate 25.4 months
- Allowance rates 50.7% with RCE
Why should I care?

70-80%

Public disclosures are really bad.
Food & Drug Administration

- Manufacturers (foreign and domestic) and importers
- Center for Devices and Radiological Health (CDRH)
- FDA Approval
  - FDA Device Classification Panels (1,700 classifications)
  - Must List Class I, II, and III/Exempt
  - Premarket approval Class III; high risk devices; data
- 21 CFR Part 807-820
Types of US Patents

- **Utility** – granted for a useful process, machine, manufacture, or composition of matter

- **Design** – granted for a new, original and ornamental design for an article of manufacture

- **Plant** – for a new asexually reproduced plant

A patent application is an argument

- Industry
- Problem?
  - Comparing existing technology
- How does it overcome the problem?
  - Differences with existing technology
- Its benefits?
- How is it made?
- Define the invention.
  - What are the exact innovative technologies that make it different/novel from existing technologies
US Provisional Application

- Terminates in 1 year
- Reduction to practice
- Placeholder
- Not examined
- Priority date for non-provisional
- Public disclosure
- “Patent Applied for”
  - Not “patent pending”

June 2009 Provisional, Dec. 2009 Non-Provisional
Issue Feb. 2013
Non-provisional application

- Examined
- Expensive
- Applicant must provide proof of patentability
  - Sort of...
- Published at 18 months (inventor option)
- Only protected if it issues (patent grant)
Patent Grant

- Granted (duh!)
- Claims finalized
- Access Federal Courts
- Sellable/transferable
  - Property
- Valuation Issues
Front Page: 1971

- International standard (INID codes)
- Brief bibliographic information
- Titles are merely descriptive
- Abstract descriptive; invention not revealed
- Classifications assigned
- References Cited (prior art)
- Representative drawing
Patent Drawings & Specification

- Full disclosure – how it is made
- Key to understanding underlying concepts
- Illustrates by examples
- Comparison of cited prior art
Claims “the invention defined”

- Defines what is being invented
- Applicants/Attorneys draft as broadly as possible
- Examiners narrow the claims based on prior art
- Infringement

Application with 8943 Claims! Only 90 issued! In today’s dollar $180,305 spent of claims!
The Test

- New/Novel
- Non-Obvious
- Useful
- Design – ordinary observer test
Non-Obviousness
Prior Art

35 USC Sec. 102 - A person shall be entitled to a patent unless...the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.
ABSTRACT
This invention involves a device, referred to herein as a "cabinet," which provides physical and biochemical support for an animal's head which has been "disincorporated" (i.e., severed from its body). This device can be used to supply a disincorporated head with oxygenated blood and nutrients, by means of tubes connected to arteries which pass through the neck. After circulating through the head, the deoxygenated blood returns to the cabinet by means of cannulae which are connected to veins that emerge from the neck. A series of processing components removes carbon dioxide and adds oxygen to the blood. If desired, waste products and other metabolites may be removed from the blood, and nutrients, therapeutic or experimental drugs, anti-coagulants, and other substances may be added to the blood. The replenished blood is returned to the disincorporated head via cannulae attached to arteries. The cabinet provides physical support for the head, by means of a collar around the neck, pins attached to one or more vertebrae, or similar mechanical means.

20 Claims, 3 Drawing Figures
Prior Art: the search

I never saw it before...doomsday scenario
Non-Patent Literature examples

What? Me Worry?  You better!
Wow, nice forest
Purpose of a patent search

- **Validate an idea** (also known as a preliminary patentability search)
  - evidence of invention’s uniqueness
  - similar solutions
  - better solutions/market survey
  - infringement
  - commercialization potential/costs and profit margins

- **Invalidate a competitor’s invention**
  - Just be mean
Job interview? Find out what a company is currently working on.
Toilet Snorkeling

Fresh-Air Breathing Device and Method
Pat 4,320,756
Grandpa Airbag

Bodily-injury protective clothing and accessories for outdoors and in a vehicle
Pat. 6,543,054
Au revoir gopher...

- Animal Trap
- Mouse Trap
- Rodent extermination device
- Vermin execution machine
- Carlspacklerene percussion projectile gopher brain matter removal device
- Bang Bang® trap
Method and system for identifying people who are likely to have a successful relationship

Method for treating foodstuffs

Data transmission in a radio telephone network

Method and apparatus for activating switches in response to different acoustic signals
Keyword Pitfalls

- Foreign spelling:
  - Color or colour
  - Aluminum or aluminium
  - Spotlight or torch

- Misspellings/Made-up words/Weird Grammar/other and multiple meanings

- Reliable keyword searching only goes back to 1971

God Save the Queen’s English!
51.9% of all US applications are from foreign filers
Single mode visual media capture

United States Patent
Spiegel et al.

SINGLE MODE VISUAL MEDIA CAPTURE
Inventors: Evan Thomas Spiegel, Pacific Palisades, CA (US); Robert Cornelius Murphy, El Cerro, CA (US)
Assignee: [Redacted]

Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

Appl. No.: 13/570,188
Filed: Aug. 8, 2011
Int. Cl. G03B 17/00 (2006.01)
U.S. Cl. 396/299
Field of Classification Search 396/297, 396/299
See application file for complete search history.

Patent No.: US 8,428,453 B1
Date of Patent: Apr. 23, 2013

References Cited
U.S. PATENT DOCUMENTS
* cited by examiner

Primary Examiner — W. B. Perkey
Attorney, Agent, or Firm — Cooley LLP

ABSTRACT
An electronic device includes digital image sensors to capture visual media, a display to present the visual media from the digital image sensors and a touch controller to identify haptic contact engagement, haptic contact persistence and haptic contact release on the display. A visual media capture controller also alternately records the visual media as a photograph or a video based upon an evaluation of the time period between the haptic contact engagement and the haptic contact release.

19 Claims, 3 Drawing Sheets
### Keyword or technology classification?

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicants don’t use a common language</td>
<td>Each patent classified by patent professionals</td>
</tr>
<tr>
<td>Legal implications</td>
<td>CPC is a hierarchical and detailed: you can narrow down searches</td>
</tr>
<tr>
<td>Scope of protection</td>
<td>Description of classes written in such a way as to be easily found and understood</td>
</tr>
<tr>
<td>Hide from competitors</td>
<td>BUT: CPC classes won’t match your needs 100%</td>
</tr>
<tr>
<td>Hard to find the right keywords</td>
<td></td>
</tr>
<tr>
<td>Good results usually require professional patent search experience</td>
<td></td>
</tr>
</tbody>
</table>
Baby Skeet Shooting Apparatus
Cooperative Patent Classification

Organizing Technology by the Prior Art
Hierarchical Top Levels: 9 Sections

A  HUMAN NECESSITIES
B  PERFORMING OPERATIONS; TRANSPORTING
C  CHEMISTRY; METALLURGY
D  TEXTILES; PAPER
E  FIXED CONSTRUCTIONS
F  MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING ENGINES OR PUMPS
G  PHYSICS
H  ELECTRICITY
Y  GENERAL TAGGING OF NEW TECHNOLOGICAL DEVELOPMENTS; GENERAL TAGGING OF CROSS-SECTIONAL TECHNOLOGIES SPANNING OVER SEVERAL SECTIONS OF THE IPC; TECHNICAL SUBJECTS COVERED BY FORMER USPC CROSS-REFERENCE ART COLLECTIONS [XRACs] AND DIGESTS

https://worldwide.espacenet.com
“Flipping the Shoe Box”

- Brief bibliographic information
- Titles are merely descriptive
- Abstract descriptive; invention not revealed
- Classifications assigned
- Prior art cited
- Representative drawing
The $600 Autoinjector

A business opportunity

Ease of use
Exact measure
Self administration
Non-Medical personnel
Throw away safely
Preparing to Respond: We provide medical countermeasures designed and engineered for use in a variety of emergency situations. Training simulators and demo kits are available separately and contain no active ingredients or needles.

Antidote Treatment Nerve Agent, Auto-Injector (ATNAA) (atropine and pralidoxime chloride injection)

Indication:
For the treatment of poisoning by susceptible organophosphorous nerve agents having anticholinesterase activity.

This product is only available for use by United States military personnel.

ORDER OR REQUEST A QUOTE

SEE PRODUCT DETAILS

Binaject® is a registered trademark of Meridian Medical Technologies, Inc., a Pfizer company.

For medical questions concerning Meridian products, to report an adverse event, or to speak to a member of Pfizer US Medical Information, call 1-800-438-1985.
My Search Strategy

- Seller: Mylan?
- Terminology
  - Synonyms and jargon
- Competitors?
- Inventors/scientists/faculty
- Classification: CPC
- Rinse and Repeat
Any Questions?

Phil Flynn
Engineering Librarian
phil.flynn@wright.edu
937-775-2533

Ran Raider
Gov & Legal Info Coor
ran.raider@wright.edu
937-775-3521