Protecting Intellectual Property-
Patents and Trade Secrets

PHYS 4601
November 4, 2016

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Copyright
Patent
Trademark
Trade Secret

Intellectual Property
Careers in Patent Law

What:

- Technical Specialist
- Patent Agent
- Patent Attorney
Careers in Patent Law (cont’d)

Where:

• Legal departments of companies
• Law firms
• Technology Transfer Offices:
  − Universities (Ga. Tech: Office of Industry Engagement - industries.gatech.edu)
  − Companies
  − Government
• U. S. Patent Office (Examiner)
Number of U.S. Patent Agents and Attorneys

- Patent Agents - 11,275
- Patent Attorneys - 33,572

- Number of all U.S. attorneys (2011) – 1,225,452
- Percentage of patent attorneys – 3%
No Patent or Trade Secret - Trademark
Web Sites: Patents, Trademarks, and Copyrights

www.uspto.gov
(Patents and Trademarks)

www.copyright.gov
(Copyrights)
Patents – From Then to Now
In the 1970’s:
Patents in the U.S.

Today:

• “Patent Pending” is a good marketing tool.
• Creates asset – looks good in the business plan – investors look to IP portfolio in deciding to invest.
• Ability to use patents strategically: enforce, assign/sell/license - trade to avoid litigation.
Why Patent? – Pros (cont’d)

• Commercial advantage over competitor (enhanced market share and higher margins to recoup front-end investments until non-infringing substitutes appear).

• Reflects innovation.
Why Patent? – Cons

• “Patent Pending” – no protection until patent issues.

• Long time to get a patent – average of 3½ years (utility) and 18 months for design.

• Limited life – 20 years after filing (utility); 14 years after filing for design patents.

• Expensive to get and to enforce.
Why Patent? – Cons (cont’d)

• Patents require full public disclosure of invention – sacrifice secrecy - educate competitors.

• Can’t get patent for mere idea or concept.

• No absolute right to practice invention – limited monopoly - only right to “exclude others.”
What is “Patent Eligible”?

The U.S. Supreme Court has said that patents cover “anything under the sun that is made by man.”

(genetically-engineered bacteria that broke down crude oil)
What is Not “Patent Eligible”? 

- Laws of nature 
  (always existed, not “invented”). 

- Physical phenomena. 

- Abstract ideas.
Patent Territory

• U.S. patent covers only the United States.

• Separate patent necessary in each country – no one patent covers the world.
When Does An Invention Occur?

Conception

+ “Reduction to Practice” → Invention
“Inventors may apply for a patent jointly even though:

(1) they did not physically work together or at the same time,

(2) each did not make the same type or amount of contribution, or

(3) each did not make a contribution to the subject matter of every claim of the patent.”
First to Invent \( v. \) First to File

Old law (First to invent)

\( v. \)

New law (First to file patent application) - \textit{U.S. now like the rest of the world.}
Types of Patents - Utility

*Utility* – protects how invention is made and works.
- most inventions fall into this category.
- any “useful, new and unobvious” process/method, machine, article of manufacture or composition of matter.
- lasts for 20 years from the patent application’s filing date.
The Step

United States Patent
Irwin et al.

ADJUSTABLE STEPPING STRUCTURE FOR AEROBIC EXERCISES

Inventors: Lyle R. Irwin, Kennesaw; Peter H. Hand, Atlanta; Edward F. Leftwich, Decatur, all of Ga.


Filed: Sep. 20, 1991

Related U.S. Application Data

Continuation of Ser. No. 418,159, Oct. 6, 1989, abandoned.

Int. Cl. A63B 21/12

U.S. Cl. 482/52; 482/142

Field of Search 272/113, 70, 144, DIG. 9, 272/74; 248/346, 188.2; 182/222; 108/104; 446/117, 128; 297/439; 482/52, 142

References Cited

U.S. PATENT DOCUMENTS

Des. 271,256 11/1983 McClelland
2,933,850 4/1960 Martin
3,033,671 5/1962 Sicherman
3,743,283 7/1973 Garrett

FOREIGN PATENT DOCUMENTS

0901614 5/1972 Canada

Primary Examiner—Stephen R. Crow
Attorney, Agent, or Firm—Needle & Rosenberg

ABSTRACT

An adjustable stepping structure for aerobic exercises comprising a platform upon which the participant places his or her feet, the platform being elevated above a support surface by means of one or more support elements which are capable of being detachably stacked upon each other until the platform is maintained at a selected distance above the support surface, depending upon the skill and physical characteristics of the participant.

10 Claims, 3 Drawing Sheets
Types of Patents - Design

- Protects exterior shape or appearance of an article of manufacture.
- Doesn’t protect structural or functional features.
- Lasts 15 years from filing date.
- Examples: shoe tops and soles, laptop cases, Coke bottle, exterior of the iPhone.
Don’t Screw Up !!

WARNING:

The One-Year Statutory Bar Rule
Inventor has **one year** to file a patent application in the U.S. Patent Office from date of first **“public disclosure”** of the invention:

sale, offer for sale, publication, public use, on website, trade show
“[I]t is a condition upon an inventor’s right to a patent that he shall not exploit his discovery competitively after it is ready for patenting; he must content himself with either secrecy, or legal monopoly.”

Public Use/Offer for Sale/Sale Before U.S. Applications Filed = No Foreign Filings

One Year Rule for Patents
One Year Rule for Patents

U.S. Application Filed Before Public Use/Offer for Sale/Sale = Foreign Filings Preserved

File in U.S.  Public Use  File Foreign

ONE YEAR
Sale of the Invention v. Sale/License of Patent

- Only the sale of the invention creates a potential statutory bar.
- Assigning or granting a license to a patent, or pending patent application does not amount to a sale.
Experimental Use Exception

- Based on desire to give an inventor adequate time for testing whether invention truly works for its intended purpose.

- The sale was primarily for experimentation rather than commercial gain.

- Inventor must document that use is for experimental purposes.
You may forfeit your right to patent an invention if there is a public disclosure of your invention more than one (1) year prior to filing a patent application.

Therefore, you should not do any of the following without determining whether patent protection should be sought for the technology:
Display or discuss the invention at a seminar, lecture, workshop, poster presentation or trade show open to the public, or

Disclose the invention without a signed Confidentiality (or Non-Disclosure) Agreement, or
Do Not

- Disclose the invention on inventor’s or company’s web site, or

- Submit an article to a journal for publication, or

- Publish a manuscript, letter, note or chapter in format available to the public, or
- Do Not -

- Offer for sale or sell the invention, or

- Distribute samples of the product to customers or collaborator, or

- Consumer or market test a new product, or
THE GOAL: to prevent unnecessary loss of patent rights due to premature use, sale or publication of patentable technology.
Why Document an Invention? – Lab Notebooks

- Establish **prior user’s rights** (prove you used the invention commercially in U.S. at least 1 year before 3rd party’s patent filing date).

- To prove “**derivation**” if 3rd party steals the invention.

- Helps **patent attorney** in preparing patent application.
Identifies correct inventor(s) – prevents misjoinder/nonjoinder of inventors on patent applications and establishes inventorship under Joint development Agreements and improvements to licensed technology.
Flowchart for U.S. Utility Patents

1. Gather information on invention
2. Patentability Search
3. Prepare Application
4. Inventor Signs Declaration, POA, Assignment

5. USPTO Examiner conducts patentability search
6. USPTO Advises serial number and filing date
7. Application Filed in Patent Office

8. Examiner Issues Office Action

9. Publication of Application 18 months from filing
10. Response to Action Filed

12. Pay Maintenance Fees at 3½, 7½ and 11½ years after patent issues
13. Patent Issues
14. Pay Issue Fee
Examples of Trade Secrets

- Coca-Cola formula
- WD-40 formula
- BING search algorithm
Definition of a Trade Secret

- **Secret** - must not be generally known by or readily ascertainable to competitors.

- It confers a **competitive advantage** on its owner.

- It is subject to reasonable efforts to **maintain** its secrecy.
What Can Be a Trade Secret?

Unlike a patent, a trade secret can include "business information" such as:

- financial data and plans,
- marketing/strategic/business/investment/R&D plans and strategies,
- technical reports,
- internal procedures for improved efficiencies,
- actual or potential customers,
What Can Be a Trade Secret?

• personnel/wage and salary information,
• product specifications,
• customer preferences, special sources of supply, negotiated prices, quantity requirements, sales figures and
• failed experiments or designs that did not work.
What Can Be a Trade Secret?

Additionally, a trade secret can be a:

- device/machine,
- processes,
- computer software, databases,
- lab notebooks,
- unique combinations of generally known concepts,
  and
- a catch-all category of "know-how" - just about any kind of secret information that relates to a business.
Trade Secrets are Hard to Define

• “An exact definition of a trade secret is not possible.” Restatement of Torts, § 757, Comment b (1939).

• No general and invariable rule can be laid down to govern the determination of whether a device, process, or other compilation of information should be classified as a trade secret.
Reverse Engineering

“If the information can be readily duplicated without involving considerable time, effort or expense, then it is not secret.”

Term of a Trade Secret

A trade secret remains a trade secret as long as it remains a secret.
“Reasonable Efforts to Maintain Secrecy”

• The **most critical factor** in gaining trade secret protection is the owner’s efforts at maintaining secrecy.

• “In defending against a trade secret claim, defendants will search and pounce upon any shortcoming in the plaintiff’s efforts to keep its information secret.”
“Reasonable Efforts to Maintain Secrecy”

• Employment agreements.
• Marking documents and drawings “Confidential.”
• Posting and circulating written policy.
• Limit types of employees who have access.
“Reasonable Efforts to Maintain Secrecy”

- Locking up confidential information.
- **Visitor sign-in** and executing confidentiality agreements/NDA’s (beware: inventor sending idea to company).
- **Exit interviews** – return of proprietary information and reminder of non-disclosure obligation.
Trade Secret Protection – Pros

- **Involves no registration costs** - The only cost of protecting a trade secret is the cost of keeping it secret.
- **Is immediately effective.**
- **Is not limited in time** – lasts forever vs. 20 years from filing for utility patent.
- **Can be licensed for any duration** – patent can’t be licensed for more than its life.
- **Gives businesses a flexible, lower-cost way to make a return on investments in developing valuable information.**
Trade Secret Protection – Pros (cont’d)

• Less expensive to maintain protection than patents.

• Less expensive to enforce than patents.

• Protects against persons who improperly acquire the trade secret – but does not protect against independent discovery or reverse engineering.
• **A small improvement** can qualify as a trade secret, even if not patentable.

• **But if invention can be easily reverse engineered**, then patent protection may be preferable – can it be kept secret?
Trade Secret Protection – Cons

• Trade secret owner has no remedies against a person who acquires trade secret through legal means.

• Difficult to police for theft of trade secret, particularly processes.

• Without a patent, inventors would invest more resources in maintaining trade secret.

• “Innocent use defense” available in theft of trade secret cases.
A patent may facilitate efficiency in manufacturing – able to more freely license with patent.

Unless you are a “prior user,” subsequent patent owner can sue you for infringement.

Risk of losing trade secret rights higher than losing patent rights.
Patents vs. Trade Secrets

Trade secret protection may be preferable where:

• “Shelf life” of invention is short.
• Number of competitors is small.
• Patent protection is hard to get.
• Product is complex.
Patents vs. Trade Secrets

Patent protection preferred where technology is pioneering.