

# The Fundamentals of Intellectual Property for the Entrepreneur



**Sue A. Purvis**

*Innovation and Outreach Coordinator*

*Greater New York Region*

U.S. Patent and Trademark Office

Department of Commerce



# Objectives

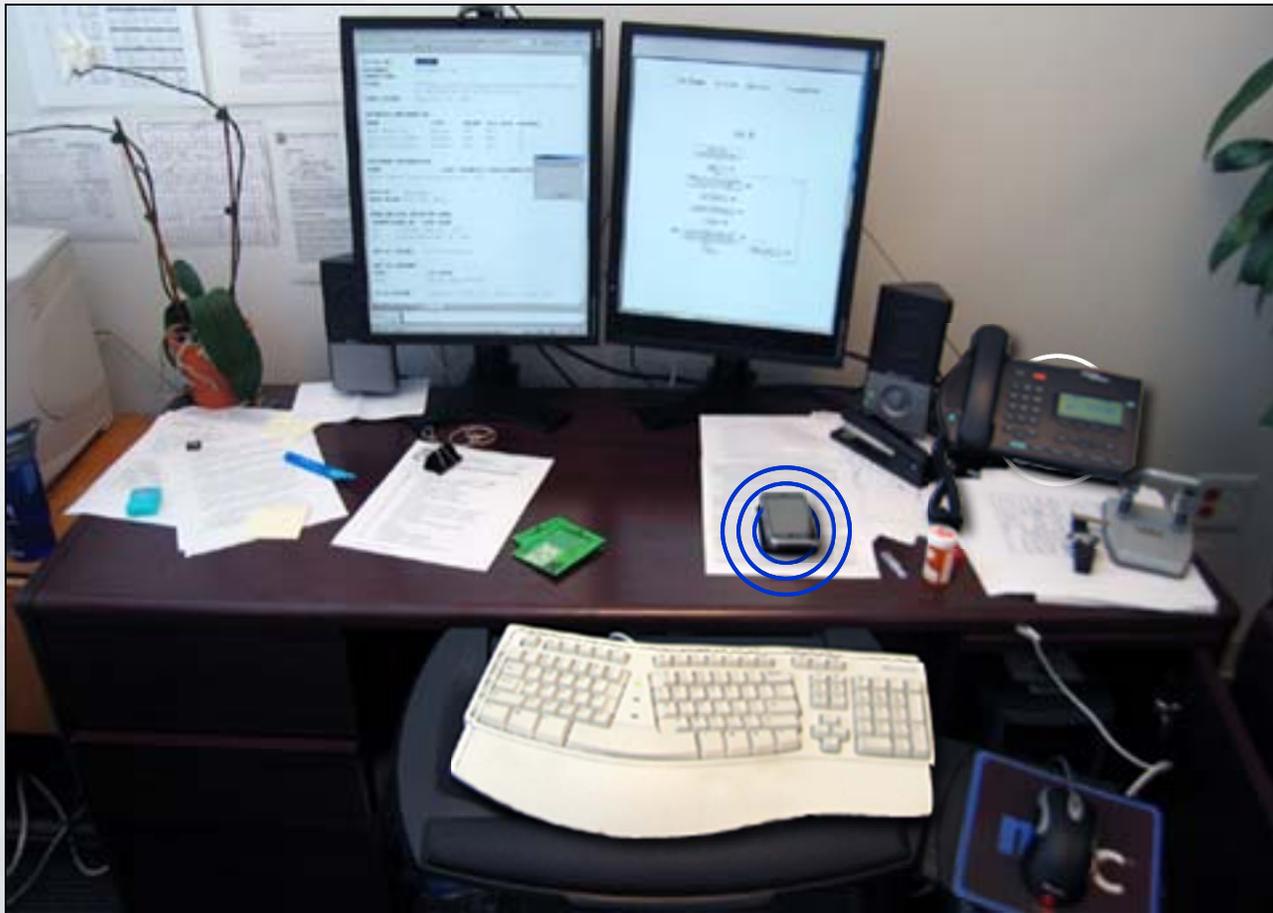
This module presents the fundamentals of intellectual property, including the following topics:

- (1) Definition of Intellectual Property (IP)
- (2) Importance & far-reaching effects of IP
- (3) Rights reserved to the rightful IP owner
- (4) Increasing importance of University's role in IP



# Patented Products

Can you identify a patented product on this desk?





# Patented Products

**Inventor:**

**Timothy Miller**

**Steven Jobs**

**Alexander Graham Bell**

**Invention:**

Ergonomically condensed QWERTY keyboard

Touch screen device, method and graphical user interface for determining commands by applying heuristics

Improvement in telegraphy

**Patent number:**

5,660,488

7,479,949

174,465

**Application filed:**

9/23/94

4/11/08

2/14/1876

**Patent granted:**

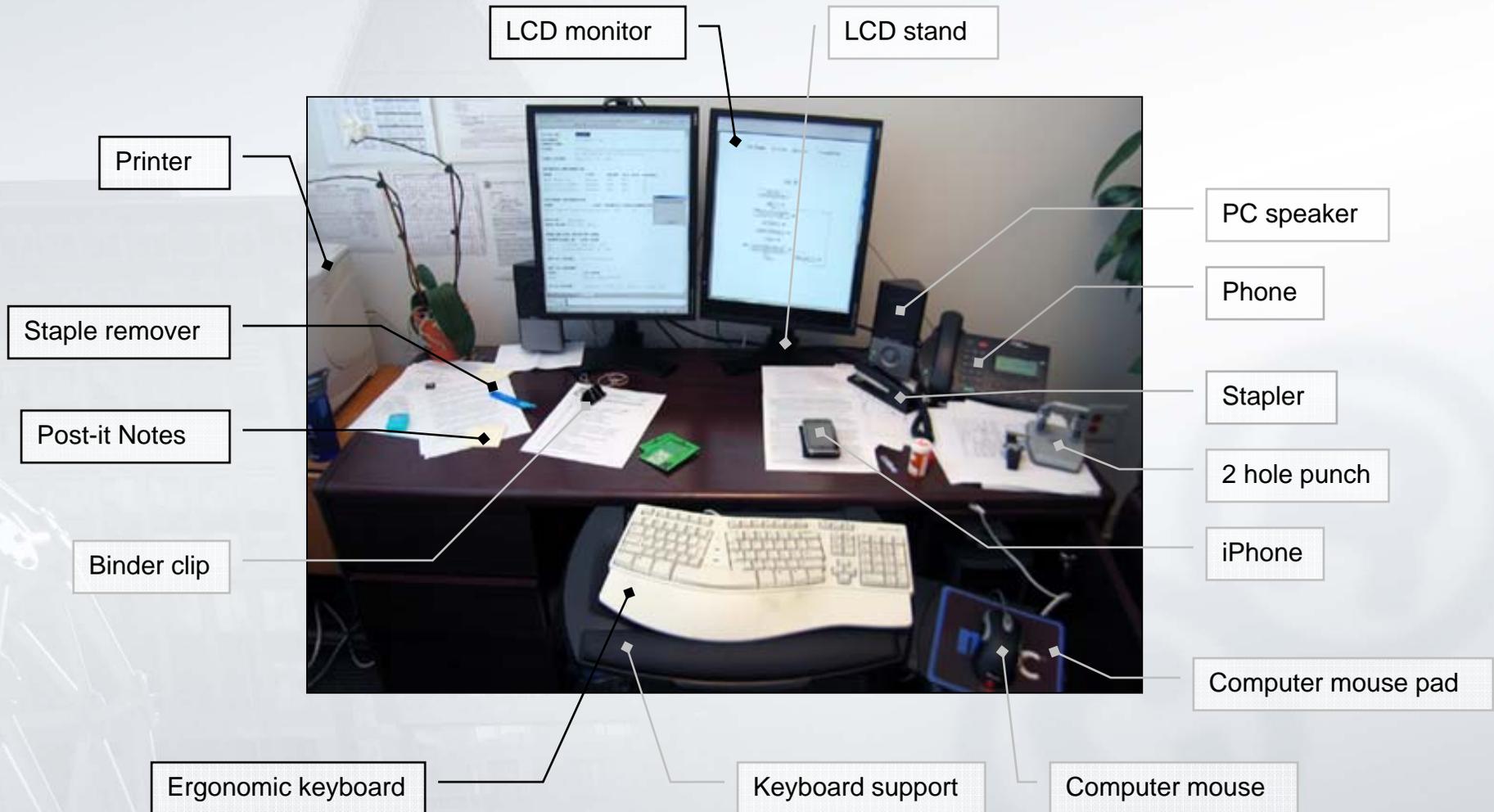
8/26/97

1/20/09

3/7/1876



# Patents Identified





# Case Study: Apple Inc.

## **Facts about Apple and iTunes store:**

More than 13 million songs, priced at 69¢, 99¢, or \$1.29 each

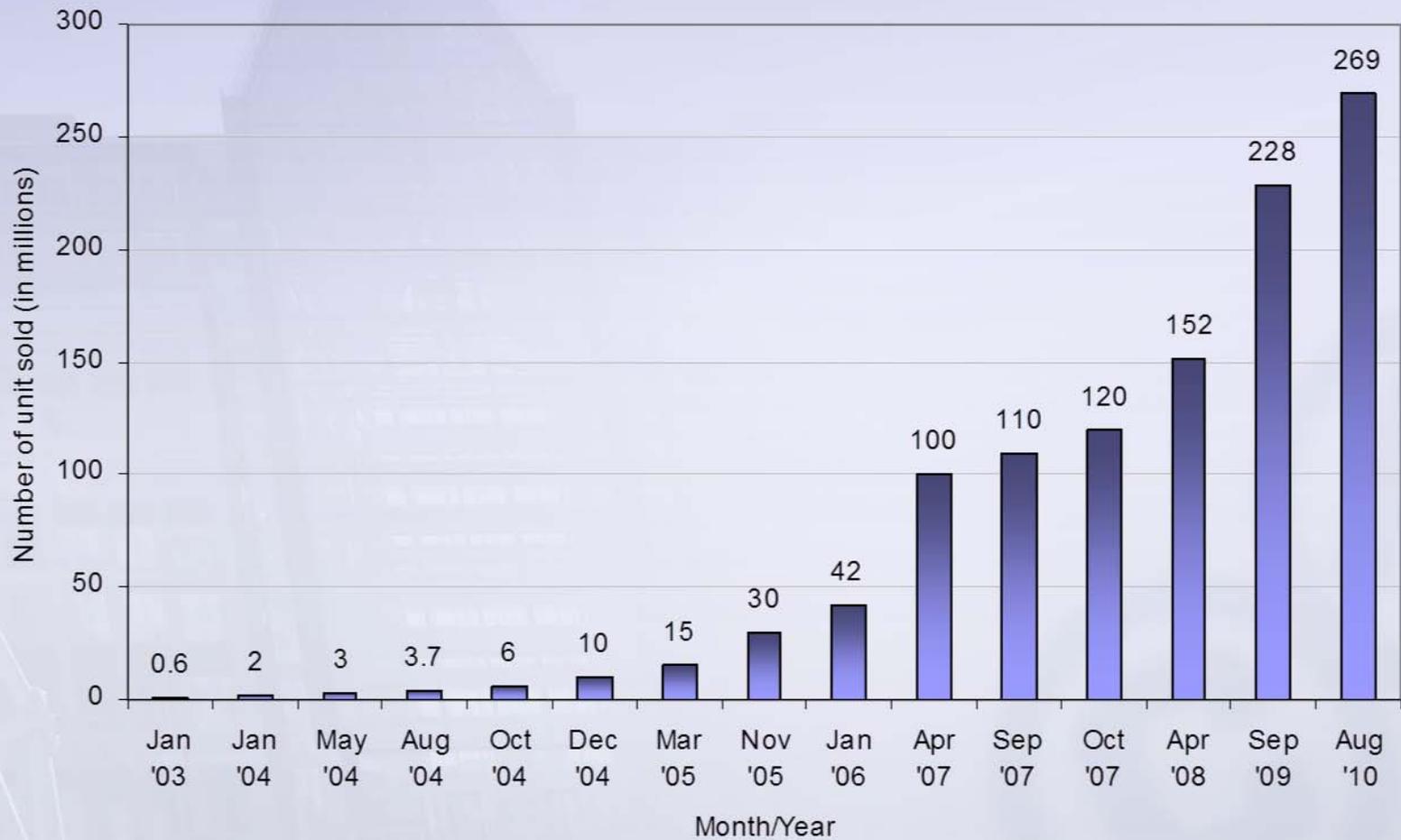
Movies, ringtones, podcasts, and apps available

**Consider these numbers with the number of iPods sold**



# Case Study: Apple Inc.

Total Number of iPod units sold





# Types of Property

## Real property



## Personal property



## Intellectual property





# Case Study: Apple Inc.

**So, where's the connection between  
the number of iPods sold & Intellectual Property?**



# What is Intellectual Property

4 types of intellectual property:

- (1) Copyright
- (2) Trademark
- (3) Trade Secrets
- (4) Patent



# Copyright

Definition: A form of protection provided to the authors of “original works of authorship”

Protects: Literary, dramatic, musical, artistic, and certain other intellectual works

Duration: In general, author’s life + 70 years

For more information on copyright, visit the U.S. Copyright Office website at <http://www.copyright.gov>





# Trademark

Definition: Any word, name, symbol, or device, or any combination, used, or intended to be used, in commerce to identify and distinguish the goods or services

Protects: All of the above & logo, banner, sound, smell, etc.

Duration: 10-year terms with 10-year renewal terms



*Kellogg's*®



**FedEx** Corporation



**IBM**®



# Trade Secrets

Definition: Any information that provides economic value that is not in the public domain and that has been reasonably kept secret

Protects: Formulas, patterns, compilations, programs, devices, methods, techniques or processes

Duration: As long as they remain secret





# Patent

Definition: A grant of property rights by the U.S. Government through the USPTO

Patentability: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent” (35 U.S.C. 101)

Duration: [Utility/Plant] 20 years from date of filing;  
[Design] 14 years from patent grant



# What is a Patent

Purpose: To promote the progress of science and useful arts... (U.S. Constitution Article I, §8, Clause 8)

System: A quid pro quo;  
Disclosure of the invention to the government in specific terms, in exchange for exclusive rights to the inventor



# Filing for a Patent – Why bother?

Patents have the attributes of **personal property** and may be:

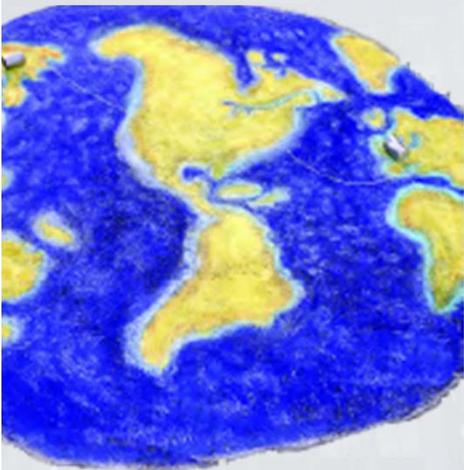
- Sold to others;
- Mortgaged;
- Assigned;
- Given away;
- Bequeathed in a will and inherited; or
- Licensed and taxed



# Rights included in a Patent

A U.S. patent *grants* a right to **exclude** others from:

- Making;
- Using;
- Offering for sale;
- Selling the invention throughout the U.S.; or
- Importing the invention into the U.S.





# Who Enforces Patent Infringements

Infringement: Violation of any of the patent rights

Enforcement: Up to patent owner, not USPTO.

The USPTO-granted rights valid only in U.S.

PCT : Enables a U.S. applicant to file an international utility patent application in a standardized format at USPTO.

A filing system; and it does not grant a patent

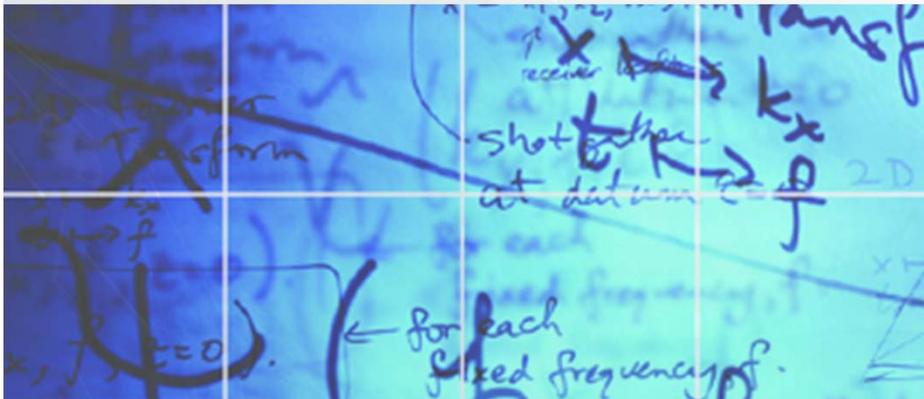


# Patentable & Non-patentable subject matters

## Patentable subject matters:

“... any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof...”

Software and business methods also patentable



## Non-patentable subject matters:

A mere idea or concept;  
pure mathematical formulas;  
phenomena of nature



# Types of Patents

## Utility:

New and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof  
→ How an invention works

U.S. Patent Jan. 20, 2009 Sheet 8 of 293 US 7,479,949 B2

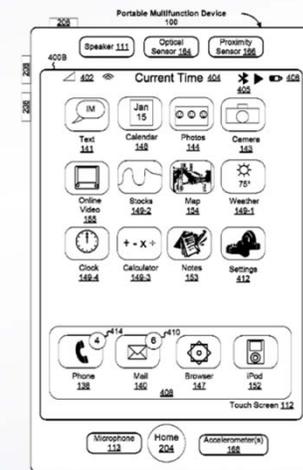


Figure 4B

## Design:

New, original & ornamental design  
→ How an invention looks

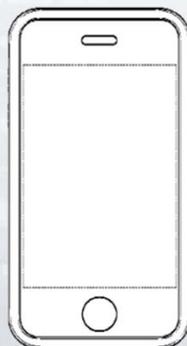
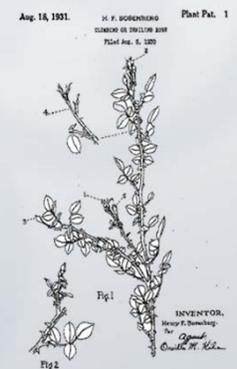


FIG. 35

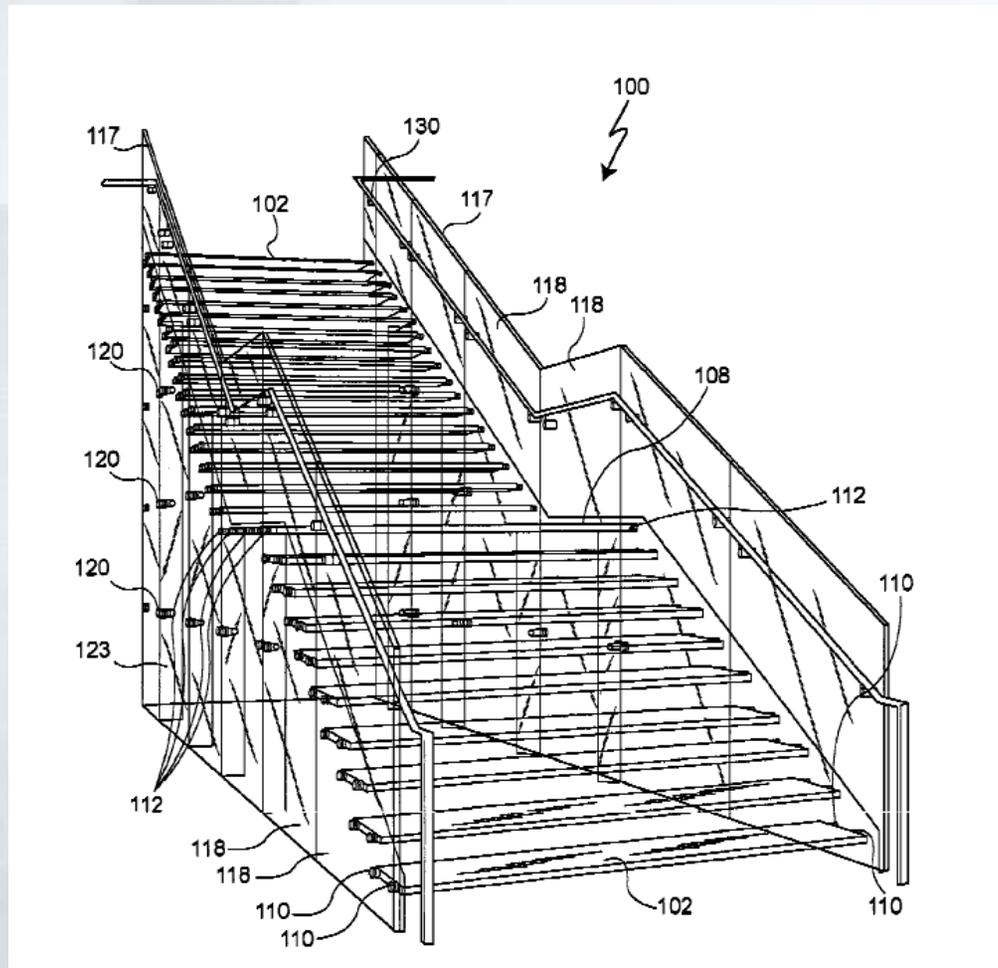
## Plant:

Asexually-produced distinct and new variety of plant



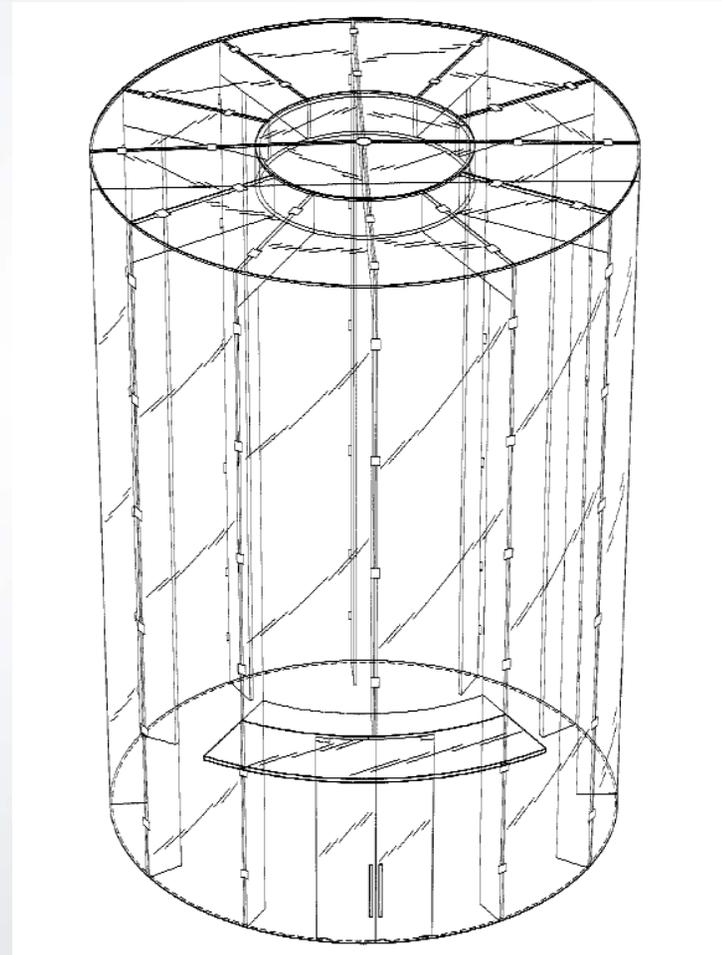
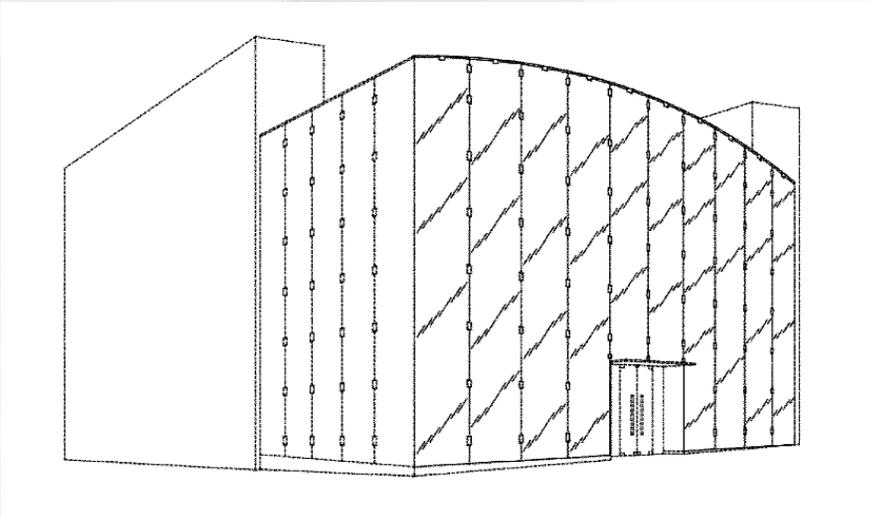


# Utility Patent





# Examples of Design Patents





# Types of Applications

## Provisional:

- One year period
- Filed for filing date priority
- No claims required
- Not examined, so no patent
- Not allowed for design

## Non-Provisional:

- 20-year patent protection from filing date
- Examined for patentability
- Claims required



# Filing a Patent Application in U.S. and in other countries

## U.S.:

The real person or persons who first made the invention (i.e. the first to invent), or his/her assignee, is entitled to a patent

## Other countries around the world:

The first to file a complete application is entitled to a patent, provided the invention was not copied from another





# Patents and Universities

**University research** has been vital to:

- Fostering innovation;
- Ensuring economic opportunity; and
- Creating American jobs

**Transfer of new technologies** from university labs to marketplace is critical



# Patents and Universities

**University  
research**

**Royalty generation  
from university  
innovation**

- Fostering innovation
- Ensuring economic opportunity
- Creating American jobs

**Capturing IP for  
IP protection**

**Diffusion of innovation &  
Transfer of technology from  
university labs to marketplace**



# Ideas for Your Ideas



Collegiate Inventors Competition

<http://www.invent.org/collegiate/>



National Collegiate Inventors  
and Innovators Alliance

<http://nciia.org/competitions>



LEMELSON-MIT PROGRAM

The Lemelson-MIT Awards for  
Invention and Innovation

<http://web.mit.edu/invent/a-main.html>



# Questions

**Sue A. Purvis**

[sue.purvis@uspto.gov](mailto:sue.purvis@uspto.gov)

**USPTO Website:**

[www.uspto.gov](http://www.uspto.gov)