Expanding the innovation ecosphere

Demystifying the patent system
Notice

This content is for informational purposes only and is not legal advice. Please consult with appropriate sources for legal authority and guidance on these matters.
Objectives

• History
• Overview of intellectual property (IP)
• Overview of the patent process
Historical foundation of intellectual property

• Intellectual property (IP) is deeply rooted in our nation’s history.
  
  – U.S. constitution Article 1, Section 8, Clause 8: “The Congress shall have Power ... to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries ... ”
# Overview of intellectual property

<table>
<thead>
<tr>
<th>Utility/Plant patent</th>
<th>Design patent</th>
<th>Trade secrets</th>
<th>Copyrights</th>
<th>Trademarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is protected</strong></td>
<td>Inventions – Process, machine, manufacture, or composition of matter</td>
<td>Ornamental characteristics embodied in, or applied to, an article of manufacture</td>
<td>Commercially valuable information (e.g., formulas, techniques, processes)</td>
<td>Art, in an all-encompassing sense – original works fixed in a tangible medium</td>
</tr>
<tr>
<td><strong>Protects against...</strong></td>
<td>Making, using, selling, offering for sale, and importing into the U.S.</td>
<td>Making, using, selling, offering for sale, and importing into the U.S.</td>
<td>Stealing or unauthorized disclosure</td>
<td>Copying, performing, displaying, and creating derivative works</td>
</tr>
<tr>
<td><strong>Endures until...</strong></td>
<td>Generally, from the patent grant date to 20 years from the earliest effective U.S. filing date</td>
<td>15 years from issuance of patent for applications filed on or after May 13, 2015</td>
<td>Publicly disclosed</td>
<td>The life of the author +70 years for works created on or after 1/1/78</td>
</tr>
<tr>
<td><strong>Rights of independent third party creators</strong></td>
<td>None</td>
<td>None</td>
<td>Full</td>
<td>Full</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
<td><img src="image3.png" alt="Diagram" /></td>
<td><img src="image4.png" alt="Diagram" /></td>
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</tbody>
</table>
Overview of IP: Types

- **Trademarks**
  - Protects marks in commerce that indicate the source or origin of goods or services
  - Source: Federal, state, and common law

- **Copyrights**
  - Protects original (art) works fixed in a tangible medium
  - Source: U.S. Const., Art. I, Sec. 8

- **Trade secrets**
  - Protects commercially valuable information
  - Source: State and common law

- **Patents**
  - Protects inventions
  - Source: U.S. Const., Art. I, Sec. 8
Overview of IP: Mobile phone

**Trademarks:**
- Made by “Apple” (logo)
- Product “iPhone”
- Software “iOS”, “Safari”

**Patents:**
- Semiconductor circuits
- Touch Screen
- Battery/Power Control
- Antenna
- Speaker
- Device Housing

**Copyrights:**
- Software code
- Instruction manual
- Ringtone

**Trade secrets:**
- ???

**Designs (some of them patented):**
- Form of overall phone
- Placement of button & speaker
- Color pattern of trim
- Surface finish
Overview: The role of the patent system

- Protect inventions
- Encourage inventions
- Promote commercialization and application of invention
- Accelerate the commercialization of invention to the whole society
Overview:
What is a patent?

- Property right
  - Provides the right to exclude others from:
    - making, using, selling, offering for sale, or importing the claimed invention
  - Granted for a limited term
  - Territorial: A U.S. patent provides protection only in the U.S.
    - No worldwide patents
  - Granted by the USPTO in exchange for a full disclosure of the invention.
Overview:
Why get a patent?

• A patent can help companies grow by:
  – Help to gain entry into, and deter others from entering into, a market
  – Attract investors
  – Be used as a marketing tool to promote unique aspects of a product
  – Be asserted against an infringer
  – Be used as collateral to obtain funding and increase leveraging power
  – Create revenue – sell or license like other property

• Benefit communities by making new goods and services available
• Promote innovation and help safeguard your inventions
• Provide personal growth, development, and advancement
Overview:
Who can apply for a patent?

• Inventor(s)
  • Anyone who contributes to the conception of an invention

• Assignee(s)
  • An individual or a company that has gained the rights and title to an invention

• Obligated assignees
  • An individual or company that will be obligated to be assigned the rights and title to an invention

• A person with a sufficient proprietary interest
  • A person with sufficient proprietary interest in a matter to file and prosecute an application on behalf of the inventor
Who can be an inventor on a patent?

- Anyone who contributes to the conception of an invention
  - Alone, or in combination with others
The USPTO is America’s innovation agency

Committed to:

• Fostering innovation and economic growth
• Creating a reliable, predictable, and high-quality IP system
The patent application journey

Demystifying IP
Types of patents

Utility

Design

Plant
Anatomy of a patent

- **Abstract**
  - A short summary of the invention.
- **Written description**
  - How does it work?
  - How is it made or used?
- **Drawings**
  - What does it look like?
- **Claims**
  - The claim(s) define(s) the legal boundaries of the invention, similar to a deed to a property.
Claim 1. A chair comprising:

- a seat,
- a back support attached to the seat,
- support arms attached to the seat and back support, and
- a base comprising a plurality of legs attached to the seat.
The patent application journey

First, you need an idea!  

– Is your idea worth protecting?

Present your idea

Draft application

File application
Is your idea eligible for protection?

35 U.S.C. § 101
Is your idea novel and non-obvious?

• “Novel”: e.g., your invention is new, was not described in the prior art.
• “Non-obvious”: e.g., the differences between your invention and prior art would not have been obvious to someone in that field.

35 U.S.C. §§ 102 and 103

NOTE: Prior Art is all the information that has been made available to the public in any form (including Patents, Articles, Books, flyers etc.) before a given date.
The patent application journey

First, you need an idea!

Present your idea

- Maintain confidentiality.

Draft application

File application
Presenting your idea

• Don’t be afraid to champion your idea.
  – Diagrams are helpful.

• **Best to** maintain confidentiality prior to filing your patent application.

• Consult with counsel about safe ways to disclose your invention before filing a patent application.

• The USPTO provides the **Pro Se Assistance Program** which provides outreach and education assistance to applicants who file an application without the assistance of an attorney.
The patent application journey

First, you need an idea!

Present your idea

Draft application

– It’s now time to write the patent application.

File application
What do I need to disclose?

A patent is a *quid pro quo*:

- In exchange for:
  - The right to exclude others from making, using, importing, or selling your invention for a limited time period; a limited *monopoly*.
- You must **fully** disclose your invention so the public can benefit from it and expand on it.

35 U.S.C. § 112
What do I need to disclose?

Slide 1 of 2

Does the disclosure:

• Demonstrate that the inventor was in possession of the claimed invention?
• Teach one of ordinary skill to make and use the invention without undue experimentation?
• Describe the best mode contemplated for carrying out the invention by the inventor?

35 U.S.C. § 112 (a)
What do I need to disclose?

Are the claims clear enough that:

• The public is informed of the boundaries of your invention?

• It can be determined whether the claimed invention meets all the criteria for patentability?

35 U.S.C. § 112 (b)
The patent application journey

First, you need an idea!

Present your idea

Draft application

File application

- The application is filed with the USPTO. You will need to file a sworn oath or declaration that you invented the invention described in the application.
The patent application roadmap

Back and forth with the USPTO
Role of the applicant

- File a complete application
- Disclose all known prior art
- In response to examiner office actions:
  - Explain your position, and/or
  - Make good faith changes to the application
What is a USPTO office action?

An office action sets forth the basis for any objections, rejections, and allowability.
What does a rejection mean?

• Rejections are a normal part of the process.
• They help define what is patentable.
• Often due to existing prior art.
  – The examiner must have a basis to believe someone else may have come up with what you invented before you.
• Can often be overcome.
Fact: In FY 2019, 84% of original filings received a first office action containing a rejection.

Fact: In FY 2019, 58% of examiner disposals were allowances.
Power of the interview

FY 2017 allowance rate

- With interview: 80%
- Without interview: 67%
Allowance and issuance

- A notice of allowance indicates all objections and rejections have been overcome and your application is ready for issuance.

- Congratulations!
Remember

• Stay involved throughout the process.
For more information

• Contact the Pro Se Assistance Center:
  – 866-767-3848
  – innovationdevelopment@uspto.gov

• Visit our Website:
  – https://www.uspto.gov/patents-getting-started/using-legal-services/pro-se-assistance-program