

The background of the slide is a technical drawing of a mechanical assembly, rendered in a light gray color. It features various components, lines, and callouts, including numbers like 18, 80, 68, 86, 84, 82, 34, 32, and 52. The drawing is a cross-section or a detailed view of a complex part.

# **US Patent Practice for the SBIR-STTR Grantees**

November 08, 2016

UNITED STATES  
PATENT AND TRADEMARK OFFICE



# 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: Trade Secrets



- Any information that derives economic value from not being generally known or ascertainable
- Can be formulas, patterns, compilations, programs, devices, methods, techniques or processes
- Protection stems from common law dating to the 1800's
- All states have some sort of trade secret protection
- Most laws based on the Uniform Trade Secrets Act
- In 2014 Congress considered, but did not pass, federal versions of the UTSA

# Why are Trade Secrets useful?

- Protects commercially valuable proprietary information, e.g., formulas, recipes, or business information that gives a competitive advantage
  - Customer lists
  - Product formulations
  - Search algorithms
- Trade Secrets are not generally known and must be subject to reasonable efforts to preserve confidentiality
- No set term for protection



# How to Lose a Trade Secret?

- Failure to take adequate steps to prevent disclosure
- Owner or owner-authorized disclosure
- Reverse engineering
- Independent development



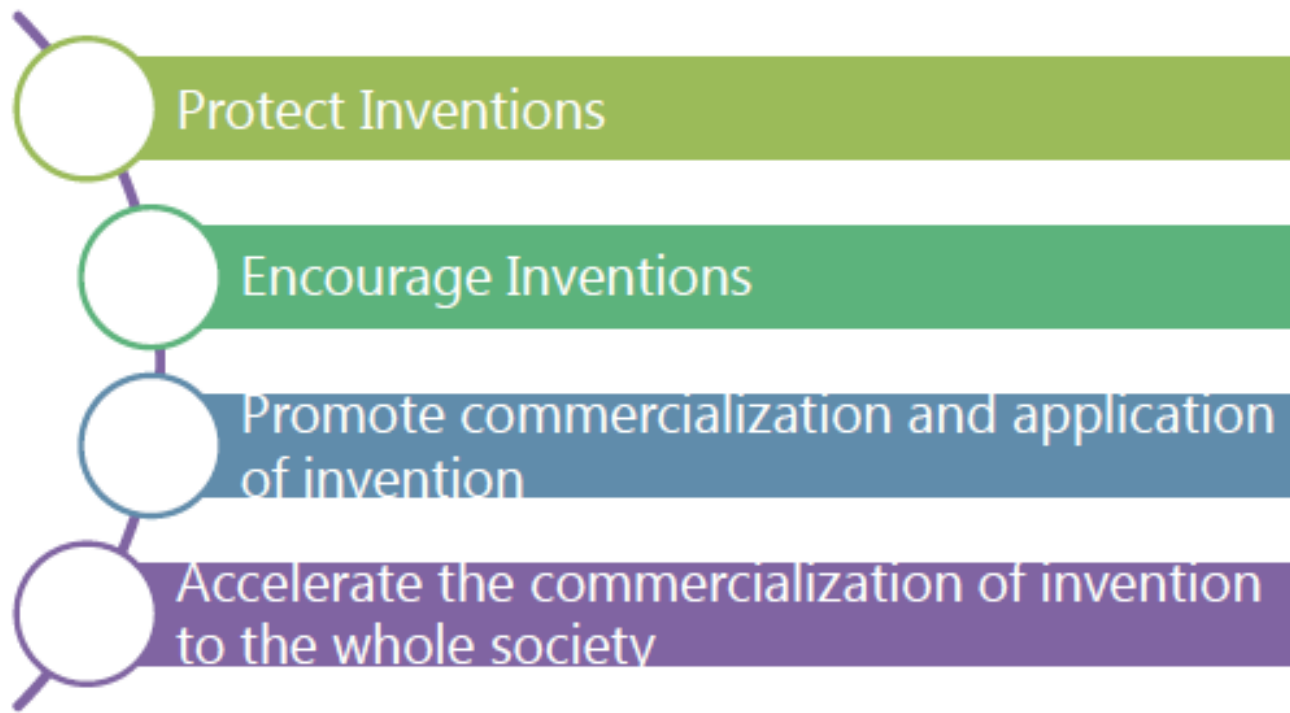
# Overview of IP: What is a Patent?

- A Property Right
  - Right to **exclude others** from making, using, selling, offering for sale or importing the claimed invention
  - Limited term
  - Territorial: protection only in territory that granted patent; **NO world-wide patent**
- Government grants the property right in exchange for the disclosure of the invention



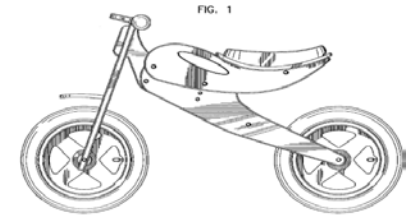
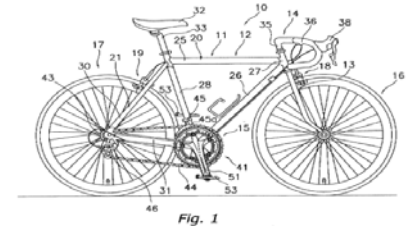


# The Role of the Patent System



# Types of Patents

- Utility - New and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof Term – 20 years from earliest effective filing date
- Design - Any new, original and ornamental design Term - 15 years from issue date
- Plant - Whoever invents or discovers and asexually produces any distinct and new variety of plant... Term – 20 years from earliest effective filing date





# What Type of Application?

- Provisional – abandoned after one year, no claims required, written disclosure must meet same requirements as non-provisional, not allowed for design.
- Non-Provisional - claims required, written disclosure must meet requirements of 35 USC 112(a). Examined for patentability, may result in a patent grant.

# Micro-entity

- SMALL ENTITY REQUIREMENT –
- APPLICATION FILING LIMIT – no more than four previously filed applications
- GROSS INCOME LIMIT ON APPLICANTS AND INVENTORS – equal to three times the median household income for the preceding calendar year (\$160,971 for 2015)
- GROSS INCOME LIMIT ON PARTIES WITH AN “OWNERSHIP INTEREST”

# Parts of a Patent: The Specification

“Specification” refers collectively to the:

- Background of the Invention,
- Brief Summary of the Invention,
- Brief Description of the Drawings,
- Detailed Description of the Invention and
- Drawings

# Parts of a Patent: The Claims

- CLAIMS define legal protection being conferred by the patent.
- Must particularly point out and distinctly claim the subject matter which applicant regards as the invention or discovery
- Must conform to the invention as set forth in the specification and drawings.
- All terms and phrases used in the claims must also appear in the specification (written description).
- Must start on a separate sheet and be numbered consecutively in Arabic numerals

# The Claims (*con't...*)

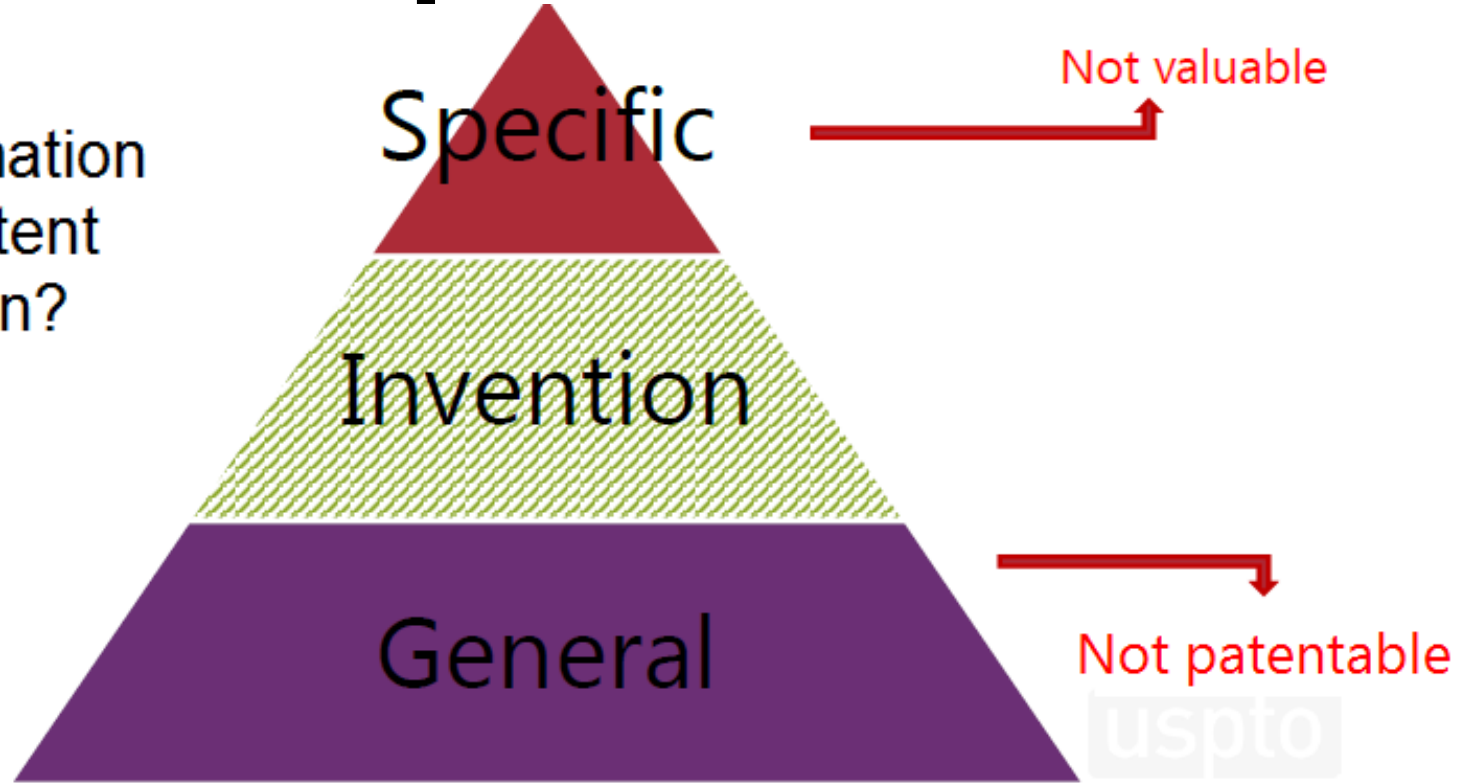
A claim in a Utility application or patent has three (3) main parts

- A **preamble** or the introduction;
- A **transitional phrase** of:
  - comprising (open);
  - consisting essentially of (excludes materials that materially affect the basic and novel characteristics of the invention); and
  - consisting of (closed); and
- A **body** reciting the elements of the invention.



# What is patentable?

What information should a patent claim contain?

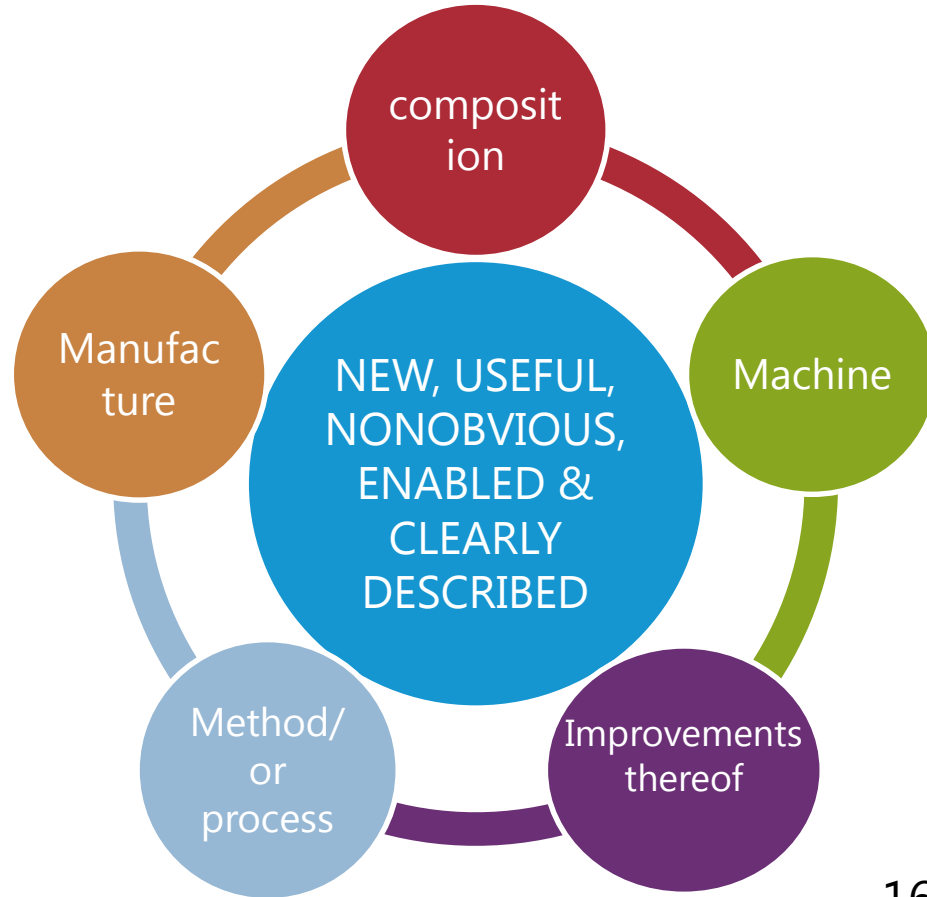


# What is Patentable?

The claims, as supported by the rest of the application, are reviewed for compliance with:

- **35 USC §101**: Patent eligible subject matter, utility, double-patenting
- **35 USC §102**: Must be new
- **35 USC §103**: Must not be obvious over what's been done before
- **35 USC §112(a)**: The claims must be described in the specification including the manner of making and using the claimed invention
- **35 USC §112(b)**: The claims must clearly define what applicant is trying to protect

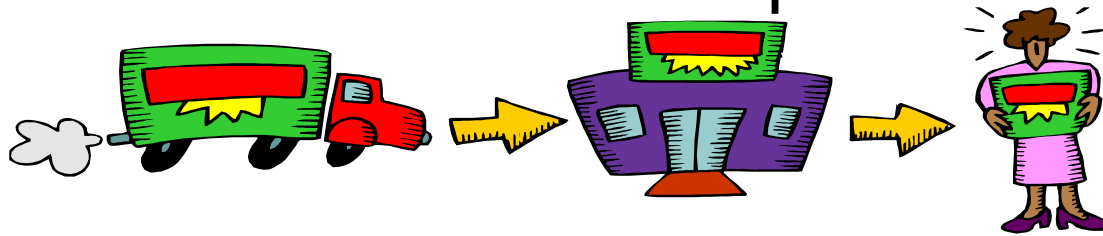
# What is patentable?





# Process

- “Process” means Process, Art or Method
- Includes a new use for a known process, machine, manufacture, composition of matter, or material
- A process is a series of steps



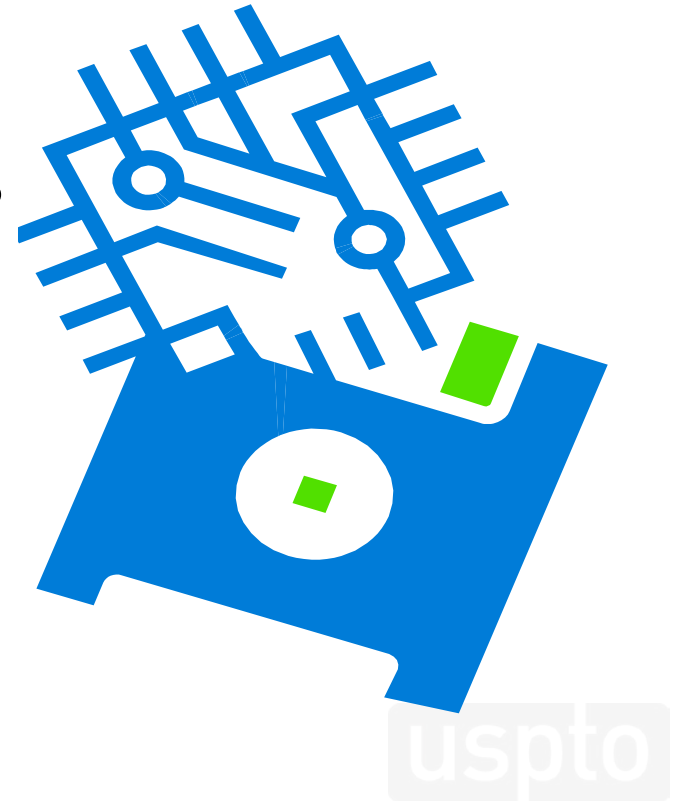
# Machine

- Parts of devices
- Complete devices
- Combinations of Devices



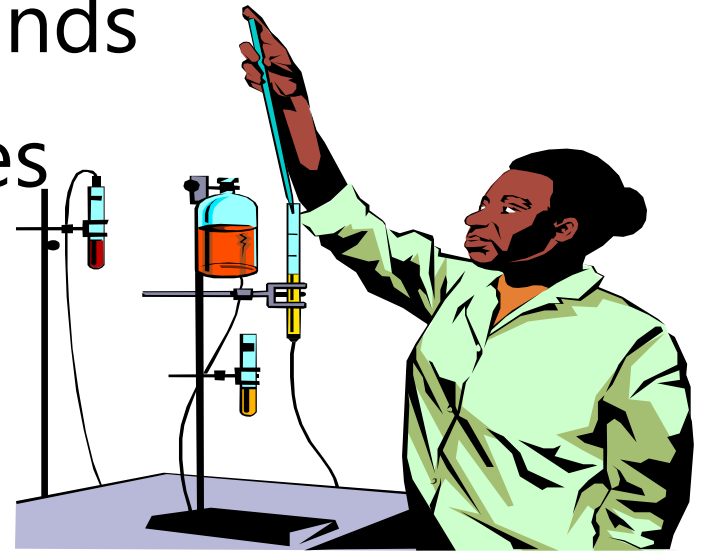
# Manufacture

- Produced Item
- Physical articles or objects



# Composition of Matter

- Chemical Compound
- Combinations of Compounds
- Composition of substances
- Composite article



# Improvements Thereof

- Improvements on:
  - Process
  - Machine
  - Manufacture
  - Composition of Matter



# Patent Examination: The Application

Appeal

Application is filed  
by Inventor  
or Assignee

USPTO  
Pre-Exam

Amendment and/or argument

EXAMINER

APPLICANT

Rejection and/or objection

Notice of Allowance

Abandonment

USPTO Grants Patent



# The Examination

Patent Examiner reviews contents of the application for compliance with all U.S. patent legal requirements.

**“An applicant is entitled to a patent unless...”** \* The requirements of U.S. patent law are not met. *\*(35 USC §102)*

**The burden is on the examiner to show if a patent is not warranted.**



# Patent Cooperation Treaty

- Enable a US applicant to file an international application in a standardized format in English at the US Receiving Office (USPTO).
- PCT is a filing system, it does not grant a patent.
- Only inventions have protection under PCT - no design or trademark protection.



# Tools and Resources



The Office has a number of tools and resources to help applicants throughout the patent examination process and beyond...

# Pro Bono

Free legal assistance to inventors

In general, there are three basic requirements:

- Income below a certain threshold;
- Knowledge of the patent system; and
- Possession of an actual invention (not just an idea).

# Law School Clinical Certification Program

- Patent and Trademark assistance by law school students
- Strict guidance of law school faculty
- Application is advanced out of turn (special)
- Please visit our website for the current list of schools

# Pro Se Assistance

- The Pro Se Assistance Program offers various services for the public, including:
- Dedicated personnel for assisting people filing applications without the assistance of an attorney
- Walk-in assistance for the general public at USPTO Headquarters (by appointment)

# Start Up Resources Page

## Resources include:

- Patent Process Overview
- Inventor Assistance Center
- Trademark Assistance Center
- Scam Prevention
- Pro Bono
- Law School Clinical Program
- Pro Se Assistance
- Upcoming events, and
- so much more



## Startup Resources

Many startup businesses face unique IP-related challenges, such as IP portfolio prerequisites to secure funding, and the possibility of costly patent infringement demand letters and lawsuits. We have tailored this area of our website to suit the specific needs of startup businesses, a segment of our stakeholders that continues to be recognized as an outsized engine of job creation, economic growth, and unparalleled innovation in the United States.

This portal is part of our Startup Partnership Initiative—putting key resources and critical information for startups in a single place so it's easier to find what you may need when you need it.

<b>Patents for Startups</b> <p>The patent process can be challenging if you are not familiar with it. Here is basic information on the patent process.</p> <ul style="list-style-type: none"><li>• Patent Process Overview</li><li>• Inventors Assistance Center</li><li>• Patent FAQs</li><li>• Patent Homepage</li><li>• Search for Patents</li><li>• Official Gazette for Patents</li></ul>	<b>Trademarks for Startups</b> <p>The trademark process can be confusing for a beginner, so here is basic information on registering a trademark.</p> <ul style="list-style-type: none"><li>• Trademark Basics</li><li>• Search for Trademarks</li><li>• Filing online</li><li>• Trademark Homepage</li></ul>	<b>Startup Assistance</b> <p>The Inventors Assistance Center and Trademark Assistance Center provide information and services to the public. Center staff can answer questions on patent and trademark processes, but cannot provide specific legal advice.</p> <ul style="list-style-type: none"><li>• Inventors Assistance Center</li><li>• Trademark Assistance Center</li><li>• Patents Ombudsman Program</li><li>• BusinessUSA (link is external) <sup>Ⓔ</sup></li></ul>	<b>Current Events</b> <p>Information about conferences, conventions and other opportunities to engage.</p> <ul style="list-style-type: none"><li>• Upcoming Events</li><li>• Inventors Eye   Events &amp; Announcements</li></ul>
<b>Scam Prevention</b> <p>We provide a public forum for the publication of complaints concerning invention promoters/promotion firms. However, we do not investigate complaints or participate in legal proceedings related to invention promoters.</p> <ul style="list-style-type: none"><li>• Scam Prevention Basics</li><li>• Non-USPTO Trademark Solicitations</li><li>• American Inventors Protection Act of 1995</li><li>• Federal Trade Commission (link is external) <sup>Ⓔ</sup></li><li>• Consumer Protection (link is external) <sup>Ⓔ</sup></li></ul>	<b>Pro Se - Pro Bono</b> <p>Are you a startup with limited resources and need help applying for a patent on an invention? If so, you may be eligible to receive pro bono ("for free") attorney representation through the nationwide Pro Bono Program. Alternatively, you might be eligible to participate in a law school clinical program near you.</p> <ul style="list-style-type: none"><li>• Pro Se</li><li>• Interest Form (link is external) <sup>Ⓔ</sup></li><li>• Pro Bono</li><li>• Inventors Eye   Pushing Ahead with Pro Bono Assistance</li><li>• Patent and Trademark Resource Centers</li><li>• Law School Clinics</li></ul>	<b>Education &amp; Information</b> <p>Guides and additional resources and information for startups.</p> <ul style="list-style-type: none"><li>• Provisional Application for Patent</li><li>• Filing a Nonprovisional Utility Patent Application</li><li>• Filing A Design Patent Application</li><li>• Financial Manager</li><li>• Patent Litigation Toolkit</li><li>• IP Awareness Assessment</li></ul>	<b>State Resources</b> <ul style="list-style-type: none"><li>• U.S. map of resources</li></ul>



