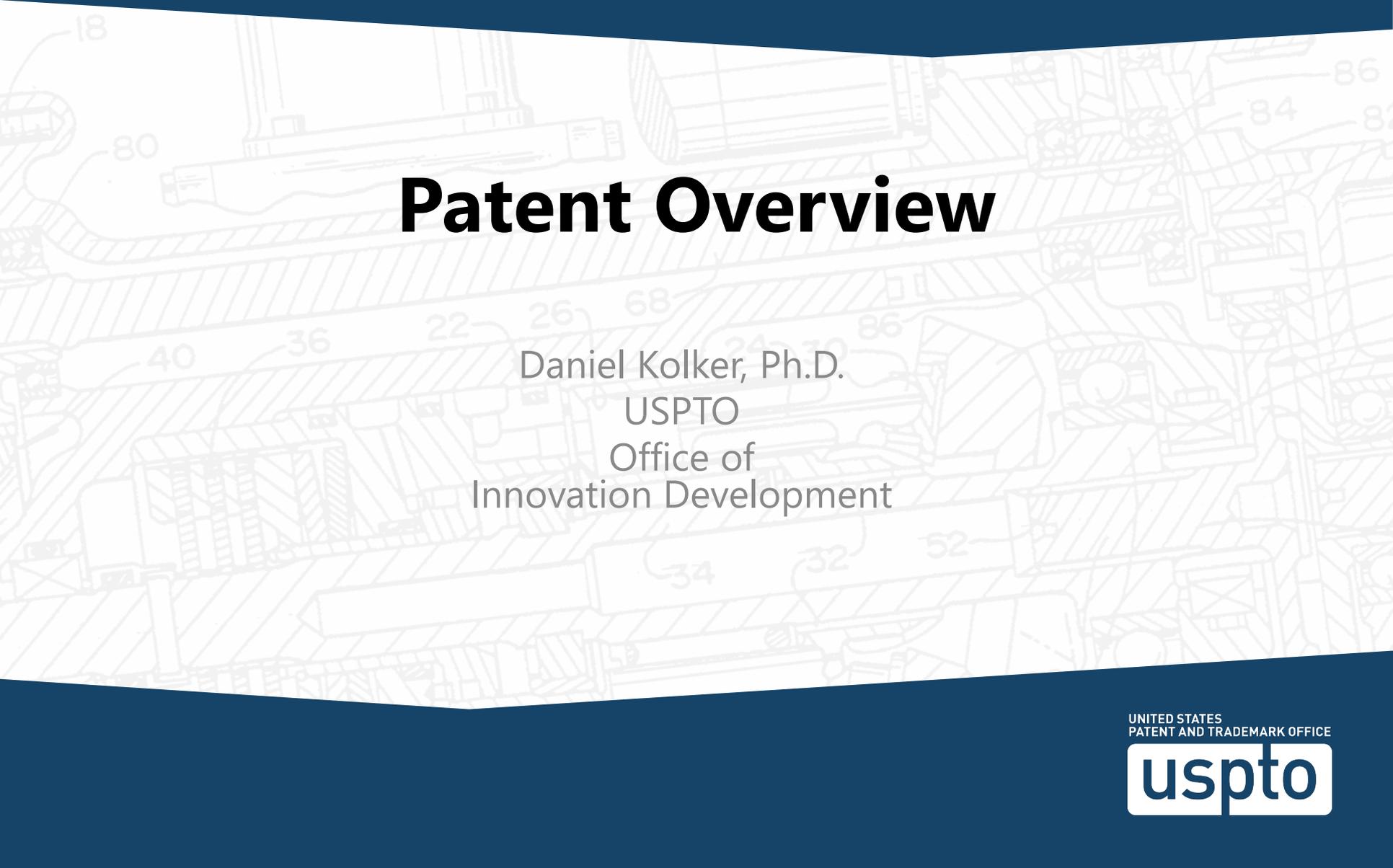


**UNITED STATES  
PATENT AND TRADEMARK OFFICE**





# Patent Overview

Daniel Kolker, Ph.D.  
USPTO  
Office of  
Innovation Development

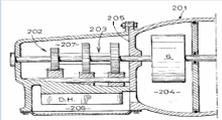
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# Objectives

- Overview of Intellectual Property (IP)
- Process of Filing a Patent Application
- Resources

# Overview of Intellectual Property

	<u>Utility/Plant Patent</u>	<u>Design Patent</u>	<u>Trade Secrets</u>	<u>Copyrights</u>	<u>Trademarks</u>
<b>What is protected</b>	Inventions – Process, machine, manufacture, or composition of matter	Ornamental characteristics embodied in, or applied to, an article of manufacture	Commercially valuable information (e.g., formulas, techniques, processes)	Art, in an all-encompassing sense – original works fixed in a tangible medium	Marks in commerce that indicate the source or origin of goods or services
<b>Protects Against...</b>	Making, using, selling, offering for sale, and importing into the U.S.	Making, using, selling, offering for sale, and importing into the U.S.	Stealing or unauthorized disclosure	Copying, performing, displaying, and creating derivative works	Using a mark in a way that causes likelihood of confusion
<b>Endures until...</b>	Generally, from the patent grant date to 20 years from the earliest effective U.S. filing date	15 years from issuance of patent for applications filed on or after May 13, 2015	Publicly disclosed	The life of the author + 70 years for works created on or after 1/1/78	Abandoned or loss of distinctiveness or secondary meaning
<b>Rights of Independent Third Party Creators</b>	None	None	Full	Full	None
<b>Examples</b>			Coca Cola formula 		

# 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: A 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



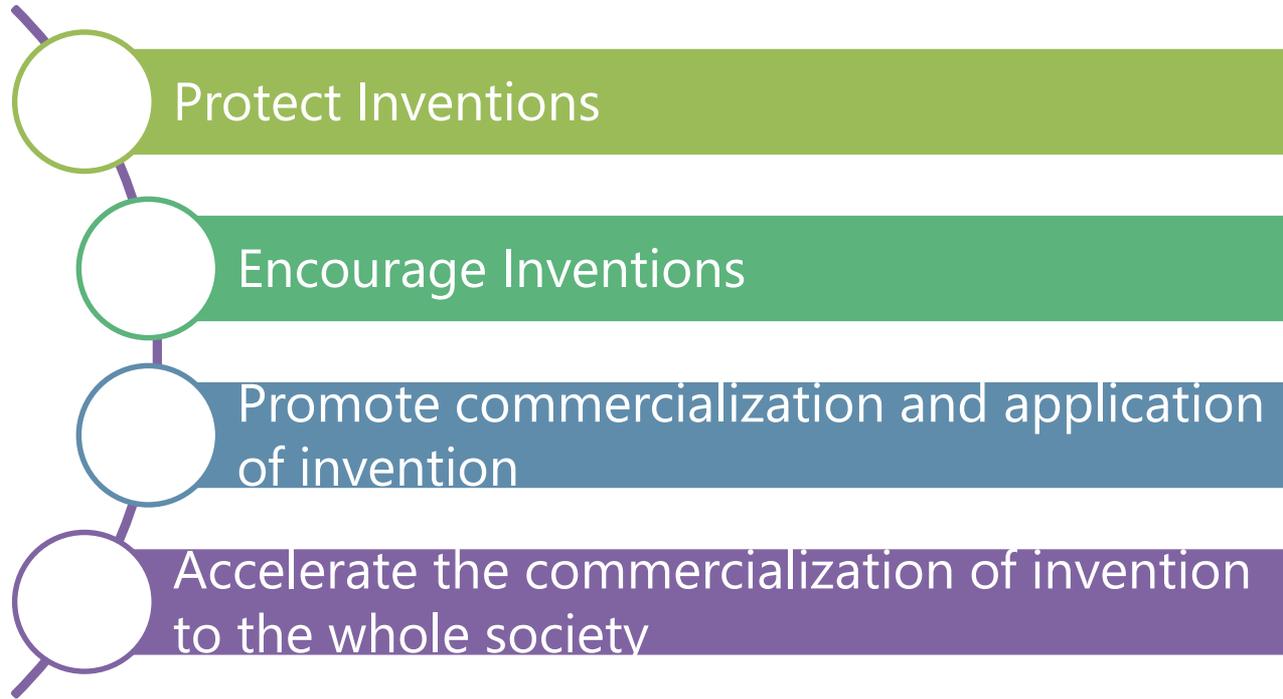
© Apple

# 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



# Why get a Patent?

- A patent can:
  - 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
- **Patents are a form of property that can add value to a company's assets**



US 20080210223A1



US 20150290354A1

(19) **United States**  
 (12) **Patent Application Publication** (10) **Pub. No.: US 2008/0210223 A1**  
**Joines et al.** (43) **Pub. Date: Sep. 4, 2008**

(54) **APPARATUS AND METHOD FOR REPOSITIONING ABDOMINAL FAT TISSUE**

(75) **Inventors:** Sharon Joines, Raleigh, NC (US); Jessica Stahl, Winston-Salem, NC (US); Glenwood Morris, Raleigh, NC (US)

**Correspondence Address:**  
**ALSTON & BIRD LLP**  
**BANK OF AMERICA PLAZA, 101 SOUTH TRYON STREET, SUITE 4000**  
**CHARLOTTE, NC 28280-4000 (US)**

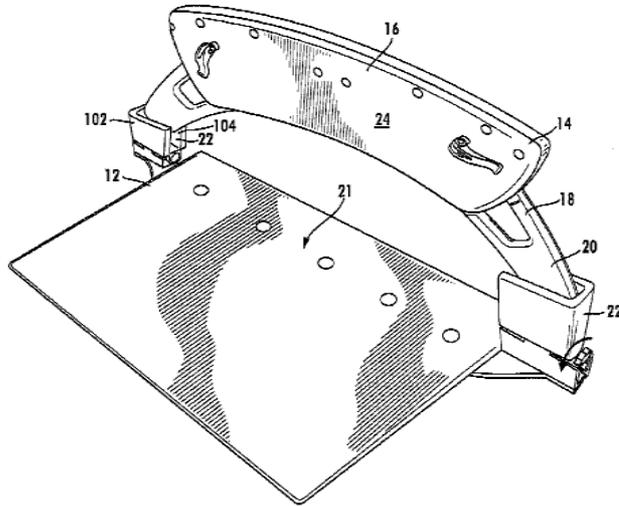
(73) **Assignee:** North Carolina State University

(21) **Appl. No.:** 11/948,295

(22) **Filed:** Nov. 30, 2007  
**Related U.S. Application Data**  
 (60) Provisional application No. 60/861,947, filed on Nov. 30, 2006.

**Publication Classification**  
 (51) **Int. Cl.** A61F 5/24 (2006.01)  
 (52) **U.S. Cl.** 128/96.1  
 (57) **ABSTRACT**

The present invention is directed to an apparatus and associated method for repositioning fat tissue in a patient's abdominal region during medical and surgical procedures. In particular, the apparatus of the present invention is particularly adapted for repositioning an abdominal pannus and exposing the lower abdominal and groin regions of a patient. In one embodiment, the present invention includes a base member and a support member that angularly rotatable with respect to the base member. The support member includes a surface that contacts the pannus of a patient and pushes it superiorly away from the groin region.



(19) **United States**  
 (12) **Patent Application Publication** (10) **Pub. No.: US 2015/0290354 A1**  
**Loboa et al.** (43) **Pub. Date: Oct. 15, 2015**

(54) **NONWOVEN FIBER MATERIALS**

(71) **Applicant:** NORTH CAROLINA STATE UNIVERSITY, Raleigh, NC (US)  
 (72) **Inventors:** Elizabeth G. Loboa, Cary, NC (US); Behnam Pourdeyhimi, Cary, NC (US); Mahsa Mohliti Asli, Raleigh, NC (US)

(73) **Assignee:** NORTH CAROLINA STATE UNIVERSITY, Raleigh, NC (US)

(21) **Appl. No.:** 14/437,624

(22) **PCT Filed:** Oct. 22, 2013

(86) **PCT No.:** PCT/US2013/066030

§ 371 (c)(1),  
 (2) **Date:** Apr. 22, 2015

**Related U.S. Application Data**

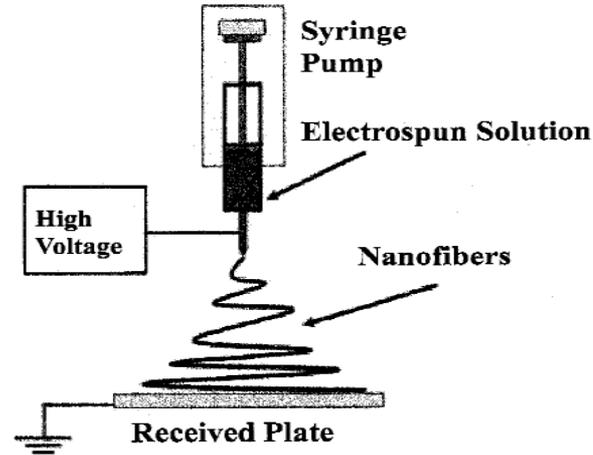
(60) Provisional application No. 61/716,820, filed on Oct. 22, 2012, provisional application No. 61/846,396, filed on Jul. 15, 2013.

**Publication Classification**

(51) **Int. Cl.** A61L 15/42 (2006.01); A61L 15/26 (2006.01); A61L 15/44 (2006.01); A61L 15/40 (2006.01); D04H 1/382 (2006.01); D04H 1/728 (2006.01)  
 (52) **U.S. Cl.** CPC ..... A61L 15/425 (2013.01); D04H 1/4382 (2013.01); D04H 1/728 (2013.01); A61L 15/44 (2013.01); A61L 15/40 (2013.01); A61L 15/26 (2013.01); D10B 2509/022 (2013.01); A61L 2300/61 (2013.01); A61L 2300/104 (2013.01); A61L 2300/30 (2013.01); A61L 2300/21 (2013.01); A61L 2300/41 (2013.01)

(57) **ABSTRACT**

The present invention provides electrospun fibrous materials with various potential applications in the healthcare industry. Unique fiber morphologies are provided, which can allow the fibrous materials to exhibit a range of desirable properties. The electrospun fibrous materials are advantageously biocompatible and may be tailored for certain specific applications, e.g., by the incorporation of one or more therapeutic agents. Exemplary materials described herein can be employed in controlled, localized drug delivery, tissue engineering, and wound healing applications.



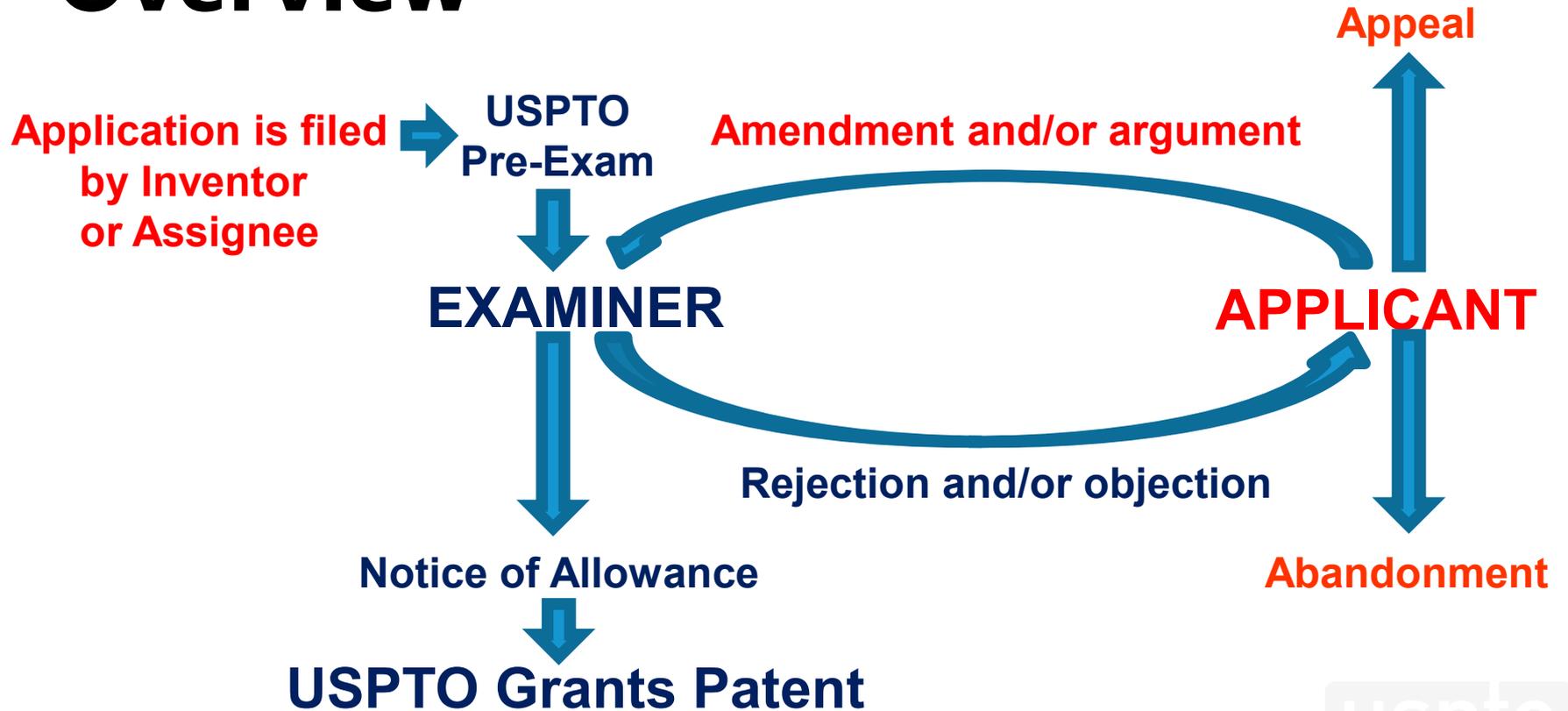
## Who can apply for a Patent?

- Inventor(s)
- Assignees
- Obligated Assignees
- A person with a sufficient proprietary interest

# What happens after I get my patent?

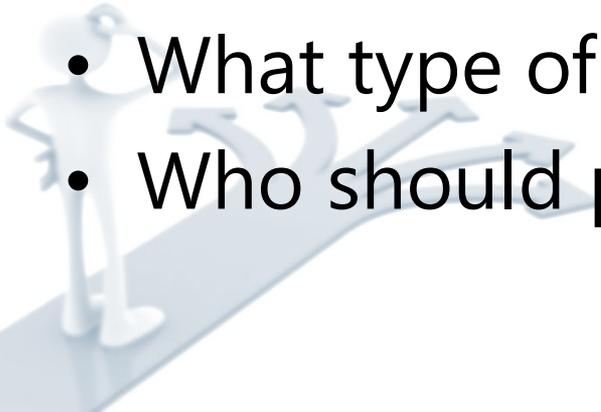
- Licensing
- Enforcement
- More innovation and competition
- Etc...

# Patent Examination Process Overview



# Pre-filing Decisions

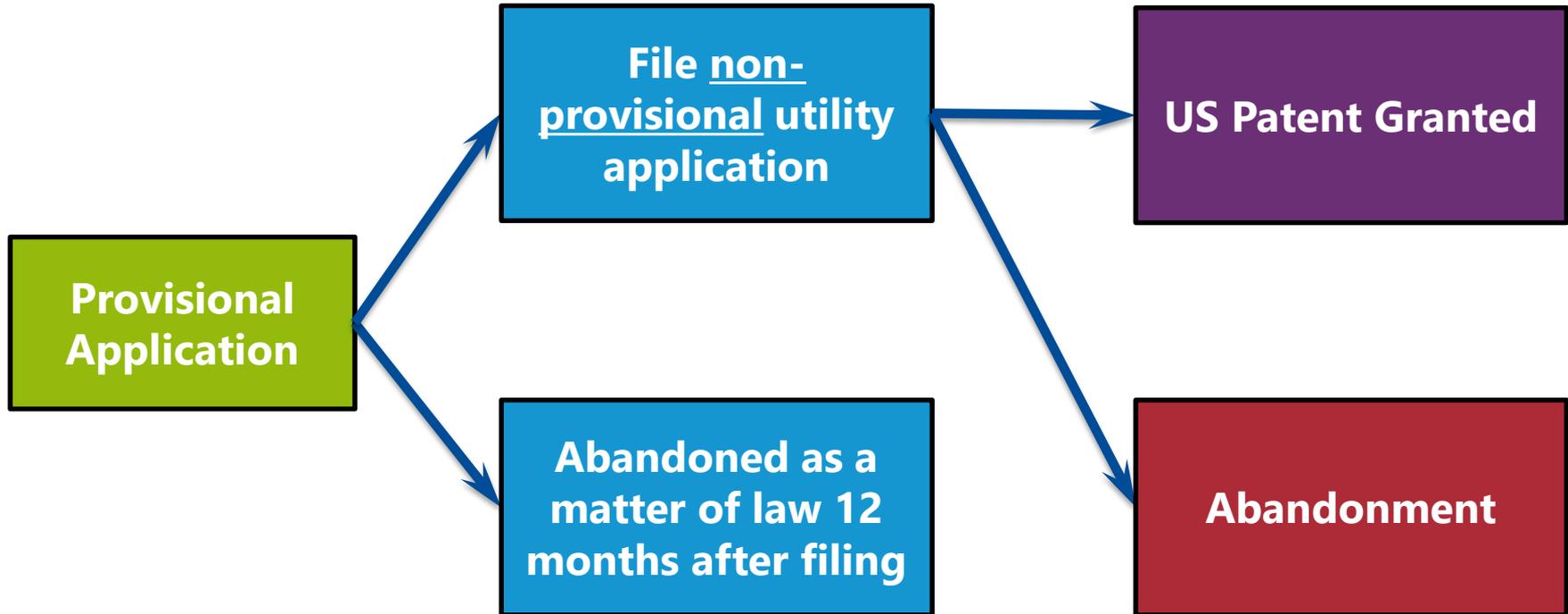
- Should I file an application?
  - Prior art search
  - Business plan – who will buy the invention?
- When should I file?
- Where should I file, i.e. electronic or USPTO?
- What type of application(s) to file?
- Who should prepare the application(s)?



# Provisional Utility Applications

- A low-cost way to establish an early effective filing date (priority date) with fewer formalities
- A provisional application does **NOT** issue as a patent, but a later-filed non-provisional application may issue as a patent and benefit from the provisional application filing date
- 12 month window to file corresponding **utility non-provisional patent application** in order to benefit from the priority date of the provisional application
- Provisional application is **abandoned automatically** at 12 months and is **not examined**

# Provisional Utility Applications



# Provisional Utility Applications

## Additional benefits of Provisional Applications:

- Patent term measured from filing date of subsequent **non-provisional** application
  - Patent term is currently 20 years from the date of filing
  - Provides up to an additional 12 months of protection on your invention based on filing of the non-provisional.
- Term **patent pending** allowed to be applied
  - Inventors may use term during time period after patent application (Provisional, Non-Provisional, Design, or Plant) has been filed, but before patent has issued



# Provisional Utility Applications

(MPEP 201.04)

- Automatic abandonment after one year
- Inventor given time to investigate market potential / make improvements
  - Be careful - too much change could result in loss of provisional filing date
  - Many inventors file multiple provisional applications during the 12 month pendency of the first filed provisional to include improvements
- Also provide time to obtain counsel if desired
- **No patent issues**—not examined

# Provisional Utility Applications

- Simplified filing requirements
- Items required:
  1. Specification - CLEAR DESCRIPTION - in compliance with 35 USC 112, Paragraph (a)
    - enablement, written description, best mode
  2. Drawings
    - a) Always required where necessary for an understanding of the subject matter sought to be patented
    - b) May be required by the office where the nature of the subject matter admits of illustration
  3. Filing fees
  4. Cover Sheet identifying Provisional Application





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# Thank You!

Office of Innovation Development  
[innovationdevelopment@uspto.gov](mailto:innovationdevelopment@uspto.gov)

Daniel Kolker  
Daniel.Kolker@uspto.gov



