



**IP And Coffee Seminar Series – Sept. 19, 2019**

**Patenting 101 – Understanding the Patent Process**

# Overview

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# Why Protect IP

- Society
  - Encourage innovation and creativity
  - Allow artistic and creative persons to benefit from their investment in their work
  - Encourage public disclosure of technical know-how
- Individual
  - Return on investment for R&D expenditures
  - Prevent others from using, manufacturing or selling covered products or processes (trade barrier)
  - Licensing to control/prevent use of covered technology by: vendors, customers, business partners
  - Derive a royalty stream from licensing technology

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# Patents are Rooted in the U.S. Constitution

- U.S. Constitution, Article 1, Section 8, Clause 8:  
“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.”
- Society benefits from disclosure of inventions:
  - encourages innovation
  - improvements can begin immediately

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# Patent *Quid Pro Quo* Requires Disclosure

- Disclose your invention in exchange for the *possibility* of a time-limited right to exclude others from using your invention
  - disclosure
    - in general, a patent application is published 18 months after filing, whether or not it leads to a patent
      - exception: if filing patent application in US only and request non-publication, can keep invention secret unless and until a patent is granted
  - *possibility* of a right to exclude (not a right to practice)
    - currently about 50-60% of US patent applications become patents

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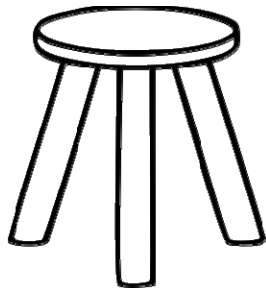
# Patents

- Three Types of Patents (U.S.)
  - **Utility patent: process, machine, manufacture, or composition of matter (term: 20 years)**
  - Design patent: ornamental designs for manufactured articles (term: 14 years)
  - Plant patent: new variety of asexually reproduced plant (term: 20 years)
- Outside of the U.S. some countries have other types of patents, such as a utility model or petite patent (typically these are unexamined registrations of the invention)

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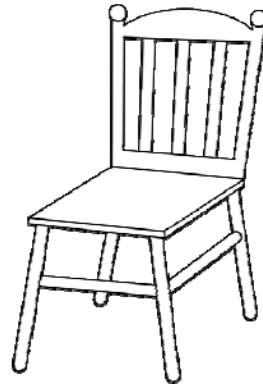
## What protection does a patent provide?

- A patent does not give you a right to make your invention
- A patent gives you only the *right to exclude*.



Company A's Stool

Chair comprising:  
a seat, and  
two or more legs.



Company B's Chair

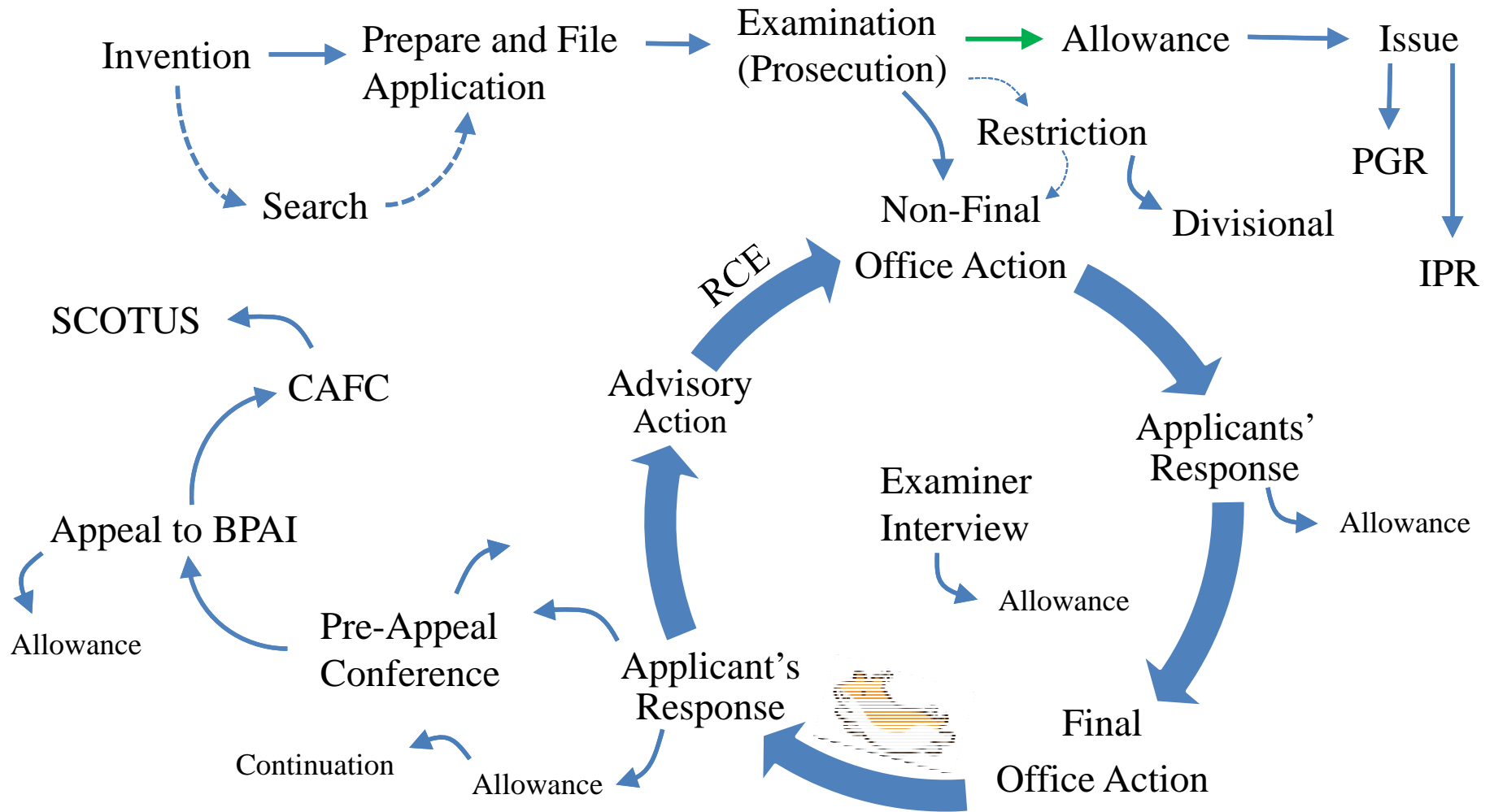
Chair comprising:  
a seat,  
two or more legs, and  
a backrest.



Company C's Rocking Chair

Chair comprising:  
a seat,  
two or more legs,  
a backrest; and  
curved feet.

# The Patent Process





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# Invention

- Conception: when the inventor perceives a specific result and a particular means of accomplishing the result, so that no more than ordinary skill in the art is needed to build or carry out the invention
  - if more than ordinary skill is required to build or carry out the invention, then building or carrying out the invention is required before conception is complete
- Signed, dated, witnessed documentation of conception and implementation is critical
  - Design or Inventor Notebooks

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# Inventorship

- Determined claim-by-claim
- Only those who contributed to the inventive concept can legally be considered an inventor
  - not those carrying out routine work pursuant to instructions
  - not those merely posing the problem to be solved
  - not those with only managerial responsibility
  - decisions as to who should be listed as an inventor must be made in “good faith”

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# Inventorship

Inventorship is not the same as ownership:

- most universities and companies have explicit assignment agreements with their inventors
- a corporation can have rights under common law (“shop rights”)
- an inventor’s obligation to aid (e.g., provide signatures) continues after employment ceases

Joint Invention does not require:

- physically working together
- working at the same time
- making the same amount or type of contribution
- working on all aspects of the invention

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# Search of the Prior Art (Optional)

- Prior art includes:
  - Publications - books, articles, patents, published patent applications
  - previously sold products (including applicant's own products)
  - public use of the invention by applicant or others
  - America Invents Act (AIA): “otherwise available to the public”
- Patentability search analysis seeks to answer the questions:
  - Is the invention new?
  - If the invention is new, what is the closest prior art, and why is the invention not obvious in view of that art?
- Patent searches may be performed for free:

<http://www.uspto.gov>

<http://www.epo.org/searching/free/espacenet.html>

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# Requirements for a Patent

- Requirements to obtain a U.S. patent include
  - statutory subject matter
  - utility
  - novelty
  - nonobviousness
  - enablement and written description
  - best mode
  - disclosure of material art

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# Tests for Patentability

- Utility
  - is the invention useful?
  - a very low hurdle for patent applicants
- Novelty
  - is the invention new?
  - new as of what date?
    - Until 3/15/2013, new as of the date of invention
    - AIA: after 3/16/2013, new as of the date of patent application filing
- Nonobviousness
  - at the time applicants made their invention, would the invention have been obvious to a skilled person?
  - a very high hurdle for applicants
    - the single most important reason that many U.S. applications do not lead to a patent

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# Statutory Subject Matter

- Is the invention the kind of thing that can be patented?
- U.S. Federal Law (35 U.S.C. 101): “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 therefor, subject to the conditions and requirements of this title.”
- Excluded: abstract ideas, tax-avoidance strategies, some medical procedures
  - AIA: human organisms
- Included but controversial (and excluded in some non-U.S. countries): software, business methods, life forms, methods of medical treatment

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# Bars to Novelty

- Public disclosure
- Public (non-secret) use
- Offers for sale, sales
- AIA: “otherwise available to the public”
- U.S. has one year grace period
  - U.S.: applicant’s own disclosure, public use, offer for sale or sale cannot occur more than one year before filing
  - Most non-U.S. countries: disclosure, public use, offer for sale or sale cannot occur any time before filing (Absolute Novelty)



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# Parts of a Patent Application

- Brief Description of Related Art
- Summary
- Detailed Description of the Invention
  - Enablement
  - Best Mode
- Claims
- Drawings



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# The Thundershirt

D677,021

8,291,867

D677,020

D683,083

**8,459,211**

8,899,189

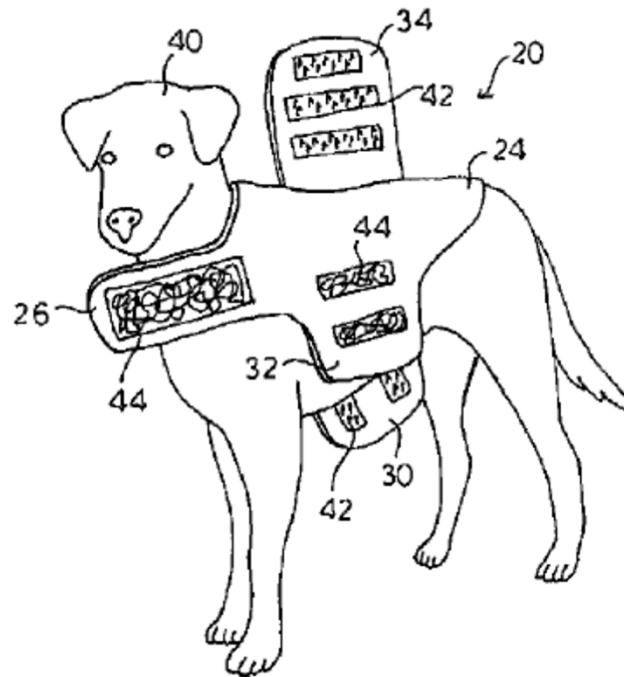
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D805,265



(12) **United States Patent  
Blizzard**

(10) **Patent No.:** US 8,459,211 B2  
(45) **Date of Patent:** Jun. 11, 2013

(54) **PRESSURE-APPLYING GARMENT FOR  
ANIMALS**

(71) Applicant: **Thundershirt, LLC**, Durham, NC (US)

(72) Inventor: **Philip J. Blizzard**, Durham, NC (US)

(73) Assignee: **Thundershirt, LLC**, Durham, NC (US)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **13/657,364**

(22) Filed: **Oct. 22, 2012**

(65) **Prior Publication Data**  
US 2013/0042820 A1 Feb. 21, 2013

**Related U.S. Application Data**

(63) Continuation of application No. 12/769,735, filed on Apr. 29, 2010, now Pat. No. 8,291,867.

(60) Provisional application No. 61/218,620, filed on Jun. 19, 2009.

(51) **Int. Cl.**  
**A01K 13/00** (2006.01)

(52) **U.S. Cl.**  
USPC ..... **119/850**

(58) **Field of Classification Search**  
USPC ..... 119/850, 856, 863, 865; 602/75, 602/76; 54/79.1, 79.2, 79.4; 2/69.5, 88, 89, 2/102, 103, 908, 912-916, 920  
See application file for complete search history.

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(57) **ABSTRACT**

A garment to reduce an animal's anxiety, fearfulness, over-excitement, or a combination thereof. The garment may include a central portion, flaps extending from opposite sides of the central portion, and, in some cases, a cinching member that extends from a central area of the central portion. The flaps may be fastened together around the chest and stomach of the animal, and the cinching member may be fastened to the central portion or one or more flaps to tighten the garment further, applying pressure to reduce anxiety, fearfulness, or over-excitement. Straps may be provided to secure the garment to the animal's neck. One material that may be used in making the garment is a fabric made of 55% cotton, 35% polyester, and 10% spandex. The animal may generally be any animal with four legs, for example, a dog or cat, or two arms and two legs, for example, a monkey.

**29 Claims, 7 Drawing Sheets**

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# Claims

- Determine the scope of protection provided by patent.
  - Used to determine patent infringement.
- A patent can contain one claim, a few claims, or many claims (about 20 claims is typical)
- A patent can contain more than one type of claims
  - e.g., claims to a new drug, a method of making the drug, and a method of using the drug to treat a disease
- Each claim is a single sentence

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# Sample Claim

- 1. **A garment for an animal** having a first pair of appendages, a second pair of appendages, and a neck, the animal having a mid-body between the first pair of appendages and the second pair of appendages, the garment comprising:  
**a central portion having a longitudinal axis** and including a front end, a rear end opposite the front end, a first side extending laterally in a first direction from the longitudinal axis, and a second side extending laterally in a second direction from the longitudinal axis, the second direction opposite the first direction;  
**a first strap** extending from the front end of the central portion, the first strap including a free distal end, two opposing edges, an inside surface including a hook section of fastener and a loop section of fastener, and an outside surface; and  
**a second strap** extending from the front end of the central portion laterally spaced in the second direction from the first strap, the second strap including a free distal end, two opposing edges, an inside surface, and an outside surface including a hook section of fastener and a loop section of fastener,  
wherein when the garment is worn by the animal the first strap and the second strap extend around the neck of the animal and fasten to each other.

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# Examination by the USPTO

- Almost all patent applications are initially rejected
- Responses to rejection
  - Argue
  - Amend claims (narrow definition of invention)
    - claim amendments must be supported by application as filed
  - Appeal
  - Abandon
- Filing application entitles applicant to two office actions and two responses, with more available for money

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# Duty of Disclosure of Material Art

- Applicants have no requirement to search the prior art, but . . .
- The USPTO **REQUIRES** that all inventors and attorneys disclose “material” art to the USPTO
- Failure to disclose such art can invalidate that patent as well as any related patents
- Duty to disclose continues from date of filing to date of issue



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# Specification Requirements

- Enablement and Written Description
  - Written description: a person skilled in the art should be able to tell from the application that applicant made the invention claimed
  - Enablement: a person skilled in the art should be able to practice the invention without undue experimentation
- Best Mode
  - The application must set forth the “best mode contemplated by the inventor of carrying out the invention”
  - Often conflicts with applicant’s desire to maintain trade secrets
  - Two-step inquiry:
    - did the inventor contemplate a best way to practice the invention when the application was filed?
    - if yes, did the inventor disclose the best way to practice the invention?

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# Commercialization

- You have a U.S. patent and want to commercialize your invention
- In addition to seeking patent protection, inventors should be concerned about competitive patents.
- Infringement analysis is different from patentability analysis. The focus is on the features of your product, not the ideas in your patent.
- **Even if you receive a patent on an idea, you may not be free to practice due to patents issued to others.**
- Willfully infringing a patent may result in damages being tripled.

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# Patent Assertion

- Once issued, a patent grants its owner the exclusive right to prevent others from
  - making,
  - using,
  - offering for sale,
  - selling the claimed invention in the U.S., or
  - importing the claimed invention into the U.S.
- Right to exclude is defined by the patent claims
- A federal law suit is filed against the accused infringer
- A losing defendant can be forced to stop infringing activity and/or pay monetary damages for infringing activity

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# Defense

- Someone else sues or accuses you for infringing their Intellectual Property
- Typically begins with a letter or other communication
- Responses include
  - Defense of noninfringement (e.g., design around)
  - Defense of invalidity (the patent should not have been granted)
  - Settlement (e.g., agree to pay royalties)

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**Thank you for your time**