The Path to a Patent, Part I: The patent application process

Rocky Mountain Regional U.S. Patent and Trademark Office
January 7, 2021
The USPTO in FY19

12,652 employees
- 9,614 patent examiners
- 701 trademark examining attorneys
- 383 Patent Trial and Appeal Board team
- 73 Trademark Trial and Appeal Board team

Patents
- 665,231 applications filed
- 370,434 patents issued

Trademarks
- 673,233 trademark applications
- 297,774 Certificates of Registration

USPTO headquarters in Alexandria, VA
Patent process overview

1. Determine the type of IP protection you need
2. Determine if your invention is patentable
3. Determine what kind of patent you need
4. Get ready to apply
5. Prepare and submit your initial application
6. Work with your examiner
7. Receive your approval
8. Maintain your patent
What is intellectual property?

Real property

Intellectual property
Step 1: Determine the type of IP protection you need

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Types of intellectual property

<table>
<thead>
<tr>
<th>Patent</th>
<th>Trademark</th>
<th>Copyright</th>
<th>Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>New, inventive ideas</td>
<td>Identifies the origin of goods or services</td>
<td>Creative expression stored in a tangible form</td>
<td>Any information that is valuable &amp; kept confidential</td>
</tr>
</tbody>
</table>
Trade secrets
Ways to lose a trade secret

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

- Songs
- Books
- Movies
- Sculptures
Copyright

• Library of Congress
• Protects “original works of authorship” including literary, dramatic, musical, artistic, and certain other intellectual works
• Term: Author’s life + 70 years
• www.copyright.gov
Common-law trademark

- Trademark that is **used** in commerce in connection with specified goods and services, but **not registered**
- Rights are limited to geographic area (based on use in that area)
- Optional symbols: ™ SM
- U.S. is a first-to-use country
  - most countries are first-to-file
Federal registration advantages

• Public notice of claim of ownership
• Legal presumption of ownership and exclusive right to use mark in U.S. on/in connection with the goods/services listed in registration
• Ability to bring an action in federal court
• Use of U.S. registration as a basis to obtain registration in foreign countries
• Right to use the federal registration symbol ®
• Listing in the United States Patent and Trademark Office’s online databases
• Registration may be recorded with U.S. Customs to prevent importation of infringing foreign goods
  – Recordation fee for trademarks is US $190 per International Class of goods
Examples of trademarks

Trademarks can be **WORDS**

STARBUCKS

NIKE

Trademarks can be **DESIGNS**

TARGET
Nontraditional marks – colors
Nontraditional marks – scents

verizon
Nontraditional marks – sounds
Trade dress
Trademark fees

• Application fee: $225 per class (electronic filing, TEAS plus)

• Post-registration fees
  – Affidavit of use $125 per class (after five years)
  – Application for renewal $300 per class (after nine years)

• Upcoming Trademark Fundamentals
Patents

A U.S. patent is

- A property right granted by the United States government to an inventor
- To exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States
- For a limited time
- In exchange for public disclosure of the invention
Why get a patent?

• Gain entry to a market
• Exclude others from a market
• Use it as a marketing tool to promote unique aspects of a product
• Sell or license, like other property
Step 2: Determine if your invention is patentable

1. Determine the type of IP protection you need
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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.
Patent eligibility requirements

What can be patented:
- Process
- Machine
- Article of manufacture
- Composition of matter
- Improvement of any of the above
- Ornamental design of an article of manufacture
- Asexually reproduced plant varieties

What cannot be patented:
- Law of nature
- Physical phenomena
- Abstract ideas
- Literary, dramatic, musical, and artistic works
- Inventions which are:
  - Not useful or
  - Offensive to public morality
How do I know if my invention is patentable?

• Search
  – U.S. patents
  – Foreign patents
  – Printed publications
  – The internet

• Part II of this presentation is focused on searching
Step 3: What kind of patent do you need?

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Types of patents

**Utility**
New and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof

**Design**
Any new, original and ornamental design; protects the way an object appears

**Plant**
Whoever invents or discovers and asexually produces any distinct and new variety of plant
Utility patents

- Protect the function of an invention—the way it works
- Valid for 20 years from the date the application is filed
Step 4: Get ready to apply

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Provisional vs. nonprovisional

Provisional application
- Establishes a filing date
- No claims required
- Inexpensive
- Not published or examined
- One year to pursue nonprovisional

Nonprovisional application
- Statutory requirements for what has to be filed
- More expensive
- Published and examined
- Can result in a patent
## Utility patent fees

<table>
<thead>
<tr>
<th></th>
<th>Large entity</th>
<th>Small entity</th>
<th>Micro entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic filing fee</td>
<td>$300</td>
<td>$150</td>
<td>$75</td>
</tr>
<tr>
<td>Search fee</td>
<td>$660</td>
<td>$330</td>
<td>$165</td>
</tr>
<tr>
<td>Examination fee</td>
<td>$760</td>
<td>$380</td>
<td>$190</td>
</tr>
<tr>
<td><strong>Initial cost</strong></td>
<td><strong>$1720</strong></td>
<td><strong>$860</strong></td>
<td><strong>$430</strong></td>
</tr>
<tr>
<td>Issue fee</td>
<td>$1000</td>
<td>$500</td>
<td>$250</td>
</tr>
</tbody>
</table>
Entity status discounts

• Small entity status gets a 50% discount
  – An individual or
  – A small business (less than 500 employees) or
  – A non-profit organization

• Micro-entity status gets a 75% discount
  – Qualify as a small entity
  – Filed no more than four previous applications
  – Income not greater than three times the median income
    • September 2019: $184,116
  – Not assigned to other than a micro-entity
  – Inventions assigned to employer don’t count against you
Need to fast track your patent?

- Track One provides a final disposition within about 12 months
- Utility and plant applications
- Limited to 12,000 requests
- $4,000/$2,000/$1,000
Step 5: Prepare and submit your initial application

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2. Determine if your invention is patentable
3. Determine what kind of patent you need
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Parts of a patent application

• Abstract: Short summary of the invention
• Written description: How does it work? How is it made or used?
• Drawings: What does it look like?
• One or more claims
How should invention be delineated by the claims?

- Too general
- Too specific

Not patentable

Not valuable
Filing your application

• Submit online using EFS-Web
  – Upload all necessary documents
  – Payment of required fees

• Receive an application number and filing date
Electronic Business Center (EBC)

- The EBC can assist with:
  - Submitting your patent application via EFS-Web
  - Viewing application information in Public and Private PAIR
  - Searching for patents in AppFT and PatFT
  - Digital certificate, customer number issues, and assistance
  - Java and web browser problems
  - Technical problems or errors with your patent application
  - PDX/DAS registration inquires and issues
  - Technical problems with biotech tools

Contact Info

Hours: Monday – Friday, 6 a.m. to midnight ET, except federal holidays

Telephone Numbers:
- Toll-Free: 866-217-9197
- Local: 571-272-4100

Email: ebc@uspto.gov
Step 6: Work with your examiner

1. Determine the type of IP protection you need
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Patent examination

Application is filed by inventor or assignee

USPTO pre-exam

Examiner

Notice of allowance

USPTO grants patent

Appeal

Amendment and/or argument

Applicant

Rejection and/or objection

Abandonment
What does a patent examiner do?

• Reads and understands the application
• Searches for prior art
• Evaluates the claims with respect to statutory requirements and formal requirements
• Writes office actions to applicant describing all findings related to patentability
• Holds interviews with applicant to explain findings and explore opportunities to advance prosecution
Statutory hurdles

• Is it patent eligible?
• Is it new?
• Is it nonobvious?
• Are the claims written clearly?
• Could a skilled technician reproduce the claimed invention based on what is in the specification?
Step 7: Receive your approval

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8. Maintain your patent
issued Patent

(58) References Cited
U.S. PATENT DOCUMENTS

290/291.9

4,938,400 A 3/1990 Higuchi -- GRST 5/00
398/28

FOREIGN PATENT DOCUMENTS

(57) ABSTRACT
A frequency modulated (coherent) laser detection and ranging system includes a read-out integrated circuit (ROIC) including a photosensitive region receiving both return light reflected from a target and light from a local oscillator, and local processing circuitry sampling the output of the photosensitive region. Each time a data sample period elapses, a digitizer converts the digitizer output samples into digital information corresponding to the return light and local oscillator light. A processor coupled to the ROIC receives the digital information and determines an amortized and a phase for at least one interfering frequency corresponding to interference between the return light and local oscillator light using the digital information.

20 Claims, 6 Drawing Sheets
Step 8: Maintain your patent

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Enforcement

• Onus is on the owner to enforce their patent rights
  – Monitor marketplace for infringing products
  – Respond to infringement when detected

• Government enforcement resources
  – STOPfakes.gov
  – Customs and Border Protection
Resources
STOPfakes.gov

- The International Trade Administration (ITA), U.S. Department of Commerce, manages STOPfakes.gov to assist U.S. businesses in protecting and enforcing their intellectual property rights against counterfeits and pirated goods in the global marketplace
- Provides information, guidance, and trainings for businesses and consumers by both industry and country of interest
U.S. Customs and Border Protection

- Customs and Border Protection (CBP) can detain and seize imported goods which violate intellectual property rights in the United States.
- CBP officers can access the recordation database at each of the 317 ports of entry.
U.S. Customs and Border Protection

• Intellectual Property Rights (IPR) e-recordation
  – Copyrights and trademarks
  – $190
Inventors Assistance Center (IAC) provides patent information and services to the public. The IAC is staffed by former supervisory patent examiners and experienced former primary examiners who answer general questions concerning patent examining policy and procedure.

**Contact Info**

**Hours:** Monday – Friday, 8:30 a.m. to 8 p.m. ET, except federal holidays

**Telephone Numbers**
- 800-PTO-9199 (800-786-9199)
- 571-272-1000

TTY customers can dial 800-877-8339 for customer assistance.
Inventors Assistance Center (IAC)

• What IAC can do for you:
  – Answer general questions regarding patent examining policy
  – Answer questions concerning necessary formats and items needed for your patent application
  – Assist you with forms needed and with filling out the forms
  – Direct your calls to appropriate USPTO personnel or www.USPTO.gov web pages, as necessary
  – Provide you with general information concerning patent examining rules, procedures, and fees
  – Send you patenting information and forms via USPS mail or facsimile

• What IAC cannot do for you:
  – Cannot give an opinion as to whether an invention is patentable
  – Cannot provide legal advice or legal interpretations
  – Cannot provide patent searches or other intellectual property research
  – Cannot provide specific line-by-line completion of forms (but can provide directions)
Patent Prosecution Highway (PPH)

- A system of work sharing that improves examination efficiency by reducing duplication of effort among patent offices
- Enables an applicant who has received a determination of allowable claims in an application from one office (national stage or PCT) to obtain fast track processing of corresponding claims in application pending in other offices
How does PPH work?

• Applicant receives a positive examination result from a PPH participating office
  – A national/regional office action indicating allowable claims
  – Patent Cooperation Treaty (PCT) written opinion or PCT international preliminary report on patentability

• Applicant files a PPH request in a corresponding application in another PPH participating office

• Once the PPH request is granted, the examination of the application in the second office is expedited
Applications excluded from PPH

- Provisional applications
- Plant applications
- Design applications
- Reissue applications
- Reexamination proceedings, and
- Applications subject to a secrecy order
# Resources

## Helpline: 1-800-PTO-9199

<table>
<thead>
<tr>
<th>Resource</th>
<th>URL</th>
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<tbody>
<tr>
<td>Patent process</td>
<td><a href="https://www.uspto.gov/patents/process">www.uspto.gov/patents/process</a></td>
</tr>
<tr>
<td>Inventor and entrepreneur resources</td>
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<td>Pro se assistance</td>
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<td>Micro entity limit</td>
<td><a href="https://www.uspto.gov/PatentMicroentity">www.uspto.gov/PatentMicroentity</a></td>
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<tr>
<td>Patent pro bono help and video</td>
<td><a href="https://www.uspto.gov/inventors/proseprobono">www.uspto.gov/inventors/proseprobono</a></td>
</tr>
<tr>
<td>First inventor to file</td>
<td><a href="https://www.uspto.gov/aia_implementation/patents.jsp#heading-10">www.uspto.gov/aia_implementation/patents.jsp#heading-10</a></td>
</tr>
<tr>
<td>Law school clinic program</td>
<td><a href="https://www.uspto.gov/LawSchoolClinic">www.uspto.gov/LawSchoolClinic</a></td>
</tr>
</tbody>
</table>
Patent and Trademark Resource Centers (PTRC)

Nationwide network of public, state, and academic libraries that are designated by the USPTO to disseminate patent and trademark information and to support intellectual property needs of the public.

[website link] www.uspto.gov/ptrc
Helpful Hint: Have an Interview

Interview

*Pro Se Inventor(s)/Applicant(s)*
- In person on Office premises, via WebEx, over the phone, or Video Tele-Conference (VTC)

*Attorney/Agent representing inventor(s)*
- In person on Office premises, via WebEx, over the phone, or Video Tele Conference
- Inventor(s)/Applicant(s) cannot have an interview without their attorney or agent present
Glossary of patent terms

• **Utility** – a credible use for a particular purpose of the claimed invention

• **Metes and bounds** – the claim scope which determines the legal limits of patent property rights

• **Person having ordinary skill in the art (PHOSITA)** – a hypothetical person who is presumed to have the capability of understanding the scientific and engineering principles applicable to the pertinent art

• **Patentable** – subject matter that is able to be patented

• **Allowable** – subject matter that meets all statutory requirements
Upcoming programs

The Path to a Patent, Part II: How to Draft a Provisional Application, Thursday, Jan. 21, 1:30-2:30 p.m. ET

The Path to a Patent, Part III: Patent Searching, Friday, Jan. 22, 1–2:30 p.m. ET

The Path to a Patent, Part IV: Learn How to Draft a Patent Application, Friday, Jan. 29, 1-3 p.m. ET

The Path to a Patent, Part V: Learn How to Draft Patent Claims, Friday, Feb. 12, 1-3 p.m. ET

The Path to a Patent, Part VI: Learn How to Protect Your IP Abroad: Friday, Feb. 26, 1-3 p.m. ET

The Path to a Patent, Part VII: Filing a Patent Application Using EFS-Web, Friday, Mar. 12, 1-3 p.m. ET

The Path to a Patent, Part VIII: Common Mistakes and Support after Filing: Friday, Mar. 26, 1–2:30 p.m. ET
Thank you!

uspto.gov
usptovideo
@uspto
@uspto
rockymountain@uspto.gov
www.uspto.gov/denver