

**UNITED STATES  
PATENT AND TRADEMARK OFFICE**



# Drafting Utility Patent Application Disclosure

UNITED STATES  
PATENT AND TRADEMARK OFFICE



# 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

- Contents of a Patent application disclosure
  - Detailed Description
  - Drawing
  - Abstract
  - Claims
- Enablement Requirement
- Limitations of claims can be modified based only on the disclosed invention at the time of filing
- Important to capture the invention using clear and consistent language throughout the disclosure

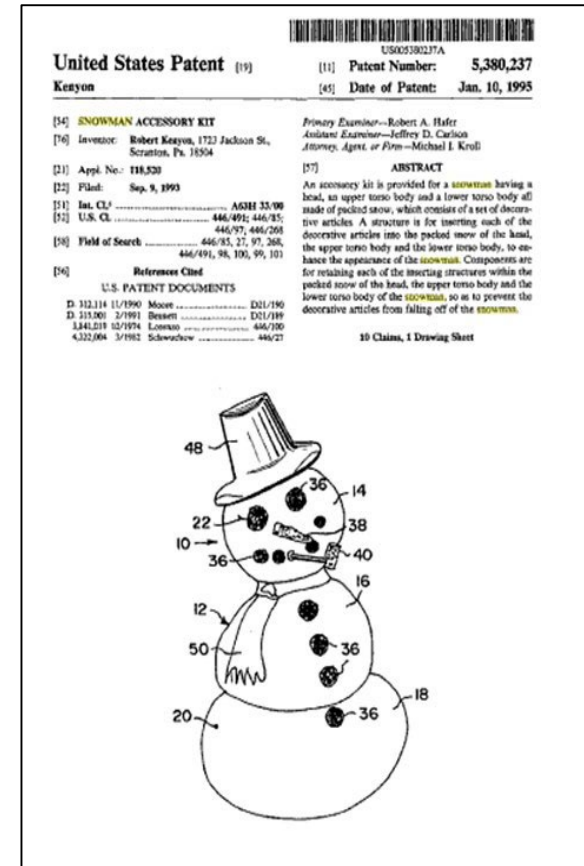
# Utility Applications

## Provisional

- Not examined or published
- One-year time limit
- Only for utility

## Non-Provisional

- Examined: claims required, written description must meet requirements
- Published
  - 18 months from earliest filing date
  - Unless request for non-publication at filing
- Can become a patent



# Provisional Patent Application Requirements

Law Requires:

- Clear indication that applicant is filing a provisional application
- Fee
- Description of the invention must enable someone to make and use the invention
- Drawing if necessary to understand the invention

# Provisional Patent Application Requirements (cont'd)

Cover Sheet provides a clear indication that applicant is filing a provisional form PTO/SB/16

- Inventor name(s)
- Inventor residence(s)
- Title of the invention
- Correspondence address
- Attorney information (if any)
- U.S. government interest (if any)

# Provisional Patent Application Coversheet

PTO/58/16 (03-13)  
Approved for use through 01/31/2014. OMB 0651-0032  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## PROVISIONAL APPLICATION FOR PATENT COVER SHEET – Page 1 of 2

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No. \_\_\_\_\_

INVENTOR(S)		
Given Name (first and middle (if any))	Family Name or Surname	Residence (City and either State or Foreign Country)

Additional inventors are being named on the \_\_\_\_\_ separately numbered sheets attached hereto.

TITLE OF THE INVENTION (500 characters max):

Direct all correspondence to: CORRESPONDENCE ADDRESS

☐ The address corresponding to Customer Number: \_\_\_\_\_

OR

☐ Firm or Individual Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Country \_\_\_\_\_ Telephone \_\_\_\_\_ Email \_\_\_\_\_

ENCLOSED APPLICATION PARTS (check all that apply)

☐ Application Data Sheet. See 37 CFR 1.76. ☐ CD(s), Number of CDs \_\_\_\_\_

☐ Drawing(s) Number of Sheets \_\_\_\_\_ ☐ Other (specify) \_\_\_\_\_

☐ Specification (e.g., description of the invention) Number of Pages \_\_\_\_\_

Fees Due: Filing fee of \$260 (\$130 for small entity) (\$65 for micro entity). If the specification and drawings exceed 100 sheets of paper, an application size fee is also due, which is \$400 (\$200 for small entity) (\$100 for micro entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.161(s).

METHOD OF PAYMENT OF THE FILING FEE AND APPLICATION SIZE FEE FOR THIS PROVISIONAL APPLICATION FOR PATENT

☐ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29. Applicant must attach form PTO/58/15A or B or equivalent.

☐ A check or money order made payable to the Director of the United States Patent and Trademark Office is enclosed to cover the filing fee and application size fee (if applicable).

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the filing fee and application size fee (if applicable) or credit any overpayment to Deposit Account Number: \_\_\_\_\_

TOTAL FEE AMOUNT (\$) \_\_\_\_\_

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT  
This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 10 hours to complete, including

PTO/58/16 (03-13)  
Approved for use through 01/31/2014. OMB 0651-0032  
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## PROVISIONAL APPLICATION FOR PATENT COVER SHEET – Page 2 of 2

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

☐ No.

☐ Yes, the invention was made by an agency of the U.S. Government. The U.S. Government agency name is: \_\_\_\_\_

☐ Yes, the invention was made under a contract with an agency of the U.S. Government. The name of the U.S. Government agency and Government contract number are: \_\_\_\_\_

### WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers [other than a check or credit card authorization form PTO-2038 submitted for payment purposes] is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

TYPED OR PRINTED NAME \_\_\_\_\_ REGISTRATION NO. \_\_\_\_\_  
(if appropriate)

TELEPHONE \_\_\_\_\_ DOCKET NUMBER \_\_\_\_\_

uspto



# Provisional v. Non-Provisional

- **Provisional**

- Automatically abandoned after one year period
- no claims required
- written disclosure must meet same requirements as non-provisional
- Note: provisional applications are not allowed for design patent applications

- **Non-Provisional**

- At least one claim required
- written disclosure must meet requirements of 35 USC 112 1<sup>st</sup> paragraph (pre AIA), or 35 USC 112(a) paragraph (post AIA).
- Examined for patentability, can result in a patent.

35 USC 112 (1)/(a): The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

# Non-provisional (Utility) Patent Application Filing Guide

- A non-provisional utility patent application must include a specification, including a description and a claim or claims; drawings, when necessary; an oath or declaration; and the prescribed filing, search, and examination fees.
- Online Guide: <http://www.uspto.gov/patents-getting-started/patent-basics/types-patent-applications/nonprovisional-utility-patent>
- File Wrapper Images of published or patented applications: <http://portal.uspto.gov/pair/PublicPair>

# Specification

- Written description of the invention
- How to make and use the invention
- Clear, full, concise, and exact terms to allow any person skilled in the technology of the invention to make and use the invention
- At least one specific embodiment
- Concludes with at least one claim (must begin on a new page)

# Specification Page Format

- The specification, including the abstract and claims, must have lines that are 1.5 or double-spaced in a single column of text
- Written on only one side in portrait orientation
- 8.5 by 11 inches with all margins of at least  $\frac{3}{4}$  inches except for a left side margin of at least 1 inch
- The application pages must be numbered consecutively (centrally located above or below the text) starting with page one
- Nonscript font (e.g., Arial, Times Roman, or Courier), preferably with a font size of 12

# Specification Sections

- Title of the Invention (short and specific)
- Most common applicable sections
  - Background (e.g., state of the art before your invention)
  - Brief Summary of the Invention
  - Brief Description of the Drawings (list of all figures by number with brief statement of what the figure depicts)
  - Detailed Description of the Invention
- Claims (on a separate sheet)
- Abstract (less than 150 words, one paragraph, on separate sheet)

# Lesser used sections

- Cross reference to related applications
  - Include if you are filing a continuation or divisional or claiming priority to a provisional application
- Statement regarding federally sponsored research
- Names of parties to a joint research agreement
- Incorporation by reference of material submitted via compact disk or text file
- Statement regarding prior disclosure by the inventor or a joint inventor
- Sequence listing

# Title of the Invention

- The title should be short and specific in describing the invention.
  - Think of the title as the quick description of your invention
  - Avoid generic language such as “system and method for...”
  - Should allow a reader to readily ascertain what your invention is

# Background of the Invention

- Field of invention
  - Describe at a high level the areas pertinent to your invention.
- Description of Related Art
  - Describe what you know has been done before
  - Describe the problems that lead you to come up with your invention
  - Describe what prior art you know about



# Brief Summary of the Invention

- Describe at a high level your invention
- Describe the problems you solve using your invention
- Describe what makes your invention special/different
- Describe what your invention does

# Brief Description of the Drawings

- If drawings (e.g., figures or flow diagrams) are part of the application papers, this section needs to be provided before the application is considered complete and released from initial processing
- This section must include a brief statement of what each figure depicts (e.g. a front view of the invention, an expanded view of the elements prior to assembly)

# Drawings

- Part of disclosure of the invention, and are required if necessary to understand the invention
  - A drawing necessary to understand the invention cannot be introduced after the filing date
- Must show every feature of the invention claimed
- Must contain as many views as necessary to show the invention

## 37 CFR 1.84: Two acceptable standards for Drawings:

- 1: Black and white drawings are normally required for utility and design applications
- 2: Color drawings are permitted in design applications

# Drawing Requirements

- Black and white drawings; lines; numbers heavy enough to permit adequate reproduction
- Use reference characters (in specification and drawings; numerals preferred)
- Each Figure must be labeled (e.g., FIG. 1)
- Avoid using descriptive words in the Figures

# Abstract

- Starts on a separate sheet with the Heading “Abstract”
- Must be 150 words or less; 1.5 or double spaced
- Narrative form; single paragraph
- Points out what is new in the technology
- Not a repeat of the claim(s) or Brief Summary
- Written to enable the public to quickly determine the nature of the technical disclosures of the invention

**See MPEP § 608.01(b) for more information**

# Detailed Description of the Invention

- Very important part of the application
- Explain the invention and the process of making and using it in full, clear, concise and exact terms.
- Focus on explaining the structures, processes or compositions of the invention.
- Refer to the figures, if applicable, and explain the different parts by use of reference numerals shown in the figures.

See MPEP § 608.01(g) for more information

# Detailed Description of the Invention

- The detailed description should provide clear support or antecedent basis for all terms used in the claims so that the meaning of the claim terms in the claims may be ascertainable by reference to the description.
- It can be helpful to draft your claims first.
  - By drafting the claims first, you can decide on the terminology to use and make sure that terminology is consistent throughout the specification.
  - You can also figure out which terms need to be defined or explained in more detail in the specification.
  - The claims can be a checklist to make sure the detailed description provides clear support for the claims.

# Specification DOs

- ✓ Describe the invention clearly to allow any person skilled in the art to make and use the invention without undue experimentation
- ✓ When referencing the drawings, be sure that each reference numeral is used for only one part depicted in the drawings, and that each reference numeral shown in the drawings is mentioned in the specification
- ✓ Provide at least one specific embodiment, including the best one known to you at the time of filing
- ✓ Make sure there is a "Brief Description of the Drawings" section that includes each figure referenced by its full label (e.g., Figures labeled 1A, 1B, and 1C should be separately mentioned vs. collectively referred to as "Figure 1" in the brief description)
- ✓ Provide proper antecedent basis for all the terms in the claims
- ✓ Focus on the technical features of the invention



# Specification Cautions

- ✗ Should not use trademarks in the title or to describe structure (e.g., "VELCRO" to describe a hook and loop fastener), or using a mark (e.g. logo, brand) you intend to register for a commercialized product
- ✗ "Background of the Invention" section does not need to state how the inventor conceived the invention (e.g., "I came up with this idea while jogging")
- ✗ Avoid making claims of possible future success (e.g., "This invention will sell and make millions" or "This invention will revolutionize the field")
- ✗ Do not include a detailed discussion of the figures or refer to the reference characters in the "Brief Description of the Drawings" section
- ✗ Do not forget to proof read your specification to look for grammatical errors

# Claim(s)

If it is in the claim, it **must** be in the specification:

- Defines the invention and what aspects are legally enforceable
- Must conform to the invention as set forth in the remainder of the specification
- Terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims are clearly understood by reference to the description

# Form of Claim(s)

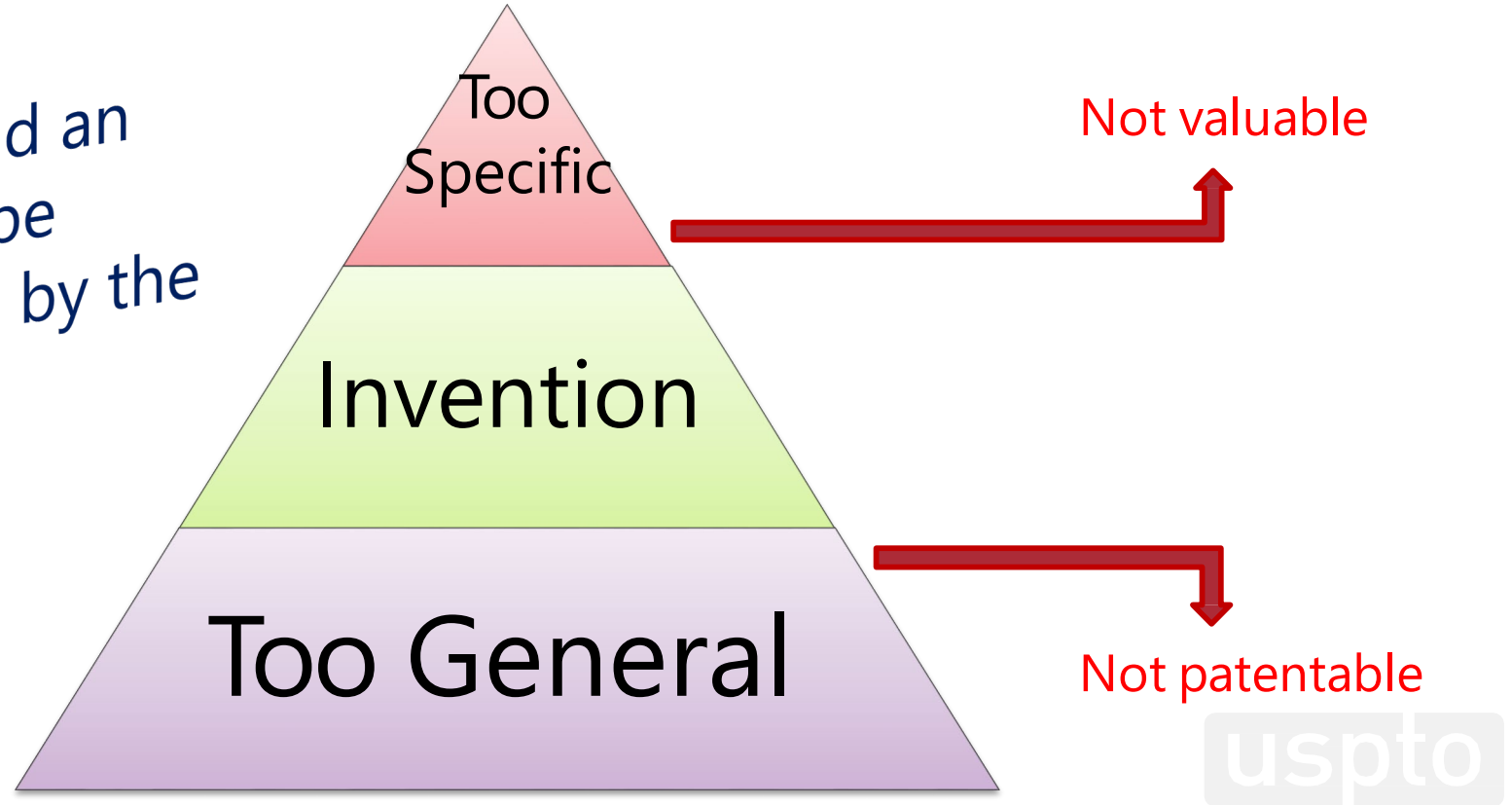
- Starts on a separate sheet with the Heading "Claim Listing"
- 1.5 or double spaced
- Each claim is a single sentence (begins with a capital letter and ends with a period)
- 3 independent claims; 20 claims total before excess fees are due
- Numbered consecutively in ascending order; original numbering preserved throughout prosecution

# U.S. Patent Law Requirements

- A non-provisional patent application must
  - Have at least one claim particularly pointing out and distinctly defining the invention
- A claim may be written in independent or dependent form
- A dependent claim refers to a claim previously set forth and then further limits the claimed invention
- A claim in dependent form incorporates by reference all the limitations of the claim to which it refers

# Claims

How should an invention be delineated by the claims?



# Before Drafting Claims

Prior to writing claim answer these questions:

- What is the invention?
- What are the pieces and parts that make up the invention?
- How do the pieces and parts relate to one another?
- Do you have more than one invention?
  - Tangible: Apparatus, machine, composition
  - Method: Making or Using
- Are there multiple versions of each invention?

# Thinking Strategically

- What is it that you are hoping to accomplish
  - Obtain the broadest, valid claim possible
  - Obtain claims with a variety of claim scope
  - Not just at time of filing, but during prosecution
- Are at least some claims you filed likely to be patentable without amendment?
  - 35 USC § 154(d) provisional rights

# Thinking Strategically

- How much can you afford to spend on claims?
  - Independent in excess of 3 = \$115 per claim (Subject to change)
  - Total claims in excess of 20 = \$25 per claim (Subject to change)
  - Not just at time of filing, but during prosecution

**Note: All of the above costs are for micro-entity**



# Claim Drafting

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

1. A preamble or the introduction;
2. A transitional phrase, such as:
  - "comprising" (open);
  - "consisting of" (closed)
3. A body reciting the elements of the invention.

# Claim Drafting (continued)

## Transitional Phrases in Patent Claims: Comprising vs. Consisting of

- “Comprising” or “which comprises”
  - Most commonly used
  - Open ended
  - Claim encompasses all of the listed elements and may more
- “Consisting of”
  - Close ended
  - Claim elements are limited to as listed and no more

# Example Claim:

A shovel comprising:  
a handle; and  
a blade having a point thereon.

A shovel



Preamble

comprising:



Transitional  
Phrase

a handle; and  
a blade having a point thereon.



Body

# Claim Drafting DOs

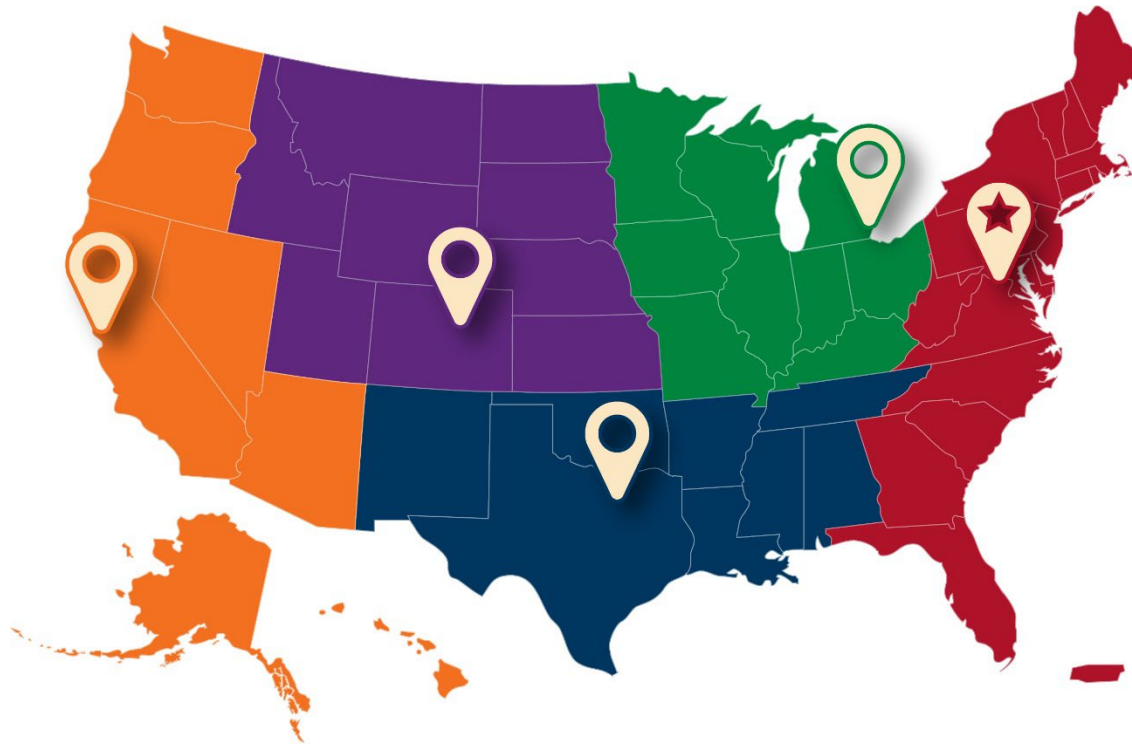
- ✓ Particularly point out and distinctly claim the subject matter regarded as the invention
- ✓ Consider drafting your claims first and then your specification based on terms used in the claims
- ✓ Review both to make necessary additions and corrections so that the claim terms find support in the specification
- ✓ Look at the claims in patents issued in your field of technology
- ✓ Ensure each term has proper antecedent basis
- ✓ Think about what legal protection you need for your invention and tailor your claims accordingly



# Claim Drafting Cautions




- ✗ Do not use claims covering two statutory classes of invention ("A widget and method for using same...")
- ✗ Do not use terms inconsistently between the claims and/or specification (e.g. visor, visor member, visor section; removable visor portion)
- ✗ Do not write multi-sentence claims
- ✗ Do not refer back to only a portion of another claim in a dependent claim (e.g., "The widget of the apparatus of claim 1...")
- ✗ Do not "replace" elements from another claim within a dependent claim



**Support and resources**

# Resources in your area



-  USPTO office location
-  USPTO headquarters

-  West Coast region
-  Rocky Mountain region
-  Texas region

-  Midwest region
-  East Coast region

## USPTO offices:

### Headquarters

- Alexandria, VA

### Regional offices

- Detroit
- Denver
- Silicon Valley
- Dallas

## Additional resources:

- Inventors Assistance Center
- Patent Pro Bono Program
- Law school clinics
- Patent and Trademark Resource Centers

[uspto.gov](https://www.uspto.gov)



# Inventors Assistance Center (IAC)

The 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.

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

- 800-PTO-9199  
(800-786-9199)
- 571-272-1000

**TTY customers can dial  
800-877-8339 for  
customer assistance**



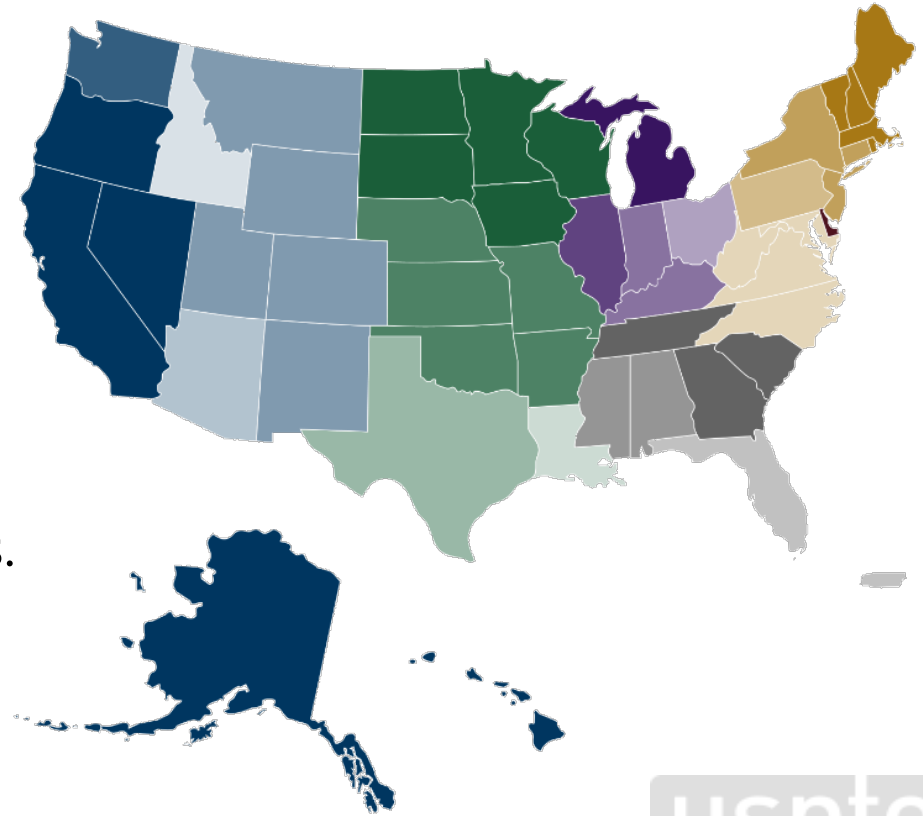


# Patent Pro Bono Program

## File and prosecute patent applications

The program matches financially under-resourced inventors and small businesses with registered patent attorneys.

- 22 regional programs across the country provide matching services.

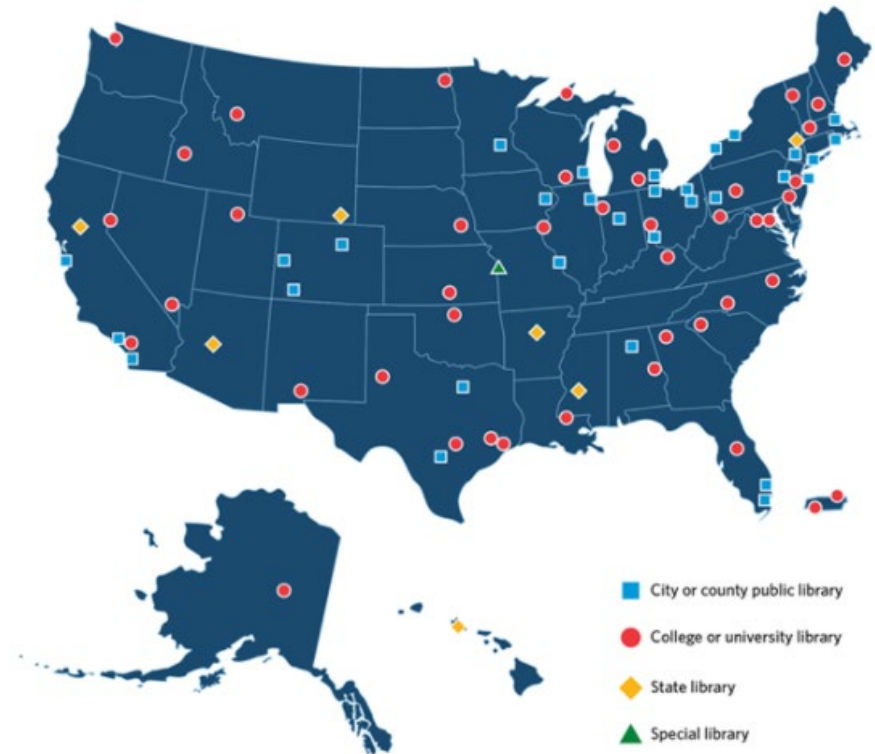


For more information, visit [www.uspto.gov/probonopatents](http://www.uspto.gov/probonopatents).

# 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.

Visit [www.uspto.gov/ptrc](http://www.uspto.gov/ptrc) for more information.





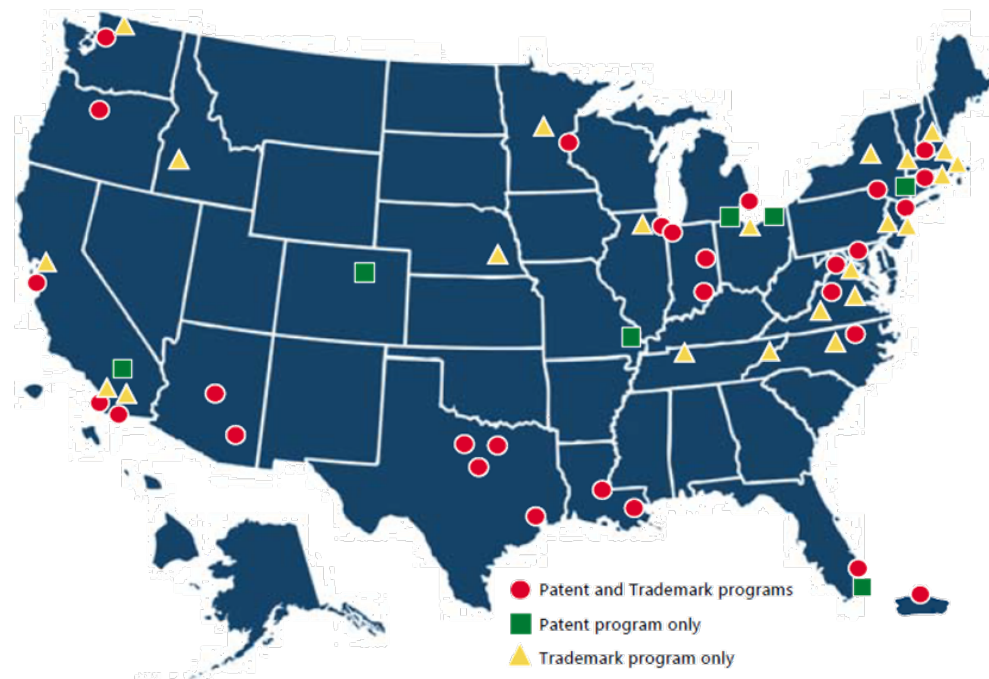
USPTO

# Law School

CLINIC CERTIFICATION PROGRAM

The USPTO's Law School Clinic Certification Program allows law students enrolled in a participating law school's clinic program to practice before the USPTO under the guidance of a law school faculty clinic supervisor.

For more information, visit  
[www.uspto.gov/lawschoolclinic](http://www.uspto.gov/lawschoolclinic).



# Other USPTO resources

**Helpline: 1-800-PTO-9199**

Provisional patent application guide	<a href="http://www.uspto.gov/ProvisionalPatent">www.uspto.gov/ProvisionalPatent</a>
Patent process	<a href="https://www.uspto.gov/patents/basics/patent-process-overview">https://www.uspto.gov/patents/basics/patent-process-overview</a>
Inventors Assistance Center	<a href="http://www.uspto.gov/inventors/iac/index.jsp">http://www.uspto.gov/inventors/iac/index.jsp</a>
Inventor and entrepreneur resources	<a href="http://www.uspto.gov/inventors">www.uspto.gov/inventors</a>
Pro se assistance	<a href="http://www.uspto.gov/ProSePatents">www.uspto.gov/ProSePatents</a>
Micro entity limit	<a href="http://www.uspto.gov/PatentMicroentity">www.uspto.gov/PatentMicroentity</a>
Patent pro bono help and video	<a href="http://www.uspto.gov/inventors/proseprobono">www.uspto.gov/inventors/proseprobono</a>
Law school clinic program	<a href="http://www.uspto.gov/LawSchoolClinic">www.uspto.gov/LawSchoolClinic</a>
Glossary of IP Terms	<a href="https://www.uspto.gov/learning-and-resources/glossary">https://www.uspto.gov/learning-and-resources/glossary</a>
Patent FAQs	<a href="https://www.uspto.gov/help/patent-help#type-browse-faqs_1421">https://www.uspto.gov/help/patent-help#type-browse-faqs_1421</a>

# Upcoming patents programs

## **The Path to a Patent, Part V: Understanding the role of claims in a patent application**

May 12, 11:00am–12:30pm PT / 12:00–1:30pm MT / 1:00–2:30pm CT / 2:00–3:30pm ET

## **The Path to a Patent, Part VI: Learn how to protect your IP abroad**

May 19, 11:00am–12:30pm PT / 12:00–1:30pm MT / 1:00–2:30pm CT / 2:00–3:30pm ET

## **The Path to a Patent, Part VII: How to file a patent application using Patent Center**

June 9, 11:00am–12:30pm PT / 12:00–1:30pm MT / 1:00–2:30pm CT / 2:00–3:30pm ET

## **The Path to a Patent, Part VIII: Common mistakes and support after filing**

June 16, 11:00am–12:30pm PT / 12:00–1:30pm MT / 1:00–2:30pm CT / 2:00–3:30pm ET

List of upcoming USPTO programs at [www.uspto.gov/events](https://www.uspto.gov/events)

The USPTO logo, consisting of the letters "uspto" in a lowercase, sans-serif font, enclosed within a light gray rounded rectangular border.



# Thank you!



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[rockymountain@uspto.gov](mailto:rockymountain@uspto.gov)

[www.uspto.gov](https://www.uspto.gov)