

Knowledge Packs

Pre-Filing

General Information:

1. What is a patent?
 - a. A patent for an invention is the grant of a property right to an inventor(s), issued by the United States Patent and Trademark Office (USPTO). Generally, the term of a new patent is twenty (20) years from the date on which the application for the patent was filed in the United States.
 - i. U.S. patent grants are effective only within the United States, U.S. territories, and U.S. possessions.
 - ii. Please visit [USPTO Patent website](#), for further details.
2. What are the different types of patent applications that can be filed?
 - a. There are three basic types of patent applications that can be filed:
 - i. **A Utility Patent Application:** may be filed by anyone who invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. For further details, please see the [Utility Patent Application Guide](#) on the USPTO website.
 - ii. **A Design Patent Application:** may be filed by anyone who invents a new, original, and ornamental design for an article of manufacture. For further details please see the [Design Patent Application Guide](#) on the USPTO website.
 - iii. **A Plant Patent Application:** may be filed by anyone who invents or discovers and asexually reproduces any distinct and new variety of plant. For further details please see the [Plant Patent Application Guide](#) on the USPTO website
 - b. In general terms, the difference between the protection of an article via a utility patent and the protection of an article via a design patent is that a "utility patent" protects the way an article is used and works, while a "design patent" protects the way an article looks. Both design and utility patents may be obtained on an article if invention resides both in its utility and ornamental appearance.

3. How much does it cost to file a patent application?

There are various fees associated with filing of a patent application. Generally, a patent application is subject to the payment of a basic filing fee and additional fees that include a search fee, an examination fee, and issue fee. The fees required varies with the type of application being filed, the entity status of the applicant, content of the application, size of the application etc.

- a. Fees for filing a patent application can be found in the following location [on the USPTO website](#). There is a basic filing fee associated with the type of applications being filed i.e. a Utility Application, a Design Application or a Plant Application.
 - b. A reduction in the fees may be obtained based on entity status of the applicant i.e. small entity status or micro entity status. An applicant(s) may determine their entity status based on meeting certain requirements provided in the following location [on the USPTO website](#).
 - c. All payments of money required for United States Patent and Trademark Office fees, including fees for the processing of international applications shall be made in U.S. dollars and in the form of a (i) *cashier's or certified check*, (ii) *Treasury note*, (iii) *national bank notes*, (iv) *United States Postal Service money order* or (v) *credit card*. More information on application completeness can be found in [section 509 of the MPEP](#).
 - d. Payment of a fee by credit card must specify the amount to be charged to the credit card and other information as is necessary to process the charge. The Office will not accept a general authorization to charge fees to a credit card. If credit card information is provided on a form or document other than a [form provided by the Office](#) for the payment of fees by credit card, the Office will not be liable if the credit card number becomes public knowledge.
4. Is there assistance available for independent inventors, small business owners, and university-affiliated inventors having limited resources and needing help applying for a patent?

- a. The [Office of Innovation Development](#) (OID) provides educational programs to independent inventors and university-affiliated innovators. OID oversees the [Pro Se Assistance Program](#) for applicants filing without the help of a registered patent attorney or agent, and offers a one-on-one service for applicants at USPTO headquarters in Alexandria, Va. OID also has [past inventor info chats](#) that can assist applicants with patent filing. OID may be contacted at 1-866-767-3848 or innovationdevelopment@uspto.gov.
- b. The [Office of Enrollment and Discipline](#) oversees two programs that provide applicants with free options for acquiring intellectual property protection:
 - i. [Patent Pro Bono Program](#) is a nationwide network of independently operated academic and nonprofit organizations that endeavor to match

volunteer patent practitioners with financially under-resourced inventors seeking patent protection. Inventors and small businesses that meet qualifying criteria, including certain economic and financial thresholds, may be eligible for free income-based legal assistance in preparing and filing a patent application. The programs are administered locally and each have their own requirements.

- ii. [Law School Clinic Certification Program](#) allows applicants to obtain pro bono legal assistance in both patent and trademark matters while allowing law students enrolled in a participating law school's clinic program to practice intellectual property law before the USPTO under the strict guidance of a law school faculty clinic supervisor. Each school has its own criteria for accepting clients. Please visit the [Law School Clinic Certification website](#) to see the list of participating schools.

5. What can and cannot be patented?

- a. A Utility Patent *can* be obtained for any new, useful, and non-obvious process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. The latter three categories define "things" or "products" while the first category defines "actions" (i.e., inventions that consist of a series of steps or acts to be performed).
 - i. An Example of a process or method includes a semiconductor manufacturing process, a process of manufacturing a chemical, or a pharmaceutical process etc. i.e. an industrial or technical process.
 - ii. The term "composition of matter" relates to chemical compositions and may include mixtures of ingredients (chemicals) as well as new chemical compounds. Examples may include a pharmaceutical drug, or shampoo.
 - iii. An Example of a machine may include a bicycle or an apparatus or device.
 - iv. The term "manufacture" refers to articles that are made, and manufactured articles. Examples may include a tire or an integrated circuit.
- b. A Plant Patent *can* be obtained by an inventor(s) who invents or discovers and asexually reproduces any distinct and new variety of plant.
- c. A Design Patent *can* be obtained by an inventor(s) who invents a new, original, ornamental design for an article of manufacture.
- d. A patent *cannot* be obtained for laws of nature, physical phenomena, and abstract ideas. Furthermore, a patent *cannot* be obtained for a mere idea. A complete description of the actual machine or other subject matter for which a patent is sought is required. For further details see [section 2106 I of the MPEP](#). (Patent Subject Matter Eligibility).
- e. Literary, dramatic, musical, and artistic works *cannot* be patented, these are copyright protected.

- f. See the [subject matter eligibility website](#) for up-to-date guidance on patentable subject matter eligibility.
6. For the purposes of a Utility Patent: What is meant by (i) new (ii) Non-Obvious and (iii) Useful?
 - i. New (novelty) means that the invention must be new i.e. that the claimed invention is not identically disclosed as set forth in [35 U.S.C. 102](#).
 - ii. Non-obvious means that the claimed invention is not identically disclosed as set forth in section [35 U.S.C. 102](#), but the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.
 - iii. Useful (utility) means it must accomplish something, work, and/or produce a result. An invention has a well-established utility if (i) a person of ordinary skill in the art would immediately appreciate why the invention is useful based on the characteristics of the invention (e.g., properties or applications of a product or process), and (ii) the utility is specific, substantial, and credible. For further details see [section 2107 of the MPEP](#). (Guidelines for Compliance with the Utility Requirement).
7. What should an inventor do to determine if their invention is patentable?
 - a. Review the list of what can and cannot be patented and determine if your invention falls into one of those categories. Review the description of patent types found at the [USPTO website](#).
 - b. Learn the basics of the patent process. See [USPTO website—General Information](#). Or contact OID ([Pro Se Assistance Program](#)).
 - c. A search for all previous public disclosures (prior art) including, but not limited to, previously patented inventions in the U.S. (i) U.S. Patents, and U.S. Patent application publications should be conducted. Additionally, a search of (ii) foreign patents and (iii) printed publications, such as technical journals should also be conducted. While a search of the prior art before the filing of an application is not required, it is advisable to do so.
8. Is the use of an attorney or registered agent required?
 - a. The use of an attorney or registered agent is not required for filing an application for a patent. However, an attorney or registered agent is often a useful resource and the USPTO recommends the use of such for the preparation of an application for a patent and conducting of the proceedings in the USPTO. To

obtain a patent is an undertaking requiring the knowledge of patent laws and rules and office practice and procedures, as well as scientific or technical knowledge involved in the particular invention. Please see the [USPTO website](#) for more information.

- b. The USPTO cannot recommend any particular attorney or agent, or aid in the selection of an attorney or agent, as by stating, in response to inquiry that a named patent attorney, agent, or firm, is "reliable" or "capable." The USPTO maintains a directory of registered patent attorneys and agents at the following location ([Office of Enrollment and Discipline – Patent Practitioners](#)).
9. How can I determine if my invention has already been patented?
- a. A preliminary search may be performed in a variety of different ways:
 - i. The USPTO [Public Search Facility](#) – located in Alexandria, Va., the facility provides public access to patent and trademark information in a variety of formats. Trained staff are available to assist public users:
 - ii. [Patent and Trademark Office Resource Centers](#) (PTRCs) – located at libraries throughout the country, PTRCs provide library staff and information experts trained on how to search and how to use search tools to access patent and trademark information. Additionally, PTRCs provide programs and classes on intellectual property.
 - iii. The USPTO website provides a [web-based tutorial](#) on how to conduct a preliminary search and a [seven step strategy to outline a search procedure](#).
 - iv. A registered attorney or agent may also provide a search of an invention.
10. How is an application for patent filed?
- a. A patent application can be filed via:
 - i. United State Postal Service (USPS); (Please see the [Correspondence](#) for more information).
Correspondence in patent-related matters under the direction of the Commissioner for Patents should be addressed to:
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
 - ii. hand delivery to the USPTO office in Alexandria, Va.:
USPTO
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, Va. 22314
 - iii. EFS-Web (the USPTO's Electronic Filing system for patent applications).

- b. An additional fee (non-electronic filing fee) will be charged to applications mailed or hand delivered. However, Design, Plant, and provisional applications are not subject to the additional non-electronic filing fee and may continue to be filed by mail or hand-delivery without additional charge. It is further noted that Plant applications and related documents are not permitted to be filed via EFS-Web.
 - c. EFS-Web is the USPTO's web-based patent application and document submission solution which allows anyone with a web-enabled computer to file an application and submit documents, in PDF form, without downloading special software or changing document preparation tools and processes. Electronic filing is also the only way to avoid the non-electronic filing fee for utility patent applications. An applicant does not have to be a registered user to file an application, and concurrently pay the application filing fees, with EFS-Web, however, an unregistered user will not be able to file follow-on documents/fees in EFS-Web even subsequently on the same day. For more information about EFS-Web, please visit the [USPTO website about EFS-Web](#).
 - i. [The Patent Electronic Business Center](#) is open Monday-Friday from 6:00 a.m. – midnight to provide technical assistance regarding the use of EFS-Web.
11. How long after filing an application in EFS-Web will an application number be assigned?
- a. You are immediately assigned an application number upon filing that is included on your electronic acknowledgment receipt. Additionally, most new applications submitted electronically can be viewed in Private PAIR within an hour after filing (note that applicants must be registered users to access Private PAIR).
12. After filing an application, how long will it take for the application to be examined for patentability?
- a. There are a number of variables in the determination of how long it takes for an application to be examined by and examiner. The USPTO provides a [First Office Action Estimator](#) that gives an approximation as to length of time it will take for an application to be examined by an examiner.
13. Is there a way to expedite the processing of a patent application?
- a. The USPTO has several programs that will allow an application to be examined early:
 - i. [Patent Prosecution Highway \(PPH\) Fast Track Examination of Applications](#) speeds up the examination process of corresponding applications filed in participating intellectual property offices where at least one claim has been allowed in the corresponding application and there is no fee required.
 - ii. [Track One prioritized examination](#) expedites the examination process of utility non-provisional and plant applications (not available for design patent applications) for an additional fee. The goal is to provide a final

disposition within 12 months of Track One status grant. The number of request for Track One prioritized examination is currently limited to 12,000 in a fiscal year. [A Track One request form](#) and appropriate fees should be included with application filing.

- iii. [Petition to make special based on age](#) will advance the examination of an application. The applicant must be at least 65 years of age to qualify. This petition has no fee.

14. What services does the USPTO have to help with understanding and correcting the *Notice of Missing Parts* or *Notice of Incomplete Application*?

- a. The *Notice of Missing Parts* will be sent to an applicant in the event that an essential filing requirement is found to be missing when an application is filed. Some examples of essential filing requirements are: appropriate filing fees, improper entity status, and improper priority claims.
- b. A *Notice of Incomplete Application* is sent to an applicant when non-provisional application papers are deemed incomplete. Essential filing papers are the specification, drawings, and claims. *The filing date of the application will be the date the corrections are made.* More information on application completeness can be found in [section 506 of the MPEP](#).
- c. The USPTO has a variety of services designed to provide assistance and to answer questions related to patent filing, patent examining, and USPTO services.
 - i. [The Inventor's Assistance Center \(IAC\)](#) provides patent information and services to the public. The IAC is staffed by former supervisory patent examiners, experienced primary patent examiners, various intellectual property specialists, and attorneys who can answer general questions concerning patent examining policy and procedure. IAC can be reached: Toll-Free: 800-786-9199, Local: 571-272-1000, TTY/TDD: 800-877-8339.
 - ii. [The Pro Se Assistance Center](#), located in the Office of Innovation Development (OID), provides dedicated personnel for assisting Pro Se applicants. The assistance provided may be done on a one-on-one basis at USPTO headquarters in Alexandria, Va., or via other mechanisms such as telephone assistance, email assistance. Furthermore, the Pro Se Assistance Center can connect applicants with relevant resources and information available either in person or online. The Pro Se Assistance Center can be reached at: Toll-Free: 1-866-767-3848 or innovationdevelopment@uspto.gov
 - iii. [OID](#) conducts educational programs for independent inventors and university-affiliated innovators. In addition, it oversees the Pro Se Assistance Program for applicants filing without the help of a patent attorney. OID has past monthly [Inventor Info Chat webinars](#) providing information to assist in filing, understanding the patent prosecution

process, and services provided for applicants. OID can be reached at: 1-866-767-3848 and email: Innovationdevelopment@uspto.gov.

- iv. [Application Assistance Unit \(AAU\)](#) provides staff trained to assist in a broad range of questions and issues pertaining to pre-examination processing of patent applications by the Office of Patent Application Processing (OPAP) and post-examination processing of patent application by the Office of Data Management (ODM). AAU can assist with questions about status, filing receipts, missing parts letters, pre-examination and post-examination abandonment notices, express abandonments, power of attorney issues, Oath and Declaration issues. AAU can be reached at: Toll-Free: 888-786-0101, Local: 571-272-4000, Email: HelpAAU@uspto.gov.

Provisional applications:

1. What is a provisional patent application?
 - a. A provisional application for patent (provisional application) is a U.S. national application filed in the USPTO for a utility, and plant inventions. Design inventions are not eligible for filing provisional applications. A provisional application, considered a placeholder application, provides the means to establish an early effective filing date in a later filed *non-provisional* patent application. It also allows the term "Patent Pending" to be applied in connection with the description of the invention.
 - b. A provisional application for patent has a pendency lasting twelve (12) months from the date the provisional application is filed. **The 12-month pendency period cannot be extended.** It should be noted that provisional applications are **not** examined. An applicant who files a provisional application *must* file a corresponding non-provisional application for patent during the 12-month pendency period of the provisional application in order to benefit from the earlier filing of the provisional application and to retain any patent pending notice.
 - c. Requirements for filing a Provisional application:
 - i. A detailed written description of the invention including drawings. Although a filing date maybe obtained regardless of whether any drawings are submitted, applicants shall furnish a drawing(s) necessary for the understanding of the subject matter to be patented.
 - ii. The Title of the invention.

- iii. The name(s) of all inventors.
 - iv. The inventors residence(s).
 - v. The name and registration number of attorney or agent and docket number (if applicable).
 - vi. The correspondence address.
 - vii. Indication whether any U.S. Government agency that has a property interest in the application.
 - viii. The filing fees, which can be found at the following location on the USPTO website ([USPTO Fee Schedule](#))
 - ix. A cover sheet or a cover letter, form PTO/SB/16, pages 1 and 2, is available at ([PTO/SB/16](#)). Also an EFS-Web version of the SB/16 is available at ([EFS-Web PTO/SB/16](#)). Please note that an Application Date Sheet ([ADS](#)) may be used as the provisional application cover sheet.
- d. A Provisional application filing guide is available at the following location on the USPTO website ([Provisional Application filing Guide](#)).
2. Is my invention protected if I file a Provisional Application?
No. A provisional application, is only considered a placeholder application. It provides a means to establish an early effective filing date in a later filed *non-provisional* patent application. Provisional applications are **not** examined. An applicant who files a provisional application **must** file a corresponding non-provisional application for patent to eventually protect their invention.

Non-provisional applications:

1. What is a non-provisional patent application?
 - a. A non-provisional patent application is an application for a patent that is examined by a patent examiner and may be issued as a patent if all the requirements for patentability are met.
 - b. Requirements for filing a Non-Provisional application:
 - i. The Non-provisional application which includes:
 1. A Specification providing a detailed written description of the invention.
 2. Drawings when necessary, applicants are advised to file with the application any drawings necessary for the understanding of the invention.
 3. Claim or Claims.
 4. Abstract of the Disclosure.
 5. The Title of the invention.

For further details see [section 601 I of the MPEP](#). (Guidelines for Drafting a Non-Provisional Application).

- ii. Utility Patent Application Transmittal Form or Transmittal Letter ([Form PTO/AIA/15](#)).
 - iii. Application Data Sheet ([Form PTO/AIA/14](#)).
 - iv. Appropriate Fees, which can be found at the following location on the USPTO website ([USPTO Fee Schedule](#)). The Fee Transmittal Form ([Form PTO/SB/17](#)) may be used to calculate the prescribed filing, examination, and search fees, any excess claim fees or application size fee.
 - v. Executed Oath or Declaration. Either ([Form PTO/AIA/01](#)) or ([Form/AIA/08](#)).
- c. A Non-Provisional application filing guide is available at the following location on the USPTO website ([Non-Provisional application filing guide](#)).

2. What is the purpose of claim?

- a. The claim defines the scope of the invention. A patent is granted based on the patent claims that define the patent protection. The claim(s) define, in technical terms, the extent of the patent protection and define the limits of exactly what the patent does and does not cover.
- b. The claim or claims must particularly point out and distinctly claim the subject matter that the inventor or inventors regard as the invention.
- c. One or more claims may be presented in dependent form, referring back to and further limiting another claim or claims in the same application.
- d. Each claim should be a single sentence, and where a claim sets forth a number of elements or steps, each element or step of the claim should be separated by a line indentation.

For further details see [37 C.F.R. 1.75](#).

3. How is a claim drafted?

- a. The Office of Innovation Development has a monthly Inventor Info Chat series which is designed to provide inventors with information on topics that assist with applying for a patent. The [Inventor Info Chat held on Feb. 15, 2018](#) included a presentation on claim drafting which discussed the basic structure of a claim and provided some examples of claims, questions to ask regarding your invention when drafting a claim set, and one approach to claim drafting.

4. What are the drawing requirements?
 - a. Drawings are required if they are necessary to understand the subject matter to be patented. Please review the [drawing requirement information guide](#). For further details see [section 608.02 of the MPEP](#). (Requirements for Drawings).

Petitions:

1. How may an abandoned application be revived?
 - a. A petition, along with all necessary fees, must be filed to revive an application that is unintentionally abandoned. Please use [form PTO/SB/64](#). Petitions may be filed via United States Postal Service (USPS) or as an ePetition. An ePetition has the benefit of secure filing with auto-grant, saves time when immediate petition decisions are needed, and increases the accuracy by providing immediate feedback. Additional information on ePetitions may be found on [the USPTO website](#).

Misc. Questions:

1. Can I request to have my application sent to the Pro Se Art Unit?
 - a. No. Right now the applications are randomly selected.
2. How is an amendment (changes/modifications) to the specification made?
 - a. An amendment to the specification (description) of an application requires: a marked-up copy, a clean copy, and a statement that the amendment does not contain new matter. However, irrespective of whether the statement related to new matter is included or not, new matter may not be added, 37 CFR 1.121(f). For more information see [section 714 of the Manual of Patent Examining Procedure](#) (MPEP).
 - b. Amendments to the specification can be in the form of (1) amendments to delete, replace or add a paragraph, (2) amendments by replacement of a section where the specification contains section headings, and (3) amendments by substitute specification.
 - i. The marked-up copy should include an underline of all additions to the specification and a strike through (~~strike-through~~) of all deletions from the specification.

1. Example: The current invention is directed to a chair having four legs extending at an angle from the bottom of a ~~circular~~ square chair base.
 - ii. The clean copy is a copy of the "new" specification which incorporates all changes and is presented as the specification should read.
 1. Example: The current invention is directed to chair having four legs extending at an angle from the bottom of a square chair base.
 - iii. The statement of no new matter is simply a statement filed with the substitute specification stating that no new matter has been added. It should be noted that any subject matter added to specification that was not already supported in the originally filed application materials is considered "New Matter".
 1. Example: The substitute specification contains no new matter.
3. How is an amendment to the claims made?
 - a. Amendments to a claims are made in a similar manner as to the specification:
 - i. The text of any *added* subject matter must be shown by underlining the added text.
 - ii. The text of any *deleted* subject matter must be shown by strike-through (~~strike-through~~). However, if a strike-through cannot be easily perceived then the text of any deleted subject matter must be shown by being placed within double brackets.
 - iii. The status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), (Not entered).
 - iv. Additional New claims may be added with the status listing as "New".
 - v. When an entire claim is canceled, the text for that claim should not be presented and the status listing of the claim should be "canceled."
4. How is an amendment to the drawings made?
 - a. One or more application drawings shall be amended in the following manner: Any changes to an application drawing must be submitted on a replacement sheet of drawings which shall be an attachment to the amendment document and, in the top margin, labeled "Replacement Sheet." Any replacement sheet of drawings shall include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is amended. Any new sheet of drawings containing an additional figure must be labeled in the top margin as "New Sheet." All changes to the drawings shall be explained, in detail, in either the drawing amendment or remarks section of the amendment paper.

5. Where are patent forms located?
 - a. [Forms are located at USPTO.GOV.](#)

6. How is power of attorney changed?
 - a. A change in power of attorney can be made using [form AIA/80](#) or [form AI/81](#). Instructions for completing the form and understanding the purpose of power of attorney can be found at: [Guide to Power of Attorney forms.](#)

7. How would the Pro Se Assistance Program help an applicant with the understanding and filing of a patent application?
 - a. The Pro Se Assistance Program in the Office of Innovation Development provides assistance as follows:
 - i. One-on-one assistance at the USPTO headquarters in Alexandria, Va.
Hours for one-on-one assistance are 10:00 a.m. to 4:00 p.m. ET
 - ii. Email assistance at innovationdevelopment@uspto.gov
 - iii. Telephone assistance at 1-866-767-3848
 1. Assistance with pre-filing questions including an explanation of the types of applications and fees.
 2. Assistance with form completion and filing.
 3. Review of application for compliance with current regulations.