AND GUIDE

PATENTING



The Technology Development Group (TDG) supports UCLA's research, education, and service mission. Working with TDG is a complementary approach to traditional publishing that can facilitate the translation of UCLA discoveries into new products and services that have the potential to broadly benefit the public. Our office manages a large portfolio of technologies and license agreements, and has a rich history of startup company formation that we continue to build upon.

We encourage you to contact TDG to discuss your research and the possibility of patenting or copyrighting your ideas. All of our contacts are on our website at tdg.ucla.edu

What is a patent, and how are patents regulated?

A patent is an exclusive right granted for an invention by a government. In exchange for public disclosure, the patent holder is given the right to exclude others from making, using, or selling the invention. The U.S. Patent and Trademark Office (USPTO) is the government body responsible for examining and issuing patents in the United States.

What are the different types of patents issued by USPTO?

The USPTO issues several different types of patents, though the Technology Development Group (TDG) most commonly seeks utility patents:

Design Patent

A design patent protects a new and ornamental design for an article of manufacture where the design is nonfunctional, is part of, and cannot be removed from the article.

Plant Patent

A plant patent protects a distinct and new asexually-reproduced plant. This includes cultivated sports, mutants, hybrids, and newly found seedlings, but does not include a tuber-propagated plant or a plant found in an uncultivated state.

Utility Patent

A utility patent protects a new and useful process, machine, article of manufacture, composition of matter, or any new and useful improvement of any of the foregoing.

What is the difference between a provisional and a non-provisional patent application?

A provisional patent application is a simplified patent application that is typically filed to establish a filing date for an invention and has a pendency of 12 months. If the applicant does not file a non-provisional patent application before the provisional application expires, then the invention reverts to its prior unprotected state. Provisional patent applications are **not** examined by the USPTO.

The provisional patent application process is beneficial because it is more flexible and less expensive than a non-provisional application. A provisional patent application has the added advantage of affording the inventor a year to generate additional supportive data and further refine the invention before filing a more robust non-provisional patent application, without impacting the 20 year patent term. It is important that **ALL** aspects of the invention be included in the provisional application to ensure that claims in any subsequent non-provisional patent application are entitled to the provisional application's earlier filing date.

Unlike a non-provisional application, which is generally published by the USPTO 18 months from the earliest filing date, a provisional patent application will not be published or made public unless a non-provisional application is filed.

What is a PCT application?

The Patent Cooperation Treaty (PCT) is an international treaty which enables a U.S. patent applicant to file an application (a "PCT application") in English with the USPTO and have that application have the same effect as a regular national or regional filing in all the countries that are a party to the treaty. PCT applications are not examined *per se*, but can serve as a placeholder for seeking patent protection in any of these countries. In most cases, up to 18 months from the time a PCT patent application is filed (or 30 months from the filing date of the initial patent application), we need to decide whether there is merit in filing national phase applications in each territory or country where patent protection is desired. The PCT application allows the applicant to defer the substantial costs associated with national phase filings; TDG uses this time to identify prospective licensees or investors.

What effect does the Leahy–Smith America Invents Act have on U.S. patent filings?

The Leahy–Smith America Invents Act (AIA) is a federal statute that was enacted on September 16, 2011. Under AIA, a number of significant changes was made to U.S. patent law, which included switching from a "first-to-invent" to a "first-to-file" system . Under the new law, if two applicants file for the same invention, if found to be patentable, the patent will be awarded to the applicant with the earlier filing date. This brings the U.S. into closer harmony with the rest of the world. Additional changes under AIA include the introduction of a "post-grant" review procedure that allows other parties to challenge the validity of patents filed after March 16, 2013, without the need to bring a lawsuit, and changes that increase the scope of prior art that may be available to argue against the patentability of an invention.

What is prior art?

Prior art refers to publicly-available information that may impact the patentability of an invention claimed in a patent application. If an invention is described in a patent, published patent application, or other printed publication, or on sale, in public use, or otherwise publically known **BEFORE** the filing of a patent application, then the invention may not be eligible for patent protection. In the United States and a limited number of foreign territories, there are certain exceptions to these rules. Please contact TDG with any questions in this regard.

What are claims?

Patent claims define the specific elements and limitations of the invention for which the applicant is claiming rights. Non-provisional patents are required to contain at least one claim.

What is the written description requirement?

The written description requirement mandates that a patent application describe the technology that is sought to be patented. To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail such that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention at the time of filing. Possession can be established by describing the claimed invention with all of its limitations using words, structures, figures, diagrams, and formulas.

What is the enablement requirement?

The enablement requirement necessitates that a patent application describe the invention in such terms that one skilled in the art can both make and use the claimed invention. Inventors should note that the enablement requirement is separate and distinct from the written description requirement.

Who is an inventor for the purposes of a patent?

Establishing who should be named as an inventor on a patent or patent application is a process called *inventorship determination*. Under U.S. patent law, an inventor is a person who contributes to the **conception** of at least one claim of a patent application or patent covering the invention. Of note, inventorship is distinct from authorship on a paper. For example, inventors would not include individuals whose sole contribution was conducting routine laboratory experiments under the direction of another, or editing an associated scientific paper. Researchers submitting an Invention Report to TDG should include all individuals who may have been involved in the conception of their invention. Naming the correct inventors is a legal determination made by patent counsel and is important for patent validity.

What is patent prosecution?

Patent prosecution is the process of patent examination during which the patent office determines if the claimed invention meets the necessary criteria to be awarded a patent. During this process, it may be necessary to amend claims and/or present arguments to overcome an examiner's rejections in order to obtain an issued patent.

What is an Office Action?

An Office Action (OA) is a document issued by a USPTO patent examiner during patent examination wherein the examiner explains why he/she has allowed, or rejected, some or all of the applicant's claims. It is not uncommon for a majority of the claims to be rejected initially and patent counsel will work with the inventor to try to overcome these rejections. The applicant must respond to an OA within a fixed period of time to avoid abandonment of the application.

What types of rejections may I encounter?

Broadly speaking, the claims in a US patent application may be rejected by an examiner on any of five grounds: (1) subject matter and utility, (2) novelty, (3) obviousness, (4) written description, and (5) enablement.

To be eligible for patenting the claimed invention must be considered statutory subject matter for patenting and have utility. The four statutory categories are: (1) machines, (2) articles of manufacture, (3) compositions of matter, and (4) processes. Ineligible subject matter includes: (1) laws of nature, (2) physical phenomena, and (3) abstract ideas.

A patent claim may also be rejected if the claimed invention is found to not be novel. A rejection based on obviousness is issued when the examiner concludes that the invention at issue would have been obvious at the time the invention was made, to a person having ordinary skill in the art.

A patent specification must also satisfy the written description, enablement, and best mode requirements. See page 3 for a description of the written description and enablement. Lastly, the best mode requirement states that an inventor must disclose the best way to practice the invention known to him/her at the time of filing.

What is the Restriction Requirement?

The patent office requires that a patent application claim a **single** invention. A Restriction Requirement may be imposed if an examiner concludes that **(1)** a single patent application claims two or more independent or distinct inventions and **(2)** searching these inventions will places a serious burden on the examiner. The Restriction Requirement directs the applicant to elect to pursue one group of claims in the application. If appropriate, the non-elected claims may be pursued in a divisional application (*see below*).

What is a continuing application?

A continuing application is an application based on an original patent filing (the "parent" application) which shares the same priority date as the parent application and at least a portion its specification. In the United States, there are several types of continuations: **(1) continuations**, **(2) divisionals**, and **(3) continuations-in-part**. A continuation application is usually filed by an applicant who wishes to pursue additional claims to an invention that was disclosed in the parent application but for which claims were not previously included or were not allowed. A divisional application is filed to capture claims not pursued following a Restriction Requirement (see above). A continuation-in-part (CIP) application is used when an applicant wishes to add additional subject matter not previously included in the specification of the parent application. CIP applications are rarely used by patent counsel and if the additional subject matter is of value, it usually makes sense to forgo filing a CIP in favor of a new application.

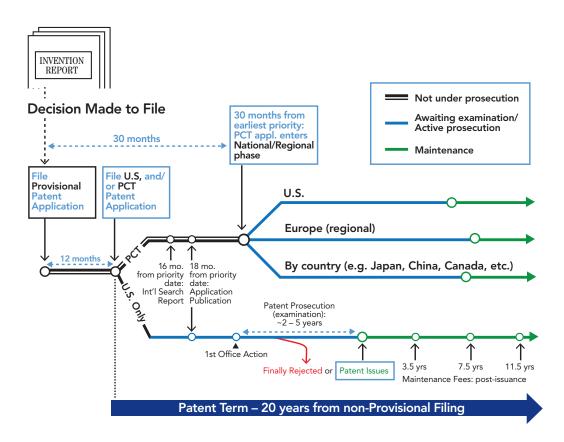
What is an International Search Report and Written Opinion?

A number of different patent offices around the world (including the USPTO) have been appointed as International Searching Authorities (ISA) to perform searches to identify relevant patent documents and other technical literature which might affect the patentability of the invention disclosed in a PCT application. The results of this search form the basis of the International Search Report (ISR), which is provided to applicants by the ISA after filing of the PCT application.

A Written Opinion (WO) is a preliminary and non-binding document issued along with the ISR by the International Searching Authorities (ISA) on whether the invention appears to have utility (or industrial applicability), and is novel and non-obvious in light of the relevant patent documents and technical literature identified in the ISR. The written opinion can be helpful in evaluating the probability of obtaining a patent for the claimed invention before incurring the significant expense associated with national phase filings. Inventors may want to review the documents cited in the ISR and WO, and the inventor should contact TDG with any questions.

How long does it take to obtain a patent?

Once a patent application is ready for examination, it is not uncommon for the process of patent prosecution to take 3 to 5 years in the United States, and even longer in other countries. In the United States, an application is not ready for examination until a non-provisional application is filed either directly or enters the U.S. national stage from a PCT application. In many other countries, an application is not ready for examination until a "request for examination" is filed.



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What is the duration of a patent?

In the United States, a utility patent's term lasts for 20 years from either (1) the date of filing of the non-provisional patent application or (2) the earliest filing date of any non-provisional application to which priority is claimed, whichever is earlier.

In other jurisdictions, patent duration may vary; however, most territories provide for a 20 year term from the filing date.

What is the process of obtaining a patent through UCLA TDG?

The process of obtaining a patent through the UCLA TDG occurs in three major stages: (1) submitting an Invention Report; (2) working with a patent attorney and TDG to prepare and file a patent application; and (3) prosecuting the patent application to secure patent rights. The inventor(s)' involvement with outside patent counsel throughout this process is critical to successfully obtaining a patent.

What does it mean to assign a patent and why do I assign to UC?

Assignment refers to the transfer of ownership of a patent. The party assigning the patent is the assignor, and the recipient of the transfer is the assignee.

The duty to promptly disclose to TDG extends to <u>all</u> potentially patentable inventions that one conceives and/or reduces to practice while a UC employee. However, UC only takes ownership over those inventions that are conceived or developed (1) within the course and scope of UC employment while employed by UC, (2) during the course of utilization of any UC research facilities, <u>or</u> (3) through any connection with the use of gift, grant, or contract research funds received through the UC.

Do I have to wait for my patent to be granted before the University can license it?

No. Patent applications are frequently licensed by TDG to parties interested in commercializing these rights.

What are my responsibilities with regard to the numerous notifications I am receiving?

The Technology Development Group (TDG) sends various communications to inventors throughout the course of prosecution. In the initial stages, TDG works to ensure that assignments, declarations, and government grant information is correct. Lack of diligence in this respect can jeopardize patent rights. It is important for inventors to review, sign and return documents to TDG as soon as possible.

Certain communications TDG sends are labeled as informational.

Other communications have **deadlines and require inventor input**. In particular, following receipt of Office Actions, TDG or patent counsel will request that inventors provide their expert input on how to overcome any rejections issued by an examiner. Because inventors are experts in their chosen field, they are well placed to support patent counsel in addressing an examiner's rejections.

How quickly can a patent application be filed?

While it is always preferable to provide our office with sufficient time to fully understand your Invention Disclosure, if absolutely necessary because of an imminent enabling public disclosure, we can get a filing in place in a few days. Optimally we would like at least two weeks so that there is time for a higher quality provisional application to be filed.



FIG. 6

We are here to support all members of the UCLA community in their entrepreneurial, research and industry-partnering activities and look forward to working with you. Don't hesitate to contact any of us anytime. tdg.ucla.edu





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