

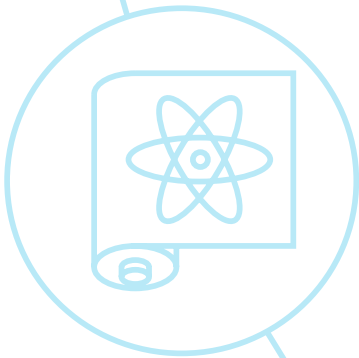
A photograph of two men in a dimly lit office. One man with a beard and glasses is seated, looking at a computer monitor. The other man, also with glasses, is standing and pointing at the screen. The monitor displays a 3D model of a landscape with a blue sky and a green ground. The background is blurred, showing other office equipment and lights.

PATENT PRIMER

Get the basics of what to do when you have a new idea worth protecting

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A patent is a legal right granted by the government that allows you to stop others from making, using or selling an invention during the term of the patent.

WHAT IS A PATENT?

A patent is a legal right granted by the government that allows you to stop others from making, using or selling an invention during the term of the patent. In Canada, a patent owner has the exclusive right to make, use, or sell an invention claimed in the patent for a term of twenty years from the filing date of the patent application. After the patent term expires, the invention falls into the public domain and is free for everyone to use.

Patents are territorial, meaning that you have to file a patent application in each country of interest in order to obtain patent rights in those countries. The grant and enforcement of patents are governed by national laws, and while the laws of most countries are generally similar, each is unique. While there are international treaties in place to provide certain benefits for applicants who decide to file in a number of foreign countries and these international treaties can help to defer patent costs, a patent must ultimately be obtained in each country of interest.

A patent is a right to exclude others from benefiting from your invention. The primary purpose of a patent is to prevent other people from copying and profiting from your invention. It is not necessary for you to have a patent in order to sell a product, and having a patent does not give you any express right to make and sell your product. For example, your product must comply with all applicable laws, and even if you have your own patent, making and selling your product may infringe other patent rights owned by third parties. Thus, the issue of ensuring that you will be able to sell your product must be dealt with separately from the issue of obtaining patent protection for your product.

CAN I OPENLY DISCUSS MY IDEA?

Briefly, no—secrecy is important. Any public disclosure of your new idea potentially affects its patentability. “Public disclosure” encompasses any non-confidential disclosure, and includes written or electronic communications, public oral disclosures, public demonstrations, public use, and can include offers to sell a product or actual sales. Non-confidential disclosure to even one person, whether in Canada or elsewhere in the world, may be considered a public disclosure.

One of the requirements for obtaining a valid patent is for your idea to be novel. If the idea has been publicly disclosed, it is no longer considered novel, and therefore does not meet this requirement for obtaining a patent. In some countries, public disclosure of the idea by any person, including the patent applicant, before filing a patent application destroys novelty. This means that in those countries, once you have publicly disclosed the idea, you cannot obtain a valid patent.



One of the requirements for obtaining a valid patent is for your idea to be novel.

Some countries, including Canada and the United States, provide a grace period after public disclosure by an inventor within which the inventor can still validly file a patent application. The length of the grace period and the requirements for relying on it varies between countries. In Canada, the grace period permits disclosure by the applicant or a person who obtained knowledge from the applicant up to twelve months prior to the date of filing the Canadian patent application.

We understand that there may be situations in which you must discuss your idea with someone else before filing a patent application. For example, you, as an entrepreneur with a new idea, have just set up a company and you need to discuss your idea with potential investors in order to obtain funding for your company. In these circumstances, you should not simply disclose your idea to potential investors. Rather, to avoid having that disclosure be considered a public disclosure that could destroy your patent rights, it is important to have a non-disclosure agreement (“NDA”) signed by such persons.

NDAs are agreements by which people or companies agree to keep certain information confidential. However, NDAs must be used with caution, because information that becomes available to the public even through a breach of the NDA can still impact your patent rights, leaving you with only the option to sue the person who breached the NDA.

Please note that even if you have filed a provisional patent application, there can still be risks in publicly disclosing your invention. Please see our primer on [provisional applications](#) for more information.

WHEN SHOULD I APPLY FOR PATENT PROTECTION?

Canada and the United States have adopted a first-to-file patent system. A first-to-file system is essentially a race to the patent office. This means that the patent application that is filed with the patent office first has priority over a later-filed application claiming the same subject matter. For this reason, it is beneficial to apply for patent protection as soon as you have an invention that appears patentable.

However, one of the requirements to obtain a valid patent is that a patent application must disclose the claimed invention in sufficient detail to enable a person skilled in the art to carry out the invention. Therefore, mere ideas or concepts are generally insufficient. It is essential to reduce an invention to practice before applying for patent protection. If you are able to describe to others in the field how you would make and use your invention, so that they could replicate the invention based on your description, you have probably reduced your invention to practice such that filing a patent application should be considered.



The patent office does not require that a working prototype be made before an application is filed.

The patent office does not require that a working prototype be made before an application is filed, although a prototype or clear drawings showing how the invention will be made are often helpful in preparing a patent application, if available. Frequently, new issues arise or design changes are made in the course of developing a prototype. However, it is not necessary to fine tune every single feature of your invention before you apply for patent protection. There is a balance between obtaining an early application filing date and arriving at a product that is ready to market. Each circumstance is unique. It is important to seek a registered patent agent at an early stage to advise on filing options that suit your unique circumstances.

WHY SHOULD I APPLY FOR PATENT PROTECTION?

Patents are potentially valuable assets. If you have come up with a new invention that has features your competitors may want to copy, you should consider applying for patent protection. A patent prevents others from making, using or selling a product that has the features claimed in your patent. Thus, a patent can prevent your competitors from copying your new invention. Without patent protection, your competitors are free to copy and benefit from your invention, even though they did not incur the costs of creating or developing that invention.

If you are seeking investment from other people to fund the development of your invention, you will likely find that potential investors are very concerned about your potential patent position. This is because having good patent protection in place can be key to recouping investment in and profiting from the development of an invention. Without a good patenting strategy, the chance that your investors will obtain a good return on their investment is decreased, because your competitors can freely copy the invention, without incurring all of the development costs funded by your investors.

In addition to preventing your competitors from benefiting from your invention, a patent can also provide you the option of selling or licensing the patent rights to interested parties. This may allow you to benefit financially from the invention even in countries or markets where you are not able to manufacture the product yourself.

In the circumstance that you find you may be infringing on a patent owned by another party, having your own patent in place may allow for settlement of a patent dispute through a cross-licensing arrangement if a device sold by that other party may also infringe your patent. Without your own patent protection in place, your options for dealing with such a dispute are considerably reduced.

Development of a strong patent portfolio requires careful consideration. You may want to consider carefully what countries your patent application can be filed in, and you may want to file subsequent patent applications as you make significant changes or improvements to your original design in circumstances where this is possible. We can work with you to develop strategies for building your patent portfolio based on your business goals and situation.

WHAT ARE THE STEPS AND COSTS INVOLVED TO OBTAIN A PATENT?

Typically, the patent process begins with a [patentability search](#) to determine whether there are any clear obstacles to obtaining a valid patent. The cost of conducting a patentability search varies based on the technology involved and the number of references to be reviewed, but costs on the order of \$2,500 to \$5,000 and up can be expected.

The second step in the patenting process involves preparing and filing a patent application. A patent application must be filed in each country in which patent protection is sought, although there are options for deferring some of these costs (see our primers on [provisional patent applications](#) and [international patent filing](#) for more information). We work with our clients to develop patent filing strategies that are sensible having regard to their business goals and available financial resources and this requires careful consideration in each specific case, but costs in the tens of thousands of dollars should be expected. As a starting point for protecting a new technology, a provisional patent application can be prepared and filed starting at a cost of \$5,000 and up. A regular U.S. patent application for a straightforward mechanical technology can typically be prepared and filed at a cost of \$10,000 and up. Costs in other technical fields are generally higher.

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A patentability search does not guarantee that a patent will be obtained.

WHY SHOULD I CONDUCT A SEARCH BEFORE FILING A PATENT APPLICATION?

There are many advantages to conducting a search before filing a patent application, and there are also many different types of searches that can be conducted.

The most common type of pre-filing search is a patentability search. A patentability search aims to determine, at relatively low cost, whether there is a prior disclosure of something that is so similar to your invention that you are unlikely to be able to obtain valid patent protection. A patentability search typically covers prior patents and published previously filed patent applications, and can be extended to consider non-patent references



A patentability search typically covers prior patents and published previously filed patent applications.

as well. A patentability search does not guarantee that a patent will be obtained, but does provide an assessment of whether there are any prior devices, products or processes that are so similar to yours that filing a patent application would likely not be worthwhile, so that the cost of filing a patent application that is likely to be rejected can be avoided.

Other types of pre-filing searches that can be conducted include state of the art or patent landscape searches. These searches may be conducted for a variety of business reasons as well as IP-related reasons, for example to make a preliminary assessment of whether it is even worthwhile investing in development of new technology and to assess the likelihood that it may be possible to obtain a reasonable scope of patent protection in a particular field, or to determine what competitors are active in a particular space or what technologies competitors are working on developing.

Another type of patent search that is often conducted, although not necessarily before filing a patent application, is a freedom-to-operate search. Freedom-to-operate searches consider whether you are likely to infringe on the claims of patents owned by others in one or more jurisdictions if you bring your invention to market. As damages for patent infringement can be significant, a thorough evaluation of freedom-to-operate is an important consideration in bringing a new product to market.

Any type of search conducted before filing your own patent application will provide valuable information that can help to determine what scope of patent protection is likely available for your invention. For example, pioneering inventions that represent a new development in a completely new field of technology are typically granted a relatively wide scope of patent protection. In contrast, new innovations in crowded fields tend to be incremental in nature, and correspondingly only a narrow scope of valid patent protection is likely to be available.

After the patent application is filed, the application will be examined. During examination, a patent examiner will analyze the application to ensure compliance with the relevant laws and rules. The examiner will conduct a search for relevant prior art, and will raise any objections the examiner considers appropriate. After any such objections are overcome, the application will be allowed, and typically an issue fee must be paid for the patent to be granted. The cost for the examination stage is highly variable depending on the nature and number of objections raised by the patent examiner. For a regular U.S. patent application for a straightforward mechanical technology, a reasonable minimum budget for examination would be about \$5,000.

Maintenance fee payments are also required in order to keep a patent (and sometimes pending patent applications) in force. In Canada, maintenance fees of a few hundred dollars are due on each anniversary of the filing date of the application, beginning on the second anniversary. In the United States, maintenance fees of a few thousand dollars are due at 3.5, 7.5 and 11.5 years after grant of patent. Maintenance fees increase over the life of the patent.

WHAT IS A PROVISIONAL PATENT APPLICATION?

A provisional patent application is not equivalent to filing a regular patent application. It is essentially a placeholder that gives an applicant one year to file a regular patent application. If no regular patent application is filed within that one-year period, the provisional application simply expires. However, if a regular patent application is filed within that one-year period properly claiming the benefit of the provisional application, then the date of filing the provisional patent application can establish a priority date for subject matter that is fully disclosed in the provisional patent application.



A provisional patent application is not equivalent to filing a regular patent application.

Why file a provisional patent application?

- **Longer patent term.**

The term of a patent is calculated based on the filing date of a regular application. A provisional patent application is not counted in this period and can effectively provide an extra year of patent protection. This may be particularly important for inventions such as pharmaceuticals that are most valuable towards the end of their patent term.

- **Defer patent costs.**

By filing a provisional patent application, you can defer some costs for up to a year, but you do not ultimately reduce costs. The professional fees for preparing a provisional patent specification and drawings may be lower than the fees for preparing a non-provisional patent application. This is because a provisional application is not required to include many components, such as a formal set of patent claims, information disclosure statement, and an oath or declaration, which are required for a non-provisional application. However, to obtain any enforceable legal rights, you will eventually incur the full cost of filing and prosecuting a non-provisional patent application, including preparing a comprehensive description of the invention and claims.

- **Provide more time to develop an invention or collect data.**

A provisional patent application can enable immediate commercial promotion of an invention by authorizing the use of “Patent Pending”.

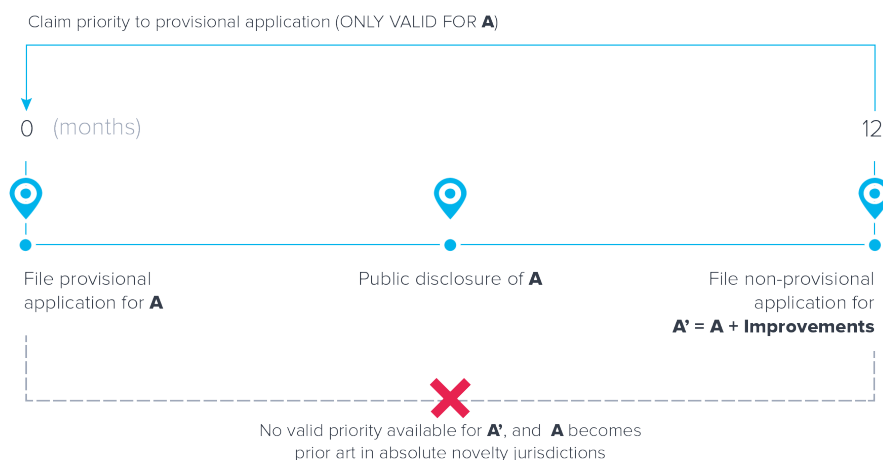
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A provisional patent application can enable immediate commercial promotion of an invention by authorizing the use of “Patent Pending”.

It can also allow time to further develop a product or to obtain additional supporting data, which can be particularly important in the chemical and biotechnology fields. The filing of multiple provisional patent applications over the course of the one-year pendency of the provisional application can allow companies to set down incremental priority dates as new improvements are made or as further supporting data is collected, and thus can be an important part of an overall filing strategy.

Are there any downsides to filing a provisional patent application?

- **Improvements may not be protectable.**

A provisional patent application sets a priority date only for subject matter that has been fully disclosed in the provisional application. As shown below, this priority date will not apply to changes or improvements not disclosed in the provisional application. If the invention is publicly disclosed after the filing date of the provisional application but before the filing of a regular application, that public disclosure will become prior art against claims including those changes or improvements in absolute novelty jurisdictions (such as Europe, China), which may render claims covering the changes or improvements invalid in those countries. You should seek professional advice prior to disclosing your invention if a provisional patent application has been filed and further changes or improvements to the invention are contemplated.





The implementation of the Leahy-Smith America Invents Act in the United States in 2011 changed its patent system from first-to-invent to a first-to-file.



There is no such thing as a “worldwide patent”

- **Provisional patent application may not enable the claimed subject matter.**

Sometimes provisional patent applications are filed before much data has been collected. If the data in the provisional patent application is determined to be insufficient to enable the claimed invention, the claims may not be entitled to the benefit of priority of the provisional patent application.

- **Overall cost will be higher.**

Because a regular patent application must be filed within one year for a provisional patent application to have any value, you will ultimately incur the costs of filing both the provisional and regular applications.

Weighing the risks and benefits of provisional patent applications

Overall, provisional patent applications are a valuable strategic tool in obtaining patent protection. The implementation of the Leahy-Smith America Invents Act in the United States in 2011 changed its patent system from first-to-invent to a first-to-file. This change has increased the importance of provisional patent applications. A properly drafted provisional application may be the quickest method to obtain the earliest possible priority date for an invention. In some cases, particularly involving disclosure to or joint development with third parties, a brief provisional patent application can be better than no filing at all. However, in all cases, the provisional patent application should form part of a comprehensive patent strategy, not an end unto itself.

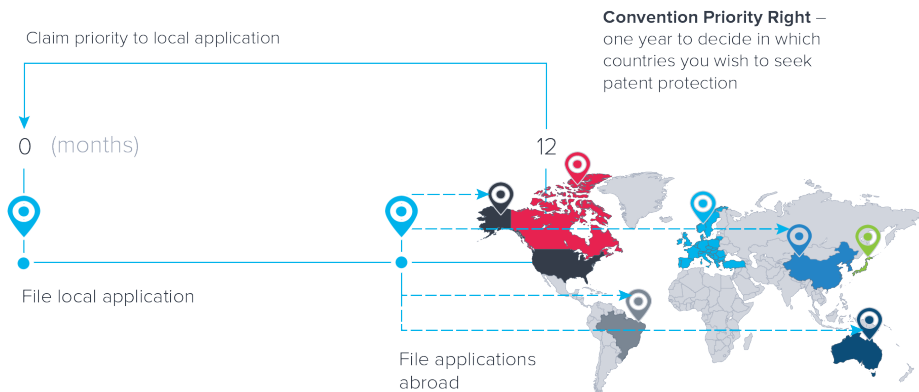
HOW DO I OBTAIN INTERNATIONAL PATENT PROTECTION?

There is no such thing as a “worldwide patent”. If an applicant seeks patent protection internationally, separate patent applications must be filed in each country of interest. There are two international treaties, the Paris Convention and the Patent Cooperation Treaty (“PCT”) that help to streamline the patent application filing process and can allow some patenting costs to be deferred.

Paris Convention Priority Right – One Year to Decide Where to Patent

Most foreign countries have signed the Paris Convention, which allows a patent applicant to claim priority to a patent application filed within the previous year. In most countries, it is sufficient to file within one year of the date on which the earliest application (which can be a provisional patent application) was filed, provided that the earliest application was filed before any public disclosure of the invention anywhere in the world.

A few countries are not members of the Paris Convention, and special consideration must be given to filing applications in such countries to avoid loss of patent rights there.



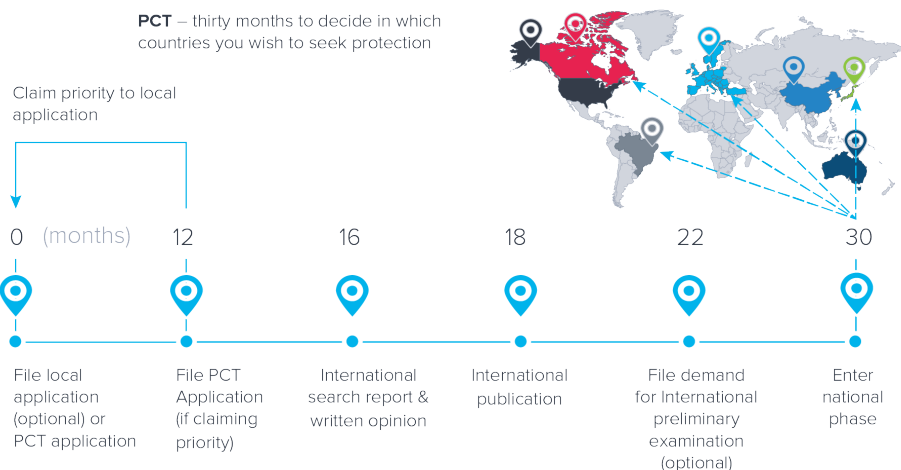
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PCT – Filing a Single Patent Application for Many Countries

The PCT provides a simplified procedure enabling applicants to obtain patent protection in a large number of countries. A single English-language PCT application may be filed. That application can optionally claim priority to a previously filed application, e.g. a provisional patent application. The PCT application is then assessed as to its potential patentability on a preliminary basis. At the request of the applicant, a further round of international preliminary examination may be carried out if the applicant disagrees with the initial assessment of patentability. A favourable patentability opinion can assist the applicant in the further processing of the application in those countries in which the applicant wishes to obtain patent protection, and may be used to accelerate examination of applications in certain countries under the Patent Prosecution Highway program.

A PCT application provides more time for an applicant to decide whether to seek patent protection in countries of interest. A PCT application provides thirty months from the earliest priority date of the application for the applicant to decide the countries in which the application should be pursued. At this stage, the application must enter the national phase for further examination for patentability under national law in each country in which protection is desired.

“A PCT application provides more time for an applicant to decide whether to seek patent protection in countries of interest.”



European Patents – Another Streamlined Filing Process

A single English-language application can be filed at the European Patent Office (“EPO”), designating a number of countries that are parties to the European Patent Convention (“EPC”). The countries that are members of the EPC are not the same as countries that are members of the European Union, so care must be taken in confirming that all jurisdictions of interest are covered by this filing. The EPO examines the application and, if the applicant is successful, grants a European patent. The European patent rights must then be perfected in each country of interest through a procedure called validation, which can include filing translations of all or part of the granted patent into the local language.

WHAT IS A DESIGN PATENT?

Industrial design registrations in Canada, also known as “design patents” in the United States, protect the way an article looks, e.g. original features of shape, configuration, pattern, and ornamentation. For example, a new water jug is unlikely to receive patent protection because its functional characteristics (container, handle, spout, etc.) are not new. However, if the visible appearance of the water jug is new and differs from the appearance of prior water jugs, then the new appearance can be protected by an industrial design registration. An industrial design registration protects the specific design registered and any design not differing substantially therefrom.

Who can apply for design protection?

The author of a design is the person entitled to register the design, unless the author was paid to create the design for another person, in which case the other person is entitled to register. If an attractive design is seen in some foreign country and no corresponding design is registered in Canada,



In Canada, an application for industrial design registration must be filed no later than one year after the earliest publication of the design.

the person seeing the design cannot register the design in Canada, because such person is not the author or true proprietor of the design. An exception applies if the Canadian design rights are properly assigned to such person by the true proprietor.

What time limitations apply?

In Canada, an application for industrial design registration must be filed no later than one year after the earliest publication of the design. Publication includes distributing samples or making public use of an article incorporating the design, selling or exhibiting such articles for sale, or publishing the design in advertising or other printed material of any sort.

The United States and Europe have a similar one-year grace period for designs, but many other jurisdictions have no grace period whatsoever. Any public disclosure of the design before filing an application for industrial design registration can result in loss of valid design protection in such countries.

Before applying to register a design, should you conduct a search?

Time and budget permitting, it may be wise to conduct a search before applying to register a design. If the same or a similar design has been disclosed anywhere in the world, it may not be possible to obtain a valid registration for the design. However, in some cases the cost of conducting a search may exceed the cost of filing an application to register the design, and small differences may be sufficient to secure registration. Thus, the costs and benefits of conducting a search must be carefully considered. No search will guarantee the registrability of any design.

How long does design protection last?

In Canada, the term of industrial design protection is the longer of ten years from the date of registration or fifteen years from the original filing date, subject to payment of a maintenance fee after the first five years. United States design patents have a fifteen-year non-renewable term, counting from the date of grant of the design patent, and no maintenance fees are required. In Europe, a design registration covering the European Union has a term of twenty-five years, subject to payment of a maintenance fee every five years.

What about international applications?

There is no such thing as a “worldwide” design registration. Separate protection must be obtained in each country of interest. A Canadian industrial design registration protects the design only in Canada. To protect

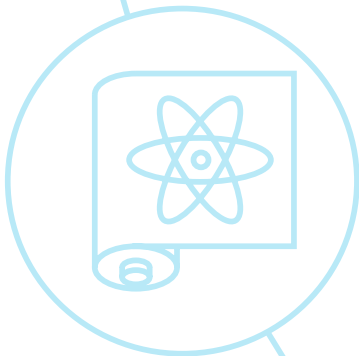


In Canada, the term of industrial design protection is the longer of ten years from the date of registration or fifteen years from the original filing date

the same design in the United States, a separate United States design patent is required.

Most countries have signed the Paris Convention, which allows a design applicant to claim priority to an industrial design application filed within the previous six months. As a result, in most countries, it is sufficient to file within six months of the date on which the earliest application was filed, provided that the earliest application is itself filed before any public disclosure of the design anywhere in the world. A few countries are not members of the Paris Convention, and special consideration must be given to filing applications in such countries to avoid loss of design rights there.

The Hague System for the International Registration of Industrial Designs provides a simplified procedure enabling applicants to obtain patent protection in multiple countries through filing a single application. However, each country will still separately examine the application for compliance with its local law, and in some cases different countries have potentially contradictory practices which can complicate use of the Hague System.





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ABOUT US

Oyen Wiggs is a Vancouver-based independent intellectual property boutique law firm. We are experienced patent lawyers with a variety of technical backgrounds that provide us with the insight to help our clients define and protect their innovations. Through our wide-reaching network of foreign associates, we advance our clients' interests around the world.

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