

United States

When to choose trade secret protection over a patent

Introduction

It may be surprising to some that when a company comes up with a new idea or development that it wishes to use in its business, there are likely to be a number of ways to protect it. In many instances, either patent protection or trade secret protection; can be obtained. The nature of the idea or development determines which is the better way to secure protection.

This chapter focuses on some of the differences between patent and trade secret protection, and highlights the matters to consider when deciding which protection to pursue. In some limited circumstances, as will be discussed below, it may be possible to have both patent and trade secret protection for different aspects of the same idea or development. However, in general, the protections are mutually exclusive. A valid patent requires disclosure of how to make and use the invention, including the best-known mode of doing so. The trade secret rights will then be lost when the patent application is published.

What is a patent?

A patent is a right granted by the government to prevent others from practising the invention claimed in the patent. However, it does not give the patentee the right to practise what is claimed.

In order for a claimed invention to be patented, the US Patent and Trademark Office will determine whether it is new, useful and non-obvious. Assuming that it is, and the specification discloses sufficient information to make and use the invention, a patent will issue.

While patents can cover many things, including plants and designs, for the purposes of comparison with trade secret rights this chapter focuses on the more common utility patents, which can, for example, be directed to new machines, electronics and software, chemical compositions, biotechnology or manufacturing methods.

What is a trade secret?

A trade secret is a piece of confidential information that

is used in a business and that gives the owner of the business a competitive advantage. Trade secrets can encompass technical, financial or customer information. Reasonable steps must be taken by the owner of the trade secret to ensure that the information is and remains confidential. Among the steps that are commonly taken are:

- locks on doors and file cabinets;
- passwords for computers; and
- limiting access to the information to those who have a 'need to know'.

If anyone outside the company is given access to the information, access should be under a strict non-disclosure agreement.

For the purposes of determining whether to seek patent or trade secret protection, this chapter focuses on technical trade secrets. In general, while financial information and customer information may be protected by trade secrets, such subject matter cannot be patented.

Differences in how the rights arise

Patent rights start with the inventor's conception of an invention, including how it is made and how it works. A patent attorney or agent then takes that information and prepares and files a patent application with one or more national or regional patent offices. The examiner reviews the application for compliance with the applicable rules and either allows the patent or rejects the application based on asserted deficiencies. Usually, following two to three years of communications between the patent attorney and the examiner, the patent will issue, and only then does the patent's exclusive right to exclude others arise.

Trade secret rights arise with the creation of the information by a company during the course of its business. No national or other filing is required and no approval or certificate issues. Trade secrets start when they are created and are maintained with appropriate confidentiality conditions and restrictions in place.

Differences in term

Patents typically last for 20 years from the filing date. Maintenance fees must be paid periodically to keep the patent in force – every four years in the United States. Assuming that the fees are paid as they become due, the exclusive patent rights will last for the full 20-year term. After expiration, the exclusive right to prevent others from using the claimed invention expires and the invention can be used by anyone with no liability to the patent holder.

Trade secrets can last forever provided that adequate steps are taken to maintain the secrecy of the information. Trade secret rights will be lost at any time if the information becomes known, regardless of whether the trade secret owner is at fault for causing the information to be disclosed. It is the potential for this unlimited term that makes trade secret protection so attractive for appropriate ideas and developments. How long will the formula for Coca-Cola continue to be a trade secret? It could be forever.

Differences in enforcement

A patent can be enforced only in the country in which it was granted. Under US law, the federal courts have jurisdiction for lawsuits that assert patent infringement. Patent rights arise under federal law and enforcement actions must be brought in the federal courts.

In contrast, trade secret rights may be enforced in many jurisdictions. In the United States, they arise under the laws of the various states and thus enforcement actions can be brought in state courts. In addition, if the parties are from different states and the amount at issue is sufficiently high, a trade secret action could also be pursued in federal court.

Thus, to enforce patent rights in the United States, there is only one forum in which to file an action, while with trade secret actions there may be two or more forums available.

Differences in cost to obtain/maintain

The cost to obtain a patent depends primarily on the complexity of the subject matter. It usually costs between \$10,000 and \$20,000 to prepare and file the application in the United States, including patent office fees. Very complex inventions can cost considerably more. Filing in each additional country or region costs an additional \$2,000 to \$10,000. Once the application is filed, the cost to obtain an issued patent depends on the issues raised by the examiner. It is not uncommon for the post-filing costs through issuance to be near to the cost of the initial filing. Maintaining the patent for the entire term requires the payment of periodic fees that

begin from as little as \$500 for the first fees to over \$4,000 for the final fees.

There is no cost to obtain a trade secret other than the cost of implementing and policing the confidentiality restrictions. Depending on the nature of the efforts that must be taken to ensure secrecy, these efforts could be more costly than pursuing patent protection. In addition, because trade secrets do not expire, these confidentiality costs will continue as long as a company wishes to maintain trade secret protection. However, because most companies maintain some level of trade secrets, the incremental cost of protecting an invention as a trade secret may be small.

How does the ability to reverse engineer weigh into which protection to seek?

The risk of reverse engineering is usually the most important factor in determining which type of protection to seek. If the secret components or ingredients in a machine or composition can be easily determined or reverse engineered once the product is on the market, then trade secret protection for that component or ingredient will be short-lived. There is no legal basis to preclude someone from studying and analysing publicly available products to determine how they are made and what they are made of. If a company has a product that can be so analysed, trade secret protection is unsuitable.

Conversely, if a company has a product which others would not be able to reverse engineer or analyse to determine its ingredients or method of manufacture, then trade secret protection may be the right option, particularly if the company is interested in the unlimited term of protection that trade secrets can provide. In other words, if a company has a secret recipe or method that gives it a competitive advantage and that competitors cannot uncover following a thorough examination of the products, it should consider protecting that competitive advantage as a trade secret.

Products which are principally mechanical in nature, such as a new hinge or a new machine for making pasta, can easily be reverse engineered once they are on the market. They can be taken apart and deconstructed by any competitor, and thus any trade secrets that may exist in how the product is put together are promptly lost on the first sale. For these types of product, patent protection is preferred. Similarly, a product such as a golf ball can be cut in half to determine whether the core is solid rubber, a wrapped band, some high compression liquid or a combination of those components. So again, unless there is something unique about the composition of one or more of the components, patent protection is

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generally a preferable form of protection.

Suppose, however, that the product is a chemical mixture making it more difficult for a competitor to obtain a sample and analyse it to determine the chemical components. A company may lean towards keeping the exact composition and recipe a trade secret. However, it should be aware that analysis tools and techniques are improving over time and although its competitors may not have been able to determine the composition five years ago, they may be able to determine it today or five years from today. The shorter the projected time period in which the reverse engineering would be successful, the more likely it is that patents are the better form of protection.

The difficulty in determining whether a patent is being infringed is another factor in deciding to use trade secret protection. In fact, if an invention can be kept confidential, a patent, which would have destroyed the trade secret through publication, may be of little value because infringement might not be provable. If a company has decided to rely on patent protection to protect the new idea or development and it followed the rules and disclosed how to make and use the claimed invention, including its best mode of doing so, each of the other companies in the industry can read the published patent and learn how to practise the invention. If the patent holder cannot reverse engineer an infringing product to determine whether the rights in the patent have actually been used, the patent may be difficult to enforce.

For these reasons, a company must consider not only how difficult it would be for a competitor to copy its secret, but it should also consider whether it will be able to determine that others are using the idea that it has covered with a potential patent. If it cannot determine

without a full litigation whether the patent has been infringed, the value of a patent is considerably less. Because of this, many new ideas and methods relating to manufacturing methods are maintained as trade secrets and not disclosed in patents.

When can both patent and trade secret protection be obtained?

Only in limited circumstances can both protections be obtained, such as when multiple inventions are directed to distinct aspects of the new idea or development. If a patent is sought, the application for the patent must set forth not only how to make and use the claimed invention, but also the best mode contemplated by the inventor for practising the invention. Often the best mode requirement results in the need to disclose secret ingredients and/or manufacturing methods in the patent application.

To avoid the need to disclose trade secrets in a patent application under the best mode requirement, the secret will need to be directed to something that is different from the invention as claimed. Suppose, for instance, that the claimed invention is directed to a new chemical composition and the ingredients, recipe and methods of making the composition are disclosed in the patent application. If another aspect of the development relates to a new mixing machine that can be used for chemical compositions in general, it may be possible to keep the mixing machine as a trade secret, assuming that the company could argue that the machine does not relate to the invention as claimed. In contrast, the ingredients and recipes must be disclosed in the patent application in which the claimed invention is a chemical composition. This type of information clearly relates to the claimed invention and thus it cannot be maintained as a trade

secret without jeopardising the validity of any patent that may issue on the application.

The best mode requirement is satisfied at the time of filing of an application, so trade secrets developed after filing need not be disclosed.

What if a company initially decides to pursue one type of protection and then changes its mind?

A company can change its mind and seek the other form of protection if it does so promptly. Although at some point for each type, it is too late to go back to the other alternative. Suppose a company initially decides to seek patent protection. Once the application is published, it is too late to switch from seeking patent protection back to seeking trade secret protection for what was published. Alternatively, it could initially decide to keep the information as a trade secret. One year after a product covered by a trade secret has been offered for sale, it is too late to go back to seeking patent protection

in the United States. Under US law, patent protection is unavailable to products that have been on sale for more than one year. In other countries, this one-year grace period does not exist and the right to file for patent protection will be extinguished with the first sale or public divulgation.

So while there is some initial flexibility in switching between the alternatives for protection, the time for changing is fleeting and, once it passes, a company is limited to sticking with the type of protection that it originally sought.

Conclusion

There are many factors to consider when deciding which type of protection to seek for a new idea or development. For each new idea or development, and with a primary focus on the risks of reverse engineering, determine the type of protection that is best for the circumstances.



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John DuPré's practice focuses on IP litigation and trademark prosecution. Since joining the firm, he has been involved in patent litigation, patent interferences, International Trade Commission proceedings, trademark and trade dress litigation, trademark oppositions and cancellation proceedings, and copyright litigation. Mr DuPré's expertise also includes IP portfolio strategy & counselling, due diligence studies and opinions, audits, trade secret advice, alternative dispute resolution, non-disclosure agreements, technology transfer, consulting, employment and community interest agreements.



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Jim Smith is a co-founder of Hamilton Brook Smith Reynolds. Over the years, he has helped universities, start-ups and emerging companies, small companies and mid-sized corporations to obtain, expand and protect IP rights. Mr Smith assists clients in electronics, computer science, communications, physical science and various engineering fields, including electrical, biomedical and mechanical engineering. His practice offers equal expertise in the physical sciences including medical devices, infrared and electromagnetic sensors, electromechanical drives, lasers, cryotechnology and optics.