

Cleantech Patents: When is Trade Secret the Right Protection?

Article By:

Jeffrey D. Peterson

Many new start-up companies in the cleantech space have been founded primarily to develop a new technology. The success of these companies, as well as more established renewable energy innovators, often strongly depends on their ability to protect the intellectual property around their innovations.

The form of intellectual property protection that usually first springs to mind is **patent protection**. A patent provides a government-supported monopoly for a limited period of years (20 years from the filing of a patent application), protecting an invention which is either a new machine or apparatus, a composition, an article of manufacture or any other process that meets the statutory requirements for patentability – those requirements being primarily that the invention is new and non-obvious.

Getting a patent can be a rigorous, expensive and time consuming activity, usually costing thousands of dollars and taking years to obtain. One of the principal drawbacks of patent protection is that the applicant for such protection must fully disclose how the technology works, and the best way to practice it, such that another engineer or scientist can use the patent as a blueprint to reproduce the invention.

This disclosure is provided to the public upon publication of the patent application, which occurs before the patent office has even decided whether the invention is protectable or not. Under the patent system, therefore, the innovator will be disclosing his invention to the public without being certain whether any protection will be ultimately available, or what the full scope of that protection will be.

So what is [an inventor or start-up company](#) to do?

Trade secret protection can provide an alternative form for intellectual property protection that does not have the same limitations as patent protection, though it has its own specific boundaries.

What is a trade secret? A trade secret is generally any information that derives its value (actual or potential) by being not known to other people or companies.

The information protected must truly 1) be a secret (i.e. not public knowledge or general knowledge in an industry; and 2) must be subject to “reasonable efforts” to be kept a secret.

Generally “reasonable efforts” include the use of confidentiality/non-disclosure agreements, security precautions (locks, passwords, badges, etc.), and “need to know” compartmentalization of knowledge to keep information secret. Examples of such trade secrets would be processes for generating ethanol or other biofuel; formulations for catalysts or other processing compounds; system designs for fuel generation; and customer lists. Trade secret protection is handled under individual state law and common law, with most states having enacted the Uniform Trade Secrets Act governing the protection of such rights.

Trade secrets have numerous benefits over the patent system including:

- 1) a trade secret is not limited to a specific term, but can be protected indefinitely as long as the information is preserved as a secret and retains its economic value;
- 2) trade secrets can protect innovations that may not meet the statutory requirements for patentability; and
- 3) trade secret innovations are not published and available to the public.

However, there are limitations to the protection of trade secrets. One significant drawback is they do not protect against independent development. For instance, if a competitor would develop a fuel processing system similar or identical to an innovator's system without obtaining or referencing the innovator's trade secret (i.e. did not obtain by theft, espionage, or disclosure by former employee of innovator), the trade secret would not protect against this independent development.

Another drawback is that the innovator must take continual “reasonable efforts” to keep the innovation a trade secret, and if the “reasonable efforts” lapse, even if only in one specific instance, the trade secret protection can be lost.

One more drawback is that certain types of innovations may not be able to be maintained as a trade secret. Fuel formulations, for example, may be difficult to keep as a trade secret as a purchaser of the fuel may be able to reverse engineer such a formulation from the fuel itself.

Given the pros and cons of trade secret protection, when is a trade secret the right form of protection for a renewable energy innovation? An innovator must ask a number of questions regarding the new technology, such as:

- Can the new technology be kept confidential and effectively used? E.g., the technology is a process for generating ethanol that can be effectively used in a closed facility? If so, trade secret protection should be available and an appropriate form of IP protection.
- Is the new technology truly innovative or is it an obvious application of existing technology? If it's a modification of existing technology, patent protection may not be available and trade secret protection may cover.
- Will use of the new technology by others be easily detectable? E.g., is the technology a new type of wind turbine that can be publicly examined? If so, the technology may not be able to be kept as a trade secret and patent protection may be a better option, especially if infringement can be easily determined.

Renewable Energy innovators should work with their intellectual property counsel to address strategies for protection of their inventions to make sure the best form of intellectual property protection is implemented to protect the company's most precious assets, their innovations.

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