Chapter 6

-- Designing Around a Patent --

It is frequently the case that a patented product or method turns out to be very valuable for the patent owner. In some cases, the value of a patent is immediately apparent, even before commercial exploitation of the invention has developed. In other cases, the value of patent may not be known until the invention has been marketed for some time and proves to be particularly popular. In either case, as the value of a patented invention is established, other entities will naturally have an interest in the patented product or method.

One possible approach in these circumstances would be for the interested parties to obtain a license from the patent owner to make and sell the patented product or to practice the patented method. Normally, this would then entail the licensee paying a royalty to the patent owner in return for the license. Most licenses are keyed to the success of the licensee, i.e., if the licensee sells more products and profits more from the license, more royalties are owed.

However, if the patent owner is finding the exclusive right to the patented invention highly profitable, the patent owner may be very reluctant to allow any other party to enter that market space. Thus, there will be a consideration by the patent owner as to whether the revenue obtained from granting patent licenses exceeds the profits that can be obtained through exclusive exploitation of the invention.

If, for example, the patent owner is an individual or a smaller entity with limited resources and is unable to fully satisfy or exploit the market for the invention, it may make sense to grant a license to a larger company that can more completely realize the commercial potential of the invention. In such a case, the patent owner may profit far more from granting a patent license than by trying to commercialize the invention directly without the help of a powerful licensee. It must be remembered that a patent is granted for a limited time. Therefore, it may be important to capitalize on the invention as rapidly as possible.

If the patent owner is unwilling to grant a license, or the license terms are too onerous for the prospective licensee, there will likely be an analysis of the patent to see if it is possible to take advantage of the commercial potential or success of the invention without infringing the patent. This is referred to as designing around the patent.

As described above, the coverage of a patent is determined by the claims. For a patent claim to be infringed, each and every element recited in the claim must be found in the accused device or method. Thus, designing around a patent involves a careful analysis of the claims of the patent.

If a claim happens to recite something, an element, function, relationship, etc. that can be omitted without compromising the value of the resulting product or method, then

it may be possible to enter the market, omit that unnecessary element from your product or method and capitalize on the popularity of the invention without infringing or licensing the patent. Thus, the practice of designing around a patent comes down to a review of each of the independent claims of the patent in a search for something that can be omitted. If something is identified that can be omitted, the claim can likely be designed around. The more significant the omission, the more clearly the claim has been avoided.

If nothing can be omitted from a claim, it may still be possible to substitute in different elements or functions so that something recited in the claim can be changed in the proposed product or method. However, this form of designing around a patent will necessarily include an analysis under the Doctrine of Equivalents to determine if the changes made are sufficiently "substantial" that infringement cannot still be found under the Doctrine of Equivalents (See Chap. 5).

In order to fully design around a patent, it is necessary to design around each and every independent claim in the patent. Remember that if any one claim is infringed, the patent is infringed. Consideration of the dependent claims is unnecessary because if the independent claims are not infringed, the dependent claims cannot be infringed either. This is because the dependent claims, by definition, incorporate all the language of the claims from which they depend.

Once one understands the process of designing around a patent, it becomes obvious that the claims of a patent must be written as broadly as possible. That is, the claims should not contain anything that can be successfully omitted. Additionally, the claims should use broad terms that cover a number of equivalents so that it is very difficult to substitute in something that is not covered by the literal language of the claim.

For example, in our discussion of the Doctrine of Equivalents in Chap. 5, we considered a claim that recited a screw for securing a first member to a second member. In an attempt to design around that claim, a bolt and nut were used to secure the two members. While the use of the nut and bolt may still be covered under the Doctrine of Equivalents, the patent claims could have recited a "fastener" used to secure the two members together rather than calling explicitly for a screw.

If the claim had recited a "fastener," the claim would literally cover a screw or a nut and bolt, as well as other possible fasteners. Thus, it become apparent that the language used in the claims is extremely important and, to a large extent, determines the worth of the patent. In this particular example, the use of a screw could be recited in a dependent claim rather than limiting the independent claim.

The claims of a patent are typically written by a patent attorney or agent representing the inventor or the assignee. As can be imagined, claim drafting is much more of an art than a science and requires years of practice and experience to do well.

During prosecution of a patent application, the U.S. Patent Office may cite prior art that is closely relevant to the claimed invention. This may require that the applicant add further recitations to the claim in order to distinguish the invention from the prior art, i.e., to establish novelty and non-obviousness. If the claims do not recite something that is new and not obvious from the prior art, the patent will not be issued

Anything added to the claim during prosecution of the patent application might be a prime candidate for something that can be omitted when attempting to design around a claim. However, it will then be necessary to consider the piece of prior art cited that caused the addition to the claim to be made. If that piece of prior art is also a valid patent, it may be necessary to design around that patent as well or at least consider whether the claims of that patent might be infringed. In fact, when designing a new product or process for market, there may be a multitude of relevant patents that must be considered and designed around.

If a patent is expired, its disclosure is in the public domain. Therefore, if you can find an expired patent that covers the product or method you wish to bring to market, you cannot be successfully sued for infringement of any patent because what you are doing is committed to the public domain. Thus, looking for an expired patent that covers your intended product or business plan is another way of designing around any currently valid patents. However, because patents have a relatively long life, about 17 years, it may be difficult to find an expired patent that describes a product or method that could still be commercially successful.

It should be noted also that the U.S. Patent Office will not generally indicate if something in a claim is unnecessary for patentability and could be omitted. The role of the Patent Office is merely to determine that the invention defined by the claims of a patent being issued is useful, novel and unobvious. Thus, the burden falls entirely on the patent applicant and his or her legal counsel to identify and obtain the broadest claims that can be permitted in light of the relevant prior art.