Design-Around Patent Strategies for Patentees and Competitors

By Shyla Shirodkar, Ph.D.

Patentees and competitors must take proactive steps to handle design-around issues related to intellectual property matters. Using a design-around strategy, a competitor can produce an equivalent product that is legally non-infringing on a patentee’s issued patent. Successful design-around strategies can present time and cost savings in terms of research and development costs, legal fees and potential litigation costs and also can minimize the delay in commercializing an equivalent product. For example, by designing around, a competitor has the incentive to potentially capture a significant market share by producing an equivalent product while undercutting the patentee’s profits.

The origins of incentives for designing around patents can be found in the policy objectives of the U.S. patent system. Our patent system’s underlying policy considerations, balancing the interests of the patentee and public and fairness to all parties, actually encourage design-arounds. In the current system, while the patentee’s property rights are protected, the public’s right to design around the patent is also encouraged. Design-around improvements based on a patent are part and parcel of the patent bargain made by the patentee. The patentee obtains a monopoly to prevent others from making, using, selling or importing an infringing product while public knowledge is broadened in that technology.

Scenario: Your company has created a new invention and secured an issued patent claiming the invention. Patenting your invention is an important step in commercializing and marketing an inventive product; you have a market-driven incentive to invest in innovation. But is your patent “design-around” proof? Increasingly, companies are imitating their competitor’s products by tweaking their own products just enough to avoid a patent infringement suit by a patentee. In today’s competitive marketplace, a potential competitor has an incentive to design around your patent to produce an equivalent product that does not legally infringe your patent.

A proposed product can be covered by a claim in a patent in one of two ways, “literally” or under the “doctrine of equivalents.” A proposed product is “literally” covered by a claim in a patent if the proposed product includes every element found in the claim, the *all elements rule*. Under the somewhat more fuzzy “doctrine of equivalents,” however, infringement occurs when an equivalent product does not literally contain every element of the claims, yet contains an equivalent of the element that is literally missing. The doctrine of equivalents prevents those who make insubstantial changes to a patented invention from reaping the benefits of such an insignificant contribution, for example, substituting a bolt for a screw. A recent case on doctrine of equivalents, *Festo Corp. v. Shoketsu Kinzoku Kogyu Kabushiki Co.* 535 U.S 722, 741 (2002) ("Festo") and subsequent case law have created a new strategy in which the narrowing of claim elements by amendment must be avoided, if possible. Although navigating *Festo* is beyond the scope of this article, in its aftermath the patent environment actually fosters design-around equivalent products. *Festo* and its progeny demonstrate the tension that exists between a patentee and those who seek to design around the patented technology. In a practical sense, however, *Festo* provides a field day for competitors to design-around and a nightmare for patentees to stop the design-around. The good news? There are strategies available to achieving both competitors’ and patentees’ goals. Two concepts are discussed: 1) strategies for a competitor to design around an issued patent; and 2) strategies for a patentee to counter a potentially hostile design-around.

**STRATEGIES FOR A COMPETITOR**

Here are some considerations for a competitor interested in bringing a design-around equivalent product to the market.

**Spot the Missing Element**

Based on the *all elements rule*, a claim can be infringed by a product that has all the elements of the claim in a patent. Put another way, if every element of a claim is used in your equivalent product, the infringement of that claim is literal. To overcome literal infringement of a claim, focus on the broadest valid claim of a patent you want to design around and determine if your equivalent product avoids an element in the broadest claim. Another consideration may be to obtain a competent non-infringement opinion from a patent attorney to help avoid a finding of willful infringement that could lead to treble damages and attorneys’ fees.
**Practice the Prior Art**

Patentees are barred from claiming that which is in the prior art (which includes, for example, U.S. and foreign patents, U.S. published applications, printed publications, and electronic publications that predate the invention or that predate the patent application by more than 1 year). Prior art, however, does not prevent the competitor from incorporating those features in the equivalent product, unless the prior art is an enforceable patent with a remaining term, in which case it may be necessary to obtain a license. Identify openings in the prior art based on what is claimed in the prior art and decide if there are any areas left open to you. If the patent is expired or if maintenance fees have not been paid, practice away.

**Narrow Patent Claims?**

In determining a design-around strategy in light of *Festo*, consider reviewing the prosecution history of the patent for amendments to decide if the amendments were made for patentability reasons. If yes, you might be able to copy all the elements of the claim and substitute an interchangeable structure, or step, for the element that has been amended to design around the patent, but consult with an experienced patent attorney to advise you on your particular circumstances.

**STRATEGIES FOR A PATENTEE**

A different scenario arises when you are the patentee. What is a patentee to do to avoid a design-around of his or her patent?

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**Go Literal**

Earlier, we discussed the **all elements rule**. As applied to the patentee, he/she should draft and prosecute claims with a view that maximizes the likelihood that the competitor will infringe literally. This may include drafting broad claims as well as carefully crafted narrower claims that are more specific and relate closely to the commercial product. A patent must have claims that will be infringed literally by an equivalent competitor product. As a patentee, avoid relying on the doctrine of equivalents and navigating *Festo*, if possible.

**Get As Broad As Possible**

Include the broadest claim possible that does not overlap with the prior art. Such a claim, if allowed by the Patent Office, will be more difficult for a potential competitor to circumvent even under a literal infringement standard. Make sure that the claims you want to issue are, to the extent possible, included in the originally filed application.

**Skip Claim Amendments, If Possible**

As discussed earlier, in light of the *Festo* decision, a new prosecution strategy is emerging in which the narrowing of claims is to be avoided, wherever possible. Consider adding new elements rather than amending an existing element in the amendments, but be careful not to add an element from a dependent claim, which can be construed as a narrowing amendment by the courts. Pay close attention to any arguments presented by your attorney in an amendment to avoid the *Festo* estoppel. Yet another strategy can be to present new independent claims with a narrower scope in an amendment, which are different from the existing claims or prior limitations in the claims. Or file an appeal brief instead of amending claims.

**Keep It Pending**

Keep a pending “continuation” application on the invention to cover a competitor’s product. This application basically continues your priority date of the initially filed application. If, during discovery in a lawsuit between you and a competitor, you find out more information about a competitor’s product, you may be able to file a continuation application claiming the competitor’s product as long as there is support in the original application. Redrafting claims to capture your competitor’s equivalent product can help you withstand an attempted design-around.

**Claim It or Lose It**

As a patentee, you define your invention in the claims, not in the specification of the patent, because the claims, not the specification, provide the measure of your right to exclude. Therefore, claim all the variations of the invention or else unclaimed variations may be dedicated to the public domain.

**Do Your Homework**

Work with your patent attorney and inventors to find the prior art in your field of invention and review it carefully before the patent examiner at the Patent Office finds it. This may avoid the future need to make any claim amendments during the prosecution of the patent.

**Having It All: Include Prior Art Embodiments and Alternatives**

Ask the inventors to design around the broadest claim drafted by the patent attorney. Think of alternative ways to make a commercially viable product, within the scope of the invention. Again, this will allow you to capture possible design-around alternatives within the scope of the claims of your patent.

In conclusion, patentees must be vigilant during the drafting and prosecution of the patent application to obtain a patent with the broadest claims possible while minimizing claim amendments. In evaluating equivalent products, competitors must carefully study the patent and its prosecution history to design around the patentee’s patent claims. To fail to be proactive, in light of emerging patent practice, is to lose the competitive edge.

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