

The Doctrine of Equivalents in the United States  
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The Doctrine of Equivalents (DOE) provides the only basis for infringement liability when each and every limitation of an asserted claim is not met literally. Although perhaps less commonly applied in recent years than decades ago, in a number of major cases it proves decisive. Some observers believe its scope has been reduced in the last decade by the Supreme Court in Warner-Jenkinson and Festo, and by the Federal Circuit in numerous decisions. I agree, but consider it still important and reasonably available, whenever appropriate.

The principal restraint on its application is the “all limitations rule” by which every claim limitation not met literally must be met by an equivalent and none can be ignored in the analysis. That rule was reinforced in Warner-Jenkinson by both courts. On the other hand, a separate structure in the accused product is not required so long as some structure can be identified that performs the same function in the same way, yielding the same result (the function/way/result test (FWR)), as to the particular limitation. The FWR test, however, cannot be applied to the accused product generally, but must be applied on a limitation-by-limitation basis.

The second major restraint involves estoppel of equivalent infringement whenever a claim amendment or argument is presented to the patent examiner in order to promote allowance of the claims. Of course, estoppels only apply to amendments or arguments that narrow claim scope or surrender claimable subject matter. In Festo, the Supreme Court held that such amendments or arguments are presumed to forfeit equivalent infringement unless they could be shown to be unrelated to patentability or for some purpose other than securing allowance. The presumption is usually difficult to overcome. Therefore, patent prosecutors must exercise caution in making such submissions to the examiner and avoids stating positions too broadly. This restraint is referred to as “Prosecution History Estoppel.”

A special case arises if the claim limitation contains a numerical parameter. In that case, equivalent infringement is generally unavailable where the relevant feature of the accused device falls outside a stated range or departs from a stated minimum or maximum. So, a parameter of “at least 100 degrees Celsius” cannot be equivalently met by a process step that instructs heating a substance to 80 degrees C. Similarly, a categorical or binary limitation usually cannot be met equivalently. For example, a limitation that says the gears must be “inside” the gear box cannot be equivalently met in a device where the gears are placed outside the box. Similarly, a claim limitation that the “majority” of a surface be covered cannot be equivalently met when only a minority of the surface is covered.

Nevertheless, equivalent infringement can be found where two things are merely inverted in terms of their relationship. Thus in co-axial tubes, a chemical cladding claimed as applied to the inside of the outer tube can be applied to the outside of the inner tube without defeating equivalent infringement. Of course, embodiments found in the prior art or obvious variations thereof can never be said to equivalently infringe. This rule obviates any need for the phantom claim analysis of Wilson Sporting Goods.

Due to the importance of the notice function of patent claims to warn others what they may not lawfully do, courts are reluctant to find equivalent infringement when an ordinary technologist in the field could not have foreseen that what he was producing would infringe by equivalence. Similarly, if the patentee could have used known terms or technologies to more broadly claim his invention, courts will tend to hold him to have gained protection only for what he expressly claimed.

Thus, foreseeability has taken on increased importance in DOE analysis. Its full dimensions, however, remain uncertain and will have to await further caselaw development. Similarly, if subject matter is set forth in the written description but then not claimed, courts will not allow equivalent infringement to capture what could have been claimed, but was not. So too if language in the specification suggests the patentee meant to exclude subject matter he later tried to cover as an equivalent.

Interestingly, in the legislative debate in the United States over the past five years, no one proposed changes in the way DOE is applied even though major changes on many other issues in infringement litigation were proposed. Nor did the Federal Trade Commission report of 2003 or the National Research Council report of 2004 propose altering DOE, although they recommended many other changes in basic doctrines, including obviousness.

Although rooted historically in equity jurisprudence, DOE can best be considered a legal doctrine that follows rules and standards much as do other legal doctrines, including literal infringement. In any event, the 1938 merger of law and equity rendered the equity genesis of DOE a moot point. As a legal doctrine, its application does not involve discretionary decisions of the judge, but application of rules and standards by a fact-finder, just as with literal infringement. For the same reason, absent dismissal, summary judgment or judgment as a matter of law, equivalent infringement is determined by a jury as a factual matter, except in cases where the parties waive trial by jury. Then, it is determined by the judge, again as a fact issue, which means appellate review is deferential.

Because claim construction is usually determined before infringement issues are decided, the scope of protection of a given claim tends to be fought out as a matter of construing the literal meaning of disputed claim terms. In addition, because appellate review is de novo (and reversal rates higher than for other issues, around 30%), parties often stipulate regarding literal infringement once the terms are construed. For these reasons, most cases are resolved on summary judgment. Only if a summary judgment of non-infringement is reversed on appeal is DOE likely to be pursued at trial as a fall-back strategy in case the jury is unpersuaded about literal infringement. That is not highly likely in most cases because the reversal usually expands literal claim scope and may greatly ease the burden on patentee of proving literal infringement. Of course, "literal" meaning of claim terms does not mean as they would be understood by lay persons, but as they would be by technologists in the relevant field.

The potential areas for harmonization include the relevant date for assessing equivalent infringement and whether prosecution history documentation should play any role. On the other hand, one can argue that these differences are so clear and settled that companies seeking patent protection on the same invention in all three countries know full well what rules apply in each jurisdiction and how to protect their interests. Although as a philosophical matter, "harmonization" sounds desirable, it may be not only difficult to achieve but even if achieved might yield only negligible practical benefits. Moreover, many companies express greater concern over high costs and long delays – both in the patent office and the courts – than about lack of uniformity internationally in application of DOE.

It may also be observed that development of DOE caselaw has started earlier and proceeded faster in the United States than in Germany or Japan. That, of course, does not mean that U.S. caselaw is better but simply that there is much more of it. Not does it imply that Germany and Japan or other nations should necessarily follow the U.S. legal and policy choices, but at least they can be used as a starting point. In addition, this may explain why U.S. decisions are cited more often in other countries' court decisions than vice-versa.

Alternatives to treaty-based efforts aimed at increasing harmonization include not only judges looking for guidance (though not precedent) in decisions of other jurisdictions, but also informal discussion such as this very panel exemplifies. Note too that the Intellectual Property Owners organization is said to be planning yet another international patent judges conference next May, this time in Brussels. Such informal integration of parallel legal regimes for applying DOE may prove both faster and more subtle than treaty-based or legislative efforts. Only time will tell, but I personally expect the judges to succeed better than the diplomats or legislators.