

**Keywords:** Doctrine of equivalents, doctrine of claim vitiation, claim construction.

**General:** While the doctrine of claim vitiation imposes a boundary around the subject matter expanded by the doctrine of equivalents, this boundary is not based on identifying a “binary” choice in which an element is either present or not present.

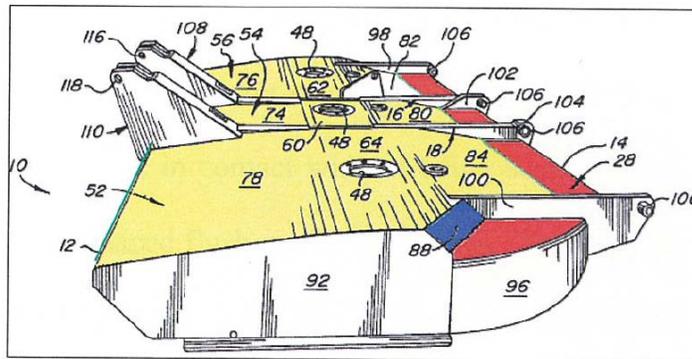
*Deere & Co. v. Bush Hog, LLC.*  
(2011-1629 Fed. Cir. 2010)  
December 4, 2012

**I. Facts and Procedural History**

Deere & Co. sued Bush Hog LLC and Great Plains Mfg., Inc., in the U.S. District Court for the Southern District of Iowa asserting infringement of U.S. Patent No. 6,052,980 (hereinafter, “’980 patent”). The technology at issue relates to rotary brush cutters. The representative claim 1 and Fig. 1 of the ’980 patent are as follows:

1. A rotary cutter deck comprising:  
a lower, substantially planar, horizontal deck wall;  
an upper deck wall including a central portion elevated above said lower deck wall, and  
front and rear portions respectively sloped downwardly and forwardly, and downwardly and rearwardly from said central portion **into engagement with, and being secured to**, said lower deck wall; and  
right— and left-hand end wall structures respectively being joined to right— and left-hand ends of said lower and upper deck walls to thereby define a box section having torsional stiffness.

’980 patent col. 4 lines 44-53 (emphasis added).



’980 Patent, Fig. 1 (highlighting added).

The U.S. District Court interpreted the “into engagement with” language of claim 1 to mean “brought into contact with”, and the “being secured to” language to mean “fastened or attached.” The Bush Hog device did not include a central portion that was in direct contact with a lower deck wall. Instead, the Bush Hog device had an intermediate structure connecting the upper deck wall the lower deck wall. Accordingly, the U.S. District court granted a summary judgment for the defendant of non-infringement of the ’980 patent. Additionally, the U.S. District court held that Deere & Co. could not assert infringement under the doctrine of equivalents because doing so

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would vitiate or moot the language of claim 1 and, under the doctrine of claim vitiation, the plaintiff is not allowed to broaden a claim when doing so would “vitate a claim limitation.” Deere & Co. appealed to the Federal Circuit on the issue of claim interpretation and the application of the doctrine of equivalents in view of claim vitiation.

## II. Issues

- A. Did the District Court err in interpreting the “portion into engagement with, and being secured to” recitation of claim 1?
- B. Did the District Court err in interpreting the doctrine of claim vitiation as applied to the doctrine of equivalents?

## III. Discussion

- A. Yes. The Federal Circuit began its analysis by focusing on the “into engagement with” language of claim 1, noting “at the outset the claim language itself counsels against this narrow interpretation of the term.” As part of the analysis, the Federal Circuit noted that terms used in the claims must be given their ordinary and customary meaning based on what a person of ordinary skill in the art would understand the terms to mean at the time of the invention. In this case, a person of ordinary skill in the art may interpret “engage” to include a meaning of “indirectly connecting.” For example, a gear may “engage” a motor through a second, intermediate gear. Further, the plaintiff had described filler plate 88 of Fig. 1 by stating in the specification that the filler plates provide an indirect connection by which the upper deck wall slopes “downwardly and rearwardly ... into engagement with” the lower deck wall. Accordingly, the plaintiff’s specification also included the “indirect connection” language. The defendant had additionally argued that if “engage” also means “to indirectly connect” then the recitations of “being secured to” would be rendered superfluous. The Federal Circuit observed that both recitations can be given consistent meaning. For example, a rigid bracket can “secure” two objects but maintain a space between the objects, thus, the objects are secured and indirectly connected. By using the new claim construction, the Federal Circuit held that summary judgment of non-infringement was improper.
- B. Yes. The District Court had stated that the vitiation analysis required an analysis “binary in nature...either the upper deck wall is in contact with the lower deck wall or it is not.” The Federal District held that this binary analysis is incorrect. While the courts apply the doctrine of equivalents on an element-by-element basis so that every claimed element, or its equivalent, is present in the accused product, “the doctrine of equivalents, by its very nature, assumes that some element is missing from the literal claim language but may be supplied by an equivalent substitute.” A more proper factual inquiry is to determine if the equivalent represents an “insubstantial difference” from the claimed element or “whether the substitute element matches the function, way, and result of the claimed element.” *Warner-Jenkinson Co. Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997) at 40. Accordingly, if no reasonable jury finds an equivalent element, then the court has to grant summary judgment of non-infringement under the doctrine of equivalents. The Federal Circuit cautioned in applying the doctrine of claim vitiation in an overbroad manner that would overtake the doctrine of equivalents. A more proper application of vitiation includes an analysis of whether “the accused device contain[s] the antithesis of the claimed structure.”

**IV. Conclusion**

Terms used in the claims must be given their ordinary and customary meaning based on what a person of ordinary skill in the art would understand the terms to mean at the time of the invention. While the doctrine of claim vitiation is properly used to restrict the doctrine of equivalents, claim vitiation is not applicable in a binary yes/no factual determination for every element of the claim. More properly, claim vitiation is applied, for example, when the equivalent structure is “the antithesis of the claimed structure.”