

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**LEARNING CURVE BRANDS,**  
*Plaintiff-Appellant,*

v.

**MUNCHKIN, INC.,**  
*Defendant-Appellee.*

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2011-1036

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Appeal from the United States District Court for the Western District of Wisconsin in case No. 09-CV-0416, Senior Judge Barbara B. Crabb.

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Decided: March 30, 2012

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R. TREVOR CARTER, Faegre Baker Daniels LLP, of Indianapolis, Indiana, argued for plaintiff-appellant. With him on the brief was DANIEL M. LECHLEITER.

JOSEPHINE K. BENKERS, Quarles & Brady, LLP, of Madison, Wisconsin, for defendant-appellee.

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Before BRYSON, MAYER, and MOORE, *Circuit Judges*.

BRYSON, *Circuit Judge*.

This case arises from the second round of patent litigation between two manufacturers of children’s drinking containers, commonly known as “sippy cups.” Learning Curve Brands alleged that Munchkin, Inc.’s newest sippy cup models infringe Learning Curve’s U.S. Patent No. 7,185,784 (“the ’784 patent”). The district court ruled that the accused cups did not infringe the patent because they lacked one of the claimed limitations. We affirm.

The ’784 patent is directed to disposable children’s drinking cups that have lids with drinking spouts designed to minimize spills and leakage. Claim 1 recites (emphasis added):

1. A drinking container comprising

a main body . . . having a rim about its opening, the rim having . . . inner and outer walls defining a recess therebetween, the outer wall of the rim having a lower, distal edge spaced apart from the inner wall to define a recess opening; and

a removable lid secured to the main body . . . the lid defining a groove about its edge sized to receive and snap over the rim of the main body and form a seal; . . .

the groove about the lid has an inner surface, and the rim of the main body has an outer surface, that each define semi-circular arcs of similar radii and have interlocking features

on an inboard side, the interlocking features including

a first lip projecting radially outward from the lid into the groove and

a second lip projecting radially inward from the outer surface of the rim of the main body to produce a nominal radial interference between the first and second lips as the lid and main body are engaged.

In 2007, Learning Curve and a co-plaintiff sued Munchkin in the United States District Court for the Western District of Wisconsin, alleging that Munchkin's sippy cups infringed the '784 patent and another patent not at issue here. *See First Years, Inc. v. Munchkin, Inc.*, 575 F. Supp. 2d 984 (W.D. Wis. 2008). The accused cups in that case had lids that snapped onto the body of the cup. After the court granted the plaintiffs' motion for summary judgment of infringement in that case, the parties stipulated to a consent judgment, including a stipulation of the patent's validity.

Munchkin subsequently began making disposable sippy cups with screw-on, rather than snap-on, lids. Learning Curve sought to have Munchkin held in contempt for violating the consent judgment in the *First Years* case. When the district court denied that request, Learning Curve filed this action against Munchkin, once again alleging infringement of the '784 patent.

The district court held a claim construction hearing at which it construed several disputed terms of the patent. Notably, the district court construed the term "snap" not to require any audible feedback, contrary to the position

urged by Munchkin. The court also concluded that a “snap” method of attaching the lid to the body of the cup was not incompatible with having a threaded interface; thus, the court ruled, the lid could screw onto the cup and still “snap [to] form a seal” as required by the claim terms. And, pertinent to this appeal, the court construed the term “semi-circular arcs of similar radii” to mean that “[t]he inner surface of the groove and the rim of the main body are curved at respective radii so that the inner surface and the rim remain in nearly continuous contact over the extent of the semi-circular arcs when the lid and body are assembled.”

The parties then cross-moved for summary judgment. The court concluded that “undisputed evidence shows that the grooves about the lids and the rims of the accused products do not ‘define semi-circular arcs of similar radii.’” Based on that conclusion, the court held that the accused products did not infringe the ’784 patent either literally or under the doctrine of equivalents. With respect to literal infringement, the court relied on evidence presented by the plaintiff’s expert, who used a micro computed tomography (CT) scanner to scan the cross-sections of the accused devices at 15 degree intervals. The scan showed that the arcs formed by the inner surface of the groove in the lid and the outer surface of the rim of the cup were in contact over only 79-80% of their respective surface areas. That amount of contact, the court concluded, did not qualify as “nearly continuous.” With respect to the doctrine of equivalents, the court concluded that the “accused product may perform substantially the same function to achieve substantially the same result, but it does not do so in substantially the same way.” According to the court, that was because the arcs in the patented design “are shaped and sized to closely follow each other and snugly fit together,” while in

the accused device the interlocking of the cup and lid is achieved by the threaded subparts of the cup and lid. Consequently, the court granted summary judgment in favor of Munchkin.

Learning Curve moved to alter or amend the judgment under Fed. R. Civ. P. 59. Learning Curve argued, *inter alia*, that the district court was wrong to conclude that “nearly continuous contact” required contact over more than 79 or 80% of the surface areas of the rim and lid. The court denied the motion. It explained that even if it had erred with respect to what degree of contact constituted “nearly continuous contact,” it would reach the same conclusion with respect to infringement. That was because, even adopting Learning Curve’s evidence as to the shape of the respective semi-circular arcs in the accused cups and lids, there was a “substantial difference in size between the respective radii, far more substantial than any ‘difference in degree’ that must be decided by the jury.”

On appeal, Learning Curve argues that the district court incorrectly construed the claim term “semi-circular arcs of similar radii” by requiring that the lid and the rim of the cup body be in nearly continuous contact. Learning Curve asserts that the disputed claim term needed no construction and that under the plain meaning of that term, Munchkin’s accused cups infringed. Learning Curve also contends that, even accepting the district court’s construction of that claim term, the evidence as to whether the rims and lids in the accused cups were in nearly continuous contact presented a factual issue that precluded the grant of summary judgment.

We need not address whether the district court was correct to interpret the term “semi-circular arcs of similar

radii” to require nearly continuous contact between the cup and lid components throughout the circumference of the cup. Instead, we uphold the district court’s summary judgment ruling based on the alternative ground for decision set forth in the court’s opinion on Learning Curve’s motion for reconsideration. As the district court noted, the record shows that the semi-circular arcs defined by the groove in the lid and the rim of the main body of the accused cups have substantially different radii. Because of that difference, we agree with the district court that the accused cups do not satisfy the limitation in claim 1 of the ’784 patent requiring “semi-circular arcs of similar radii.”

The district court examined the evidence proffered by Learning Curve’s expert, including the CT scans of the accused cups, and it concluded that the difference in the radii of the lids and the rims of the accused cups was so great that no reasonable jury could find the radii to be “similar.” The court observed that based on Learning Curve’s own evidence, at least one-fifth of the extent of the arc formed by the groove in the lid of the accused cups is not in contact with the corresponding arc formed by the rim of the main body of the cup. As Learning Curve’s own evidence demonstrates, that difference in congruence reflects a substantial difference in the radius of curvature of each of the two arcs. An exhibit offered by Learning Curve shows the difference in the two semi-circular arcs clearly. The CT scan of the accused cups with the lid screwed into place over the cup shows the arc of the cup rim with a relatively short radius and the corresponding arc of the groove of the lid above the cup rim with a substantially greater radius:



**Micro-CT Scan of the Accused Cups**

Thus, as the district court observed, the evidence demonstrates “a substantial difference in size between the respective radii, far more substantial than any ‘difference in degree’ that must be decided by the jury.”

Because the district court properly concluded, based on the difference in the radii of the two semi-circular arcs, that no reasonable jury could have found that the accused cups infringe the '784 patent, the grant of summary judgment was appropriate. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248, 255-56 (1986); *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129-30 (Fed. Cir. 2011); *On Demand Mach. Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1345 (Fed. Cir. 2006).

**AFFIRMED**