

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WISCONSIN

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LEARNING CURVE BRANDS, INC.,

Plaintiff,

v.

MUNCHKIN, INC.,

Defendant.

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OPINION and ORDER

09-cv-416-bbc

This is plaintiff's second lawsuit against defendant for infringement of United States Patent No. 7,185,784 (the '784 patent), a patent relating to features designed to improve the fit and seal between a lid and body of a disposable "sippy cup." In the first lawsuit, First Years, Inc. v. Munchkin, Inc., 07-cv-558-bbc, in which plaintiff was co-plaintiff, plaintiffs alleged infringement of the '784 patent by defendant's sippy cups with snap-on lids. During negotiations to settle that lawsuit, defendant started making sippy cups with screw-on lids. After the case settled and plaintiffs obtained an injunction, they discovered the screw-on cup in the market and they brought a motion for contempt in the original lawsuit, which was denied. Plaintiff then brought this suit, which is before the court on plaintiff's motion for leave to amend the complaint, the parties' cross-motions for summary judgment and a slew

of motions to strike and related motions to file reply briefs.

I will grant plaintiff's motion for leave to amend the complaint because it would not be prejudicial to do so. As for the parties' cross-motions for summary judgment and related motions, I conclude that plaintiff has failed to show the accused products have "semi-circular arcs of similar radii." Because of this, I will grant defendant's motion for summary judgment and deny plaintiff's. For the same reason, I will deny the motions to strike and related motions as unnecessary (in defendant's case) and moot (in plaintiff's). Defendant has asked for attorney fees in relation to its motions to strike, which were filed as motions for sanctions. I am not persuaded that plaintiff's additional materials were so clearly inappropriate that attorney fees would be warranted in this context, so the requests for attorney fees are denied.

Plaintiff moves for leave to amend its complaint to add an accused product. In its original complaint, plaintiff identified only defendant's Twist Tight 10 oz. Re-usable Spill-Proof Cups as infringing, but since then plaintiff has discovered defendant's line of Twist Tight 8 oz. Re-usable Trainer Cups and believes they are also infringing. Although defendant opposed the motion, both parties treated the Trainer Cups as though they were part of the case in their summary judgment briefing. There appears to be no prejudice to including the new allegations related to the Trainer Cups because defendant is prepared to challenge the infringement of these products as well. Therefore, I will grant plaintiff's motion for leave to

amend the complaint and treat its proposed first amended complaint, dkt. #65-2, as the operative pleading.

Turning to summary judgment, I note that the parties raise many different issues involving both plaintiff's infringement and willfulness claims and defendant's affirmative defenses. Although these disputes cover several hundred pages of briefs and thousands of pages of proposed facts and supporting documents, this case can be decided on a single limitation present in every claim in the '784 patent. Claim 1 of the '784 patent is the sole independent claim in the patent. It requires that an inner surface of the "groove about the lid" and an outer surface of the "rim of the main body . . . each define semi-circular arcs of similar radii." The 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" and plaintiff has failed to adduce evidence that would allow a reasonable jury to find that the accused products infringe under the doctrine of equivalents.

The parties dispute virtually everything in one way or another but this does not mean that a trial is necessary. Even plaintiff's version of the facts does not show infringement. Rather than attempt to hash out the parties' disputes (including the parties' motions to strike), I will simply accept plaintiff's version of the facts as true at this stage, adding only those facts defendant proposes that plaintiff does not dispute. See, e.g., Jackson v. Kotter, 541 F.3d 688, 698 (7th Cir. 2008) (accepting plaintiff's version of the events as true for

purpose of deciding whether summary judgment is appropriate). Of course, this does not mean that all of plaintiff's proposed findings of fact are accepted as "facts." In particular, those "facts" merely asserting that the accused products satisfy a given claim limitation or are "equivalent" under the doctrine of equivalents must be disregarded because conclusory statements are not facts at all. From the parties' proposed findings of fact and the record, I find the following facts to be material and undisputed, or, for those facts in dispute, to represent plaintiff's version of the facts.

## FACTS

### A. Claims Construction of "Semi-circular Arcs of Similar Radii"

In an order entered March 23, 2010, I construed the term "semi-circular arcs of similar radii" to require 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." Dkt. #37, at 14. I explained that this meant that the arcs must "contact each other when assembled in 'nearly' all places . . . over the entire semi-circular arc (as opposed to all on one side)." *Id.* at 12. The rationale behind this construction was that "[t]he only way that two radii of semi-circular arcs could be 'similar' is for the *size* of each radius to be 'alike'" and "the only apparent rationale for having the size of one of the radii approximate

the other is” to create a “snug” fit between the cup and lid “throughout the extent of their curvatures.”

Although I concluded that “semi-circular arcs of similar radii” required “nearly continuous contact over the extent of the semi-circular arcs,” I also concluded that defendant is stuck with a construction that allows for some spaces between the semi-circular arcs of “similar radii” because it relied on a similarly expansive construction when making its invalidity argument in the original case and would not be allowed to shift positions now. *Id.* at 13 (citing *First Years*, 07-cv-558-bbc, dkt. #59, at 108-09, 114). In particular, defendant had argued that the following prior art images contained “semi-circular arcs of similar radii” in the areas circled:

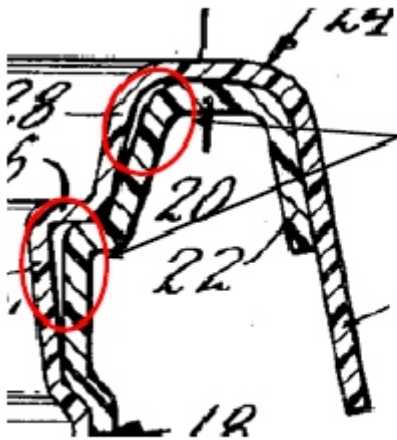


Figure 3 of the '207 Patent

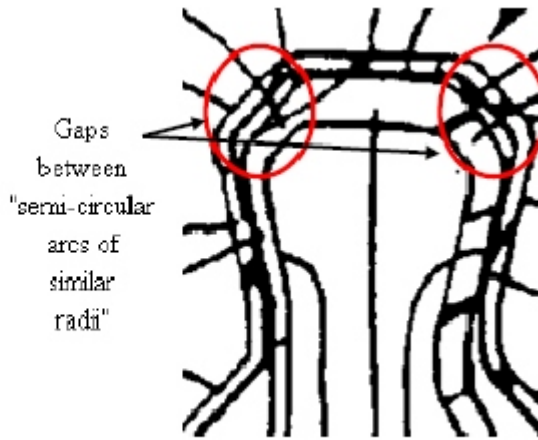


Figure 17C of the '696 Patent

*First Years*, 07-cv-558-bbc, dkt. #59, at 97-98, 103 (citing Figure 3 of U.S. Patent No.

3,773,207 and Figure 17C of U.S. Patent No. 6,170,696). In addition, defendant's expert asserted during a deposition that the following prior art picture from a German patent application showed "semi-circular arcs of similar radii," as circled:



First Years, 07-cv-558-bbc, dkt. #194, at 193-195.

Although the gaps defendant cited in prior art must be covered by the term, I concluded that allowable gaps would not include gaps "created by major size differences between the radii," but instead only "minor size differences (such that the smaller arc would not fit snugly on both ends, for example)" and "acceptable imperfections in the 'semi-circular' arc." Dkt. #37, at 13.

#### B. Semi-Circular Arcs on Accused Products

Defendant uses, offers for sale, sells, and imports into the United States disposable sippy cups including the "Twist Tight 10oz. Re-usable Spill-Proof Cup" and the "Twist Tight

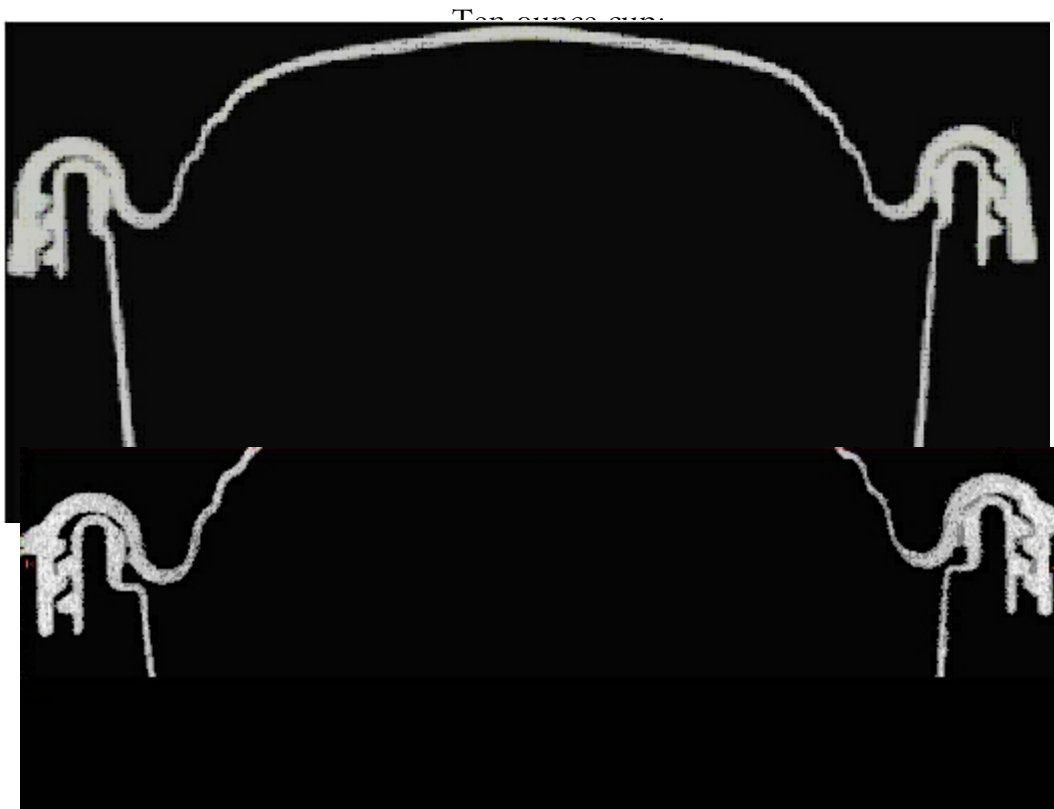
8oz. Re-usable Trainer Cup.” Both the ten ounce cup and the eight ounce trainer cup include a grooved lid designed to fit over a grooved rim in the cup body. Unlike the accused products in the previous lawsuit, which involved a “snap-on” lid, the accused products in this case are threaded, so the lids screw onto the cup over the groove.

The threading helps facilitate the fit of the lid by serving as a guide that brings the lid’s groove closer to the main body’s rim. The threads control the axial (vertical) movement of the lid as the lid and body are brought together during assembly. Although the threads help fit the lid on the body, the lid will fit on the body even without threads. Plaintiff’s expert, Tim A. Osswald, removed the threads from a lid and reassembled the lid to the cup. The lid remained on the cup when flipped upside down, as shown below:



(As the images show, Osswald cut off the entire part of the groove containing the threads, leaving only the “inboard” side of the lid.)

To assess the relationship between the “semi-circular arcs” in the grooves of the lid and cup body, Osswald analyzed micro-CT scans of cross sections taken at 15 degree intervals around the circumference of assembled sippy cups. The scan of an eight ounce trainer cup showed contact between the arcs on the lid and rim for 79% of their total surface area. For the ten ounce cup, the total was 80%, with nine of the cross-sections showing contact over 100% of the length of the arcs. Spacing was present between the grooves in the cup and the lid in those cross-sections with less than 100% contact. That spacing was created by the presence of threads. The following figures show cross-sections of an assembled ten ounce cup and an assembled eight ounce trainer cup, with visible gaps on the sides of the arcs that contain threads:





## OPINION

### A. Literal Infringement

Plaintiff contends that the accused products contain “semi-circular arcs of similar radii” and, if not, they infringe under the doctrine of equivalents. According to plaintiff, the accused products infringe literally because the gaps between the products involve merely “imperfections” (which I explained would be acceptable, dkt. #37, at 13) and are no different from the gaps shown in the prior art defendant cited in the previous case. Plaintiff is wrong on both counts. First, plaintiff acknowledges that the “imperfections” are caused by the presence of threads in the accused products. A specific design feature such as threads is not an “imperfection” and is not what I had in mind when I explained that minor gaps caused by “imperfections” in the semi-circular arcs were acceptable. Allowable “imperfections” are slight variations in the shape of the arcs away from a perfect semi-circle, such as those shown in the prior art defendant cited in the first lawsuit

At any rate, plaintiff’s point that the gap is caused by the threads is only part of the story. The grooves of the lids of the accused products include threads on the inside and the grooves of the cup body include threads on the outside, with the assembled product fitting these threads together *within* the lid’s groove. What this means is that the grooves on the lid and cup body that contain “semi-circular arcs” must also contain threads. This takes away space from the “inside” arc on the rim to make room for the threads, leading to a

smaller arc on the cup body. (A same-size radius might be compatible with gaps caused by threading if there were evidence that assembling the threaded cups caused the arcs to bend or distort, which could show that, although similarly sized, the arcs become distorted and a gap is created by forcing threads together. Plaintiff adduces no evidence of any such distortion.)

Plaintiff points out that the patentee anticipated that its design was compatible with threads, suggesting that gaps caused by threading should not count. However, at most the fact that the claimed invention was intended to be compatible with threading would require that the claims be read to allow *some* sort of threaded cup to practice the patent. As explained above, the threading in this case does not do so and plaintiff has no evidence that threading always requires creating a space between the semi-circular arcs or necessarily affects the sizes of the semi-circular arcs. (If it did, there might be an argument that gaps caused by threading do not count.)

Next, according to plaintiff, the spaces shown in the prior art that defendant cited are no different from the spaces present in this case. This matters, says plaintiff, because defendant already admitted in the previous case that arcs such as those shown in the prior art images would infringe. (Its argument was that the patent was invalid in part because the prior art contained that limitation.) Assuming plaintiff is correct that defendant cannot now argue that arcs like the prior art images are not “semi-circular arcs of similar radii,” it would

not matter because the accused products are different. In the figures from the '207 and '696 patent, the gaps result from variations in the shape of the "arcs." Because the larger and smaller arcs are not the same shape, they do not fit together perfectly. In addition, one of the gaps in figure 3 of the '207 patent (the lower left gap) appears to be created solely because other design features keep the arcs apart. The same appears to be the case in the figure defendant's expert marked. For either of these arcs, the sizes of each arc would appear to allow nearly continuous contact if the design allowed the arcs to be pressed together. To the extent there is any doubt about whether the arcs in the cited images are closer in size, this is because the images are not drawn to scale. This also means that less can be read into defendant's original arguments that these arcs showed semi-circular arcs of similar radii.

Nothing in the prior art that defendant identified previously show arcs sized as differently as they appear in the accused products. Plaintiff's images show a clear gap between the respective arcs and their expert found contact between the semi-circular arcs across only 79-80% of the extent of the arcs around the cups. Such a large gap means that contact across the radii is less than "nearly continuous," and more important, that the radii of the semi-circular arcs in the lid and rim of the accused products have markedly different sizes.

Although plaintiff points out that in nine cross-sections there was 100% contact, such contact in only nine out of 24 cross-sections around the cup does not show the required

“nearly continuous contact” required. Nor does it provide any other reason to believe the semi-circular arcs that go all the way around a cup and lid are sufficiently “similar” to allow a jury to find this limitation in the accused products. (Although I do not rely on this point, it is also worth noting that plaintiff declined to provide images for any of the nine most favorable cross-sections, raising concerns about Osswald’s methods.) In sum, there is no evidence of literal infringement.

#### B. Doctrine of Equivalents

Under the doctrine of equivalents, a product that does not contain all the claimed limitations may still infringe if “there is ‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.” Warner-Jenkinson Co. v. Hilton Davis Chemicals Co., 520 U.S. 17, 21 (1997). To prove equivalence, a plaintiff must show that “the accused product or process contain[s] elements identical or equivalent to each claimed element of the patented invention.” Id. at 40. A given product is sufficiently “equivalent” if either the differences between the claimed limitation and any element of the product “can be fairly characterized as an insubstantial change from the claimed subject matter without rendering the pertinent limitation meaningless,” Freedman Seating Co. v. American Seating Co., 420 F.3d 1350, 1358 (Fed. Cir. 2005), or “the accused device performs substantially the same function in substantially the same way to obtain the

same result as the claim limitation.” E.g., Catalina Marketing International v. Coolsavings.com, Inc., 289 F.3d 801, 813 (Fed. Cir. 2002) (citations omitted). Under the “all limitations” rule, equivalence must be assessed on a limitation-by-limitation basis, meaning each *limitation* or its equivalence must be present in an accused product before infringement can be found. E.g., Freedman, 420 F.3d at 1358.

Plaintiff contends that the radii of the arcs in the accused products are sufficiently similar to allow the accused products to perform substantially the same function in substantially the same way to achieve substantially the same result. According to plaintiff, the arcs (1) “align the inboard interlocking features” (substantially same function); (2) “are shaped and sized to closely follow each other and snugly fit together” (substantially same way); and (3) produce the claimed interference or snap fit (substantially same result). Plt.’s PFOF #531. However, the evidence does not show (2). (For the sake of this order only, I am assuming that the products satisfy the claim limitations other than the “similar radii” limitation, including the required interlocking features and snap fit).

Aside from Osswald’s say-so, plaintiff’s sole evidence that the arcs “are shaped and sized to closely follow each other and snugly fit together” is an image showing an inverted cup and lid with threads cut away. This test fails for the simple reason that in cutting away the threads, Osswald cut away the arcs, leaving only the inboard portion of the arcs. Thus, nothing in the test shows how the shape and size of the *arcs* create a “snug fit.” If anything,

this image shows that a “snug fit” can occur *without* arcs, using only the claimed interlocking features that appear on the inboard side. On a related note, the “snug fit” plaintiff identifies (on the inboard side) is not the one I identified in the claims construction order as the apparent rationale for including “similar radii” as a separate limitation, which instead involved a “snug fit” between the *arcs*.

Plaintiff contends that it should be able to show that the products’ non-similar arcs are equivalent because their failure to be “similar” is a matter of degree. In other words, it would not “vitate” the “similar radii” limitation (and thereby run afoul of the “all limitations” rule) for a non-similar radii to be treated as though it were similar. I agree that in some circumstances radii that are not sufficiently similar may nonetheless be “equivalent,” especially if a “snug fit” can still be created along the arcs.

However, plaintiff wants to take its point to the next level, arguing that equivalence can be shown because the arcs on the accused product allow the cup’s interlocking features. That is nothing but a rehash of plaintiff’s proposed construction of “similar radii,” which would have ignored the fact that the claim requires both “similar radii” *and* “interlocking features.” The requirement that the radii of the arcs be “similar” must require more than that the interlocking features function because the two features are separate and independent limitations.

It may be that the accused product facilitates interlocking features by helping align

the lips. However, rather than use semi-circular arcs of similar radii as required by the patent, the accused products use arcs that are threaded to align the lips. In other words, 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. Therefore, plaintiff's doctrine of equivalence argument fails.

Because plaintiff has failed to show that the accused products include "semi-circular arcs of similar radii," either literally or by equivalence, plaintiff's motion for summary judgment will be denied and defendant's will be granted.

#### ORDER

IT IS ORDERED that:

1. Plaintiff Learning Curve Brands, Inc.'s motion for leave to amend its complaint, dkt. # 65, is GRANTED and dkt. #65-2, is ACCEPTED as the operative pleading.
2. Defendant Munchkin, Inc.'s motions to strike declarations and reports, dkts. ##68, 97 and 107, are DENIED as unnecessary.
3. Plaintiff's motion to strike a declaration, dkt. #135, defendant's motion for leave to file a reply brief in support of its motion to strike, dkt. #92, and plaintiff's motion for leave to file a reply brief in support of its motion to strike, dkt. #139, are DENIED as moot.
4. Plaintiff's motion for summary judgment, dkt. #75, is DENIED.

5. Defendant's motion for summary judgment, dkt. #67, is GRANTED.
6. The clerk of court is directed to enter judgment for defendant and close this case.

Entered this 29th day of September, 2010.

BY THE COURT:  
/s/  
BARBARA B. CRABB  
District Judge