

# United States Court of Appeals for the Federal Circuit

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**EDGEWELL PERSONAL CARE BRANDS, LLC,  
INTERNATIONAL REFILLS COMPANY, LTD.,**  
*Plaintiffs-Appellants*

v.

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

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2020-1203

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Appeal from the United States District Court for the Central District of California in No. 2:18-cv-03005-PSG-JPR, Judge Philip S. Gutierrez.

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OPINION ISSUED: March 9, 2021  
OPINION MODIFIED: May 26, 2021\*

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KIRK T. BRADLEY, Alston & Bird LLP, Charlotte, NC, argued for plaintiffs-appellants. Also represented by KEITH E. BROYLES, JAMES GRANT, JOSHUA MARK WEEKS, Atlanta, GA.

TRAVIS W. MCCALLON, Lathrop GPM LLP, Kansas City, MO, argued for defendant-appellee. Also represented by LUKE MERIWETHER.

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\* This opinion has been modified and reissued following a petition for rehearing filed by Appellee.

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Before MOORE, *Chief Judge*\*\*, NEWMAN and HUGHES,  
*Circuit Judges.*

MOORE, *Chief Judge*.

Edgewell Personal Care Brands, LLC, and International Refills Company, Ltd. (collectively, Edgewell) sued Munchkin, Inc. in the Central District of California for infringement of claims of U.S. Patent Nos. 8,899,420 and 6,974,029. Edgewell manufactures and sells the Diaper Genie, which is a diaper pail system that has two main components: (i) a pail for collection of soiled diapers; and (ii) a replaceable cassette that is placed inside the pail and forms a wrapper around the soiled diapers. The '420 patent and the '029 patent relate to alleged improvements in the cassette design. *See, e.g.*, '420 patent at 2:18–32; '029 patent at Abstract. As relevant to this appeal, Edgewell accused Munchkin's Second and Third Generation refill cassettes, which Munchkin marketed as being compatible with Edgewell's Diaper Genie-branded diaper pails, of infringement. J.A. 18474.

In February 2019, the district court issued a claim construction order, construing terms of both the '420 patent and the '029 patent. Based on those constructions, Edgewell continued to assert literal infringement of the '420 patent, but only asserted infringement under the doctrine of equivalents for the '029 patent. Munchkin moved for, and the district court granted, summary judgment of noninfringement of both patents. *See Edgewell Personal Care Brands, LLC v. Munchkin, Inc.*, No. 18-3005-PSG, 2019 WL 7165917 (C.D. Cal. Oct. 16, 2019) (*Summary Judgment Decision*). Edgewell appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1). For the reasons discussed below, we vacate-in-part, reverse-in-part, and remand.

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\*\* Chief Judge Moore assumed the position of Chief Judge on May 22, 2021.

## DISCUSSION

We review a district court’s grant of summary judgment under the law of the regional circuit, here, the Ninth Circuit. *Unwired Planet, LLC v. Apple Inc.*, 829 F.3d 1353, 1356 (Fed. Cir. 2016). The Ninth Circuit reviews a district court’s grant of summary judgment de novo. *Greater Yellowstone Coal. v. Lewis*, 628 F.3d 1143, 1148 (9th Cir. 2010). “[O]n appeal from a grant of summary judgment of non-infringement, we must determine whether, after resolving reasonable factual inferences in favor of the patentee, the district court correctly concluded that no reasonable jury could find infringement.” *Miken Composites, L.L.C. v. Wilson Sporting Goods Co.*, 515 F.3d 1331, 1336 (Fed. Cir. 2008).

### I. The ’420 Patent

The ’420 patent is directed to a cassette with a “clearance” located in a bottom portion of the cassette. See e.g., ’420 patent at Abstract. The written description contemplates that the cassette may be placed into a pail with an “interfering member” having “a shape that is complementary to that of the cassette 30 with the chamfer clearance.” *Id.* at 8:40–43. The claimed “clearance” thereby purportedly prevents users from installing the cassette upside down. *Id.* at 8:43–45. Claim 1 of the ’420 patent is illustrative and recites:

1. A cassette for packing at least one disposable object, comprising:

an annular receptacle including an annular wall delimiting a central opening of the annular receptacle, and a volume configured to receive an elongated tube of flexible material radially outward of the annular wall;  
a length of the elongated tube of flexible material disposed in an accumulated

condition in the volume of the annular receptacle; and

an annular opening at an upper end of the cassette for dispensing the elongated tube such that the elongated tube extends through the central opening of the annular receptacle to receive disposable objects in an end of the elongated tube,

wherein ***the annular receptacle includes a clearance in a bottom portion of the central opening***, the clearance extending continuously from the annular wall and radially outward of a downward projection of the annular wall, the clearance delimiting a portion of the volume having a reduced width relative to a portion of the volume above the clearance.

(emphasis added).

In its summary judgment order, the district court concluded that the parties “dispute[d] whether the term ‘clearance’ can cover circumstances where there is not actually space between a cassette” and another structure when the cassette is “normally positioned” in the pail. *Summary Judgment Decision*, 2019 WL 7165917, at \*7. There was no dispute that the cassette itself (when not installed in the pail) contained a clearance. Rather, the dispute focused on whether the claims required a clearance space between the annular wall defining the chamfer clearance and the pail itself when the cassette was installed. The district court determined that “clearance” required space after cassette installation and construed clearance as “the space around [interfering] members that remains (if there is any), not the space where the interfering member or cassette is itself located upon insertion.” *Id.* at \*8.

Based on that construction, the district court granted

Munchkin summary judgment of noninfringement of the '420 patent. The court concluded that there was no space between the cassette and the pail after the cassette was installed. *Id.* Edgewell challenges this determination on appeal, arguing that the district court erred in its summary judgment claim construction of "clearance." *Id.* at \*7.

As an initial matter, Munchkin argues that we cannot review the court's summary judgment claim construction because it is the same as the district court's original construction of "clearance," which Edgewell does not dispute on appeal. We do not agree. As the district court recognized, its summary judgment order resolved a further claim construction dispute between the parties, adding a limitation not present in the original construction. *Summary Judgment Decision*, 2019 WL 7165917, at \*7. The district court's original construction required only that the clearance prevent interference between the cassette and another structure; it did not require space between the cassette and the unclaimed structure after the cassette was installed. The district court's clarification that the "clearance" cannot be filled by an unclaimed interfering member, therefore, constitutes a separate claim construction subject to our review.

We review a district court's claim construction de novo except for underlying factual findings based on extrinsic evidence, which we review for clear error. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 321–22, 332 (2015). An apparatus claim is generally to be construed according to what the apparatus is, not what the apparatus does. *See Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1468 (Fed. Cir. 1990) ("apparatus claims cover what a device *is*, not what a device *does*" (emphases in original)). Thus, it is usually improper to construe non-functional claim terms in apparatus claims in a way that makes infringement or validity turn on the way an apparatus is later put to use. *See Paragon Sols., LLC v. Timex Corp.*, 566 F.3d 1075, 1091 (Fed. Cir. 2009) ("Construing a non-

functional term in an apparatus claim in a way that makes direct infringement turn on the use to which an accused apparatus is later put . . . is inconsistent with the notice function central to the patent system.”).

The parties do not dispute that the ’420 patent claims are directed only to a cassette. Therefore, absent an express limitation to the contrary, the term “clearance” should be construed as covering all uses of the claimed cassette. *See id.; see also Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 809 (Fed. Cir. 2002) (“a patent grants the right to exclude others from making, using, selling, offering to sale, or importing the claimed apparatus or composition for any use of that apparatus or composition”). The specification discloses multiple embodiments which discuss the cassette clearance. In one embodiment, “[i]t is observed that the movable portion 58 passes closely to the wall defining the chamfer clearance 41.” ’420 patent at 6:36–38. The term “passes closely” suggests that there would still be a space where the clearance is located even after the cassette is inserted into the pail. There are multiple other embodiments which suggest there would be no space after insertion (*i.e.*, that the clearance space would be filled by a complimentary structure in the pail itself). *See e.g.*, ’420 patent at 3:5–9 (“[T]he tubular wall tapers in a downward direction, and the annular body has a corresponding frustoconical outer periphery for complementary engagement of the cassette in the holder.”); 8:5–11 (“The tapered clearance 41’ is used in conjunction with a tapered flange 44’ in the holder 26 of the apparatus 10, as is clearly illustrated in FIG. 4 (*i.e.*, the flange 44’ defines an interference member of frustoconical shape). Accordingly, this complimentary shape ensures that the cassette 30’ is properly oriented in the holder 26, otherwise the funnel 25 could not be installed properly on the top of the bin 12.”); 8:40–45 (“[T]he holder 26 features an interfering member 70 that has a shape that is complementary to that of the cassette 30 with the chamfer clearance 41.”). In nearly all

of the disclosed embodiments, the specification suggests that the cassette clearance mates with a complimentary structure in the pail such that there is “engagement.” The specification, taken as a whole, does not support the district court’s construction which would preclude such engagement when the cassette is inserted into the pail. The purpose of the clearance in the bottom of the central opening in the cassette is “to ensure that the cassette 30 is properly installed in the holder 26 when the apparatus 10 is in use.” *Id.* at 5:14–15; *see also id.* at 6:38–44 (“If the chamfer clearance 41 were not provided, the cassette 30 would impede the movement of the movable portion 58. Accordingly, if the cassette 30 were installed upside down, the movable portion 58 would be prevented from moving along its path. Therefore, if a user person wants to use the cassette 30 properly, the cassette 30 must be oriented properly.”); 8:9–11 (“[T]his complimentary shape ensures that the cassette 30’ is properly oriented in the holder 26, otherwise the funnel 25 could not be installed properly on the top of the bin 12.”). The cassette has a clearance that will ensure proper insertion whether a space remains after insertion or not. We thus conclude that the district court erred by adding this limitation into its construction. The clearance limitation is satisfied when the cassette itself is constructed with a clearance. The claim does not require a clearance after insertion; in fact, such a requirement would be at odds with many of the disclosed embodiments and is simply not required by the claims.

Accordingly, we hold that the district court erred in construing the term “clearance” on summary judgment in a manner dependent on the way the claimed cassette is put to use in an unclaimed structure. *See Paragon Sols.*, 566 F.3d at 1091. Because we hold that the district court erred in its construction of the term “clearance,” we vacate the district court’s grant of summary judgment of noninfringement of the ’420 patent and remand.

## II. The '029 Patent

The '029 patent is directed to a cassette with a cover extending over pleated tubing housed therein. '029 patent at Abstract. The cover includes a "tear-off" section that, when torn-off, leaves a peripheral gap to allow access to the pleated tubing. *Id.* at 1:63–67. Claim 1 of the '029 patent is illustrative and recites:

1. A cassette for use in dispensing a pleated tubing comprising:

an annular body having a generally U shaped cross-section defined by an inner wall, an outer wall and a bottom wall joining a lower part of said inner and outer walls, said walls defining a housing in which the pleated tubing is packed in layered form;

an *annular cover extending over said housing; said cover having an inner portion extending downwardly and engaging an upper part of said inner wall of said body and a top portion extending over said housing; said top portion including a tear-off outwardly projecting section having an outer edge engaging an upper part of said outer wall of said annular body*; said tear-off section, when torn-off, leaving a peripheral gap to allow access and passage of said tubing therebetween; said downwardly projecting inner portion having an inclined annular area defining a funnel to assist in sliding said tubing when pulled through a central core defined by said inner wall of said body; and

cooperating inter-engagement means on said upper part of said body and on opposite edges of said cover to lock said cover to said body.

(emphasis added).

The district court construed “annular cover” as “a single, ring-shaped cover, including at least a top portion and an inner portion that are parts of the same structure.” J.A. 12. It construed “tear-off outwardly projecting section” as “a section initially formed as part of the same structure as the rest of the annular cover [and] which can be torn off” from the cover. J.A. 12–13. Lastly, it construed “engage”/“engaging” to mean “attach”/“attached to.” J.A. 13–14.

Munchkin’s accused Second and Third Generation cassettes each include a two-part cover. The accused annular cover of the Second Generation cassettes includes an inner piece of molded plastic and an outer piece of shrink wrap that is designed to be torn off by the user before installing the cassette. Munchkin’s Third Generation cassettes likewise include an inner piece of molded plastic but use a plastic “blister cap” instead of shrink wrap. Therefore, after the district court construed “annular cover” and “tear-off” section as being part of the same structure, Edgewell limited its infringement allegation of the ’029 patent to the doctrine of equivalents. In granting Munchkin summary judgment of noninfringement, the district court determined that no reasonable jury could find that Munchkin’s Second and Third Generation Cassettes satisfy the ’029 patent’s “annular cover” and “tear-off section” limitations under the doctrine of equivalents because that “would effectively vitiate the ‘tear-off section’ limitation.” *Summary Judgment Decision*, 2019 WL 7165917, at \*5. Edgewell challenges this determination on appeal, arguing that (1) the district court erred in construing the terms “annular cover,” “tear-off section,” and “engage” and that (2) even

under the district court’s constructions, the district court erred in holding that the doctrine of equivalents would vitiate the claim elements.

We hold that the district court correctly construed “annular cover” and “tear-off section” as part of a single structure. The claims recite “an annular cover” having “an inner portion” and a “top portion” that includes a tear-off “section.” *See, e.g.*, ’029 patent at claim 1. The plain language of the claims, therefore, supports construing the annular cover as a single-structure comprising multiple “portions” or “sections.” The written description likewise supports the court’s construction, describing the claimed cassette as having two parts: an “annular body” and an “annular cover.” *See id.* at 2:30–40, 51–56; *see also id.* at Fig. 1 (depicting the annular cover as a single structure). We see no error in the district court’s construction of “annular cover” and “tear-off section” as part of a single structure.

The district court also correctly construed “engage” to mean “attach.” The claims recite an “annular cover . . . having an inner portion extending downwardly and engaging an upper part of said inner wall of said body.” *Id.* at claim 1. As Edgewell acknowledges, the plain language of the claim requires more than mere contact; it requires at least meaningful contact or connection. Appellant’s Reply Br. 30. The written description likewise requires some form of attachment, describing the annular body as “lockingly engaged” or “snappingly engag[ed]” to the annular cover. ’029 patent at 3:36–40. We see no error in the district court’s construction of “engage” to mean “attach.”

We agree with Edgewell, however, that the district court erred in granting summary judgment of noninfringement of the ’029 patent under the doctrine of equivalents on the basis that the claimed “annular cover” and “tear-off” would be vitiated and rendered meaningless. *Summary Judgment Decision*, 2019 WL 7165917, at \*6. “Under the doctrine of equivalents, an infringement theory . . . fails if

it renders a claim limitation inconsequential or ineffective.” *Akzo Nobel Coatings, Inc. v. Dow Chem. Co.*, 811 F.3d 1334, 1342 (Fed. Cir. 2016). This vitiation doctrine ensures the application of the doctrine of equivalents does not “effectively eliminate [a claim] element in its entirety.” *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1997). Claim vitiation is a legal determination that “the evidence is such that no reasonable jury could determine two elements to be equivalent.” *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1356–57 (Fed. Cir. 2012); *see also UCB, Inc. v. Watson Labs. Inc.*, 927 F.3d 1272, 1283 (Fed. Cir. 2019) (Vitiation “is not an exception or threshold determination that forecloses resort to the doctrine of equivalents, but is instead a legal conclusion of a lack of equivalence based on the evidence presented and the theory of equivalence asserted.”). We review de novo a district court’s application of claim vitiation. *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1320–21 (Fed. Cir. 2003).

Although the district court correctly construed “annular cover” as being a single structure, the district court erred in concluding that Edgewell’s theory of infringement under the doctrine of equivalents vitiates or renders meaningless the “annular cover” claim element. Vitiation has its clearest application “where the accused device contain[s] the antithesis of the claimed structure.” *Planet Bingo, LLC v. GameTech Int’l, Inc.*, 472 F.3d 1338, 1345 (Fed. Cir. 2006). But as we explained in *Deere & Co.*, 703 F.3d at 1356–57, “[c]ourts should be cautious not to shortcut this inquiry by identifying a ‘binary’ choice in which an element is either present or ‘not present.’” *See also Cadence Pharms. Inc. v. Exela PharmaSci Inc.*, 780 F.3d 1364, 1372 (Fed. Cir. 2015) (“The determination of equivalence depends not on labels like ‘vitiation’ and ‘antithesis’ but on the proper assessment of the language of the claimed limitation and the substantiality of whatever relevant differences may exist in the accused structure.”).

Applying these concepts to the facts of this case, we conclude that the district court erred in evaluating this element as a binary choice between a single-component structure and a multi-component structure, rather than evaluating the evidence to determine whether a reasonable juror could find that the accused products perform substantially the same function, in substantially the same way, achieving substantially the same result as the claims. *See, e.g., Bio-Rad Labs., Inc. v. 10X Genomics, Inc.*, 967 F.3d 1353, 1368 (Fed. Cir. 2020) (limiting question of infringement under doctrine of equivalents to a “binary choice between ‘flourinated’ and ‘non-flourinated’ microchannels” was improper where a reasonable juror could have found negligibly-flourinated microchannel performed substantially the same function).

The element at issue is the claimed “annular cover.” Edgewell’s expert, Mr. Jobin, opined that the accused products’ annular covers perform the same function, in the same way, to achieve the same result as the claimed annular cover.<sup>1</sup> J.A. 2300–01 (discussing the Second Generation cassettes); J.A. 2316–17 (discussing the Third Generation cassettes). Specifically, he opined that the annular cover of Munchkin’s Second Generation cassettes provides the same function by extending over the housing of the pleated tubing while still providing a means of access thereto. J.A. 2300. He opined that it performs the function in the same way, as it “is comprised of a plastic portion that engages the inner wall [of the annular body], and shrink-wrap that engages the outer wall and may be torn-off.” J.A. 2301. He also opined that the result is the same because “when the shrink-wrap is torn off of the housing, a peripheral gap is

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<sup>1</sup> The expert opined that the accused cassettes perform the same function-way-result, even though the doctrine of equivalents analysis requires only that they be substantially the same.

exposed that allows the tubing to be accessed and withdrawn from the housing through the peripheral gap.” *Id.* This testimony, *see* J.A. 2300–01, sufficed to create a question of fact precluding summary judgment as to the annular cover and whether the shrink wrap engages the outer annular wall of the Second Generation cassettes.

Likewise, Mr. Jobin opined that the annular cover of Munchkin’s Third Generation cassettes performs the same function as the claimed annular cover because the accused cover “extends over the annular housing and retains the pleated tubing stored within, but still allows for access to the pleated tubing.” J.A. 2317. He opined that it performs the function in the same way, because it “is comprised of a plastic portion that engages the inner wall, and a blister cap that engages the outer wall and may be torn-off.” *Id.* He also opined that the function is the same because “when the blister cap is torn-off of the housing, a peripheral gap is exposed that allows the tubing to be accessed and withdrawn from the housing.” *Id.* Edgewell also presented Munchkin fact witness deposition testimony to support Mr. Jobin’s opinions. *See, e.g.,* J.A. 3464–65 (testimony that the blister cap and shrink wrap “keeps the consumer from touching it or pulling out the film” and that consumers “have to remove the packaging to access” the tubing); *see also* J.A. 2300–01 (Jobin Expert Report citing Munchkin fact witness deposition testimony); J.A. 2316–17 (same).

This detailed application of the function-way-result test, supported by deposition testimony from Munchkin employees, is sufficient to create a genuine issue of material fact for the jury to resolve and, therefore, is sufficient to preclude summary judgment of noninfringement under the doctrine of equivalents. Accordingly, we reverse the district court’s judgment of noninfringement of the ’029 patent and remand for further proceedings consistent with our opinion.

CONCLUSION

Because the district court based its grant of summary judgment of noninfringement of the '420 patent on an erroneous construction, we vacate that judgment and remand. Because the district court erred in granting Munchkin summary judgment of noninfringement of the '029 patent, we reverse that judgment and remand.

**VACATED-IN-PART, REVERSED-IN-PART, AND  
REMANDED**

COSTS

Costs to Edgewell.