

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

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**RING & PINION SERVICE INC.,**  
*Plaintiff-Appellee,*

v.

**ARB CORPORATION LTD.,**  
*Defendant-Appellant.*

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2013-1238

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Appeal from the United States District Court for the Western District of Washington in No. 09-CV-0586, Judge Ricardo S. Martinez.

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Decided: February 19, 2014

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LAWRENCE D. GRAHAM, Lowe Graham Jones, PLLC, of Seattle, Washington, argued for plaintiff-appellee.

BENJAMIN J. BYER, Davis Wright Tremaine LLP, of Seattle, Washington, argued for defendant-appellant. With him on the brief was STUART R. DUNWOODY.

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Before MOORE, CLEVINGER, and REYNA, *Circuit Judges.*

MOORE, *Circuit Judge*.

Defendant ARB Corporation Ltd. (ARB) appeals from the district court’s grant of summary judgment of non-infringement of U.S. Patent No. 5,591,098 (the ’098 patent) to Ring & Pinion Service, Inc. (R&P). Because the district court erred by improperly applying the doctrine of claim vitiation, we *reverse* and *remand* with instructions to enter judgment of infringement for ARB.

#### BACKGROUND

The invention claimed in the ’098 patent is an improved automobile locking differential. ’098 patent col. 1 l. 63–col. 2 l. 2. A differential is a mechanism that allows wheels to rotate at different speeds relative to each other. When locked, a locking differential distributes torque from the engine such that both wheels spin at the same rate. Claim 1 is representative:

A locking differential comprising  
a differential carrier . . . ,  
a locking means . . .

*cylinder means formed in* said differential carrier  
and housing an actuator position[ed] to cause  
movement of said locking means relative to said  
carrier . . . .

’098 patent claim 1 (emphasis added).

R&P sought declaratory judgment that its Ziplocker product did not infringe the ’098 patent. Following claim construction, the parties cross-moved for summary judgment. After briefing was complete, the parties jointly stipulated that there were “no issues of material fact regarding infringement under the doctrine of equivalents.” J.A. 260. The parties agreed that the Ziplocker product literally met every limitation of claim 1 except the “cylinder means formed in . . .” limitation, but that the

Ziplocker included an “equivalent” cylinder. *Id.* Moreover, the parties agreed that the cylinder in the Ziplocker “would have been foreseeable to a person having ordinary skill in the art at the time the application for the ’098 patent was filed.” *Id.*

The parties agreed that “should the Court hold . . . that foreseeability of an equivalent at the time of application prevents use of the doctrine of equivalents, . . . the accused differential *would not infringe* under the doctrine of equivalents.” *Id.* (emphasis added). In the alternative, they further agreed that “should the Court hold . . . that foreseeability at the time of application does *not* prevent use of the doctrine of equivalents, . . . the accused differential *would infringe* under the doctrine of equivalents.” *Id.* (emphasis added). Thus, the parties agreed that the outcome of the case would be determined by the resolution of a single legal issue: whether an equivalent is barred under the doctrine of equivalents because it was foreseeable at the time of the patent application. The district court entered an order approving the parties’ joint stipulation. Subsequently, the court requested that the parties submit additional briefing to address the all-limitations rule.

The court held that, while foreseeability did not preclude the application of the doctrine of equivalents, a finding of infringement under the doctrine of equivalents would vitiate the “cylinder means formed in . . .” limitation. Therefore, the court granted summary judgment of non-infringement to R&P. ARB appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

#### DISCUSSION

We review summary judgment decisions under regional circuit law. *Lexion Med., LLC v. Northgate Techs., Inc.*, 641 F.3d 1352, 1358 (Fed. Cir. 2011). The Ninth Circuit reviews the grant of summary judgment *de novo*.

*Greater Yellowstone Coal. v. Lewis*, 628 F.3d 1143, 1148 (9th Cir. 2010).

## I

In ruling on the parties' summary judgment motions, the district court held that "foreseeability at the time of [patent] drafting alone[] is not a formally recognized limitation on the doctrine of equivalents." *Ring & Pinion Serv. Inc. v. ARB Corp.*, No. 09-586, 2013 WL 414220, at \*7 (W.D. Wash. Feb. 1, 2013). R&P argues that the district court erred. Relying principally on *Sage Products, Inc. v. Devon Industries, Inc.*, 126 F.3d 1420 (Fed. Cir. 1997), R&P contends that we have found that the doctrine of equivalents does not apply to equivalents that were foreseeable at the time of the patent application. It argues in the alternative that the doctrine of equivalents has been found to exclude foreseeable equivalents under certain circumstances and that we should extend those exclusions to create a *per se* foreseeability bar to application of the doctrine.

We do not agree. There is not, nor has there ever been, a foreseeability limitation on the application of the doctrine of equivalents. It has long been clear that known interchangeability weighs in favor of finding infringement under the doctrine of equivalents. *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 36 (1997) ("The known interchangeability of substitutes for an element of a patent is one of the express objective factors . . . bearing upon whether the accused device is substantially the same as the patented invention."); *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 609 (1950) (holding that "whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was" is an "important factor" weighing in favor of equivalence); *Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc.*, 467 F.3d 1370, 1382 (Fed. Cir. 2006) (finding that "known

interchangeability” is a “factor to consider in a doctrine of equivalents analysis” that “aids the fact-finder in assessing the similarities and differences between a claimed and an accused element.”); *Interactive Pictures Corp. v. Infinite Pictures, Inc.*, 274 F.3d 1371, 1383 (Fed. Cir. 2001) (holding that “the known interchangeability test looks to the knowledge of a skilled artisan to see whether that artisan would contemplate the interchange as a design choice.”); *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1261 (Fed. Cir. 1989) (finding that “the substitution of an ingredient known to be an equivalent to that required by the claim presents a classic example for a finding of infringement under the doctrine of equivalents.”). Excluding equivalents that were foreseeable at the time of patenting would directly conflict with these holdings that “known interchangeability” supports infringement under the doctrine of equivalents. We conclude that the foreseeability of an equivalent at the time of patenting is not a bar to a finding of infringement under the doctrine of equivalents.

R&P’s reliance on *Sage Products* to argue that a general foreseeability bar to the doctrine of equivalents exists is misplaced. *Sage Products* held that claim vitiation, not foreseeability, prevented the application of the doctrine of equivalents in that case because its application “would have utterly written” express limitations “out of the claim.” *Overhead Door Corp. v. Chamberlain Grp., Inc.*, 194 F.3d 1261, 1271 (Fed. Cir. 1999) (citing 126 F.3d at 1423–25). “[B]ecause the scope of the claim” in *Sage Products* “was limited in a way that plainly and necessarily excluded a structural feature that was the opposite of the one recited in the claim, that different structure could not be brought within the scope of patent protection through the doctrine of equivalents.” *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1346 (Fed. Cir. 2001) (citing 126 F.3d at 1425). *Sage Products* did not create a foreseeability limitation on the

doctrine of equivalents, but instead held that a finding of infringement under the doctrine of equivalents would vitiate a claim limitation based on the facts of that case.

Relying on our holding in *Chiuminatta Concrete Concepts, Inc. v. Cardinal Industries, Inc.*, 145 F.3d 1303 (Fed. Cir. 1998), R&P argues that there is a foreseeability bar to the application of the doctrine of equivalents for means-plus-function limitations. R&P misstates the law. There is no such foreseeability limit on the doctrine of equivalents, nor did we create one in *Chiuminatta*.

In *Chiuminatta*, we explained that there are two differences between the equivalence determination made for literal infringement purposes under § 112(f) and a doctrine of equivalents determination for the same limitation: timing and function. 145 F.3d at 1310. Equivalence under section 112(f) is evaluated at the time of issuance. *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1320 (Fed. Cir. 1999). Equivalence under the doctrine of equivalents, in contrast, is evaluated at the time of infringement. *Id.* Hence, an after-arising technology, a technology that did not exist at the time of patenting, can be found to be an equivalent under the doctrine of equivalents even though it cannot be an equivalent under the literal infringement analysis of § 112(f). *Id.*

The second difference between literal infringement and doctrine of equivalents infringement under § 112(f) relates to the function of the element. For literal infringement, the accused structures must perform the function recited in the claim (identical function). The doctrine of equivalents covers accused structures that perform substantially the same function in substantially the same way with substantially the same results. The doctrine of equivalents thus covers structures with equivalent, but not identical, functions. This is true whether the accused equivalent was known at the time of patenting or later arising. As we explained in *Interactive Pic-*

*tures*, whether the accused structure “predates” the patent or is after-arising technology, the doctrine of equivalents applied to a means-plus-function clause requires only that equivalent structures perform substantially the same function. 274 F.3d at 1381–82. Where a finding of non-infringement under § 112(f) is based solely on the lack of identical *function*, it does not preclude a finding of equivalence under the doctrine of equivalents. *Id.* at 1382.

As we have explained in other cases, when the accused technology was known at the time of patenting and the functions are identical, the structural equivalence inquiry under § 112 and the structural equivalence portion of the doctrine of equivalents are coextensive. *Al-Site Corp.*, 174 F.3d at 1320 n.2 (holding that for pre-existing structures where the functions are identical “any analysis for equivalent *structure* under the doctrine of equivalents collapses into the [§ 112(f)] analysis.”) (emphasis added); see also *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1100 (Fed. Cir. 2008); *Frank’s Casing Crew & Rental Tools, Inc. v. Weatherford Int’l, Inc.*, 389 F.3d 1370, 1379 (Fed. Cir. 2004). Nothing in *Chiuminatta* or in any other case cited by R&P supports its assertion that there exists a foreseeability exception to the doctrine of equivalents that applies to means-plus-function or any other claim terms.

We agree with the district court that foreseeability does not create a bar to the application of the doctrine of equivalents. Given the joint stipulation, this conclusion should have resolved the case and the court should have entered a judgment of infringement pursuant to the stipulation.

## II

In its order, the district court concluded that finding that the accused cylinder design was equivalent to the recited “cylinder means formed in . . .” limitation would

vitiating the claim limitation as a matter of law, and thus granted R&P's motion for summary judgment of non-infringement. *Ring & Pinion*, 2013 WL 414220, at \*9–10. The court did not discuss the impact of the joint stipulation on its summary judgment ruling.

ARB argues that, once the district court determined that foreseeability does not prevent the application of the doctrine of equivalents, it should have enforced the parties' joint stipulation by entering the stipulated finding of infringement. It contends that the district court reviewed and entered the joint stipulation and that R&P is bound by it.

R&P counters that the district court properly did not give effect to the stipulation. It argues that ARB waived the argument that the stipulation should be enforced by failing to raise it in response to the court's request for supplemental briefing on the all-limitations rule. R&P further contends that, while it admitted that the accused structure was equivalent to the claimed structure, it did not concede the antecedent question of whether the doctrine of equivalents applied in this case.

As a preliminary matter, we find that ARB did not waive its argument that the joint stipulation should have been enforced by the court. The stipulation and the parties' briefing were sufficient to provide notice to R&P of the possible impact of the joint stipulation.

We further agree with ARB that the district court erred by failing to enforce the parties' stipulation. A stipulation of fact that is fairly entered into is controlling on the parties and the court is generally bound to enforce it. *See Am. Title Ins. Co. v. Lacelaw Corp.*, 861 F.2d 224, 226 (9th Cir. 1988). Here, the parties stipulated to equivalence, which is a question of fact, and agreed that there were no remaining issues of fact. *See Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1356 (Fed. Cir. 2012). The district court nonetheless held that a finding of infringe-



ment under the doctrine of equivalents would vitiate the “cylinder means formed in . . .” claim limitation. *Ring & Pinion*, 2013 WL 414220, at \*9–10. That was legal error.

Vitiation is “not an exception to the doctrine of equivalents, but instead a legal determination that the evidence is such that no reasonable jury could determine two elements to be equivalent.” *Deere*, 703 F.3d at 1356 (citation omitted); see *Charles Mach. Works, Inc. v. Vermeer Mfg. Co.*, 723 F.3d 1376, 1380 (Fed. Cir. 2013); *Brilliant Instruments, Inc. v. GuideTech, LLC*, 707 F.3d 1342, 1347 (Fed. Cir. 2013). The parties’ stipulation precludes the conclusion that the “cylinder means formed in . . .” limitation is vitiated because it states that the Ziplocker includes an equivalent to that limitation. J.A. 260. Thus, we hold that the court erred by failing to grant summary judgment of infringement to ARB under the doctrine of equivalents.

#### CONCLUSION

We have considered R&P’s remaining arguments and find them unpersuasive. We reverse the grant of summary judgment of non-infringement and remand with instructions to grant summary judgment of infringement to ARB.

**REVERSED AND REMANDED**