

United States Court of Appeals for the Federal Circuit

CLEARVALUE, INC. AND RICHARD ALAN HAASE,
Plaintiffs-Cross Appellants,

v.

**PEARL RIVER POLYMERS, INC., POLYCHEMIE,
INC.,
SNF, INC., POLYDYNE, INC., AND SNF HOLDING
COMPANY,**
Defendants-Appellants.

2011-1078, -1100

Appeals from the United States District Court for the Eastern District of Texas in case no. 06-CV-0197, Judge Leonard Davis.

Decided: February 17, 2012

ARNOLD A. VICKERY, Vickery, Waldner & Mallia, LLP, of Houston, Texas, argued for plaintiffs-cross appellants. With him on the brief was EARL L. VICKERY, of Austin, Texas.

JOHN T. GALLAGHER, Dickstein Shapiro, LLP, of New York, New York, argued for defendants-appellants. With him on the brief were GARY M. HOFFMAN and ROBERT L.

KINDER, of Washington, DC. Of counsel on the brief were ANDY TINDEL, Provost Umphrey Law Firm, LLP, of Tyler, Texas; and HOWARD L. CLOSE and R. RUSSELL HOLLENBECK, Wright & Close, LLP, of Houston, Texas.

Before PROST, SCHALL, and MOORE, *Circuit Judges*.

MOORE, *Circuit Judge*.

ClearValue, Inc. and Richard Alan Haase (collectively, ClearValue) accused Pearl River Polymers, Inc., et al. (collectively, Pearl River) of indirectly infringing U.S. patent no. 6,120,690 ('690 patent). After a jury found that the '690 patent was valid and indirectly infringed, the district court denied Pearl River's motions for judgment as a matter of law (JMOL) of invalidity and noninfringement. J.A. 5-37. Because the jury's verdict that the '690 patent was not invalid under 35 U.S.C. § 102 was not supported by substantial evidence, we *reverse* the denial of the motion for JMOL of invalidity.

Cross-Appellant ClearValue appeals the district court's grant of JMOL that Pearl River did not misappropriate ClearValue's Trade Secret #1. Because we agree with the district court that the jury verdict was not supported by substantial evidence, we *affirm*.

BACKGROUND

The '690 patent is directed to a process for clarifying low alkalinity water using a blend of a high molecular weight quaternized polymer (e.g., DADMAC) and an aluminum polymer. '690 patent col.16 ll.15-32. Claim 1, the only claim at issue on appeal, reads:

A process for clarification of water of *raw alkalinity less than or equal to 50 ppm* by chemical treatment, said process comprising:

adding to the water and, prior to or after adding to the water, blending at least one aluminum polymer with a high molecular weight quaternized ammonium polymer in an amount sufficient to form a flocculated suspension in the water and to remove turbidity from the water, said high molecular weight quaternized ammonium polymer comprising at least an effective amount of

high molecular weight di-allyl di-methyl ammonium chloride (DADMAC) having a molecular weight of at least approximately 1,000,000 to approximately 3,000,000 and

said aluminum polymer including at least an effective amount of poly-aluminum hydroxychloride [ACH] of a basicity equal to or greater than 50%.

'690 patent cl.1 (emphasis added).

ClearValue alleged that Pearl River indirectly infringed claim 1 by selling high molecular weight DADMAC polymers, which customers allegedly used in combination with aluminum polymers to clarify water with alkalinity below 50 ppm. A jury found Pearl River liable for both induced and contributory infringement of claim 1, and the district court denied Pearl River's JMOL of noninfringement. Pearl River also filed a motion for JMOL of invalidity, in which it argued that the '690 patent was anticipated by U.S. patent no. 4,800,039 (Hassick). The district court denied JMOL based on ClearValue's expert testimony that Hassick "teaches away" from claim 1, which the district court held was

“more than sufficient to support the jury’s finding of no anticipation or obviousness.” J.A. 20-21.

ClearValue also alleged that Pearl River misappropriated its trade secrets, including Trade Secret #1, which covers a clarification process similar to the one in claim 1. ClearValue claims that it confidentially disclosed this trade secret to Pearl River pursuant to a business relationship between the companies, and that Pearl River subsequently misappropriated the trade secret by using it to further its own water clarification business. ClearValue argued that it kept this process secret until the ’690 patent issued. The jury found that Pearl River had misappropriated ClearValue’s trade secrets. The district court, however, found no evidence to support the jury’s determination that Trade Secret #1 was actually a trade secret. In particular, the district court held that Hassick disclosed every element of Trade Secret #1 before any alleged misappropriation by Pearl River. J.A. 11. The court thus granted Pearl River’s motion for JMOL of no trade secret misappropriation.

Pearl River now appeals the district court’s denial of its motions for JMOL of invalidity and noninfringement. ClearValue cross-appeals the grant of JMOL of no trade secret misappropriation. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

We review the grant or denial of a motion for JMOL under the law of the regional circuit. *Summit Tech., Inc. v. Nidek Co.*, 363 F.3d 1219, 1223 (Fed. Cir. 2004). The Fifth Circuit reviews the grant or denial of JMOL *de novo*. *Med. Care Am., Inc. v. Nat’l Union Fire Ins. Co.*, 341 F.3d 415, 420 (5th Cir. 2003). “If there is substantial evidence opposed to [JMOL] . . . [it] should be denied.” *Id.* (citation omitted). We have interpreted the Fifth Circuit’s stan-

dard to mean that the jury's determination must be supported by substantial evidence. *ACCO Brands, Inc. v. ABA Locks Mfrs. Co.*, 501 F.3d 1307, 1312 (Fed. Cir. 2007). Anticipation under 35 U.S.C. § 102 is a question of fact, which we review for substantial evidence. *z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1347 (Fed. Cir. 2007).

I. Invalidity

As a preliminary matter, ClearValue argues that Pearl River waived its invalidity defenses on appeal by including them in its motion under Fed. R. Civ. P. 50(b) but not in its Fed. R. Civ. P. 50(a) motion. We apply the law of the regional circuit to decide waiver of an issue not raised in a Rule 50(a) motion. *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1203 (Fed. Cir. 2010). In the Fifth Circuit, when a party fails to make a Rule 50(a) motion, but brings a Rule 50(b) motion, the non-moving party may only raise waiver on appeal if it also did so in opposing the Rule 50(b) motion. *Arsement v. Spinnaker Exploration Co.*, 400 F.3d 238, 247 (5th Cir. 2005). ClearValue's opposition to Pearl River's Rule 50(b) motion did not raise waiver. J.A. 6333-38. As a result, we hold that ClearValue cannot argue waiver on appeal and that Pearl River is not barred from presenting its invalidity arguments.

The district court denied Pearl River's motion for JMOL of invalidity based on anticipation and obviousness because it concluded that Hassick "teaches away" from the true inventiveness of the '690 patent." J.A. 20. The court relied on testimony by ClearValue's expert that it would not have been obvious to one of ordinary skill to clarify water using ACH with high molecular weight DADMAC because Hassick shows this combination does not work well. *Id.* The district court held that this was

sufficient evidence to support the jury's finding of no anticipation or obviousness based on Hassick. *Id.* at 20-21. Although this alleged teaching away would be relevant to an obviousness analysis, "whether a reference 'teaches away' from [an] invention is inapplicable to an anticipation analysis." *Celeritas Techs., Ltd. v. Rockwell Int'l Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998) (citation omitted). The district court thus erred by holding that this testimony was substantial evidence supporting the jury's verdict of no anticipation.

To anticipate a patent claim under 35 U.S.C. § 102, "a reference must describe . . . each and every claim limitation and enable one of skill in the art to practice an embodiment of the claimed invention without undue experimentation." *Am. Calcar, Inc. v. Am. Honda Motor Corp.*, 651 F.3d 1318, 1341 (Fed. Cir. 2011) (citing *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009)). On appeal, Pearl River argues that the jury's verdict was not supported by substantial evidence because Hassick teaches each and every limitation of claim 1 of the '690 patent.

Claim 1 is directed to "A process for clarification of water of *raw alkalinity less than or equal to 50 ppm.*" '690 patent cl. 1 (emphasis added). ClearValue concedes that Hassick teaches every limitation of claim 1.¹ ClearValue argues, however, that substantial evidence supported the jury's verdict of no anticipation because Hassick's disclo-

¹ Hassick teaches that a combination of high molecular weight DADMAC polymer with ACH "synergistically reduce[s] turbidity in aqueous systems, particularly low-turbidity . . . low-alkalinity systems (i.e., 150 ppm or less)." Hassick col.3 ll.2-6; *see also* Hassick col.2 ll.53-65. Example 15 of Hassick teaches using a blend of ACH and DADMAC with a molecular weight between 1-2 million to clarify water with alkalinity of between 60-70 ppm. *Id.* col.4 l.5-col.5 l.29.

sure of clarifying water with alkalinity of 150 ppm or less is too broad to anticipate the 50 ppm limitation of claim 1. Cross-Appellant's Br. 36. In support of its argument, ClearValue cites our opinion in *Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991 (Fed. Cir. 2006).

ClearValue's reliance on *Atofina* is misplaced. The patent at issue in *Atofina* claims a method of synthesizing difluoromethane at a temperature between 330-450 °C. U.S. patent no. 5,900,514 col.3 ll.61-62 ('514 patent); see also *Atofina*, 441 F.3d at 993. The patent states that "only a narrow temperature range enables" the process to operate as claimed, and that problems occur when operating the reaction either below 330 °C or above 400 °C. '514 patent col.3 ll.23-29. For these reasons, the patent in *Atofina* taught that the claimed reaction "must be carried out at a temperature of between 330° C and 450° C," and more preferably at a temperature between 350-400 °C. *Id.* col.3 ll.61-65. During the prosecution of the *Atofina* patent, *Atofina* described this temperature range as "critical." *Atofina*, J.A. 1304, 1312. *Atofina* also noted during prosecution that the patent's comparative example 1 "shows that a temperature of 300°C does not allow" the synthesis reaction to operate as claimed. *Atofina*, J.A. 1306, 1311-12. By contrast, the prior art in *Atofina* disclosed a broad temperature range of 100-500 °C. *Atofina*, 441 F.3d at 999.

In *Atofina*, we held that the "considerable difference between the claimed [temperature] range and the range in the prior art" precluded a finding of anticipation. 441 F.3d at 999. We explained that the prior art's teaching of a broad genus (i.e., broad temperature range) does not disclose every species within that genus. *Id.* In *Atofina*, the evidence showed that one of ordinary skill would have expected the synthesis process to operate differently outside the claimed temperature range, which the pat-

entee described as “critical” to enable the process to operate effectively. *Id.*; see also ’514 patent col.3 ll.23-29. Based on this “considerable difference” between the prior art’s broad disclosure and the “critical” temperature range claimed in the patent, we held that “no reasonable fact finder could conclude that the prior art describes the claimed range with sufficient specificity to anticipate this limitation of the claim.” *Atofina*, 441 F.3d at 999.

This case is not *Atofina*. ClearValue has not argued that the 50 ppm limitation in claim 1 is “critical,” or that the claimed method works differently at different points within the prior art range of 150 ppm or less. Nor does ClearValue argue that the Hassick reference fails to teach one of ordinary skill in the art how to use the claimed invention, i.e., that Hassick is not enabled to the extent required to practice claim 1 of the ’690 patent. Hassick discloses the exact process claimed and explains that the chemical treatment can be used for clarification of water with 150 ppm or less. Hassick col.2 l.53-col.3 l.6. Moreover, Hassick gives examples, including one with water with “a total alkalinity of 60-70 ppm.” *Id.* col.4 l.40-col.5 l.29. Certainly if this example had been at 50 ppm there would be no dispute but that Hassick anticipates. To be clear, it is not this example at 60-70 ppm that anticipates because 60-70 ppm is not 50 ppm or less as the claim requires. But rather the disclosure that this chemical process works for systems with 150 ppm or less is what anticipates. The disclosure of 150 ppm or less is a genus disclosure as in *Atofina*. But unlike *Atofina* where there was a broad genus and evidence that different portions of the broad range would work differently, here, there is no allegation of criticality or any evidence demonstrating any difference across the range. In fact, the example in Hassick at 60-70 ppm supports the fact that the disclosure of 150 ppm or less does teach one of skill in the art how to

make and use the process at 50 ppm. Unlike *Atofina*, here there is no “considerable difference between the claimed range and the range in the prior art.” See 441 F.3d at 999. Hassick teaches one of ordinary skill to use a high molecular weight DADMAC in combination with ACH to synergistically clarify water with alkalinity of 150 ppm or less. Hassick col.2 1.53-col.3 1.6. Hassick thus teaches and enables each and every element of claim 1. For these reasons, we find that the jury lacked substantial evidence to find Hassick did not anticipate that claim 1. We thus reverse the district court’s denial of Pearl River’s JMOL of invalidity.

Because we reverse the district court’s denial of JMOL on this basis, we need not reach Pearl River’s other arguments in support of JMOL of invalidity or the denial of its motion for JMOL of noninfringement. Because the parties did not argue that anticipation by Hassick depends on the construction of the disputed claim term “molecular weight,” we also need not address the parties’ claim construction arguments.

II. Trade Secret Misappropriation

ClearValue cross-appeals the district court’s grant of Pearl River’s motion for JMOL that it did not misappropriate Trade Secret #1, which was presented to the jury as the “use [of] a combination of a high molecular weight organic polymers, specifically DADMACs or Epi-DMA, and aluminum chlorohydrate, ACH, to clarify water.” J.A. 1549. The district court granted JMOL because it found no evidence to support the jury’s finding that Trade Secret #1 was, in fact, a trade secret. J.A. 11. In particular, the district court found that the Hassick reference publicly disclosed the elements of Trade Secret #1 before the alleged misappropriation by Pearl River. *Id.* The district court rejected ClearValue’s argument that Has-

sick “teaches away” from Trade Secret #1, and found implicit in ClearValue’s argument an admission that Hassick discloses the elements of the alleged trade secret. J.A. 10.

On appeal ClearValue argues that Hassick does not publicly disclose Trade Secret #1 because it does not teach that a combination of ACH and high molecular weight DADMAC is *effective* at clarifying low alkalinity water. Cross-Appellant’s Br. 62-64. Pearl River argues that the district court correctly granted JMOL because Hassick publicly disclosed Trade Secret #1. Pearl River asserts that Trade Secret #1, as presented to the jury, contained no “effectiveness” requirement and that ClearValue admitted that Hassick disclosed the elements of the trade secret. Pearl River further argues that Hassick teaches that a blend of ACH and high molecular weight DADMAC polymer is *effective* at clarifying low-alkalinity water.

We agree with the district court that Hassick publicly disclosed Trade Secret #1 before ClearValue communicated the alleged secret to Pearl River, and thus that the jury’s verdict of trade secret misappropriation was not supported by substantial evidence. As presented to the jury, the alleged trade secret contained no effectiveness requirement. Regardless, Hassick teaches that a blend of ACH and high molecular weight DADMAC is “especially effective in low turbidity, low-alkalinity waters.” Hassick col.2 ll.9-13; *see also* Hassick col.3 ll.30-31. We thus affirm the district court’s grant of Pearl River’s motion for JMOL that it did not misappropriate Trade Secret #1.

REVERSED-IN-PART, AFFIRMED-IN-PART