

United States Court of Appeals for the Federal Circuit

FMC CORPORATION,
Plaintiff-Appellee

v.

SHARDA USA, LLC,
Defendant-Appellant

2024-2335

Appeal from the United States District Court for the Eastern District of Pennsylvania in No. 2:24-cv-02419-MRP, Judge Mia Roberts Perez.

Decided: August 1, 2025

LUCAS M. WALKER, MoloLamken LLP, Washington, DC, argued for plaintiff-appellee. Also represented by JENNIFER ELIZABETH FISCHER, KAYVON GHAYOUMI, WALTER H. HAWES, IV, JEFFREY A. LAMKEN; BENOIT QUARMBY, New York, NY.

MIRCEA TIPESCU, Benesch, Friedlander, Coplan & Aronoff LLP, Chicago, IL, argued for defendant-appellant. Also represented by MANISH MEHTA, TARA MYTHRI RAGHAVAN.

Before MOORE, *Chief Judge*, CHEN, *Circuit Judge*, and
BARNETT, *Judge*.¹

CHEN, *Circuit Judge*.

Sharda USA, LLC (Sharda) appeals from a preliminary injunction order, barring it from importing, marketing, selling, or distributing its accused product. J.A. 1–2; *see FMC Corp. v. Sharda USA LLC*, No. 24-cv-02419, 2024 WL 3361604 (E.D. Pa. July 10, 2024) (*First Memorandum*); *FMC Corp. v. Sharda USA LLC*, No. 24-cv-02419, 2024 WL 3850811 (E.D. Pa. Aug. 16, 2024) (*Second Memorandum*). For the reasons explained below, we *vacate* and *remand*.

BACKGROUND

FMC owns U.S. Patent Nos. 9,107,416 ('416 patent) and 9,596,857 ('857 patent) (collectively, asserted patents). The asserted patents claim the benefit of U.S. Provisional Application No. 60/752,979 ('979 provisional application).

The asserted patents,² titled “Insecticidal and Miticidal Mixtures of Bifenthrin and Cyano-Pyrethroids,” relate to insecticides and miticides. '416 patent at Abstract. They propose “novel insecticidal compositions comprising bifenthrin and a cyano-pyrethroid” that purportedly “exhibit unexpected insecticidal activity.” *Id.* col. 1 ll. 11–13. Independent claim 1, representative for the purposes of this appeal, recites:

1. A miticidal composition comprising bifenthrin and a cyano-pyrethroid selected from the group consisting of deltamethrin, cyfluthrin, alpha-cypermethrin, zeta-cypermethrin, lambda-cyhalothrin,

¹ Honorable Mark A. Barnett, Chief Judge, United States Court of International Trade, sitting by designation.

² The asserted patents share a common specification. We cite to the specification of the '416 patent as exemplary of both patents.

and esfenvalerate, wherein the weight ratio of bifenthrin to cyano-pyrethroid is from 10:1 to 1:30.

'416 patent at claim 1.

Sharda sells WINNER, an insecticide containing bifenthrin and zeta-cypermethrin (a cyano-pyrethroid). J.A. 1. FMC brought suit against Sharda for patent infringement, asserting both the '416 and '857 patents. FMC initially moved for both a temporary restraining order and a preliminary injunction, which the district court denied for reasons unrelated to this appeal. *First Memorandum*, 2024 WL 3361604, at *1; J.A. 169–71.

But of importance, in its memorandum denying FMC's motion, the district court issued a claim construction of "composition." *First Memorandum*, 2024 WL 3361604, at *3–4. Rather than adopting the term's plain and ordinary meaning, which Sharda argued for, the district court construed "composition" as limited to "stable compositions, rather than the well-known unstable compositions that produce ineffective results as discussed throughout the prosecution history." *Id.* at *4.

To support this construction, the district court relied on statements about physical stability in the '979 provisional application. As the district court noted, the '979 provisional observed that "[a] problem in the art of formulating bifenthrin and zeta-cypermethrin is in successfully achieving physical stability of a water-diluted mixture of the formulation over significant periods of time," and that "[p]hysical stability is most important in this type of formulation to ensure the small amounts of the insecticides are fully effective." *Id.* (first alteration in original) (quoting J.A. 870). The district court also relied on disclosures in U.S. Patent No. 8,153,145 ('145 patent), another patent owned by FMC which also claims the benefit of the '979 provisional application. Here too, the district court relied on express disclosures about physical stability. *See, e.g., id.* ("[T]he '145 Patent explained that '[t]he novel

formulations of the present invention are superior in maintaining the physical stability of a mixture of bifenthrin and zeta-cypermethrin in dilution stability tests when compared to the control dilution stability test.” (second alteration in original) (quoting ’145 patent col. 7 ll. 29–32)). The district court, however, did not acknowledge that such disclosures about physical stability, though present in the ’979 provisional application and the ’145 patent, did not exist in the asserted patents.

Shortly thereafter, FMC renewed its motion for a temporary restraining order. The district court first rejected Sharda’s invalidity defense based on anticipation over McKenzie, a prior art reference.³ *Second Memorandum*, 2024 WL 3850811, at *3–4. According to the district court, McKenzie disclosed only *unstable* compositions, which fell outside “composition” as construed. *Id.* at *3. The district court then rejected Sharda’s obviousness arguments “for similar reasons as the anticipation argument.” *Id.* at *4. The district court separately noted that, during prosecution of the asserted patents, “the patented compositions overcame obviousness arguments due to their unexpected superior performance.” *Id.* And in response to Sharda’s written description and indefiniteness challenges under 35 U.S.C. § 112, the district court found that the common specification discloses “the ‘unexpected insecticidal activity’ achieved by the patented compositions,” which sufficed to provide adequate disclosure of stable compositions and reasonable certainty as to the scope of the claimed invention. *Id.* at *5 (citations omitted).

The district court issued the temporary restraining order, which automatically converted into a preliminary injunction order after 14 days elapsed. J.A. 1–2; *see* Fed. R. Civ. P. 65(b)(2). Sharda appeals the district court’s order,

³ McKenzie, a 1996 article, discusses the performance of various pesticide mixtures. J.A. 311–18.

arguing that the district court’s construction of “composition” was erroneous, and thus, so too was the district court’s conclusion that Sharda had not raised a substantial invalidity challenge under anticipation or obviousness. We have jurisdiction under 28 U.S.C. § 1292(c)(1); *see also id.* § 1295(a)(1).

DISCUSSION

We review the grant or denial of a preliminary injunction under the law of the regional circuit, here the Third Circuit. *Natera, Inc. v. NeoGenomics Lab’ys, Inc.*, 106 F.4th 1369, 1374 (Fed. Cir. 2024). “However, the Federal Circuit has itself built a body of precedent applying the general preliminary injunction considerations to a large number of factually variant patent cases, and gives dominant effect to Federal Circuit precedent insofar as it reflects considerations specific to patent issues.” *Id.* at 1375 (quoting *Murata Mach. USA v. Daifuku Co.*, 830 F.3d 1357, 1363 (Fed. Cir. 2016)). Both the Third Circuit and the Federal Circuit review the district court’s decision to grant or deny a preliminary injunction for an abuse of discretion. *Id.*; *Ferring Pharms., Inc. v. Watson Pharms., Inc.*, 765 F.3d 205, 210 (3d Cir. 2014). An abuse of discretion may arise when the district court made a clear error of judgment in weighing relevant factors, exercised its discretion based upon an error of law, or exercised its discretion based upon clearly erroneous factual findings. *Natera*, 106 F.4th at 1375.

We begin with Sharda’s challenge to the district court’s construction of “composition,” before turning to Sharda’s invalidity defenses.

I. Claim Construction

“We review claim construction based on intrinsic evidence de novo and review any findings of fact regarding extrinsic evidence for clear error.” *SpeedTrack, Inc. v. Amazon.com*, 998 F.3d 1373, 1378 (Fed. Cir. 2021). We

generally give claim terms their plain and ordinary meaning, which is the meaning that a skilled artisan would ascribe when reading the term in context of the claim, specification, and prosecution history. *Kyocera Senco Indus. Tools Inc. v. ITC*, 22 F.4th 1369, 1378 (Fed. Cir. 2022).

The district court construed “composition” to mean *stable* compositions only, relying primarily on disclosures stressing stability within the ’979 provisional application and the related ’145 patent. *First Memorandum*, 2024 WL 3361604, at *4. The district court also relied on references to “unexpected insecticidal activity” in the shared specification of the asserted patents. *Id.*

Sharda contends that, although the ’979 provisional application and ’145 patent contain various teachings about stability and stable compositions, the common specification of the asserted patents omits every such disclosure. That is, the patent applications that matured into the asserted patents did not simply carry over and maintain the same specification from the earlier-filed ’979 provisional application; instead, FMC chose to alter the asserted patents’ written description by deleting every single one of the many references contained in the ’979 provisional application to stability and stable compositions. And therefore, according to Sharda, the district court impermissibly grafted a stability requirement onto “composition” as used in the claims of the asserted patents. We agree.

We begin with the ’979 provisional application. As FMC notes, it contains several references to “stability.” *See, e.g.*, J.A. 870 (“However, a problem in the art of formulating bifenthrin and zeta-cypermethrin is in successfully achieving physical stability of a water-diluted mixture of the formulation over significant periods of time.”); *id.* (“Mixtures containing two or more insecticide compositions have been practiced in the art, but problems with the physical stability of such mixtures in water have caused application and efficacy issues.”); *id.* at 873 (“An acid is used to

buffer the formulation in order to stabilize the zeta-cypermethrin from epimerizing to less active isomers.”); *id.* at 876 (“Dilution stability studies were conducted using 2.5 mL of the formulation added to 47.5 mL of water with 342 ppm hardness in a 50 mL Nessler tube.”). But none of those stability statements made it into the asserted patents; FMC culled all such references from the common specification. Neither “stable” nor “stability,” nor any variation thereof, appear anywhere in the common specification.

Under the circumstances, we see little difference between this case and *DDR Holdings, LLC v. Priceline.com LLC*, 122 F.4th 911 (Fed. Cir. 2024). In *DDR*, the provisional application defined “merchants,” in relevant part, as “producers, manufacturers, and select distributors of *products or services*.” *Id.* at 915 (citation omitted). But the patent-at-issue defined “merchants” as “the producers, distributors, or resellers of the *goods*.” *Id.* at 915–16 (citation omitted). “Notably missing from the patent’s specification, however, [was] any mention of *services* in relation to merchants.” *Id.* at 916. We found that deletion of “services” “highly significant,” explaining that a skilled artisan would understand that “progression between the provisional application and the patent specification to indicate an evolution of the applicant’s intended meaning of the claim term.” *Id.*

So too here. The ’979 provisional application contains several disclosures about stable compounds, yet none appear in the asserted patents. A skilled artisan would find that evolution meaningful: every textual reference in the provisional application that a skilled artisan might reasonably have relied upon for interpreting “composition” as covering only stable compounds was removed from the asserted patents. A skilled artisan, in light of such deletions in the prosecution history, would not understand “composition” as claimed in the asserted patents to cover only stable formulations. *See MPHJ Tech. Invs., LLC v. Ricoh Ams. Corp.*, 847 F.3d 1363, 1369 (Fed. Cir. 2017) (“In

this case, it is the deletion from the . . . [p]rovisional application that contributes understanding of the intended scope of the final application.”); *Finjan LLC v. ESET, LLC*, 51 F.4th 1377, 1383 (Fed. Cir. 2022) (“The use of a restrictive term in an earlier application does not reinstate that term in a later patent that purposely deletes the term, even if the earlier patent is incorporated by reference.”).

FMC attempts to distinguish *DDR*, arguing that it applies only where the progression between a provisional application and the patent-at-issue *narrows* the meaning of a claim term. Here, according to FMC, the progression is different because, if considered, it would *broaden* the scope of “composition” to also include unstable compositions. But our reasoning in *DDR* did not turn on whether the deletions there would narrow or broaden the claim scope. See *DDR*, 122 F.4th at 915–17. Rather, our holding turned on the existence of meaningful alterations the patent owner made between the content of the provisional application and the patent-at-issue. And here, as explained above, FMC amended the common specification of the asserted patents, deleting every reference to the terms “stable,” “stability,” and variations thereof. The ’979 provisional application, accordingly, cannot limit “composition” in the asserted patents to only stable compositions.

The district court’s reliance on the related ’145 patent suffers from a similar problem. Unlike the common specification of the asserted patents, FMC’s ’145 patent specification maintained the ’979 provisional application’s several disclosures of stable compounds. See, e.g., ’145 patent col. 1 ll. 10–13 (“In particular, the invention relates to novel insecticidal compositions comprising bifenthrin and enriched cypermethrin that are physically stable when diluted with water.”); *id.* col. 1 ll. 55–58 (“The present invention is directed to novel insecticidal compositions comprising bifenthrin and enriched cypermethrin in an insecticidal formulation having significantly improved physical stability when the composition is diluted in water.”).

According to the district court, because “composition” as claimed in the ’145 patent seemed to cover only stable compositions, “composition” in the asserted patents should be similarly limited.

We disagree. It is true we typically interpret a claim term consistently across a patent family when the patents “derive from the same parent application.” *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1316 (Fed. Cir. 2015). But that principle does not hold true when the patent owner, like FMC here, materially alters the specification of some of the members of the patent family in a manner that directs a skilled artisan to interpret the claim term differently. So even if “composition” as claimed in the ’145 patent covers only stable compositions—a premise we express no view on—the district court erred by transferring that construction to “composition” as claimed in the asserted patents.

FMC additionally contends that the asserted patents’ references to “homogeneous” compositions and “unexpected insecticidal activity” mandate a stability requirement for “composition.” We disagree.

FMC, for starters, provides no persuasive reason for why “homogeneous,” as used in the common specification of the asserted patents, means “stable.” FMC asserts that a “homogeneous” composition means one that has not physically separated. *See* Appellee’s Br. 38. But the asserted patents do not mention, let alone even discuss, physical separation.

Moreover, we find it particularly problematic to equate “homogeneous” with “stable” given the prosecution history. The ’979 provisional application expressly mentions “homogeneous” and physical “phase separation,” but in different sections corresponding to different teachings, with no suggestion that the two phrases relate to one another. *Compare* J.A. 875 (“Upon completion of the addition, the agitation was continued for 10 minutes to obtain a

yellowish homogeneous solution.”), *with* J.A. 870 (“When traditional insecticidal compositions are combined, the combined components (surfactants, viscosity modifiers, wetting agents) of both may cause accelerated physical degradation (phase separation) of the mixture when diluted in low to moderately hard water.”).

FMC’s reliance on the “unexpected insecticidal activity” fares no better. According to FMC, compositions exhibiting “unexpected insecticidal activity” means that the compositions possessed “unexpected effectiveness,” which in turn implies that the compositions were stable. Appellee’s Br. 39. FMC’s attempt to indirectly equate “activity” with “stability” runs into two problems.

First, the common specification suggests that “insecticidal activity” has a different meaning from “stability.” The asserted patents discuss insecticidal activity in context of how many total insects a composition can kill. *See, e.g.*, ’416 patent col. 6 ll. 24–27 (measuring insecticidal activity as a percentage “derived from the total number of dead insects (TD) compared to the total number of insects (TI) in the test . . .”). In contrast, although the common specification does not discuss stability, the ’979 provisional application indicates that stability refers to the ability of a composition to not physically separate into different phases over “significant periods of time.” J.A. 870. Insecticidal activity and stability, therefore, describe different properties of the claimed compositions.

Second, the prosecution history further militates against FMC’s attempt to equate “insecticidal activity” with “stability.” The ’979 provisional application itself uses “insecticidal activity” and “stability” in different contexts, suggesting that the terms carry different meanings. *Compare, e.g.*, J.A. 870 (discussing “stability” in context of phase separation), *with* J.A. 872 (discussing “insecticidal activity” in context of the kinds of insects killed). But FMC has not explained why that distinction between “stability”

and “insecticidal activity” in the ’979 provisional application no longer applies in the asserted patents.

We thus hold that the district court erred by imposing a stability requirement onto the term “composition” as recited in the claims of the asserted patents. On remand, the district court should instead give “composition” its plain and ordinary meaning.⁴

II. Anticipation

With the correct claim construction in mind, we turn to Sharda’s argument that McKenzie anticipates the asserted patents.

“An accused infringer ‘need not make out a case of actual invalidity’ to avoid a preliminary injunction but need only show a substantial question of invalidity.” *Natera*, 106 F.4th at 1376 (citation omitted). If challenged, the patent owner must show “it is more likely than not to prevail over an invalidity challenge.” *Id.* at 1377.

The district court found that McKenzie did not anticipate the claims asserted by FMC, primarily because McKenzie disclosed only unstable compounds, and therefore did not disclose “composition” per the district court’s construction. *See Second Memorandum*, 2024 WL 3850811, at *3. Since we find error in the district court’s construction of “composition,” we accordingly find error in the district court’s anticipation analysis. Separately, to the extent that the district court formally found that McKenzie did not anticipate the claims, the district court

⁴ We also note that “composition,” as recited in the claims, includes “tank mixtures,” a specific type of mixture which the district court seemingly excluded from the construction of “composition” only because of its purported instability. *See Second Memorandum*, 2024 WL 3850811, at *3–4.

impermissibly elevated the standard for defeating a preliminary injunction motion. *See Natera*, 106 F.4th at 1376 (“An accused infringer ‘need not make out a case of actual invalidity’ to avoid a preliminary injunction but need only show a substantial question of invalidity.” (citation omitted)).

The district court also appeared to fault Sharda for focusing on certain, less-effective embodiments disclosed in McKenzie, to the exclusion of McKenzie’s preferred embodiments. *See, e.g., Second Memorandum*, 2024 WL 3850811, at *3 (“Sharda cherry-picked efficacy data regarding whitefly nymphs, ignoring the less favorable data regarding whitefly eggs and whitefly adults.”). But an anticipating embodiment in a prior art reference need not be the preferred embodiment. *See Arthrocare Corp. v. Smith & Nephew, Inc.*, 406 F.3d 1365, 1372 (Fed. Cir. 2005) (finding the district court’s anticipation analysis erroneous because it “limit[ed] the disclosure of the prior art reference to a preferred embodiment”). Thus, to the extent that the district court penalized Sharda for relying on certain embodiments in its anticipation defense, we find error.

FMC contends that even if the district court’s anticipation analysis rested on an erroneous construction of “composition,” McKenzie nevertheless fails to meet the “miticidal” limitation recited in the preamble of several asserted claims. According to FMC, although McKenzie discloses usage of Capture⁵ in various embodiments, “Capture is appropriate as a miticide only at a use rate of *at least 0.06 lbs/acre*.” Appellee’s Br. 64. And since “McKenzie does not disclose any use of Capture at the necessary [0.06

⁵ Capture is a class of prior art insecticide products that contains bifenthrin. *See Appellant’s Br. 19; Appellee’s Br. 5.*

lbs/acre] rate,” FMC concludes that McKenzie cannot raise a substantial question of anticipation. *Id.*

We reject this attempt to narrow the claimed scope based on a use recited in the preamble. “Preamble language that merely states the purpose or intended use of an invention is generally not treated as limiting the scope of the claim.” *Pacing Techs., LLC v. Garmin Int’l, Inc.*, 778 F.3d 1021, 1023 (Fed. Cir. 2015) (citation omitted).

FMC’s only rebuttal is that because one claim’s preamble recites “miticidal,” whereas a different claim’s preamble recites “miticidal or insecticidal,” that variation in preamble language should be given effect. But this argument based on linguistic differentiation presupposes that the preamble limits the claim—variations in language have no effect if said language is not controlling in the first place. *See Symantec Corp. v. Comput. Assocs. Int’l, Inc.*, 522 F.3d 1279, 1288–89 (Fed. Cir. 2008) (declining to find the preamble limiting, despite the fact that the preamble used different language from the claim body).

We thus find that the district court abused its discretion by relying on an erroneous claim construction and clearly erroneous factual findings in its anticipation analysis. On remand, the district court should reconsider whether, under the correct claim construction of “composition”, Sharda has raised a substantial question of anticipation by McKenzie.⁶

⁶ The district court also appeared to fault Sharda for not pointing out which specific Capture products and which specific Mustang products (a preexisting product line of pesticides using zeta-cypermethrin) were used in McKenzie. *Second Memorandum*, 2024 WL 3850811, at *3. The representative claim, however, requires only a composition

III. Obviousness

The district court rejected Sharda’s obviousness arguments “for similar reasons as [Sharda’s] anticipation argument.”⁷ *Second Memorandum*, 2024 WL 3850811, at *4. In light of our conclusion that the district court abused its discretion in its anticipation analysis, we accordingly find the same for its obviousness analysis.

FMC objects that, to the extent the district court erroneously construed “composition,” the erroneous construction did not affect its obviousness analysis. The district court, according to FMC, rested its obviousness analysis on the “unexpected superior performance” of the claimed compositions, not on the alleged “stability” of the claimed compositions. Appellee’s Br. 59 (citation omitted). We disagree.

The district court’s own reasoning undermines FMC’s argument. The district court prefaced its obviousness discussion by stating “[t]hese arguments fail for similar reasons as the anticipation argument.” *Second Memorandum*, 2024 WL 3850811, at *4. And the district court’s anticipation analysis, as noted above, turned on its erroneous construction of “composition.” *See supra* Discussion Section II.

comprising certain components within a certain weight ratio range. *See* ’416 patent at claim 1. FMC and Sharda appear to agree that all Capture products contain a non-zero amount of bifenthrin, and all Mustang products contain a non-zero amount of zeta-cypermethrin. *See* Appellant’s Br. 28; Appellee’s Br. 2, 5, 7, 10, 12, 20.

⁷ We reiterate that, in addressing Sharda’s defenses to a temporary restraining order or preliminary injunction, the district court must determine whether Sharda has raised a “substantial question” of obviousness, not whether Sharda has made out an actual case of obviousness. *See Natera*, 106 F.4th at 1376.

Moreover, in explaining why McKenzie’s compositions do not render the claims of the asserted patent obvious, the district court referenced its prior discussion of McKenzie. Yet the preceding—and only—discussion about McKenzie’s formulations in the decision centered on their purported instability. *See id.* at *3 (noting that McKenzie’s compositions, among other things, suffered from “instability”). And most conspicuously, the district court concluded that, among other factors, “the well-known difficulty in achieving a stable formulation of bifenthrin and zeta-cypermethrin, establish that the asserted patents are not obvious to a person skilled in the art.” *Id.* at *4. The district court’s erroneous claim construction unequivocally influenced its obviousness analysis.

The district court also focused on the unexpected results of the claimed compositions. But the effect of unexpected results, a secondary consideration, requires considering the patent challenger’s prima facie case. *See Genentech, Inc. v. Sandoz Inc.*, 55 F.4th 1368, 1378 (Fed. Cir. 2022) (“[W]eak secondary considerations generally do not overcome a strong prima facie case of obviousness.” (alteration in original) (citation omitted)). As explained above, the district court’s erroneous claim construction infected its analysis of the prima facie case.

On remand, the district court should: (1) identify each distinct obviousness theory raised by Sharda; and (2) determine whether Sharda has presented a substantial question of obviousness, considering the relative strengths of the prima facie case and any rebuttal evidence of unexpected results (or other secondary indicia of non-obviousness).

IV. Written Description

Sharda contends that, if we uphold the district court’s claim construction, the asserted patents lack adequate written description under 35 U.S.C. § 112. Because we reject the district court’s claim construction and instead

direct the district court to give “composition” its plain and ordinary meaning, we do not address Sharda’s invalidity defense based on inadequate written description.

CONCLUSION

We have considered FMC’s remaining arguments and find them unpersuasive. We therefore vacate the district court’s preliminary injunction and remand for further proceedings consistent with this opinion.

VACATED AND REMANDED

COSTS

Costs to Appellant.