NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

UPL NA INC.,

Appellant

v.

TIDE INTERNATIONAL (USA), INC.,

Appellee

2022-1514

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2020-01113.

Decided: April 14, 2023

MAXIMILIENNE GIANNELLI, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, Reston, VA, argued for appellant. Also represented by JOSHUA GOLDBERG, RAJEEV GUPTA, PARMANAND K. SHARMA, Washington, DC.

BAILEY K. BENEDICT, Fish & Richardson P.C., Houston, TX, argued for appellee. Also represented by Thad Charles Kodish, Atlanta, GA; Laura E. Powell, Washington, DC.

Before Moore, *Chief Judge*, Lourie and Stoll, *Circuit Judges*.

LOURIE, Circuit Judge.

UPL NA Inc. ("UPL") appeals from a final written decision of the U.S. Patent and Trademark Office Patent Trial and Appeal Board ("the Board") holding that claims 1–4 of U.S. Patent 7,473,685 are unpatentable as obvious in view of the asserted prior art. *Tide Int'l (USA), Inc. v. UPL NA Inc.*, No. IPR2020-01113, 2022 WL 97652 (P.T.A.B. Jan. 4, 2022) ("Decision"). For the following reasons, we affirm.

BACKGROUND

This appeal pertains to an *inter partes* review ("IPR") in which Tide International (USA), Inc. ("Tide") challenged claims 1–4 and 7–12 of the '685 patent directed to granules of an insecticidally active compound known as acephate. Representative claim 1 is presented below:

- 1. A chemically stable dry flow, low compact, dust free soluble phosphoramidothioate granule consisting of
- (i) 85-98% w/w an insecticidally active compound of the following formula:

wherein R and R^1 individually are alkyl, alkynyl or alkenyl group containing up to 6 carbon atoms, R^2 is hydrogen, an alkyl group containing 1 to 18 carbon atoms, a cycloalkyl group containing 3 to 8 carbon atoms, an

alkenyl group containing 2 to 18 carbon atoms or an alkynyl group containing 3 to 18 carbon atoms, R³ is hydrogen or an alkyl group containing 1 to 6 carbon atoms, and Y is oxygen or sulfur, wherein said insecticidal active compound is Acephate;

- (ii) 0.1-5.0% w/w a dispersing agent;
- (iii) 0.1-3% w/w a wetting agent;
- (iv) 0.01-0.08% w/w an antifoaming agent;
- (v) 0.01-1% w/w a stabilizer and
- (vi) fillers to make 100%,

wherein said granule has a length of 1.5-3.0 mm and a diameter of 0.5-1.5 mm.

'685 patent, col. 7 l. 44—col. 8 l. 4 (emphasis added). Independent claim 7 recites the same limitations as claim 1 and adds that the granules further consist of "0.1-3% w/w a binding agent," as well as "0.01-10% w/w a disintegrating agent." *Id.* col. 8 ll. 19—47.

Tide petitioned for IPR of claims 1-4 and 7-12, asserting three obviousness grounds, each based primarily on U.S. Patent 6,387,388 to Misselbrook. J.A. 64. selbrook teaches water-soluble pesticide granules, including a "more preferred" granule made up of a pesticide, which may be acephate, a dispersing agent, a wetting agent, an antifoaming agent, and a filler. J.A. 816–17. Compared to claim 1 of the '685 patent, that granule lacks only a stabilizing agent, though Misselbrook does teach more generally that stabilizers may be included. J.A. 817; Decision at *5. In its petition, Tide proposed combining Misselbrook with references that provided more express motivations to include stabilizers in Misselbrook's granules and to support a motivation for, and reasonable expectation of success in, producing granules with ingredient concentrations that fell within the claimed ranges.

The Board concluded that Tide had met its burden to establish that claims 1–4 were unpatentable as obvious over the asserted prior art. *Decision* at *8–15. In so doing, the Board found unpersuasive UPL's arguments that the prior art's recitation of a binder, which is not a limitation recited in claim 1, led away from a conclusion of obviousness. *Id.*, *12–13. The Board also concluded that Tide had not met its burden to establish that claims 7–12 would have been obvious. *Id.*, *16–19.

UPL appealed the Board's decision as to claims 1–4. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. § 141(c).

DISCUSSION

We review the Board's legal determinations *de novo*, *In re Elsner*, 381 F.3d 1125, 1127 (Fed. Cir. 2004), and the Board's factual findings for substantial evidence, *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000). A finding is supported by substantial evidence if a reasonable mind might accept the evidence as adequate to support the finding. *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938).

UPL raises two issues on appeal. First, UPL contends that the Board erred in construing "fillers" to include fillers that were also known to act as binding agents and therefore it erred in concluding that Misselbrook disclosed a composition with a filler. UPL also asserts that the Board erred in finding a motivation to combine the asserted prior art to arrive at the granules of claims 1–4, which lack an express "binding agent" limitation. We address each argument in turn.

I.

UPL first contends that the Board's construction of "fillers" to include fillers that were also known to be useful binding agents conflicts with black-letter patent law. Claim construction is a question of law that we review *de novo. Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454

(Fed. Cir. 1998) (en banc). "It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention[,] which the patentee is entitled . . . to exclude" others from practicing. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water*, *Inc. v. Safari Water Filtration Sys.*, *Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)).

Although the parties disputed what "fillers" meant, neither argued for a formal construction. Decision at *13, n.9. UPL asserts, however, that the plain and ordinary meaning of "fillers," as it appears in claim 1, excludes those that were known to also act as binding agents. In particular, UPL points to the closed "consisting of" transitional phrase, the fact that claim 1 does not expressly recite "a binding agent," and the fact that independent claim 7, also a consisting-of claim, recites both "a binding agent" and "fillers." The Board, however, held that the plain meaning of "fillers" does not exclude those that were known to also act as binding agents. We agree. The transitional phrase "consisting of" excludes elements not specified in the claim. *In re Gray*, 53 F.2d 520, 521 (CCPA 1931). It does not mean that a single, listed ingredient may only serve one function. That "a binding agent" is an additional limitation of claim 7 does not alter this conclusion.

Moreover, in analyzing whether the prior art taught "fillers," a question of fact that we review for substantial evidence, the Board correctly identified that Misselbrook teaches "water-soluble fillers" including inorganic water-soluble salts that UPL acknowledges were not known to act as binding agents. *Decision* at *13; J.A. 817; Oral Arg. at 2:47–3:10, https://oralarguments.cafc.uscourts.gov/default.aspx?fl=22-1514_04042023.mp3. The Board's decision that the prior art taught fillers, as recited in claim 1, was thus supported by substantial evidence.

II.

UPL next contends that the Board erred in finding a

motivation to combine, because "no publication of record provided any rationale for removing or replacing the binding agents of Misselbrook." Appellant's Br. at 30–31. But Tide's obviousness challenge was based on Misselbrook's teaching of acephate granules consisting of each of the claimed ingredients, including fillers that did not act as binding agents. Tide was not required to show that a skilled artisan would have been motivated to remove an ingredient not present in Misselbrook's granules.

Moreover, the Board found that "Misselbrook's express teaching that 'any water soluble or water dispersible' diluent can be used as fillers' rebuts [UPL's] argument" that a skilled artisan "would understand fillers with binding properties like lactose, sucrose, and glucose to be a 'key feature' of those granules." Decision at *13. UPL has not sought to rebut this finding with any assertion of unexpected results or other evidence of criticality. Id., *10. Instead, UPL points to U.S. Patent 5,075,058 to Chan, which provides that "a minimum amount of any particular binding agent is required in order to meet physical properties of attrition resistance, crush strength and bulk density." J.A. 1684. But the '685 patent claims do not recite these physical properties, so the "requirement" disclosed in Chan is not necessarily a "requirement" here. At best, UPL points to evidence that could be in tension with the Board's However, mere contradictory evidence is not enough to overturn a finding of fact. Velander v. Garner, 348 F.3d 1359, 1378-79 (Fed. Cir. 2003) ("If the evidence will support several reasonable but contradictory conclusions, we will not find the Board's decision unsupported by substantial evidence simply because the Board chose one conclusion over another plausible alternative."). And we hold that, despite the Chan teaching, the Board's finding that a skilled artisan would have been motivated to prepare acephate granules without a binding agent was supported by substantial evidence.

CONCLUSION

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We have considered UPL's remaining arguments and do not find them persuasive. For the foregoing reasons, we *affirm* the Board's final written decision.

AFFIRMED