

NOTE: This disposition is nonprecedential.

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

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**LOW TEMP INDUSTRIES, INC.,**  
*Plaintiff-Appellee*

v.

**DUKE MANUFACTURING CO.,**  
*Defendant-Appellant*

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2021-2137

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Appeal from the United States District Court for the Eastern District of Missouri in No. 4:20-cv-00686-MTS, Judge Matthew T. Schelp.

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Decided: December 28, 2021

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DAVID CLAY HOLLOWAY, Kilpatrick Townsend & Stockton LLP, Atlanta, GA, argued for plaintiff-appellee. Also represented by COURTNEY DABBIERE, RICHARD W. GOLDSTUCKER; KATHLEEN GEYER, Seattle, WA,

KEVIN DONALD CONNEELY, Stinson LLP, Minneapolis, MN, argued for defendant-appellant.

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Before DYK, TARANTO, and CHEN, *Circuit Judges*.

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CHEN, *Circuit Judge*.

Duke Manufacturing Co. (Duke) appeals the entry of a preliminary injunction related to its products accused of patent infringement by Low Temp Industries, Inc. (LTI). The district court found that LTI is likely to show that Duke’s accused products infringe several claims of U.S. Patent Nos. 8,307,761 (’761 patent) and 8,661,970 (’970 patent), and that Duke had failed to raise a substantial question of validity as to those claims based on the Finegan<sup>1</sup> reference. Because the district court relied on an erroneous claim construction and misread the Finegan reference, it failed to recognize that Duke raised a substantial question as to the validity of the relevant claims. We *reverse*.<sup>2</sup>

## BACKGROUND

### A

LTI owns U.S. Patent Nos. 8,307,761 (’761 patent) and 8,661,970 (’970 patent),<sup>3</sup> which relate to multi-well food presentation modules—essentially, a buffet where hot food in one well can be next to cold food in another well. *See* ’761 patent at Abstract, col. 1 ll. 6–13. According to the common patent specification, prior art food presentation equipment, whether a serving bar or some other device, “is dedicated to heating or to cooling food contained therein.” Col. 1 ll. 34–35; *Id.* at ll. 43–44 (describing prior art serving bar as “dedicated to heating or to cooling all wells.”). The specification further explains that it can be “undesirable” for dine-in, self-service restaurants with multi-well food bars to have all the wells at the same temperature. *Id.* at ll. 55–58. The patents claim to solve what they describe

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<sup>1</sup> PCT Pub. No. WO 2000/71950 (Finegan).

<sup>2</sup> Duke’s motion to stay the preliminary injunction pending appeal is hereby denied as moot.

<sup>3</sup> The patents share a common specification.

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as the “taco-presentation type problem” such that “ambient-temperature items (such as tortilla shells), heated items (such as meat), and refrigerated items (such as lettuce and cheese)” can be displayed together and in adjacent wells in the same food bar. ’761 patent at col. 2 ll. 24–28. To accomplish this goal, “[e]ach well is isolated thermally from adjacent wells and has an independently controlled heating and cooling system.” *Id.* at ll. 32–33. The specification explains that “pipes 40,” which can carry refrigerant, are in contact with the sidewalls of a well and a “heating mechanism” is located below the well floor. *Id.*, col. 4 ll. 29–53.

Claims 1–4 of the ’761 patent are representative and are reproduced in part below:

1. A food presentation module generally immobile in use, comprising:
  - a. a frame;
  - b. adjacent first and second wells for receiving containers of bulk food, each well being individually insulated and thermally isolated from an adjacent well via interior walls and exterior walls forming insulative air gaps therebetween . . . ; and
  - c. a temperature-control system for controlling temperatures of the first and second wells independently . . . such that both wells may be refrigerated, both wells may be heated, or the first or second well may be refrigerated while the other of the first or second well is heated.
2. A module according to claim 1 in which the temperature-control system is configured to allow food received in the first well alternately to be heated to a temperature substantially above ambient.
3. A module according to claim 2 in which the temperature-control system is configured to allow food



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control the temperature of two pans [18A, 18B] independently. For example, one pan could be hot and the other pan could be cold.” *Id.* at 9–10.

### C

LTI and Duke are competitors in the market for food presentation modules that can maintain adjacent food wells at different temperatures. LTI was first to market, having developed its QuickSwitch product in 2007. LTI applied for patent protection in 2008 which resulted in the ’761 and ’970 patents.

LTI initially sold its QuickSwitch product as a part of its own counters. In 2012, LTI began offering QuickSwitch through distributors as a drop-in option for its customers’ counters. Duke was one such customer.

In 2019, Duke approached LTI about buying the QuickSwitch product directly from LTI instead of through a distributor; LTI declined. Duke then brought a competing Hot-Cold-Freeze (HCF) product to market in 2020. This patent infringement suit followed.

LTI moved for a preliminary injunction enjoining Duke from activities related to its allegedly infringing competing products. *See Low Temp Indus., Inc. v. Duke Mfg. Co.*, No. 4:20-CV-00686-MTS, 2021 WL 2634671, at \*1 (E.D. Mo. June 25, 2021) (*PI Order*). The district court found that each of the four preliminary injunction factors—(1) the probability that the movant will prevail on the merits; (2) the threat of irreparable harm to the movant; (3) the balance between that harm and the harm that granting the injunction will inflict on other parties; and (4) the public interest—weighed in favor of granting an injunction. *See id.* at \*3.

The district court performed the required two-part analysis for likelihood of success on the merits. *See id.* at \*4 (“To demonstrate a likelihood of success on the merits, LTI must show that (1) it will likely show that Duke’s HCF

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infringes any one of the Asserted Patents, and (2) its infringement claims ‘will likely withstand [Duke’s] challenges to the validity and enforceability of the [Asserted Patents].’” (alterations in original)). As to infringement, the district court determined that LTI is likely to show at trial that Duke’s competing product infringes claims 3, 4, 9, 10, 13, 15, and 16 of the ’761 patent and claim 8 of the ’970 patent (the Infringed Claims). *See id.* at \*7. Central to that finding was the district court’s construction of the claim term “insulative air gaps” or “insulative gaps” to not exclude a gap filled with insulation. *See id.* at \*6.<sup>4</sup>

As to Duke’s validity challenge, Duke asserted that the Infringed Claims were either anticipated by Finegan or rendered obvious by Finegan in view of one or more secondary references. Duke’s invalidity theories accounted for the district court’s claim construction. For example, Duke contended that, if the district court found “insulative air gaps” included gaps filled with insulation, then Finegan was anticipatory for all but claim 4 of the ’761 patent. If, on the other hand, the district court limited “insulative air gaps” to exclude gaps filled with insulation, Duke’s challenge was one of obviousness based on Finegan and a secondary reference containing a gap without insulation.

The district court found Duke’s anticipation arguments unpersuasive because Duke’s expert stated that Finegan disclosed only “the vast majority of claimed features” and because Duke based its anticipation case in part on a legally incorrect “point of novelty” theory. *See id.* at \*8 & n.12. The district court did not address whether or how its construction of “insulative air gaps” affected Duke’s invalidity theories.

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<sup>4</sup> Duke does not challenge the district court’s claim construction or preliminary infringement determination on appeal.

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The district court then found that a skilled artisan would not have considered the Infringed Claims obvious based on Finegan. *See id.* at \*9. The district court concluded there were “meaningful and relevant” differences between Finegan and the Infringed Claims. *See id.* The district court focused on Finegan’s goal of providing frosting on the pan’s flanges and Finegan’s use of a hot water bath to heat the individual pans. *See id.* Ultimately, the district court concluded that:

Finegan does not . . . disclose or teach two thermally isolated and insulated ‘pans’ within a single module that can be operated at different temperatures simultaneously. Nor would it be obvious to modify Finegan to arrive at the Asserted Patents, given Finegan’s incorporation of thermally conductive material, emphasis on frosting, and its description of a single-temperature, one-pan module.

*Id.*

The district court also found that objective indicia of nonobviousness supported its conclusions that the Infringed Claims were nonobvious. *See id.* at \*10–11. Namely, LTI presented evidence of commercial success and that Duke copied LTI’s HCF technology. *See id.*

Duke timely appealed the district court’s entry of a preliminary injunction and specifically its finding that Duke failed to raise a substantial question of validity. We have jurisdiction pursuant 28 U.S.C. § 1292(c)(1).

## DISCUSSION

### A

Both the Eighth Circuit and the Federal Circuit review the grant or denial of a preliminary injunction for abuse of discretion. *See Dixon v. City of St. Louis*, 950 F.3d 1052, 1055 (8th Cir. 2020); *Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372, 1375 (Fed. Cir. 2009). “Abuse of

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discretion is a deferential standard of review that requires a showing that ‘the court made a clear error of judgment in weighing relevant factors or exercised its discretion based upon an error of law or clearly erroneous factual findings.’” *Titan Tire*, 566 F.3d at 1375 (quoting *Genentech, Inc. v. Novo Nordisk, A/S*, 108 F.3d 1361, 1364 (Fed. Cir. 1997)).

“In seeking a preliminary injunction, the patentee has the burden to show a likelihood of success regarding the patent's validity; if the accused infringer raises ‘a substantial question regarding validity,’ the district court should find that the patentee has not shown a likelihood of success on the merits.” *E.I. du Pont de Nemours & Co. v. MacDermid Printing Sols., L.L.C.*, 525 F.3d 1353, 1358 (Fed. Cir. 2008). “The burden on the accused infringer to show a substantial question of invalidity at the preliminary injunction stage is lower than what is required to prove invalidity at trial.” *Tinnus Enterprises, LLC v. Telebrands Corp.*, 846 F.3d 1190, 1205 (Fed. Cir. 2017) (quoting *Altana Pharma AG v. Teva Pharm. USA, Inc.*, 566 F.3d 999, 1006 (Fed. Cir. 2009)). “Vulnerability is the issue at the preliminary injunction stage, while validity is the issue at trial.” *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1359 (Fed. Cir. 2001).

“Where the alleged infringer attacks the validity of the patent, ‘the burden is on the challenger to come forward with evidence of invalidity,’ which the patentee must then rebut.” *Tinnus*, 846 F.3d at 1205 (quoting *Titan Tire*, 566 F.3d at 1377–78). “[I]f the trial court concludes there is a ‘substantial question’ concerning the validity of the patent, meaning that the alleged infringer has presented an invalidity defense that the patentee has not shown lacks substantial merit, it necessarily follows that the patentee has not succeeded in showing it is likely to succeed at trial on the merits of the validity issue.” *Titan Tire*, 566 F.3d at 1379.

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As explained below, the district court abused its discretion in determining that Duke had not raised a substantial question of validity as to the Infringed Claims.

## B

The district court initially erred by not considering the impact of its construction of “insulative air gap” to Duke’s invalidity challenges. The district court was correct that Duke’s expert stated at one point that “Finegan discloses the vast majority of claimed features” and that “minor other features . . . are found in secondary references.” *PI Order* at \*8 (citing J.A. 1067). But Duke’s expert made that statement with the caveat that, for each of the Infringed Claims except for claim 4 of the ’761 patent, a secondary reference was required only “[t]o the extent ‘air gaps’ or ‘air gap’ (required for each of the Asserted Claims) is construed to exclude foam.” *See* J.A. 1067; *see also* J.A. 1075 (Duke’s expert stating that “[i]f ‘air gaps’ is interpreted . . . to cover insulation material (e.g., foam) between the walls, Finegan meets [this] element.”). Since the district court construed “insulative air gap” as *not* excluding foam, Duke’s invalidity challenges for all but one of the Infringed Claims are based on anticipation by Finegan. *See* J.A. 1067–68.

When properly viewed, Duke’s anticipation challenges to claims 3, 9, 10, 13, 15, and 16 of the ’761 patent and claim 8 of the ’970 patent raise a substantial question of validity. Anticipation “under 35 U.S.C. § 102 requires that a prior art reference disclose every limitation of the claimed invention, either explicitly or inherently.” *CommScope Techs. LLC v. Dali Wireless Inc.*, 10 F.4th 1289, 1295 (Fed. Cir. 2021). LTI has not contested that Finegan’s Figure 7 discloses two temperature-controlled wells that can be operated at different temperatures (one hot and one cold) or that Finegan discloses the other required elements of the claims (except for claim 4). LTI only disputes whether Finegan’s wells in Figure 7 are “adjacent” to each other within a single module. *See* Appellee’s Br. 49–53.

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The district court clearly erred in finding no substantial merit as to whether Finegan discloses the adjacent wells limitation because (i) the court relied on an overly narrow understanding of “adjacent,” and (ii) it did not fully account for Finegan’s alternative embodiment disclosed in Figure 7 and its corresponding description. First, the district court appeared to understand the claims as requiring Finegan, for anticipation purposes, to teach “two *immediately adjacent* pans within a single module that can be maintained at different temperatures,” *PI Order* at \*9 (emphasis added), even though the claims require the wells to be simply “adjacent.” While the district court did not explicitly say so, both parties state that the district court adopted LTI’s argument that the adjacency limitation requires the wells to touch. *See* Appellant’s Br. 45; Appellee’s Br. 49. And that Finegan could not disclose touching wells (*i.e.*, *immediately adjacent* wells) because its protruding flanges are thermally conductive, and a hot flange in contact with a cold flange would destroy Finegan’s goal to provide the “attractive feature” of “frosting” or a “frost top” for a cold food well, which “give[s] the appearance of the food such as salad or additional condiments resting in ice.” *See* Finegan at 1; *PI Order* at \*9. But this constricted understanding of “adjacent” is at odds with the patents’ disclosure, which describes a “distance D1” “between adjacent wells,” “with D1 preferably being approximately three inches.” ’761 patent col. 3 ll. 46–52. Given the specification explicitly states that adjacent wells preferably have a distance between them (and not defined to be bounded by a particular outer distance), the basis for the district court’s finding that Finegan’s pans 18A and 18B are not adjacent, or next to, each other—because Finegan’s cold pan calls for frosted flanges—cannot be sustained.

At this stage of the proceeding and on this record, Duke has sufficiently raised a substantial question that Finegan anticipates all of the Infringed Claims except for claim 4, including disclosure of the adjacency limitation. Finegan’s

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Figure 7 discloses a single “apparatus 10” with two wells 18A and 18B that are independently temperature controlled by “one control system.” Finegan at 8, 9. Those wells are shown within a single countertop 14. Though Finegan does not disclose any particular measured distance between its wells, neither the district court nor LTI provides any explanation as to why a disclosure of two wells within a single apparatus (with no other components disposed within the countertop) are not adjacent under a proper understanding of that term.

And to the extent that the district court implicitly found that Finegan’s Figure 7 only discloses a single pan in each of two separate modules, its order fails to explain the basis for that finding as well.<sup>5</sup> In sum, on this record, we conclude that the district court abused its discretion in concluding that Duke failed to raise a substantial question of validity as to claims 3, 9, 10, 13, 15, and 16 of the ’761 patent and claim 8 of the ’970 patent. *Titan Tire*, 566 F.3d at 1379.

### C

Duke’s challenge to the remaining Infringed Claim, claim 4 of the ’761 patent, is grounded in obviousness under the district court’s claim construction. Dependent claim 4 requires one or more additional wells that are independently temperature controlled. *See* ’761 patent at claim 4. Duke acknowledged that Finegan’s two-well disclosure does not meet this limitation but argued that additional wells would have been obvious in light of Finegan alone, *see* J.A. 1080, and that several other references, including

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<sup>5</sup> We also note, contrary to the district court’s conclusion, that the type of heating mechanism Finegan uses is of no moment because the claims do not require a particular heating scheme.

the Safyan<sup>6</sup>, Hansen<sup>7</sup>, and Shei<sup>8</sup> references, teach three or more independently temperature-controlled wells, *see* J.A. 1067, 1082–83, 2269–71, 2275–76, 2279–81, 2283–84.

We limit our analysis to Finegan in light of Safyan. Safyan discloses a “chill-hot buffet tray” with “[a] pair of heating and cooling units,” Safyan col. 3 ll. 13–20, and that each unit receives a pan of food, *see id.* at col. 2 ll. 58–59. Safyan is not limited to two temperature-controlled pans, however. *See id.* at col. 3 ll. 46–49 (“It is to be understood that one or more than two pairs of aligned openings may be provided to accommodate as few or as many heating and cooling units as may be required or desired.”); *see also id.* at col. 1 ll. 61–63 (“Multiple temperature controlled units supported in similar openings may be used for heating and/or cooling different foods.”).

The district court addressed Finegan in light of Safyan but limited its analysis to whether Duke improperly relied on hindsight to argue that the references rendered obvious two wells within the same food bar that simultaneously allow the display of hot and cold foods. *See PI Order* at \*11. As we determined above, Duke made the requisite showing, for purposes of opposing the preliminary injunction motion, that Finegan discloses this feature. Thus, the district court’s hindsight finding fares no better.

At the district court, Duke argued that a skilled artisan would have been motivated to add additional wells to Finegan generally and, further, in light of Safyan’s disclosure of more than two wells. *See* J.A. 1080 (“[I]n view of Finegan alone, it would have been obvious to [a skilled artisan] to add a third and fourth well.”), 1080–81 (arguing a skilled artisan “would have found it obvious to modify Finegan’s

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<sup>6</sup> U.S. Patent No. 5,941,077 (Safyan).

<sup>7</sup> U.S. Patent No. 5,961,866 (Hansen).

<sup>8</sup> PCT Pub. No. WO 2008/127330 (Shei).

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food bar to have three, four, or even more wells (for holding additional pans of food) that are all independently controllable with respect to each other” in light of Safyan’s disclosure); *see also* J.A. 2275–76 (same).

LTI responded that a skilled artisan would not modify Finegan to include additional wells because “[t]he mechanical design, heat transfer, and fitment in the Safyan Reference are distinctly different from the mechanical design described and disclosed in the asserted claims” and thus a skilled artisan “would not look to the teaching of Safyan to teach the three or more well system of the Asserted Patents because Safyan does not consider or teach how refrigeration would occur in a three or more well system.” *See Low Temp Indus., Inc. v. Duke Mfg. Co.*, No. 4:20-CV-00686-MTS, ECF No. 43-3 at 32, ¶ 103; *see also* Appellee’s Br. 28 (“Safyan . . . disclose[s] mechanical designs, mechanisms of heat transfer and fitment that are different from both Finegan and the Asserted Patents.”). LTI’s argument is not responsive to Duke’s position. Duke did not argue that a skilled artisan would incorporate Safyan’s heating and cooling units into Finegan or that a skilled artisan would add one of Safyan’s units to arrive at a third well in Finegan. Rather, Duke argued that a skilled artisan would modify Finegan to include a third (or more) of *Finegan’s* wells. *See* J.A. 2275–76 (“With the idea of adding a third well (or as many as desired or required) introduced by Safyan, additional wells to the food bar of Finegan would have been no more than a duplication of [Finegan’s] parts according to [Finegan’s] methods.”). Duke’s evidence to modify Finegan to arrive at claim 4 therefore stands un rebutted.

We next consider the objective indicia of nonobviousness presented by LTI. *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1328 (Fed. Cir. 2016) (“[O]bjective considerations of non-obviousness must be considered in every case.”). The district court found that significant evidence supported a finding that Duke copied LTI’s product. *See PI*

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*Order* at \*10. The district court also found that LTI had presented evidence of commercial success of its Quick-Switch unit. *See id.* at \*11.

Without commenting on the sufficiency of LTI's objective indicia evidence, our determination that Duke has made a sufficient showing, at this stage, that Finegan anticipates all of the Infringed Claims (except for claim 4) renders LTI's objective indicia irrelevant as to those claims. *See Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1364 (Fed. Cir. 2008); *In re Fracalossi*, 681 F.2d 792, 796 (C.C.P.A. 1982) (concurring opinion) (“[Objective indicia] relevant to a case of prima facie obviousness are not considered for purposes of determining anticipation.”). As for claim 4, LTI did not tie any objective indicia to the presence of three or more wells, or to additional wells in combination with the features that, there is substantial reason to believe on this record, are disclosed by Finegan. At the district court, LTI instead tied its objective indicia evidence to the feature of multiple wells in the same food presentation module where the module can heat and cool foods at the same time. *See Low Temp Indus., Inc. v. Duke Mfg. Co.*, No. 4:20-CV-00686-MTS, ECF No. 43-3 at 55, ¶ 193; *id.* at 56, ¶ 194; *id.* at 56, ¶ 195. Thus, we conclude that at this preliminary stage, LTI failed to present sufficient evidence of a nexus between any objective indicia and claim 4 of the '761 patent. *See Rambus Inc. v. Rea*, 731 F.3d 1248, 1257 (Fed. Cir. 2013) (“[O]bjective evidence of nonobviousness lacks a nexus if it exclusively relates to a feature that was known in the prior art.”) (citation omitted).

On the current record, we conclude the district court abused its discretion in determining that Duke failed to raise a substantial question of validity as to claim 4 of the '761 patent.

#### CONCLUSION

We have considered LTI's remaining arguments and find them unpersuasive. For the reasons set forth above,

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we reverse the district court's entry of a preliminary injunction against Duke.

**REVERSED**