

NOTE: This disposition is nonprecedential.

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

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**AMP PLUS, INC., DBA ELCO LIGHTING,**  
*Appellant*

v.

**DMF, INC.,**  
*Cross-Appellant*

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2021-1595, 2021-1636

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Appeals from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. IPR2019-  
01094.

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Decided: November 10, 2022

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JOSEPH ROGER RICK TACHE, Buchalter, A Professional  
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Before STOLL, BRYSON, and CUNNINGHAM, *Circuit Judges*.  
BRYSON, *Circuit Judge*.

Appellant AMP Plus, Inc., d/b/a ELCO Lighting (“ELCO”) petitioned for *inter partes* review (“IPR”) of U.S. Patent No. 9,964,266 (“the ’266 patent”), which is owned by appellee DMF, Inc. In its Final Written Decision, the Patent Trial and Appeal Board determined that a number of the challenged claims of the ’266 patent were not unpatentable, but that claim 17 was unpatentable. Both parties appealed the Board’s decision. We affirm in part, vacate in part, and remand.

## I

The ’266 patent is generally directed to a “compact recessed lighting system” that can be installed in a standard electrical junction box. ’266 patent, Abstract. The ’266 patent discloses a “unified casting” that houses a light source and a “driver” that powers the light source. *Id.* at col. 2 ll. 7–10, col. 3, ll. 25–46. The casting, driver, and light source are all sized so that they can fit within a junction box. *See id.* at col. 2, line 65 through col. 3, line 11. Claim 1 of the ’266 patent is representative of the claimed invention. It recites as follows:

1. A compact recessed lighting system, comprising:

a light source module for emitting light;

a *driver* for powering the light source module to emit light, the driver including an electronic device to at least one of supply and regulate electrical energy to the light source module;

a unified casting with a heat conducting closed rear face, a heat conducting sidewall and an open front face wherein the heat conducting sidewall is joined to the heat conducting closed rear face at one end and defines the open front face of the unified

casting at another end, wherein the heat conducting sidewall has a first dimension between the heat conducting closed rear face and the open front face of less than 2 inches and extends 360 degrees around a center axis of the unified casting to define a first cavity that extends forward from the heat conducting closed rear face to the open front face of the unified casting and outward to the heat conducting sidewall, wherein the light source module and the driver are positioned inside the first cavity while being coupled to the heat conducting closed rear face of the unified casting such that the light source module is closer to the closed rear face of the unified casting than the open front face of the unified casting, and wherein the unified casting includes a *plurality of elements positioned proximate to the open front face so as to align with corresponding tabs of a standard junction box* and thereby facilitate holding the unified casting up against the standard junction box when the unified casting is installed in the standard junction box; and

a reflector positioned inside the first cavity of the unified casting and coupled to and surrounding the light source module such that the reflector directs light produced by the light source module into an area surrounding the compact recessed lighting system while enclosing the driver from exposure to the area surrounding the compact recessed lighting system,

wherein the heat conducting closed rear face and the heat conducting sidewall of the unified casting significantly dissipate heat generated by the light source module during operation of the light source module.

*Id.* at claim 1 (emphasis added to disputed limitations).

Claim 22 also plays a role in this appeal. It recites as follows:

22. A compact recessed lighting system, comprising:

a light source module for emitting light;

a driver for powering the light source module to emit light, the driver including an electronic device to at least one of supply and regulate electrical energy to the light source module;

a unified casting with a closed rear face, a sidewall and an open front face wherein the sidewall is joined to the closed rear face at one end and defines the open front face of the unified casting at another end, wherein the sidewall extends 360 degrees around a center axis of the unified casting to define a cavity that extends forward from the closed rear face to the open front face of the unified casting and outward to the sidewall, wherein the light source module and the driver are positioned inside the cavity of the unified casting such that the light source module is closer to the closed rear face of the unified casting than the open front face of the unified casting; and

a reflector positioned inside the cavity of the unified casting and coupled to and surrounding the light source module such that the reflector directs light produced by the light source module into an area surrounding the compact recessed lighting system while enclosing the driver from exposure to the area surrounding the compact recessed lighting system,

wherein:

the light source module is a light emitting diode (LED) module;

the sidewall of the unified casting has fins formed on its outside surface; and

the system further comprises a plurality of wires connected to the driver and connected to a first connector of a pair of complimentary [sic] keyed or interlocking connectors, such that in operation the first connector is coupled to a second connector of the pair of complimentary [sic] keyed or interlocking connectors, *wherein the second connector is coupled to electricity from an electrical system of a building* in which the compact recessed lighting system is installed.

*Id.* at claim 22 (emphasis on disputed limitation).

In its IPR petition, ELCO asserted three prior art references. Two of the references, “Imtra 2011” and “Imtra 2007,” were catalogs published by Imtra Corporation detailing various lighting fixtures that Imtra sold for use on boats or in other marine applications. J.A. 391–403 (Imtra 2011); J.A. 431–38 (Imtra 2007). The third reference, U.S. Patent No. 9,366,418 (“Gifford”), describes a non-recessed lighting system that can be attached to a standard junction box. Gifford, Abstract & Fig. 1. ELCO raised three grounds of invalidity in the petition: anticipation by Imtra 2011 (“Ground 1”); obviousness in view of the combination of Imtra 2011 and Imtra 2007 (“Ground 2”); and obviousness in view of the combination of Imtra 2011, Imtra 2007, and Gifford (“Ground 3”).

In its Final Written Decision, the Board found that Imtra 2011 disclosed all limitations of the challenged claims except for the “plurality of elements” limitation. *See*

*AMP Plus, Inc. v. DMF, Inc.*, No. IPR2019-01094, 2020 WL 6811241, at \*17 (P.T.A.B. Nov. 19, 2020). That limitation is recited in most of the challenged claims, but not in claims 17 and 22. As a result, the Board determined that claim 17 was anticipated by Imtra 2011 and therefore was unpatentable. *Id.* ELCO challenged claim 22 only in Grounds 2 and 3, so the Board did not determine whether Imtra 2011 anticipated claim 22 of the '266 patent. *See id.*

With respect to ELCO's obviousness arguments, the Board first found that the Imtra 2007 catalog did not disclose the "plurality of elements" limitation that was missing from Imtra 2011. *Id.* at \*17–19. The Board also found that a skilled artisan would not have been motivated to combine the Gifford reference with Imtra 2011 and Imtra 2007 to develop the claimed invention. *Id.* at \*19–23. Accordingly, the Board held that claim 17 was obvious for the same reasons that it was anticipated and that the remaining challenged claims were not unpatentable as obvious. *Id.* at \*19, \*25. These appeals followed.

## II

In its appeal, ELCO challenges two aspects of the Board's decision. First, ELCO argues that the Board erred in failing to find that Claim 22 was unpatentable as obvious. Second, ELCO argues that the Board erred in finding that there was no motivation to combine Gifford with the Imtra 2011 and Imtra 2007 catalogs.

### A

The Board did not explicitly address claim 22 in its discussion of either of the obviousness grounds raised by ELCO. With respect to Ground 2, the Board focused exclusively on whether the Imtra 2007 reference disclosed the "plurality of elements" limitation that was missing from Imtra 2011. *Id.* at \*17–19. Claim 22, however, does not recite that limitation. And with respect to Ground 3, the Board's analysis focused exclusively on whether a skilled

artisan would have been motivated to combine Gifford with the Imtra references. *Id.* at \*19–23. In short, the Board never explicitly addressed the patentability of claim 22.

DMF argues that the reason the Board determined that claim 22 was not unpatentable is that ELCO presented insufficient evidence that the prior art disclosed the “electrical system of a building” limitation of claim 22. *See* Cross-Appellant’s Br. 30–38. The Board, however, did not rely on that argument in its obviousness determination, and that argument therefore cannot serve as a basis for upholding the Board’s decision. *See In re Applied Materials, Inc.*, 692 F.3d 1289, 1294 (Fed. Cir. 2012) (“The Board’s judgment must be reviewed on the grounds upon which the Board actually relied. . . . Alternative grounds supporting the Board’s decision generally are not considered.”); *see also SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947).

To be sure, the Board referred to claim 22 in its claim construction analysis, where the Board explained that claim 22 is limited to lighting systems that are used in buildings. *AMP Plus*, 2020 WL 6811241, at \*6 n.8, \*8–9, \*11. Although the Imtra references are generally directed to lighting systems used on boats and not in buildings, ELCO argues that the prior art nevertheless discloses the “electrical system of a building” limitation, and that we should therefore hold claim 22 is invalid. *See* Appellant’s Reply Br. 9–12.

In light of the Board’s silence regarding the obviousness issue as applied to claim 22, it appears that the Board may have simply overlooked that claim when determining whether the challenged claims were obvious in view of Grounds 2 and 3. That inference is reinforced by the fact that the Board’s conclusion regarding Ground 2 omits any reference to claim 22. *See AMP Plus*, 2020 WL 6811241, at \*19 (“Therefore, we find that Petitioner fails to show obviousness of claims 1, 2, 4–11, 13–16, 19, 21, 25, 26, and 28–

30 over the combination of Imtra 2011 and Imtra 2007 by a preponderance of the evidence.”).

Regardless of the reason for the omission, the Board must rule on the obviousness issue as to claim 22 and must provide an explanation of its reasoning sufficient “to enable judicial review and to avoid judicial displacement of agency authority.” *Pers. Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017). It has not done so with respect to claim 22. Accordingly, we vacate the Board’s decision that claim 22 is not unpatentable and remand for the Board to address the parties’ arguments regarding the patentability of claim 22.

## B

ELCO also argues that the Board erred in finding that there was no motivation to combine the Gifford reference with Imtra 2011 and Imtra 2007. Specifically, ELCO argues that the Board failed to consider the Gifford reference “as a whole,” but rather found no motivation to combine “solely because Gifford relates to non-recessed lighting.” Appellant’s Br. 39, 41. We review the legal determination of obviousness de novo and any subsidiary factual findings, including motivation to combine, for substantial evidence. *Adidas AG v. Nike, Inc.*, 963 F.3d 1355, 1358–59 (Fed. Cir. 2020).

We reject ELCO’s contention that the Board found no motivation to combine solely because the Gifford reference relates to non-recessed lighting. To the contrary, the Board carefully weighed the record evidence in determining whether a skilled artisan would have been motivated to combine the Imtra references with Gifford.

Before the Board, ELCO relied heavily on the testimony of its expert, Dr. Eric Bretschneider. The Board rejected several aspects of Dr. Bretschneider’s testimony, however. First, the Board noted that Dr. Bretschneider cropped Figure 1 of Gifford in a way that did not “fully

characterize the teachings of Gifford.” *AMP Plus*, 2020 WL 6811241, at \*21. Second, Dr. Bretschneider testified that “Gifford teaches a lighting system that is able to be installed in a standard junction box.” J.A. 253, ¶ 175. The Board found that statement to be “incorrect[]” because “Gifford’s lighting fixture 102 is located on the exterior of adaptor apparatus 100 and is not recessed.” *AMP Plus*, 2020 WL 6811241, at \*22. Third, the Board rejected Dr. Bretschneider’s assertion that the “adaptor apparatus” disclosed in Gifford was equivalent to the “unified casting” claimed in the ’266 patent. *Id.* We discern no error in the Board’s rejection of those aspects of Dr. Bretschneider’s testimony.

Additionally, ELCO challenges the Board’s finding that a skilled artisan would not have been motivated to modify the Imtra products to fit within a standard junction box. As the Board noted, the Imtra products contain screw holes and can be mounted directly to the ceiling. *Id.* at \*19; *see also, e.g.*, J.A. 4710–11, 6141. The Board thus rejected Dr. Bretschneider’s analysis as reflecting “faulty reasoning” that “a POSITA would seek to incur additional expense in time, labor, and materials to mount an Imtra fixture in a junction box, rather than simply screw it into the ceiling.” *AMP Plus*, 2020 WL 6811241, at \*22.

In view of the record evidence, we hold that the Board’s finding that a skilled artisan would not have been motivated to combine Gifford with the Imtra 2011 and Imtra 2007 references is supported by substantial evidence.<sup>1</sup> We

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<sup>1</sup> We reject ELCO’s argument that Gifford should have been treated as analogous art. *See* Appellant’s Br. 34–39. The Board never found that Gifford was non-analogous art, nor did it exclude the Gifford reference on that basis. To the contrary, the Board treated Gifford as prior art and concluded that a skilled artisan would not have been motivated to combine Gifford’s teachings with the

therefore affirm the Board's finding that the remaining challenged claims are not unpatentable.

### III

In its cross-appeal, DMF argues that the Board erred in finding that claim 17 of the '266 patent was anticipated by the Imtra 2011 catalog for two reasons: (1) the IPR petition mixed and matched features of different products disclosed in the Imtra 2011 catalog; and (2) the Board erred in construing the term "driver," which is recited in claim 17. DMF also argues that the Board erred in determining that claim 17 was obvious.

#### A

With respect to anticipation, DMF argues that the Board erred in determining that the Imtra 2011 reference anticipated claim 17 of the '266 patent because ELCO's petition impermissibly mixed and matched features from different products in the Imtra 2011 catalog. Anticipation is a question of fact that we review for substantial evidence. *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1341 (Fed. Cir. 2016).

The Imtra 2011 catalog discloses several different lighting products, including the "Sardinia," "Cyprus," "Ventura," "Portland," and "Hatteras" product lines. J.A. 396–403. The catalog also discloses information about "Imtra PowerLED" products, which include the Ventura, Portland, and Hatteras products. J.A. 395; *see also* Appellant's Reply Br. 36. DMF argues that ELCO combined

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teachings of the Imtra references. *See AMP Plus*, 2020 WL 6811241, at \*19–23; *see also In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004) (A reference is prior art for purposes of an obviousness determination "only when analogous to the claimed invention.").

various features of those products in a manner that does not establish anticipation.

We have held that a prior art reference does not anticipate if it contains “multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention.” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008). Rather, the reference “must clearly and unequivocally disclose the claimed invention or direct those skilled in the art to the invention without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference.” *Id.* (cleaned up).

It is true that ELCO’s petition cites to various pages of the Imtra 2011 catalog that describe several different products from the Sardinia, Cyprus, Ventura, Portland, and Hatteras lines. *See* J.A. 96–107. Upon closer examination, however, it is evident that the portions of the catalog on which ELCO relied are not unrelated in a way that undermines the Board’s anticipation analysis.

The petition divides independent claims 1, 17, and 26 (which it treats as a group) into 11 limitations: the preamble and limitations A through J.<sup>2</sup> For the preamble and limitations A, B, D, F, G, I, and J, ELCO relied on disclosures from page 5 of Imtra 2011, which relates to the PowerLED products generally. J.A. 96–107, 395. For

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<sup>2</sup> DMF argues that such grouping, as well as ELCO’s alleged mixing and matching, violates “35 U.S.C. § 312(a)(3)’s requirement to state with particularity the grounds on which a challenge is based.” Cross-Appellant’s Br. 70–71; *see also* Cross-Appellant’s Reply Br. 23–25. We conclude that the Board did not abuse its discretion in finding that ELCO “identifie[d] the grounds for anticipation with sufficient particularity.” *AMP Plus*, 2020 WL 6811241, at \*13.

limitation C, ELCO also relied on statements regarding the PowerLED products generally, even though those statements were contained on pages relating to specific products. *See* J.A. 100; J.A. 398 (“The LEDs inside Imtra downlights are mounted directly to a [printed circuit board] . . . .”); J.A. 402 (“The integrated circuit we use in our PowerLED downlights can provide” a constant current to the LED “regardless of input voltage.”). Neither Limitation E nor Limitation H (the “plurality of elements” limitation) were at issue with respect to claim 17, and the Board found that the Imtra 2011 reference did not disclose Limitation H in any event. *AMP Plus*, 2020 WL 6811241, at \*17.

ELCO’s petition ties each limitation of claim 17 to the Imtra PowerLED products generally. Therefore, ELCO did not impermissibly mix and match disclosures from Imtra 2011 to arrive at an anticipatory reference. And the Board did not err in finding that there was no reason that “the general disclosures regarding Imtra LEDs” should be “limited to the specific products on the same page.” *Id.* at \*13. Accordingly, the Board’s finding that Imtra 2011 was an anticipatory prior art reference is supported by substantial evidence.<sup>3</sup>

## B

DMF also argues that the Board erred in its construction of the term “driver,” as that term is used in claim 17 of the ’266 patent. The Board adopted ELCO’s construction of that term, construing “driver” to mean “an electronic

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<sup>3</sup> DMF initially argued that ELCO should be subject to judicial estoppel with respect to this issue due to statements ELCO made in a parallel district court proceeding. Cross-Appellant’s Br. 72–75. DMF expressly abandoned that argument in its reply brief, however, and we therefore decline to address it. *See* Cross-Appellant’s Reply Br. 27.

device to supply, regulate, or supply and regulate electrical energy to a light source module.” *AMP Plus*, 2020 WL 6811241, at \*12. DMF argues for a narrower construction requiring the driver to be connected to a building’s main power source. Cross-Appellant’s Br. 77.

The specification of the ’266 patent contains an explicit definition of “driver” that closely tracks the Board’s construction. The specification states that “[t]he driver 4 is an electronic device that supplies and/or regulates electrical energy to the light source module 3 and thus powers the light source module 3 to emit light.” ’266 patent, col. 4, ll. 21–24. The specification adds that “[t]he driver 4 may be any type of power supply, including power supplies that deliver an alternating current (AC) or a direct current (DC) voltage to the light source module 3,” and that the driver “receives an input current from the electrical system of the *building or structure* in which the recessed lighting system 1 is installed.” *Id.* at col. 4, ll. 24–27, 39–41 (emphasis added). In view of those disclosures, the intrinsic evidence does not suggest that a “driver” is limited to a device that is connected to a building’s main power source. To the contrary, the specification indicates that the driver may be installed in any structure (a term that is not defined in the ’266 patent) and is therefore not limited to traditional buildings that would contain a building main power source.

DMF argues that three aspects of the Board’s claim construction analysis were erroneous. First, DMF challenges the Board’s reliance on extrinsic evidence, such as technical dictionaries. That argument is unpersuasive, however, particularly in light of the fact that the Board’s reliance on technical dictionaries was limited to providing a summary of ELCO’s arguments. *AMP Plus*, 2020 WL 6811241, at \*10 & n.9. The Board’s construction was primarily based on the intrinsic evidence and the parties’ experts’ testimony about that evidence. *See id.* at \*10–12.

Second, DMF asserts that because there are other differences in scope between claims 17 and 22, the Board improperly invoked the presumption of claim differentiation when the Board considered that claim 22 explicitly recites a connection to building main power. That argument is unpersuasive. The Board did not purport to rely on the presumption of claim differentiation when it invoked claim 22 in construing the term “driver.” *See id.* at \*11. Moreover, even when claim differentiation does not apply, differences between claims may “provide[] guidance as to the scope” of a patent’s claims. *See Netflix, Inc. v. DivX, LLC*, No. 2021-1931, 2022 WL 2298983, at \*4 (Fed. Cir. June 27, 2022). Indeed, “[i]t is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous.” *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 810 (Fed. Cir. 2021). As ELCO points out, if a driver—which is required by claim 22—were limited to embodiments connected to a building main power source, the “building” limitation of claim 22 would be superfluous. We therefore disagree with DMF that it was inappropriate for the Board to consider claim 22 in construing the term “driver.”

Third, DMF argues that the Board improperly discounted the prosecution history of the ’266 patent. DMF points to an interview between the inventor of the ’266 patent and the patent examiner during which the inventor indicated that in his solution, “building wiring carrying the AC ‘mains’ voltage may be coupled to the driver inside the unified casting.” J.A. 4637. That statement in the prosecution history, however, is best read as a non-limiting description of the location of a driver in certain contexts. It does not rise to the level of an “unequivocal[] and unambiguous[]” disavowal as to the scope of the term “driver,” of the sort we have required to find a prosecution disclaimer. *See Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013).

We find DMF’s arguments for a narrower construction of “driver” to be unpersuasive, and we therefore affirm the

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Board's decision finding claim 17 to be unpatentable. Because we affirm the Board's determination that claim 17 is anticipated, we need not reach DMF's arguments regarding obviousness. *See Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983) ("Though it is never necessary to so hold, a disclosure that anticipates under § 102 also renders the claim invalid under § 103, for anticipation is the epitome of obviousness." (cleaned up)).

#### IV

For the reasons stated, we vacate the Board's decision that claim 22 is not unpatentable for obviousness and remand for further proceedings regarding that claim. We affirm the Board's decision with respect to all other challenged claims.

In light of the disposition of this case, DMF's motions to include documents in the appendix (ECF No. 16) and to strike portions of ELCO's reply brief (ECF No. 39) are both denied as moot.

No costs.

**AFFIRMED-IN-PART, VACATED-IN-PART, AND  
REMANDED**