

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMP PLUS, INC., dba ELCO LIGHTING,
Petitioner,

v.

DMF, INC.,
Patent Owner.

IPR2019-01094
Patent 9,964,266 B2

Before CHRISTOPHER L. CRUMBLEY, JEFFREY W. ABRAHAM, and
DEBRA L. DENNETT, *Administrative Patent Judges*.

DENNETT, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision on Remand
Determining Claim 22 Not Unpatentable
35 U.S.C. §§ 144, 318

I. INTRODUCTION

This case returns on remand from the United States Court of Appeals for the Federal Circuit in *AMP Plus, Inc. d/b/a ELCO Lighting v. DMF, Inc.*, No. 2021-1595, 2021-1636, 2022 WL 16844516 (Fed. Cir. Nov. 10, 2022) (“*ELCO/DMF*”), affirming the Board’s Final Written Decision holding claim 17 unpatentable and claims 1, 2, 4–11, 13–16, 19, 21, 25, 26, and 28–30 not unpatentable, and vacating and remanding for further proceedings with respect to independent claim 22.

A. Procedural History

ELCO Lighting (“Petitioner”) filed a Petition for *inter partes* review of claims 1, 2, 4–11, 13–17, 19, 21, 22, 25, 26, and 28–30 of U.S. Patent No. 9,964,266 B2 (Ex. 1001, the “266 patent”). Paper 1, (“Pet.”). The Board instituted review, conducted a trial, and issued a Final Written Decision, holding claim 17 unpatentable and claims 1, 2, 4–11, 13–16, 19, 21, 22, 25, 26, and 28–30 not unpatentable. *See* Paper 70 (“Final Decision” or “Final Dec.”), 55, 57.¹ Petitioner appealed the Final Decision regarding all claims except claim 17, and DMF, Inc., Patent Owner, cross-appealed regarding claim 17. In *ELCO/DMF*, the court “vacate[d] the Board’s decision that claim 22 is not unpatentable for obviousness and remand[ed] for further proceedings regarding that claim.” *ELCO/DMF*, 2022 WL 16844516, at *3. The court found that, although the Board referred to claim 22 in its claim construction analysis, the Board did not explicitly address claim 22 in its discussion of either obviousness ground raised by Petitioner. *Id.*

¹ The court held that the Board was silent regarding the obviousness issue as applied to claim 22. *ELCO/DMF*, 2022 WL 16844516, at *3.

The Board held a conference call with the parties on Jan. 11, 2023. Neither party requested additional briefing or a hearing. We denied Patent Owner's request for permission to file briefing from *ELCO/DMF*, the Federal Circuit appeal, alleging that Petitioner made certain admissions therein regarding the meaning of claim 22.

Claims 1, 2, 4–11, 13–17, 19, 21, 25, 26, and 28–30 are not at issue on remand because the Federal Circuit affirmed our determination that claim 17 was unpatentable and the other claims were not unpatentable. Accordingly, the only claim that remains for our consideration is claim 22. For the reasons discussed below, we conclude, in view of the Federal Circuit's decision and the record previously developed during trial, that Petitioner has not shown by a preponderance of evidence that claim 22 is unpatentable.

B. The '266 Patent

The '266 patent describes a compact recessed lighting system comprising a light source module and a driver separately coupled to a unified casting, and a reflector. Ex. 1001, Abstract. According to the '266 patent, recessed lighting systems are typically installed or mounted into an opening in a ceiling or a wall, and consist of a trim, a light source module, a “can” housing, and a driver, with the driver insulated from other portions and components of the lighting system through use of a separate insulating container. *Id.* at 1:27–33. The driver may be coupled to the light source module through the use of wires or other conduits such that the driver powers the light source module to emit light. *Id.* at 1:33–36. The '266 patent purports to provide a lighting system with a more compact and cost-effective design while complying with all building and safety codes/regulations. *Id.* at 2:10–13.

C. Claim 22

Independent claim 22 reads 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 11:4–2–43 (emphasis added).

D. Asserted Ground on Remand

Petitioner asserts that the combination of Imtra 2011² and Imtra 2007³, with or without Gifford⁴ would have rendered claim 22 unpatentable as obvious.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, the Board construes claim terms “in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b) (2018).

In the Final Decision, we explicitly construed two terms (“standard junction box” and “driver”). Final Dec. 9–27. Nothing in the Federal Circuit’s decision indicates that these constructions need be revisited. We, therefore, rely on the constructions set forth in the Final Decision, and add the following.

As the Federal Circuit observed (*ELCO/DMF*, 2022 WL 16844516, at *3), we explained in the Final Decision that claim 22 is limited to lighting

² Imtra Marine Lighting– Advanced LED Solutions (“Imtra 2011”). Ex. 1005.

³ Imtra Marine Lighting – Spring 2007 (“Imtra 2007”). Ex. 1006.

⁴ U.S. Patent No. 9,366,418 B2 to Gifford, published Apr. 4, 2013 (“Gifford”). Ex. 1007.

systems that are used in buildings (*see AMP Plus, Inc. v. DMF, Inc.*, , 2020 WL 6811241, at *6 n.8, *8–9, *11 (PTAB Nov. 19, 2020)). In addition to the reasoning provided in the Final Written Decision, we note that claim 22 recites that the compact recessed lighting system comprises “a plurality of wires connected to the driver and connected to a first connector . . . coupled to a second connector . . . , wherein the second connector is coupled to electricity from *an electrical system of a building* in which the compact recessed lighting system is installed.” Ex. 1001, 11:35–43 (emphasis added).

No other claim terms requires express construction. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

B. Asserted References

Petitioner asserts that claim 22 would have been obvious over the combination of Imtra 2011 (Ex. 1005) and Imtra 2007 (Ex. 1006) (Ground 2). Paper 1 (“Pet.”), 47–55. Imtra 2011 and Imtra 2007 are brochures on LED and halogen lighting fixtures available for use in a variety of marine applications.

Petitioner also asserts that claim 22 would have been obvious over the combination of Imtra 2011, Imtra 2007, and U.S. Patent No. 9,366,418 B2 to Graham Gifford titled “Method, Apparatus, and System for Connecting a Light Emitting Diode Light Fixture to a Mains Power Conductor” issued on June 14, 2016 (“Gifford”) (Ex. 1007) (Ground 3). Pet. 64–68, 70–73.

C. Ground 2: Obviousness over Imtra 2011 and Imtra 2007

In challenging the patentability of claim 22 over Imtra 2011 and Imtra 2007, Petitioner relies on arguments made regarding limitations in other

claims that are the same or similar to limitations in claim 22. *See* Pet. 49–53. Petitioner also makes arguments applicable to three limitations present only in claim 22 identified in the Petition as Limitations [K] (“wherein: the light source module is a light emitting diode (LED) module”); [L] (“the sidewall of the unified casting has fins formed on its outside surface”); and [M]:

the system further comprises a plurality of wires connected to the driver and connected to a first connector of a pair of complimentary keyed or interlocking connectors, such that in operation the first connector is coupled to a second connector of the pair of complimentary 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 54. We need only consider Petitioner’s arguments regarding Limitation [M] to resolve Petitioner’s contentions regarding the patentability of claim 22. Regarding Limitation [M], Petitioner argues

Imtra 2011 discloses that the “fixture is equipped with an 18 awg Triplex cable tail for direct hook up to an AC J-box.” (Imtra 2011, p. 6) The use of interlocking or key connectors (interlocking connectors) and junction boxes in connection with lighting fixtures were known to a POSITA. A POSITA would know that wire connections between the fixture and the power source can be made in a variety of ways, including a keyed output connector. (Bretschneider, ¶158–159).

Id. at 54–55. Petitioner provides no analysis of the portion of Limitation [M] that recites “coupl[ing] to electricity from an electrical system of a building in which the compact recessed lighting system is installed.” *See id.* Later, in the Reply, Petitioner argues that “[t]he claims do not **require** a stand junction box and most do not **require** the recessed lighting system to be installed in a building.” Paper 42, 2. As explained below, however, some claims do require installation in building, and claim 22 is one such claim.

In the Final Decision, we did not construe “driver” as limited to a device that receives electrical power from building main power. Paper 70, 26. Although we held that “driver” does not itself require installation of the recessed lighting system in a building, we stated “[w]here desired, the Applicant drafted the claims to limit the recessed lighting system to one placed or installed in a building.” *Id.* at 25 (identifying claim 22 as one such claim). Of the challenged claims, claims 10, 16, 22, and 25 (by its dependence from claim 22) specifically require installation in a building.

Given opportunities, Petitioner side-stepped confronting the “installation in a building” issue. Claim 10 recites “a second plurality of wires that emerge from the standard junction box and that are to bring electricity from *an electrical system of a building* in which the recessed lighting system is to be installed.” Ex. 1001, 9:28–31 (emphasis added). In challenging claim 10, Petitioner argues “Imtra 2011 discloses the connection between the external power supply source and the driver would include a plurality of wires connected to the driver.” Pet. 42. Claim 16 recites “a trim directly coupled to the unified casting, for covering a hole in *a ceiling or wall of a building in which the compact recessed lighting system is placed.*” Ex. 1001, 9:65–67 (emphasis added). Petitioner argued that “Imtra 2011 discloses that the lighting devices may be installed in a ceiling of marine applications. . . . Those of ordinary skill in the art understand that decorative trim components are commonly and widely used for recessed lighting applications in buildings to cover a hole in a ceiling or wall.” Pet. 45, 60. Petitioner appears to vaguely suggest that the marine recessed lighting systems disclosed in Imtra 2011 could be installed in a building, but such suggestion is unsupported by evidence. The portions of Imtra 2011 and Dr.

Bretschneider's Declaration Petitioner relies on fail to address installation of Imtra 2011's marine lighting system in a building. *See* Ex. 1005, 5, 6, 10; Ex. 1002, ¶¶ 179–82, 193–96.

Petitioner bears the burden of proving unpatentability of the challenged claims, a burden that never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). Petitioner must establish the facts supporting its challenge by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d).

In view of Petitioner's failure to direct us to evidence sufficient to establish a person of ordinary skill in the art could have and would have installed the marine recessed lighting system disclosed in Imtra 2011 in a building, we find Petitioner fails to show obviousness of claim 22 over the combination of Imtra 2011 and Imtra 2007 by a preponderance of the evidence.

D. Ground 3: Obviousness over Imtra 2011, Imtra 2007, and Gifford

Petitioner fails to show that the Imtra references render claim 22 obvious. In the Final Decision we noted that Petitioner challenged several claims, including claim 22, as obvious over the combination of Imtra 2011, Imtra 2007, and Gifford, and determined that Petitioner failed to prove by a preponderance of the evidence that one of ordinary skill in the art would have been motivated to modify the Imtra references in view of Gifford's teaching. *Id.* at 48–49. The Federal Circuit affirmed our determination, which we maintain here. For these reasons, Petitioner fails to show obviousness of claim 22 over the combination of Imtra 2011, Imtra 2007, and Gifford by a preponderance of the evidence.

III. CONCLUSION

For the foregoing reasons, we conclude that Petitioner has not shown by a preponderance of the evidence that claim 22 is unpatentable as having been obvious over the combination of Imtra 2011 and Imtra 2007, or the combination of Imtra 2011, Imtra 2007, and Gifford.

The following table summarizes this decision in combination with our earlier decision affirmed by the Federal Circuit:

Claims	35 U.S.C. §	Reference(s)/ Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1, 2, 4–11, 13, 15–17, 19, 21, 26	102(a)	Imtra 2011	17	1, 2, 4–11, 13, 15, 16, 19, 21, 26
1, 2, 4–11, 13–17, 19, 21, 22, 26, 28–30	103	Imtra 2011, Imtra 2007	17	1, 2, 4–11, 13– 16, 19, 21, 22, 25, 26, 28–30
1, 2, 4–11, 13–17, 19, 21, 22, 26, 28–30	103	Imtra 2011, Imtra 2007, Gifford	17	1, 2, 4–11, 13– 6, 19, 21, 22, 25, 26, 28–30
Overall Outcome			17	1, 2, 4–11, 13– 16, 19, 21, 22, 25, 26, 28–30

IV. ORDER

Accordingly, the Order of the Board's November 19, 2020 Final Written Decision is hereby supplemented as follows:

ORDERED that claim 22 of U.S. Patent 9,964,266 B2 has *not been proven unpatentable*; and

FURTHER ORDERED that, because this is a final decision, parties to

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the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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