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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* UNITY OPTO TECHNOLOGY CO., LTD  
Patent Owner and Appellant

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Appeal 2020-002604  
Reexamination Control 90/014,105<sup>1</sup>  
Patent 9,447,954 B2  
Technology Center 3900

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Before JOHN A. JEFFERY, MARC S. HOFF, and ERIC B. CHEN,  
*Administrative Patent Judges.*

HOFF, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from a Final Rejection of claims 10–13, 17, and 18. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellant's invention (U.S. Patent No. 9,447,954 B2 to Myers) is a flat light emitting diode (LED) panel. Power circuitry is disposed within at least one of a number of channels within the frame. The panel includes a

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<sup>1</sup> Appellant states that the real party in interest is Unity Opto Technology Co., LTD. Appeal Br. 5.

central wire-way disposed adjacent the back surface of the bottom assembly, configured to route wiring to or from the power circuitry. Abstract.

Claim 10 is reproduced below:

10. A light fixture comprising:  
a frame including a bottom assembly and a top assembly coupled to the bottom assembly, the bottom assembly and the top assembly cooperating to form a plurality of channels within the frame, the bottom assembly having a back surface;  
a substantially flat light emitting diode (LED) panel disposed within the frame;  
power circuitry disposed within at least one of the plurality of channels within the frame, the power circuitry being configured to electrically couple the substantially flat LED panel to an external AC power supply; and  
a central wire-way disposed adjacent the back surface of the bottom assembly and configured to route wiring to or from the power circuitry disposed within at least one of the plurality of channels within the frame, wherein the central wire-way is configured to route 16 gauge wiring and 18 gauge wiring according to the AWG (American Wire Gauge) system.

The prior art relied upon by the Examiner as evidence is:

| Name        | Reference          | Date          |
|-------------|--------------------|---------------|
| Verfuertth  | US 2009/0147507 A1 | June 11, 2009 |
| Spada       | US 2008/0101094 A1 | May 1, 2008   |
| Cronk       | US 8,096,671 B1    | Jan. 17, 2012 |
| Jung        | US 2008/0297679 A1 | Dec. 4, 2008  |
| Brown       | US 6,240,665 B1    | June 5, 2001  |
| Schexnaider | US 2005/0219860 A1 | Oct. 6, 2005  |
| Kim         | US 8,061,867 B2    | Nov. 22, 2011 |
| Frazier     | US 2010/0289428 A1 | Nov. 18, 2010 |
| Lv          | US 2011/0149596 A1 | June 23, 2011 |
| Mighetto    | US 7,387,403 B2    | June 17, 2008 |
| Glory       | JP 3140783         | Apr. 10, 2008 |

Ground 1: Claims 10 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Brown, or alternately, under 35 U.S.C. § 103(a) as being unpatentable over Brown.

Ground 2: Claims 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown.

Ground 3: Claims 10, 12, 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown, Verfuert, and Mighetto.

Ground 4(a): Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown and Spada.

Ground 4(b): Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown, Verfuert, Mighetto, and Spada.

Ground 5(a): Claims 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown, Jung, and Spada.

Ground 5(b): Claims 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown, Verfuert, Mighetto, Jung, and Spada.

Ground 6: Claims 10, 12, 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cronk, Verfuert, and Mighetto.

Ground 7: Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Cronk, Verfuert, Mighetto, and Spada.

Ground 8: Claims 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cronk, Verfuert, Mighetto, Jung, and Spada.

Ground 9(a): Claims 10 and 12 stand rejected under 35 U.S.C. § 102(b) as anticipated by Glory, or in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over Glory.

Ground 9(b): Claims 10 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Glory, Kim, Frazier, and Brown.

Ground 10: Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Glory and Spada.

Ground 11: Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Glory, Kim, Frazier, Brown, and Spada.

Ground 12(a): Claims 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Glory, Spada, and Schexnaider.

Ground 12(b): Claims 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Glory, Kim, Frazier, Brown, Spada, and Schexnaider.

Ground 13(a); Claims 10–13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Glory, Verfueth, and Mighetto.

Ground 13(b): Claims 10–13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Glory, Kim, Frazier, Brown, Verfueth, and Mighetto.

Ground 13(c): Claims 10–13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Glory, Spada, Schexnaider, Verfueth, and Mighetto.

Ground 13(d): Claims 10–13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Glory, Kim, Frazier, Brown, Spada, Schexnaider, Verfueth, and Mighetto.

Ground 14: Claims 10, 12, 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lv, Kim, Frazier, and Brown.

Ground 15: Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lv, Kim, Frazier, Brown, and Spada.

Ground 16: Claims 13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lv, Kim, Frazier, Brown, Spada, and Schexnaider.

Ground 17(a): Claims 10–13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lv, Kim, Frazier, Brown, Verfuert, and Mighetto.

Ground 17(b): Claims 10–13, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lv, Kim, Frazier, Brown, Spada, Schexnaider, Verfuert, and Mighetto.

Throughout this decision, we make reference to the Appeal Brief (“Appeal Br.,” filed Aug. 28, 2019), the Reply Brief (“Reply Br.,” filed Jan. 22, 2020), and the Examiner’s Answer (“Ans.,” mailed Nov. 22, 2019) for their respective details.

## ISSUES

1. Does the Examiner’s combination of references teach or suggest an AC to DC converter disposed in a channel of a frame?
2. Does the Examiner’s combination of references teach or suggest a central wire-way disposed adjacent the back surface of the bottom assembly?

## ANALYSIS

Ground 13(b): Rejection of claims 10–13, 17, and 18 over Glory, Kim, Frazier, Brown, Verfueth, and Mighetto

Appellant argues that the Examiner’s rejection is deficient for the reasons expressed with respect to Ground 3, which itself refers to Ground 1, which is a rejection over Brown alone. Appeal Br. 47. With respect to Grounds 1 and 3, Appellant argues that Brown does not teach an AC-DC converter disposed in a channel of a frame. Appeal Br. 28, 33. Appellant also argues that Brown does not teach a central wire-way disposed adjacent the back surface of the bottom assembly. Appeal Br. 29.

These arguments are not persuasive. In Ground 13(b), the Examiner relies on Glory, rather than Brown, to teach the claimed “power circuitry,” which is construed to comprise AC to DC conversion circuitry. Ans. 19. Glory teaches AC to DC converter 22 “formed in a bar shape” and “housed inside the outer shell 21.” Glory ¶ 15, Fig. 3. The Examiner relies on Kim, Frazier, and/or Brown, rather than Glory, to teach the claimed central wire-way. Ans. 15–17, 19.

In contesting the rejection based on Ground 13, Appellant also refers to arguments against Ground 9, which is a rejection based on Glory alone. Appeal Br. 47. Appellant argues that Glory does not teach the recited central wire-way. Appeal Br. 42. This argument is not persuasive because the Examiner relies on Kim, Frazier, and/or Brown, rather than Glory, to teach the claimed central wire-way.

Appellant also contends that Kim, Frazier, and Brown fail to teach the claimed central wire-way. Appeal Br. 43. Appellant argues that “the

connecting groove 107 in Kim is located near the edge of the frame,” and that “the hole for wiring 22 in Frazier is located near the top of the frame.” Appeal Br. 48 (citing Frazier Fig. 2). Appellant alleges that the Examiner has no clear explanation as to how a person skilled in the art would have modified Glory to include the claimed central wire-way. Appeal Br. 43.

We are not persuaded by Appellant’s argument. Rather, we agree with the Examiner’s finding that Frazier teaches a hole for wiring 22, illustrated in Fig. 2, disposed in a central position with respect to the lateral dimension of housing 10. Ans. 50; Frazier Fig. 2.

Appellant’s argument that the Examiner does not adequately explain how a person of skill in the art would modify Glory to include the claimed central wire-way is not persuasive, because the test of obviousness is not whether the Kim, Frazier, or Brown references may be bodily incorporated into the Glory reference. The test of obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). We determine that the Examiner provided reasons to combine Glory with Kim, Frazier, and/or Brown, having a rational underpinning to support the conclusion of obviousness. Ans. 47–48.

We conclude that the Examiner did not err in rejecting claims 10–13, 17, and 18 over Glory, Kim, Frazier, Brown, Verfuert, and Mighetto. We sustain the Examiner’s § 103(a) rejection.



#### OTHER REJECTIONS

Affirmance of the rejection of claims 10–13, 17, and 18 based on Glory, Kim, Frazier, Brown, Verfueth, and Mighetto, renders it unnecessary to reach the propriety of the Examiner’s decision to reject those claims based on other grounds. *Cf. In re Gleave*, 560 F.3d 1331, 1338 (Fed. Cir. 2009). As such, we need not reach the propriety of the other grounds of rejection of the claims under appeal.

#### CONCLUSION

1. The Examiner’s combination of references teaches an AC to DC converter disposed in a channel of a frame.
2. The Examiner’s combination of references suggests a central wire-way disposed adjacent the back surface of the bottom assembly.

DECISION SUMMARY

In summary:

| <b>Claims Rejected</b> | <b>35 U.S.C. §</b> | <b>Reference(s)/ Basis</b>             | <b>Affirmed</b> | <b>Reversed</b> |
|------------------------|--------------------|--|-----------------|-----------------|
| 10, 12                 | 102                | Brown                                  |                 |                 |
| 10, 12                 | 103                | Brown                                  |                 |                 |
| 13, 17, 18             | 103                | Brown                                  |                 |                 |
| 10, 12, 13, 17, 18     | 103                | Brown, Verfuert, Mighetto              |                 |                 |
| 11                     | 103                | Brown, Spada                           |                 |                 |
| 11                     | 103                | Brown, Verfuert, Mighetto, Spada       |                 |                 |
| 13, 17, 18             | 103                | Brown, Jung, Spada                     |                 |                 |
| 13, 17, 18             | 103                | Brown, Verfuert, Mighetto, Jung, Spada |                 |                 |
| 10, 12, 13, 17, 18     | 103                | Cronk, Verfuert, Mighetto              |                 |                 |
| 11                     | 103                | Cronk, Verfuert, Mighetto, Spada       |                 |                 |
| 13, 17, 18             | 103                | Cronk, Verfuert, Mighetto, Jung, Spada |                 |                 |
| 10, 12                 | 102                | Glory                                  |                 |                 |
| 10, 12                 | 103                | Glory                                  |                 |                 |
| 10, 12                 | 103                | Glory, Kim, Frazier, Brown             |                 |                 |
| 11                     | 103                | Glory, Spada                           |                 |                 |
| 11                     | 103                | Glory, Kim, Frazier, Brown, Spada      |                 |                 |
| 13, 17, 18             | 103                | Glory, Spada, Schexnaider              |                 |                 |

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| <b>Claims Rejected</b> | <b>35 U.S.C. §</b> | <b>Reference(s)/ Basis</b>   | <b>Affirmed</b> | <b>Reversed</b> |
|------------------------|--------------------|--|-----------------|-----------------|
| 13, 17, 18             | 103                | Glory, Kim, Frazier, Brown, Spada, Schexnaider                     |                 |                 |
| 10–13, 17, 18          | 103                | Glory, Verfuert, Mighetto  |                 |                 |
| 10–13, 17, 18          | 103                | Glory, Kim, Frazier, Brown, Verfuert, Mighetto                     | 10–13, 17, 18   |                 |
| 10–13, 17, 18          | 103                | Glory, Spada, Schexnaider, Verfuert, Mighetto                      |                 |                 |
| 10–13, 17, 18          | 103                | Glory, Kim, Frazier, Brown, Spada, Schexnaider, Verfuert, Mighetto |                 |                 |
| 10, 12, 13, 17, 18     | 103                | Lv, Kim, Frazier, Brown  |                 |                 |
| 11                     | 103                | Lv, Kim, Frazier, Brown, Spada                                     |                 |                 |
| 13, 17, 18             | 103                | Lv, Kim, Frazier, Brown, Spada, Schexnaider                        |                 |                 |
| 10–13, 17, 18          | 103                | Lv, Kim, Frazier, Brown, Verfuert, Mighetto                        |                 |                 |
| 10–13, 17, 18          | 103                | Lv, Kim, Frazier, Brown, Spada, Schexnaider, Verfuert, Mighetto    |                 |                 |

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| <b>Claims Rejected</b> | <b>35 U.S.C. §</b> | <b>Reference(s)/ Basis</b> | <b>Affirmed</b> | <b>Reversed</b> |
|------------------------|--------------------|----------------------------|-----------------|-----------------|
| <b>Overall Outcome</b> |                    |                            | 10–13, 17, 18   |                 |

The Examiner’s decision to reject claims 10–13, 17, and 18 under 35 U.S.C. § 103(a) is affirmed.

Requests for extensions of time in this *ex parte* reexamination proceeding are governed by 37 C.F.R. § 1.550(c). *See* 37 C.F.R. § 41.50(f).

**AFFIRMED**

msc

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Patent 9,447,954 B2

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