

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PRODUCT MINIATURE, INC.,
Petitioner,

v.

POP DISPLAYS USA, LLC,
Patent Owner.

Case IPR2015-00266
Patent 8,646,935 B2

Before MEREDITH C. PETRAVICK, HYUN J. JUNG, and
NEIL T. POWELL, *Administrative Patent Judges*.

PETRAVICK, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
Inter Partes Review
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. Background

Product Miniature, Inc. (“Petitioner”) filed a Petition requesting *inter partes* review of claims 1–7 (“the challenged claims”) of U.S. Patent No. 8,646,935 B2 (Ex. 1001, “the ’935 patent”) pursuant to 35 U.S.C. §§ 311–319. Paper 1, (“Pet.”). POP Displays USA, LLC (“Patent Owner”) filed a Preliminary Response to the Petition. Paper 6, (“Prelim. Resp.”).

On April 28, 2015, we instituted *inter partes* review on the following grounds:

Ground	Claim(s)	Prior Art
§ 103	1, 2, 5, and 6	Griesshammer ¹
§ 103	3	Griesshammer and Maheu ²
§ 103	1	Piepszownik ³ and Ter-Hovhannisian ⁴
§ 103	7	Piepszownik

Paper 7, 23 (“Dec. to Inst.”).

¹ Int’l Pub. No. EP 1,688,070 A1 published on Aug. 9, 2006 (Ex. 1002).

² US Patent No. 7,798,338 B2 issued Sept. 21, 2010 (Ex. 1008).

³ Int’l Pub. No. FR 2,731,885 published on Sept. 27, 1996 (Ex. 1004).

⁴ US Patent No. 7,121,675 B2 issued Oct. 17, 2006 (Ex. 1006).

Patent Owner filed a Patent Owner Response⁵ (Paper 17, “PO Resp.”) and a Motion to Amend (Paper 13, “Mot.”). Petitioner filed a Petitioner Reply (Paper 34, “Pet. Reply”) and an Opposition to the Motion to Amend (Paper 35, “Opp. to Mot.”). Patent Owner filed a Reply to the Opposition to the Motion to Amend. Paper 36 (“PO Reply to Opp. to Mot.”).

An oral hearing was held on December 15, 2015. A transcript of the hearing is included in the record. Paper 42 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73.

B. Related Proceedings

Both parties state that the ’935 patent is involved in *POP Displays USA, LLC v. Product Miniature, Inc. et al.*, Case No. 1:14-cv-03639-ER, filed in the U.S. District Court for the Southern District of New York. Pet. 1; Paper 3, 2.

In addition, Petitioner states that pending U.S. Patent Application No. 14/139,435 was filed on December 23, 2013 and claims priority to the ’935 patent. *Id.*

C. The ’935 Patent

The ’935 patent is titled “Low Voltage Illumination Grid Assembly for Retail Display Shelf System” and issued from an application claiming priority to a provisional application filed

⁵ We refer to Patent Owner’s Reformatted Patent Owner Response, unless otherwise noted.

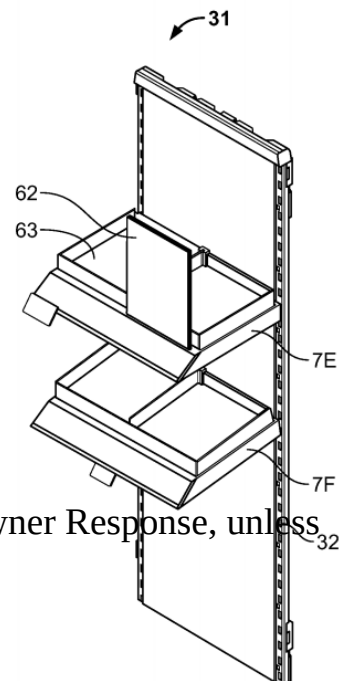


FIG. 5A

on April 23, 2009. Ex. 1001, 1. The '935 patent describes a retail display shelf. *Id.* at Abstract.

Figure 5A of the '935 patent is reproduced to the right and depicts grid assembly 31 of the shelf system supporting shelf assemblies 7E and 7F. *Id.* at col. 4, ll. 52–55. Shelf assembly 7E includes picture panel 62. *Id.*

Figure 6 of the '935 patent is reproduced below.

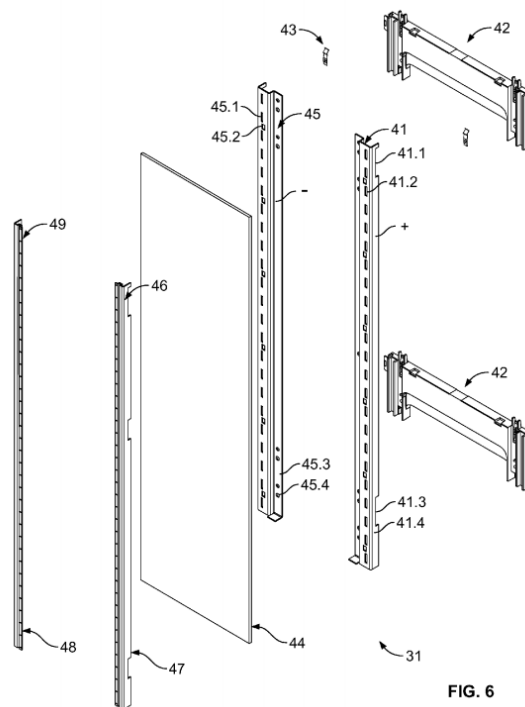


Figure 6 is an exploded view of grid assembly 31. Grid assembly 31 includes insulated horizontals 42, which hold conductive standards 41 and 45. *Id.* at col. 4, ll. 15–38. Conductive standards are attached to a low voltage power supply (not shown) by clips 43. *Id.* Back support panel 44 is sandwiched between shelf standards 41, 45 and rail covers 46, 49/standard covers 47, 48.

Figure 4 of the '935 patent is reproduced below.

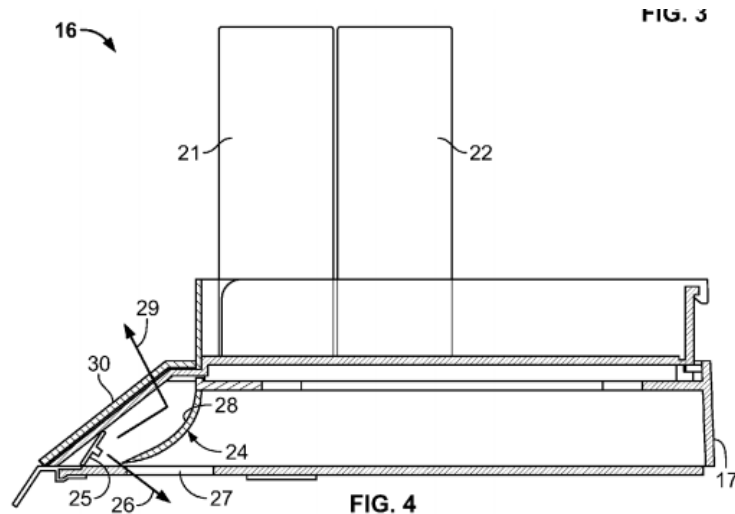


Figure 4 depicts an embodiment of a shelf assembly. Shelf assembly 17 includes light emitting diode (“LED”) assembly 25. *Id.* at col. 3, l. 62–col. 4, l. 11. Light from LED assembly 25, represented by rays 26 and 29, shines on the shelf below and backlights bullnose 30. *Id.* Shelf assembly 17 is attached to standards 41, 45 by conductive knife brackets 102 (not shown). *Id.* at col. 5, ll. 30–32; Fig. 12. LED assembly 25 is powered from low voltage power supply 80 through standards 41, 45 and knife brackets 102, 103. *Id.* at col. 6, ll. 42–56; Fig. 7. The '935 patent states:

Feeder assembly 76 plugs into power assembly 80 to distribute low voltage to standards 41 (negative) & 45 (positive) of FIG. 6, which standards 41 & 45 are electrically isolated from each other, to conduct two polarities of low voltage DC. Each knife bracket 102–103 conducts the polarity of its side, from standard 41+ or 45-, to LED assembly 25. So long as polarity consistency is established, the LED assembly 25 will always function on any vertical.

Id. at col. 6, ll. 45–52.

D. Illustrative Claim

Challenged claims 1, 3, 5, and 7 are independent. Challenged claims 2 and 6 are dependent from claims 1 and 5, respectively. Claim 1, reproduced below, is illustrative of the '935 patent.

1. A display shelf system including a gondola, the system comprising:
 - a plurality of conductive shelf support brackets;
 - a pair of conductive standards having a plurality of slots, and supporting at least one of the plurality of conductive shelf support brackets;
 - an insulating rail cover, covering at least one of the conductive standards;
 - an illumination structure including a circuit board, an array of light emitting diodes (LEDs) disposed on a surface of the circuit board, and a connector adapted to connect to a respective one of the shelf support brackets;
 - a low voltage power supply, electrically connected to the conductive standards and configured so that current travels from the low voltage power supply, conducted by the conductive standards, through the shelf support brackets, through the circuit board, to power each of the LEDs, to illuminate local parts of the display shelf system.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278–79 (Fed. Cir. 2015), *cert. granted sub nom. Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 890 (mem.) (2016). Claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the

context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

i. “cover”

In our Decision to Institute, we determined that the broadest reasonable construction, in light of the Specification, of “cover” is something that protects, shelters, or guards. Dec. to Inst. 7. This construction is consistent with a dictionary definition of “cover” as “something that protects, shelters, or guards” (Ex. 3001 (definition of “cover” from MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY)) and is also consistent with the Specification which describes standard covers 46/47 and 49/48 as snapping onto standards 41 and 45. Ex. 1001, col. 4, ll. 35–38, Fig. 1.

Neither Petitioner nor Patent Owner dispute that this construction is the broadest reasonable construction or propose any alternate construction.

ii. remaining terms

No explicit construction of any other claim term is needed to resolve the issues in this proceeding.

B. Overview of Prior Art

i. Griesshammer

Griesshammer is European Patent Application EP 1,688,070 A1 and published on August 9, 2006. Ex. 1003⁶, 1. Griesshammer is titled “Shelf with Illuminating Device.” *Id.*

Figure 1 of Griesshammer is reproduced below.

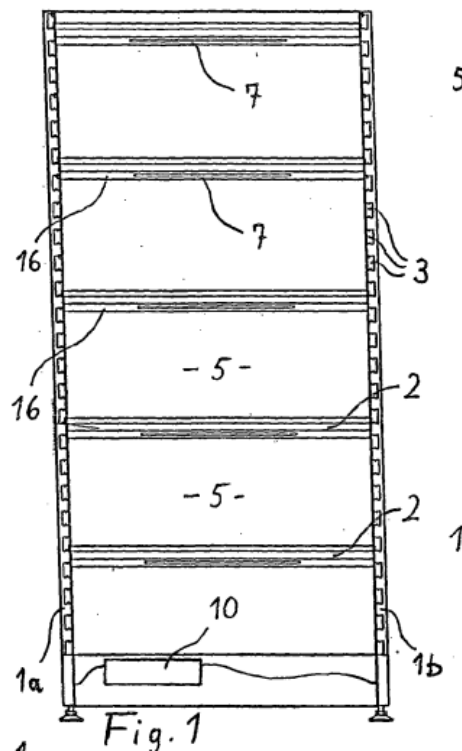


Figure 1 depicts an embodiment of a shelf module, which has vertical supports 1a, 1b having five shelf bottoms 2. *Id.* ¶ 25. Vertical supports 1a, 1b can be freestanding posts or fastened to a building wall. *Id.* Vertical supports are connected to power transformer 10 by wires and conduct current to illumination means 7 on the shelf bottoms 2. *Id.* ¶ 29. Illumination means 7 can be high-luminosity LEDs. *Id.* ¶ 26.

⁶ We refer to Petitioner’s English translation of Griesshammer unless otherwise noted.

Figure 4 of Griesshammer is reproduced below.

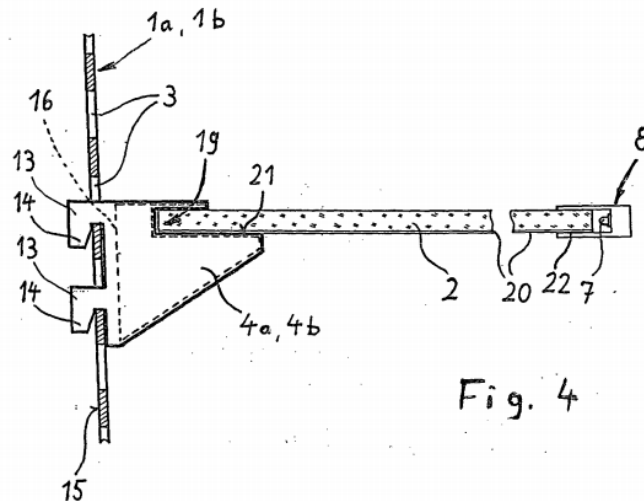


Figure 4 depicts a sectional view of shelf bottom 2 and depicts shelf bottom 2 connected to vertical supports 1a, 1b by brackets 4a, 4b. *Id.* ¶ 31. Hooks 13 on brackets 4a, 4b engage in slots 3 of vertical supports 1a, 1b and establish electrical contact with vertical supports 1a, 1b. *Id.* Shelf bottom 2 is formed of a glass or acryl pane having an electrical conducting track 20 on its bottom, which is in electrical contact with brackets 4a, 4b on one end via recess 19. *Id.* ¶ 32. Electrical conducting track 20 is in electrical contact with illuminating means 7 on its other end. *Id.* Alternatively, illuminating means 7 can be in direct electrical contact with brackets 4a, 4b. *Id.* ¶ 33.

Griesshammer states:

It is furthermore suggested that the supports, facing the shelf bottoms, are provided with a protective or decorative surface coating, e.g., a lacquering, in contrast to which the backsides or insides of the supports facing away from the shelf bottoms are bare of uncoated. In this manner the supports can be provided with any type of surface coating for decorative [or] protective purposes without hindering or degrading the electrical contact for the illumination device but rather the latter is located in the back areas of the supports that are bare or uncoated.

Id. ¶ 11.

ii. Piepszownik

Piepszownik is a French Patent Application No. 9503429 and published on September 27, 1996. Ex. 1005⁷, 1. Piepszownik is titled “Installation of Dismountable Shelves.” Figure 1 of Piepszownik is reproduced below.

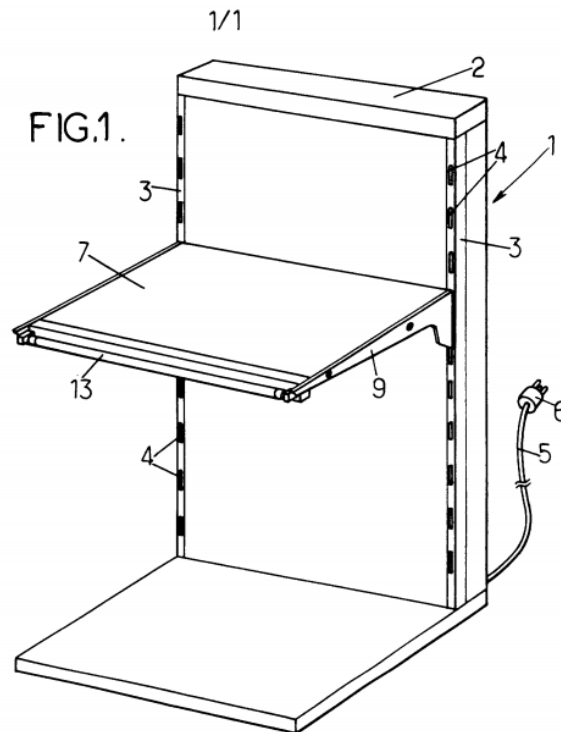


Figure 1 depicts an installation of dismountable shelves, which includes metallic vertical posts 3 having hook openings 4 and metallic brackets 9 having hook ends. *Id.* at 3–4. The vertical posts are connected to a power transformer (not shown) and conduct voltage to brackets 9. *Id.*

⁷ We refer to Petitioner’s English translation of Piepszownik unless otherwise noted.

Figure 2 of Piepszownik is reproduced below.

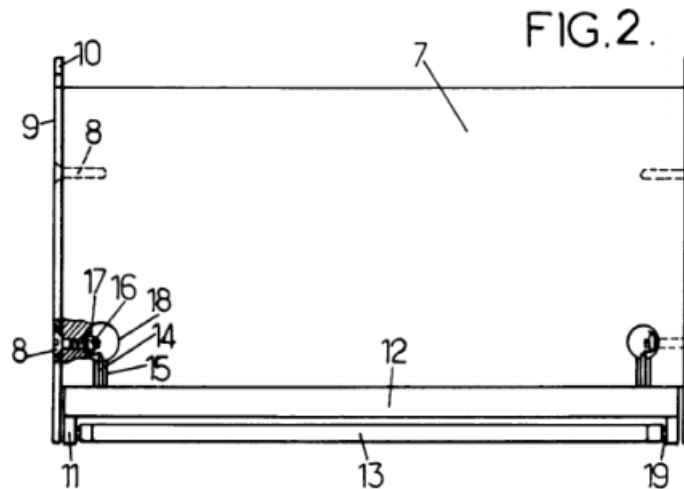


Figure 2 depicts the underside of shelf 7, which has low-voltage, low power fluorescent lighting tube 13 at its front edge. *Id.* at 4. Bracket 9 is electrically connected to feed and connection box 12 of fluorescent light tube 13 via screw 8, lug 17, nut 16, and wire 14. *Id.*

Piepszownik states that vertical posts 3 and brackets 9 “are covered with an insulating material except at the level of their mutual contact surface.” *Id.* at 5.

iii. Maheu

Maheu is US Patent No. 7,798,388 B2, which issued on September 21, 2010, from an application filed on April 15, 2006. Ex. 1008, 1. Maheu is titled “Wall Mounted Merchandising system.” *Id.* Maheu discloses that a problem faced in designing merchandising displays is that existing wall structure and configurations vary from store to store. *Id.* at col. 1, l. 15–col. 2, l. 2. Maheu solves this problem because it can adapt to display merchandise on a variety of wall configurations, including a pegboard configuration. *Id.* at Abstract. Merchandising system 10, which is

composed of display modules 20 and headers 50, mounts to perforated wall 16 using a horizontal mounting bracket 70. *Id.* at col. 5, ll. 34–57, Fig. 1.

Figure 8A of Maheu is reproduced below.

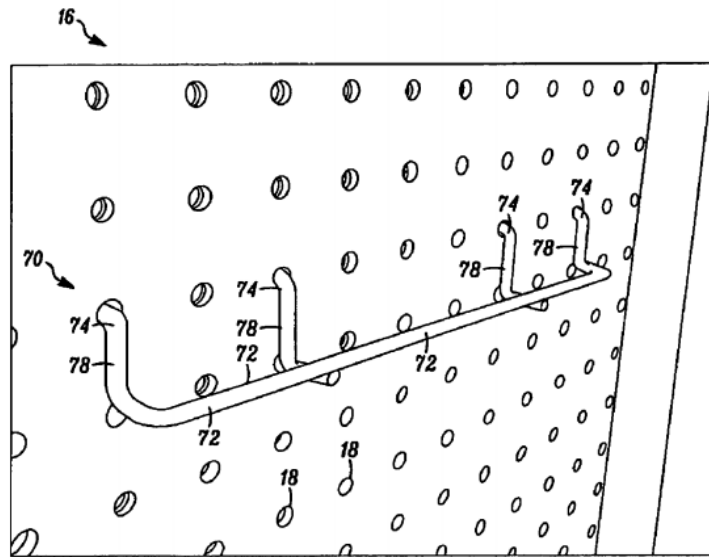


FIG. 8A

Figure 8A depicts mounting bracket 70 attached to perforated wall 16. *Id.* at col. 4, ll. 1–2. Mounting bracket 70 has a horizontal portion 72 and L-shaped prongs 74, which mount into aperture 18 of the perforated wall 16. *Id.* at col. 5, l. 52–col. 6, l. 16; Fig. 7A–7B.

iv. Ter-Hovhannisian

Ter-Hovhannisian is US Patent No. 7,121,675 B2 and issued on October 17, 2006. Ex. 1006, 1. Ter-Hovhannisian is titled “Low Temperature LED Lighting System” and describes a lighting system used on the end of shelves in a retail refrigeration unit. *Id.* at 1, Abstract. Ter-Hovhannisian discloses that the lighting system uses an array of LEDs and

that “[t]ypically, the LED’s 22 are assembled on a single or multi-unit printed circuit board (PCB).” *Id.* at col. 5, ll. 11–20.

C. Obviousness

Section 103 forbids issuance of a claim when

the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.

35 U.S.C. § 103.

The ultimate determination of obviousness under § 103 is a question of law based on underlying factual findings. *In re Baxter Int’l, Inc.*, 678 F.3d 1357, 1362 (Fed. Cir. 2012) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966)). These underlying factual considerations consist of: (1) the “level of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and (4) “secondary considerations” of non-obviousness such as “commercial success, long-felt but unsolved needs, failure of others, etc.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting *Graham*, 338 U.S. at 17–18). A claimed invention may be obvious even when the prior art does not teach each claim limitation, so long as the record contains some reason why one of skill in the art would modify the prior art to obtain the claimed invention. *See Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1307 (Fed. Cir. 2006).

Petitioner must prove unpatentability by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). Against this

background, we review Petitioner's contention that claims 1–3 and 5–7 of the '935 patent are unpatentable.

i. Claims 1, 2, 5, and 6 as Obvious over Griesshammer

a. Independent Claim 1

Petitioner contends that independent claim 1 is obvious over Griesshammer. Pet. 16–19, 21–22. Petitioner argues that Griesshammer discloses all of the elements of claim 1 except for the LEDs being disposed on a circuit board. *Id.* Petitioner argues that, although Griesshammer discloses an illumination means 7, which includes an array of LEDs, Griesshammer does not disclose that the array of LEDs is arranged on a circuit board. *Id.* at 17–18. Petitioner, however, argues that “it would have been obvious to a person having ordinary skill in the art to configure LEDs on a circuit board in accordance with convention.” *Id.* at 18 (citing for support the declaration of Mr. Bernabe Gomez, Ex. 1009 ¶ 48 (“Gomez Decl.”) and Ex. 1006, col. 5, ll. 18–20).

As can be seen from the overview of Griesshammer above, Griesshammer discloses all of the elements of claim 1 except for the circuit board. Claim 1 recites:

an illumination structure that includes an array of light emitting diodes (LEDs) disposed on a surface of the circuit board, and a connector disposed at each end of the circuit board, each connector adapted to connect to a respective one of the shelf support brackets.

Ex. 1001, col. 13, ll. 47–51.

Griesshammer discloses an illuminating means 7 in electrical contact at each end with brackets 4a, 4b. See Ex. 1003 ¶¶ 26, 32, 33. Griesshammer

teaches that the illuminating means 7 can be LEDs (*id.* ¶ 26), but fails to disclose that the LEDs are disposed on a surface of a circuit board.

Petitioner’s declarant Mr. Gomez testifies that LEDs are “typically arranged on a circuit board” and, thus, “it would have been obvious to a person having ordinary skill in the art to configure LEDs on a circuit board in accordance with convention.” Gomez Decl. ¶ 48 (citing Ex. 1006, col. 5, ll. 18–20). In addition, Ter-Hovhannisian discloses a similar lighting unit and states “[t]ypically the LED’s 22 are assembled on a single or multi-unit printed circuit board.” Ex. 1006, col. 5, ll. 18–20.

Given the above disclosures of Griesshammer and Ter-Hovhannisian and the testimony of Mr. Gomez, we determine that it would have been obvious to one of ordinary skill in the art to arrange the LEDs of Griesshammer on a circuit board as is conventional. Such a modification is nothing more “than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 416.

We determine that Petitioner shows by a preponderance of the evidence that claim 1 is unpatentable over Griesshammer. In making our determination and as discussed below, we considered Patent Owner’s arguments and evidence of secondary indicia of non-obviousness, but are not persuaded by such that claim 1 is patentable over Griesshammer.

b. Independent Claim 5

Petitioner argues that independent claim 5 is obvious over Griesshammer. Pet. 38–42. Petitioner argues that Griesshammer discloses all of the elements of claim 5 except for the claimed low voltage connector. *Id.* Claim 5 recites “a low voltage connector attached to the wiring harness,

said low voltage connector configured to connect the wiring harness to said low voltage output.” Petitioner argues that, although Griesshammer discloses that lines 11, 12 (i.e., the claimed wiring harness) are connected to the output of low-voltage power transformer 10, Griesshammer does not explicitly disclose that the lines are connected by a low voltage connector. *Id.* at 17–18. Petitioner argues that “[a] person having ordinary skill in the art would understand that connectors are typically used to connect wires to other components in a circuit.” *Id.* at 38–39 (citing Gomez Decl. ¶ 82 and Ex. 1007, Fig. 8, connectors 83).

Again as can be seen from the overview of Griesshammer above, Griesshammer discloses all of the elements of claim 5 except for low voltage connectors connecting the wiring harness to the low voltage output.

Griesshammer states:

The transformer 10 is a low-voltage transformer that delivers a direct voltage of 12 volts. A line 11 runs from the first transformer output to the left support 1a, another line 12 runs from the second transformer output to the right support 1b. The lines 11 and 12 make contact with the supports 1a, 1b in such a manner that the supports themselves are put under low-current voltage and are themselves in the current flow of the current circuit supplying the various illumination means

Ex. 1003 ¶ 29. Griesshammer, thus, discloses lines 11 and 12 (i.e., the wiring harness) are connected to an output of low voltage transformer 10, but does not explicitly disclose the use of a connector.

Mr. Gomez testifies that “[a] person having ordinary skill in the art would have understood that connectors are typically used to connect wires to other components in a circuit” and, thus, the use of connectors to electrically

and mechanically connect the lines creates a secure connection and completes the circuit.” Ex. 1009 ¶¶ 82, 89.

Given the above disclosures of Griesshammer and the testimony of Mr. Gomez, we determine that it would have been obvious to one of ordinary skill to use low voltage connectors to connect lines 11 and 12 to the low voltage transformer 10, in order to secure the connection. Such a modification is nothing more “than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 416

We determine that Petitioner shows by a preponderance of the evidence that claim 5 is unpatentable over Griesshammer. In making our determination and as discussed below, we considered Patent Owner’s arguments and evidence of secondary indicia of non-obviousness, but are not persuaded by such that claim 5 is patentable over Griesshammer.

c. Dependent Claims 2 and 6

Claim 2 depends from claim 1 and recites that “each rail cover comprises: a plurality of slots, and each slot is configured to accept one of the conductive support brackets.” Claim 6 depends from claim 5 and recites a similar limitation.

Petitioner argues that

Griesshammer does not explicitly state that the coating has slots that accept the brackets. Griesshammer does, however, state that the supports “can be provided with any type of surface coating . . . without hindering or degrading the electrical contact.” Griesshammer (Ex. 1003), pg. 5, ¶ 11. Since engagement of the brackets with the standards creates the electrical contact, the brackets must extend through the rail cover to contact the standards. Thus, it would be obvious to a person having ordinary skill in the art to design a rail cover

with slots, corresponding to the slots in the supports, to accept the bracket. *See* Gomez Decl. (Ex. 1009), pg. 17, ¶ 59.

Pet. 23.

We agree. As can be seen from Figures 1 and 4 of Griesshammer reproduced above, Griesshammer's upright supports 1a, 1b have slots 3 and brackets 4a, 4b have hooks 13 that extend through slots 3. Ex. 1003 ¶ 31. End sections 14 of hooks 13 contact back side 15 of supports 1a, 1b to create electrical contact and to transfer voltage from supports 1a, 1b to brackets 4a, 4b. *Id.* The back side 15 of supports 1a, 1b are uncoated or bare so as to not hinder or degrade the electrical contact. *Id.* ¶ 11. As Mr. Gomez testifies, in order for hooks 13 to extend through slots 3 and make the electrical contact, Griesshammer's coating or rail cover must also have corresponding slots. Gomez Dec. ¶ 59.

We determine that Petitioner shows by a preponderance of the evidence that claims 2 and 6 are unpatentable over Griesshammer. In making our determination and as discussed below, we considered Patent Owner's arguments and evidence of secondary indicia of non-obviousness, but are not persuaded by such that claims 2 and 6 are patentable over Griesshammer.

ii. Claim 3 as Obvious over Griesshammer and Maheu

Independent claim 3 is similar to independent claim 5, discussed above. Independent claim 3, however, also recites that the display system has a hang bracket and a horizontal member and recites "wherein the hang bracket is configured to be secured to the horizontal member to hang the display system from peg holes of a gondola wall." Ex. 1001, col. 14, ll. 25–

29. Independent claim 3 recites that the gondola is a “conventional gondola.” *Id.* at col. 13, ll. 63–64.

As for claim 5 above, Petitioner argues that Griesshammer renders obvious most of the limitations of claim 3. Pet. 27–30, 31–32. Petitioner, however, acknowledges that Griesshammer does not disclose the claimed hang bracket and horizontal member and cites to Maheu to cure this deficiency. *Id.* Petitioner argues that “a person having ordinary skill in the art would be motivated to modify the display of Griesshammer with the hang bracket of Maheu to attach the display to a conventional gondola.” Pet. 30 (citing Gomez Decl. ¶ 72).

As discussed with regards to claim 5 above and as can be seen from the overview of Griesshammer above, Griesshammer teaches most of the limitations of claim 3. Notably, Griesshammer discloses that its shelf module can be freestanding or, alternatively, fastened to the wall of a building. Ex. 1003 ¶ 25. Griesshammer, however, does not disclose a hang bracket and a horizontal member, “wherein the hang bracket is configured to be secured to the horizontal member to hang the display system from peg holes of a gondola wall.”

Maheu discloses “a merchandising system that is adaptable for displaying merchandise on a plurality of wall configurations.” Ex. 1008, Abstract; col. 1, l. 15–col. 2, l. 2; col. 8, ll. 13–23. According to Maheu, there is a need for an adaptable merchandise display because manufacturers install their merchandising displays in stores that have varying wall configurations. *Id.* To meet this need, Maheu discloses a universal horizontal mounting bracket 70, which has a horizontal portion and multiple prongs 74. *Id.* at col. 5, l. 52–col. 6, l. 16; Figs. 7A, 7B, 8A. The universal

horizontal mounting bracket can connect a merchandise display to different wall configurations, such as a pegboard configuration, of an existing store display. *Id.* at col. 1, l. 15–col. 2, l. 2; col. 5, l. 52–col. 6, l. 16; Figs. 1, 8B, 8C. Citing Maheu, Mr. Gomez testifies that “a person having ordinary skill in the art would have been motivated to modify the display of Griesshammer with the hang bracket of Maheu to attach the display to a conventional gondola.” Gomez Dec. ¶ 72.

Given the above disclosures of Griesshammer and Maheu and the testimony of Mr. Gomez, we determine that it would have been obvious to one of ordinary skill to use a hang bracket secured to a horizontal member to hang Griesshammer’s display system from peg holes of a conventional gondola wall. As taught by Maheu, such a modification would make Griesshammer’s display system desirably adaptable to a variety of pre-existing store display systems, includes ones having conventional gondola displays with pegboard configurations. Such a modification is nothing more “than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 416

We determine that Petitioner shows by a preponderance of the evidence that claim 3 is unpatentable over Griesshammer and Maheu. In making our determination and as discussed below, we considered Patent Owner’s arguments and evidence of secondary indicia of non-obviousness, but are not persuaded by such that claim 3 is patentable over Griesshammer and Maheu.

iii. Claim 1 as Obvious over Piepszownik and Ter-Hovhannisian

Petitioner argues that independent claim 1 is obvious over Piepszownik and Ter-Hovhannisian. Pet. 19–23. Petitioner argues that Piepszownik discloses all of the elements of claim 1 except for the claimed array of LEDs on a circuit board. *Id.* According to Petitioner, Piepszownik discloses the use of a low-voltage fluorescent tube 13 as an illuminating means instead of array of LEDs, as claimed. *Id.* at 20. Petitioner, however, argues that Ter-Hovhannisian cures this deficiency of Piepszownik by teaching the use of an array of LEDs on a circuit board as an illuminating means. *Id.* (citing Ex. 1006, col. 5, ll. 9–21). Petitioner contends that “a person having ordinary skill in the art would understand that the display of Piepszownik could be modified to include LEDs and a circuit board” because LEDs have many advantages over other light sources, “such as reduced size, high efficiency, low power consumption, long life, resistance to vibrations, faster reaction times, and low head production.” *Id.* at 20–21 (citing Gomez Decl. ¶ 56).

As can be seen from the overview of Piepszownik above, Piepszownik teaches most of the limitations of claim 3. Piepszownik, however, uses a “low-voltage fluorescent tube as an illuminating lamp” and not a circuit board with an array of LEDs. Ter-Hovhannisian discloses a similar lighting unit, except that the light is an array of LEDs on a circuit board. Ex. 1006, col. 5, ll. 9–21. Ter-Hovhannisian states “[t]ypically the LED’s 22 are assembled on a single or multi-unit printed circuit board.” *Id.* at col. 5, ll. 18–20. Griesshammer also discloses the use of LEDs on a similar display shelf. Ex. 1003 ¶ 26.

Mr. Gomez testifies that one of ordinary skill in the art would have modified Piepszownik to use LEDs arranged on a circuit board instead of the fluorescent light “due to the many advantages of LEDs over other light sources, such as reduced size, high efficiency, low power consumption, long life, resistance to vibrations, faster reaction times, and low heat production.” Gomez Decl. ¶ 56.

Given the above disclosures of Piepszownik and Ter-Hovhannisian and the testimony of Mr. Gomez, we determine that it would have been obvious to one of ordinary skill to modified Piepszownik to use LEDs arranged on a circuit board instead of a fluorescent light, because LEDs have the advantages discussed above. Such a modification is nothing more than the simple substitution of one known type of light for another. *See KSR*, 550 U.S. at 417.

We determine that Petitioner shows by a preponderance of the evidence that claim 1 is unpatentable over Piepszownik and Ter-Hovhannisian. In making our determination and as discussed below, we considered Patent Owner’s arguments and evidence of secondary indicia of non-obviousness, but are not persuaded by such that claim 1 is patentable over Piepszownik and Ter-Hovhannisian.

iv. Claim 7 as Obvious over Piepszownik

Petitioner argues that independent claim 7 is obvious over Piepszownik. Pet. 45–48. Petitioner argues that Piepszownik discloses the elements of claim 7 except for the claimed horizontal members, which are made from an insulating-material, and the claimed slots in the rail covers. *Id.* As to the claimed horizontal members, Petitioner argues that

Piepszownik's shelves 7 meet the claimed horizontal members and that "a person having ordinary skill in the art would understand that the shelves of Piepszownik would need to be made of a non-conductive material because the electrical circuit of the Piepszownik would not function if the shelves were made of a conductive material." Pet. 46 (citing Gomez Decl. ¶ 92). As to the rail cover slots, Petitioner argues that "[i]t would have been obvious to a person having ordinary skill in the art to design a rail cover with slots that align with the slots in the posts (3) in order to facilitate the electrical and mechanical connection" because Piepszownik discloses that posts 3 are covered "except at the level of their mutual contact surfaces" (Ex. 1005, 5). Pet. 47 (citing Gomez Decl. ¶ 94).

As can be seen from the overview of Piepszownik above, Piepszownik teaches most of the elements of claim 7. Piepszownik, however, does not explicitly disclose that its shelves 7 (i.e., the claimed horizontal members) are made of insulating material. Mr. Gomez testifies that "the shelves of Piepszownik would need to be made of non-conductive material, because the electrical circuit of Piepszownik would not function if the shelves were made of a conductive material." Gomez Decl. ¶ 92.

We agree. As depicted in Figure 1 of Piepszownik above, brackets 9 are connected to the ends of shelves 7. Ex. 1005, 3–4. Piepszownik discloses that its vertical posts are connected to a power transformer (not shown) and conduct voltage to brackets 9 to power low-voltage, low power fluorescent lighting tube 13 at the front edge of shelves 7. *Id.* In order to conduct voltage from the vertical posts to the fluorescent lighting tube 13 via brackets 9, the shelves must be non-conductive.

Piepszownik also does not explicitly disclose that its insulating material (i.e., the claimed insulating rail cover) has a plurality of slots. Petitioner argues that

Piepszownik does not explicitly state that the insulating material has slots that correspond to the slots in the posts (3). Piepszownik does, however, state that posts (3) are “covered . . . except at the level of their mutual contact surfaces.” Thus, the brackets (9) need to extend through the insulating rail cover in order to contact the posts (3) to create and maintain an electrical connection. It would have been obvious to a person having ordinary skill in the art to design a rail cover with slots that align with the slots in the posts (3) in order to facilitate the electrical and mechanical connection. Gomez Decl. (Ex. 1009) pg. 32, ¶ 94.

Pet. 47.

We agree. As can be seen from Figure 1 of Piepszownik reproduced above, Piepszownik’s posts 1 have hook openings 4 through which brackets 9 extend to make electrical contact with posts 1. Ex. 1005, 3–4. As Mr. Gomez testifies, in order for brackets 9 to extend through hook openings 4 and make the electrical contact, Piepszownik’s insulating material must also having corresponding slots. Gomez Dec. ¶ 94.

We determine that Petitioner shows by a preponderance of the evidence that claim 7 is unpatentable over Piepszownik. In making our determination and as discussed below, we considered Patent Owner’s arguments and evidence of secondary indicia of non-obviousness, but are not persuaded by such that claim 7 is patentable over Piepszownik.

D. Patent Owner's Arguments

The Patent Owner Response includes “[a]rguments from the Patent Owner’s Preliminary Response” that are directed to grounds upon which we did not institute *inter partes* review. *See e.g.*, PO Resp. 4, 7–8, 15–16. Those grounds are claim 4 being unpatentable over Piepszownik, claim 3 being upatentable over Slesigner and Maheu, and claim 5 being unpatentable over Griesshammer and Slesigner. *See* Dec. on Inst. 16–17, 23. Because we did not institute *inter partes* review with respect to those grounds, Patent Owner’s arguments directed to those grounds in the Patent Owner Response, thus, are moot.

i. Griesshammer’s and Piepszownik’s Alleged Lack of an Insulating Cover

Patent Owner argues that neither Griesshammer’s coating nor Piepszownik’s insulating material meet the claimed insulated rail cover of claims 1, 2, 5, 6, and 7. PO Resp. 6–7, 11–13, 18–19.

First, Patent Owner argues that Griesshammer’s lacquer coating does not meet the claimed cover because “[a] sprayed, dipped, or brushed-on protective coating of lacquer is a different thing from a formed plastic cover having its own structure.” *Id.* at 11. We find this argument unpersuasive because it is not commensurate with the scope of the claims. *See* Pet. Reply 1–2. Nothing in claims 1, 2, 5, 6, and 7 requires that the cover be formed of plastic and have its own structure. As we have construed it above, “cover” does not require that the cover be a formed plastic cover having its own structure.

Second, Patent Owner argues that “lacquer is generally not relied on to electrically insulate parts that may move, one against another, as when

shelves are moved to new slots” and that a metallic lacquer or anodized paint may be conductive and not insulating. PO Resp. 12. This argument is unpersuasive because it is merely attorney argument unsupported by evidence. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997) (stating that attorney arguments and conclusory statements that are unsupported by factual evidence are entitled to little probative value). Further, Patent Owner’s argument is unpersuasive because it does not account for Griesshammer’s disclosure that indicates that the coating, which may be lacquering, is electrically insulating. See Pet. Reply 2–3. Griesshammer discloses that the coating is provided on the side of supports 1a, 1b that face the shelves and the other side is uncoated or bare, because the uncoated or bare side makes the electrical contacted with brackets 4a, 4b. See Ex. 1003 ¶ 11, 31. Griesshammer states that “[i]n this manner the supports can be provided with any type of surface coating for decorative for protective purposes without hindering or degrading the electrical contact for the illumination device.” *Id.* ¶ 11; see Gomez Decl. ¶ 46.

Third, Patent Owner argues that Piepszownik’s insulating material does not meet the claimed cover because Piepszownik’s insulating material only partially covers the standards. PO Resp. 18. According to Patent Owner, Piepszownik discloses only partially covering the standards with an insulating material because Piepszownik teaches leaving the rail uncovered at the level of their mutual contact surfaces. *Id.* (quoting Ex. 1005, 5). This argument is unpersuasive because it is not commensurate with the scope of the claims. Nothing in the claims requires a cover that completely covers the standards or precludes a cover that partially covers the standards. As we have construed it above, “cover” does not require that the cover completely

cover the standard. Indeed, construing the claims so as to require that the standards be completely covered would be inconsistent with the Specification of the '935 patent, which depicts rail covers 46–49 covering only the front and one side of standards 41, 45 (Ex. 1001, Fig. 6). Such a requirement would also be inconsistent with another claim requirement that the insulating rail cover has slots. *See* Ex. 1001, col. 13, ll. 58–62 (claim 2); *see id.* at col. 15, ll. 19–23 (claim 6), col. 16, ll. 15–21 (claim 7).

ii. Griesshammer, Piepszownik, and UL's Alleged Teaching Away

Patent Owner argues that Griesshammer and Piepszownik teach away from a protective insulated rail cover for the standards because both references state that touching electrified rails and brackets is not harmful to people. PO Resp. 8–11, 18–19. In this regard, Griesshammer states that “a touching of the supports or also the brackets that carry current themselves is totally safe for persons” (Ex. 1003 ¶ 15) and Piepszownik states that “the voltage between these two posts can therefore be limited to a very low value on the order of 12 V and therefore does not present any danger to the users” (Ex. 1005, 4).

A teaching away requires that a reference actually criticizes, discredits, or otherwise discourages investigation into the claimed solution. *See In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). Neither of the statements above criticizes, discredits, or otherwise discourages a person of ordinary skill in the art from providing insulated rail covers for the standards. To the contrary, both Griesshammer and Piepszownik disclose such covers over the supports or brackets. *See* Ex. 1003 ¶ 11; Ex. 1005, 5; Pet. Reply 3–4, 6.

Patent Owner argues that UL 2108⁸ also teaches away from insulated slotted rail covers because UL teaches that all current-carrying parts should be enclosed in an insulating material. PO Resp. 19 (citing Ex. 1012, 12). This, however, does not criticize, discredit, or otherwise discourage a person of ordinary skill in the art from providing slotted insulated rail covers on the posts or supports of Griesshammer and Piepszownik. As discussed above, both Griesshammer and Piepszownik disclose such slotted insulating covers over the supports or brackets. See Ex. 1003 ¶ 11; Ex. 1005, 5.

iii. Secondary Considerations

Factual inquiries for an obviousness determination include secondary considerations based on evaluation and crediting of objective evidence of non-obviousness. *Graham*, 383 U.S. at 17–18. Notwithstanding what the teachings of the prior art would have suggested to one of ordinary skill in the art at the time of the invention, the totality of the evidence submitted, including objective evidence of non-obviousness, may lead to a conclusion that the challenged claims would not have been obvious to one of ordinary skill in the art. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984). Secondary considerations may include any of the following: long-felt but unsolved needs, failure of others, unexpected results, commercial success, copying, licensing, and praise. See *Graham*, 383 U.S. at 17; *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007).

⁸ Underwriter Laboratories Inc., UL Standard for Safety for Low Voltage Lighting Systems, UL 2108 (Feb. 27, 2004) (revised Apr. 22 1004) (Ex. 1012).

To be relevant, evidence of non-obviousness must be reasonably commensurate in scope with the claimed invention. *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) (citing *In re Tiffin*, 448 F.2d 791, 792 (CCPA 1971)); *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998). To be accorded substantial weight, there must be a nexus between *the merits of the claimed invention* and the evidence of secondary considerations. *In re GPAC*, 57 F.3d 1573, 1580 (Fed. Cir. 1995) (emphasis added). “Nexus” is a legally and factually sufficient connection between the objective evidence and the claimed invention, such that the objective evidence should be considered in determining non-obviousness. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988). The burden of showing that there is a nexus lies with the patent owner. *Id.*; see *In re Paulsen*, 30 F.3d 1475, 1482 (Fed. Cir. 1994).

Here, Patent Owner argues that “long-felt need, commercial success, and widespread copying” indicate that the claims would not have been obvious to a person of ordinary skill in the art. PO Resp. 2. Patent Owner also argues that “wide acclaim” indicates that the claims would not have been obvious to a person of ordinary skill in the art. *Id.* at 3–4.

To support its argument, Patent Owner proffers the declarations of: Mr. Katcher, Executive Vice President of Patent Owner (Ex. 2005 ¶ 3 “Katcher Decl.”); Ms. Alletto, Vice President of Sales and Operations of Patent Owner (Ex. 2007 ¶ 3, “Alletto Decl.”); Mr. Hsing (a.k.a. Jerry Chang), employee of Patent Owner (Ex. 2012, 1 “Hsing Decl.”); and Mr. Thomas Verrangia, husband of Ms. Alletto, former employee of Patent Owner, and former employee of L’Oréal, Patent Owner’s customer (Ex. 2013 ¶¶ 5, 12 “Verrangia Decl.”). Notably, all of Patent Owner’s

declarants are current or related to current employees of Patent Owner and, thus, have an interest in the outcome of this proceeding. *See* Opp. to Mot. 10.

a. Commercial Success

Patent Owner argues that there is tremendous evidence of commercial success of its Eclipse display. PO Resp. 2–3. In this regard, Patent Owner proffers the testimony of Mr. Katcher. *Id.* (quoting Ex. 2005 ¶¶ 17–19 “Katcher Decl.”). Mr. Katcher testifies that:

“[t]he Eclipse display system has been installed by our client L’Oreal in approximately 10,000 retail environments in the United States and Canada including CVS, Rite Aid, and Kroger’s. Long’s Stop and Shop, Shop Rite, Albertson’s, Meijer’s and many other retailers,”

“POP Displays has used the technology in the Eclipse display system in merchandising systems sold to other consumer product brands such as Unilever/Dove, Maybelline, Groupe Marcelle and Anabelle,” and

“[t]he combined sales of POP Displays USA related to the products associated with the Eclipse technology exceed \$64,000,000 (sixty four million dollars).”

Katcher Decl. ¶¶ 17–19.

Mr. Katcher’s testimony is insufficient to establish commercial success because a total sales figure and approximate number of units in use in a retail environment does not provide any indication of whether the sales figure and approximate number of units represents a substantial quantity in the market. *In re Baxter Travenol Labs*, 952 F.2d 388, 392 (Fed. Cir. 1991) (“Information solely on number of units sold is insufficient to establish commercial success.”); *see also In re Huang*, 100 F.3d at 140 (“Declining to

find evidence of commercial success because ‘[a]lthough [the inventor’s] affidavit certainly indicates that many units have been sold, it provides no indication of whether this represents a substantial quantity in this market.’”).

Additionally, Patent Owner fails to establish the required nexus between the alleged commercial success and the merits of the claimed invention. *See* Pet. Reply 15–16; Opp. to Mot. 10. Patent Owner points to ¶¶ 17–24 of the testimony of Mr. Katcher, ¶¶ 16–19 of the testimony of Ms. Alletto, and ¶¶ 1–3 of the testimony of Mr. Hsing to establish the required nexus. PO Reply to Opp. to Mot. 10. However, none of the cited testimony of Ms. Alletto or Mr. Hsing sufficiently links the Eclipse display to the invention recited in the challenged claims of the ’935 patent or sufficiently links the merits of the invention recited by the challenged claims to the commercial success. *See* Pet. Reply 15–17. Although Mr. Katcher testifies that the Eclipse display embodies the challenged claims, such as that the system “shown, described and claimed in U.S. Patent 8646935” is known internally by Patent Owner as the Eclipse display (Katcher Decl. ¶ 16), none of Mr. Katcher, Ms. Alletto, or Mr. Hsing provide any adequate explanation as to whether the claims are embodied in the Eclipse display or as to which of the claimed features is the cause of the alleged commercial success. *See id.*

Mr. Katcher testifies that it is the elimination of incandescent and florescent bulbs and the elimination of complex wiring that revolutionized cosmetic wall systems. *See* Katcher Decl. ¶¶ 10–15, 21; *see also* Alletto Decl. ¶ 17, Hsing Decl. ¶ 3 (similarly testifying that the use of LED illumination without complex wire management were key advantages). As discussed above, the prior art, in particular Griesshammer and Piepszownik,

discloses such features. *See Kao*, 639 F.3d at 1068 (“Where the offered secondary consideration actually results from something other than what is both claimed and novel in the claim, there is no nexus to the merits of the claimed invention.”) (citing *Tokai Corp. v. Easton Enters., Inc.*, 632 F.3d 1358, 1369 (Fed. Cir. 2011) (“If commercial success is due to an element in the prior art, no nexus exists.”)). Notably, claims 3 and 5–7 do not require LED illumination.

Mr. Hsing testifies that “[t]he attachable slotted rail covers were key.” Hsing Decl. ¶ 3. Mr. Hsing’s testimony is conclusory and does not adequately link the claimed insulating rail covers to the alleged commercial success. Pet. Reply 15–16; Opp. to Mot. 10. Further, Mr. Hsing’s testimony mentions features that are not required by the claims, such as “tray structures” and “*snapped-on* slotted rail covers.” Hsing Decl. ¶ 2 (emphasis added). None of claims 1–3 and 5–7 requires a tray structure or rail covers that are snapped-on.

We, thus, give little weight to Patent Owner’s argument that evidence of commercial success overcomes Petitioner’s showing of obviousness, discussed above.

b. Copying and Alleged Licensing

Patent Owner argues that widespread copying by others is objective evidence of non-obviousness. PO Resp. 3–4; PO Reply to Opp. to Mot. 10–12. According to Patent Owner, both Ovation and Petitioner copied the design of the Eclipse display for Target. *Id.* Petitioner argues that Target and Ovation’s designs are licensed uses of the ’935 patent and “[t]o the extent the designs are similar . . . , this is not copying.” Pet. Reply 6–9.

Patent Owner responds that the license is further evidence of non-obviousness. PO Reply to Opp. to Mot. 11–12.

“[C]opying by a competitor may be a relevant consideration in the secondary factor analysis.” *Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004) (citing *Vandenberg v. Dairy Equip. Co.*, 740 F.2d 1560, 1567 (Fed. Cir. 1984)). “[A] nexus between the copying and the novel aspects of the claimed invention must exist for evidence of copying to be given significant weight in an obviousness analysis.” *Wm. Wrigley Jr. Co. v. Cadbury Adams USA LLC*, 683 F.3d 1356, 1364 (Fed. Cir. 2012) (internal quotation omitted). Licenses taken under the patent in suit may constitute evidence of non-obviousness; however, only little weight can be attributed to such evidence if the patentee does not demonstrate “a nexus between the merits of the invention and the licenses of record.” *In re GPAC Inc.*, 57 F.3d at 1580 (citations omitted).

Even if Patent Owner adequately established that Ovation and Petitioner’s display was a copy or licensed use of its Eclipse display, for the same reasons as discussed above, Patent Owner fails to establish the required nexus between any alleged copying or alleged licensing and the merits of the claimed invention.

We, thus, give little weight to Patent Owner’s argument that evidence of wide-spread copying and licensing overcomes Petitioner’s showing of obviousness, discussed above.

c. Long-Felt Need

Patent Owner asserts that “[w]e have provided herewith evidence of tremendous commercial success, evidencing secondary considerations of

long-felt need.” PO Resp. 2. Patent Owner cites to ¶¶ 17–19 of Mr. Katcher’s testimony as demonstrating commercial success and ¶¶ 15–21 of Mr. Katcher’s testimony as enumerating the disadvantages of the prior art. *Id.* at 2–3.

Patent Owner must show that any evidence of long-felt need “demonstrates both that a demand existed for the patented invention, and that others tried but failed to satisfy that demand.” *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1082 (Fed. Cir. 2012). Patent Owner’s argument and Mr. Katcher’s testimony is lacking as to both elements. That is, Patent Owner’s evidence fails to demonstrate, sufficiently, that a demand existed and that others tried and failed. Further, as discussed above, Patent Owner fails to establish the required nexus between any long-felt-but-unmet need and the merits of the claimed invention.

We, thus, give little weight to Patent Owner’s argument that there was a long-felt-but-unmet need that overcomes Petitioner’s showing of obviousness, discussed above.

d. Industry Praise

Patent Owner argues that numerous industry awards for Patent Owner’s displays demonstrate that the claimed invention is non-obvious. Pet. 3 (citing Katcher Decl. ¶ 22; Ex. 2006). Mr. Katcher testifies that Patent Owner’s displays won four awards. Katcher Decl. ¶ 22; *see also* Ex. 2006 (photographs of the awards).

Industry praise for an invention may provide evidence of non-obviousness where the industry praise is linked to the claimed invention.

See Geo. M. Martin Co. v. Alliance Mach. Sys. Int'l LLC, 618 F.3d 1294, 1305 (Fed. Cir. 2010); *Asyst Techs., Inc. v. Emtrak, Inc.*, 544 F.3d 1310, 1316 (Fed. Cir. 2008). Although the awards mention the Eclipse display and Mr. Katcher's testimony indicates that one award was for a "Dove Endcap," neither Patent Owner's argument nor Mr. Katcher's testimony link the awards to the merits of the claimed invention. *See* Katcher Decl. ¶ 22; *see* Ex. 2006. Patent Owner fails to establish a sufficient nexus between the merits of the claimed invention and the alleged industry praise.

We, thus, give little weight to Patent Owner's argument that evidence of industry acclaim overcomes Petitioner's showing of obviousness, discussed above.

e. Conclusion as to Secondary Considerations

Patent Owner fails to demonstrate a sufficient nexus between the claimed invention and any commercial success, long-felt-but-unmet need, copying, licensing, or industry praise. Patent Owner also fails to sufficiently demonstrate commercial success and a long-felt-but-unmet need for the claimed invention. We, thus, determine that the proffered evidence of objective indicia of non-obviousness is insufficient to overcome the evidence of obviousness in this case.

iv. Alleged Expert Testimony

Patent Owner contends that "[e]xperts of at least ordinary skill in the art found the claims non-obvious." PO Resp. 4 (citing the entirety of the Alletto Decl., Verrangia Decl., and Hsing Decl.). Neither Ms. Alletto nor

Mr. Hsing testify as to whether claims 1–3 and 5–7 of the '935 patent are obvious over the prior art of record. *See Alletto Decl., Hsing Decl.*

Mr. Verrangia testifies that “[a]lthough I have 35 years of experience in the point of purchase display industry, when I first saw the POP display tray in a store, it would not have been obvious to me to provide” the features of claim 1. *Verrangia Decl.* ¶ 19. Mr. Verrangia’s testimony is conclusory, as he fails to provide any adequate explanation as to why claim 1 would not have been obvious to one of ordinary skill in the art in light of *Griesshammer, Piepszownik*, or any other art of record. *See* 37 C.F.R. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”); *Rohm & Haas Co. v. Brotech Corp.*, 127 F.3d 1089, 1092 (Fed. Cir. 1997) (“Nothing in the rules or in our jurisprudence requires the fact finder to credit the unsupported assertions of an expert witness.”). Patent Owner’s evidence is insufficient to overcome Petitioner’s evidence of obviousness in this case.

III. MOTION TO AMEND

Patent Owner’s Motion to Amend seeks to substitute new claims S1–S3 and S5–S7⁹ for original claims 1–3 and 5–7. *See* Paper 15. For the reasons discussed below, Patent Owner’s Motion to Amend is denied.

Patent Owner seeks to amend original claims 1–3 and 5–7 by further defining the claimed insulating rail cover as an insulating rail cover part

⁹ Patent Owner’s proposed substitute claims retain the number of the original claims. To distinguish between the proposed substitute claims and the original claims, we will refer to the proposed substitute claims as S1–S3 and S5–S7.

having a pre-formed structure. See Paper 13, 1–5. Proposed substitute claim S1 is representative and recites “a pre-formed structure, comprising an insulating rail cover part, covering at least one of the conductive standards.” Paper 13, 1 (additions to the original claim underlined).

In addition, Patent Owner seeks to amend original claim 3 to require that the “insulating rail cover part comprises: a plurality of slots, and each slot is configured to accept one of the conductive support brackets.” *Id.* at 2 (claim S3). Original claims 2, 6, and 7 similarly require an insulating rail cover that “comprises: a plurality of slots, and each slot is configured to accept one of the conductive support brackets.” Ex. 1001, col. 13, ll. 58–62 (claim 2); see *id.* at col. 15, ll. 19–23 (claim 6), col. 16, ll. 15–21 (claim 7). Proposed substitute claims S2, S6, and S7, thus, also require the insulating rail cover parts to have slots, configured to accept the brackets.

Rule 42.40(c) places the burden on the patent owner to show a patentable distinction of each proposed substitute claim over the prior art. See *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1303–08 (Fed. Cir. June 16, 2015) (affirming the Board’s denial of a motion to amend claims where the patent owner failed to establish the patentability of the substitute claims over the prior art of record). While not required to prove that the claims are patentable over every item of prior art known to a person of ordinary skill, the patent owner is required to explain why the claims are patentable over the prior art of record. *Masterimage 3D, Inc. v. RealD, Inc.*, Case IPR2015-00040, slip op. at 2 (PTAB July 15, 2015) (Paper 42). Prior art of record includes: any material art in the prosecution history of the patent; any material art of record in the current proceeding, including art asserted in grounds on which the Board did not institute review; and any

material art of record in any other proceeding before the Office involving the patent. *Id.*

In this regard, Patent Owner contends that the addition of the pre-formed insulating rail cover parts feature distinguishes the proposed substitute claims “over a coat of lacquer on a rail, as shown in Griesshammer, a covering as mentioned in Piepszownik and a finish as taught by Keil.”¹⁰ PO Reply to Opp. to Mot. 7–9; *see also* Mot. 5 (asserting that the pre-formed structure excludes painted rail covers). Patent Owner also broadly asserts that “the record (including *the file history*, and Owner’s and Petitioner’s Exhibits) shows all art now known to Patent Owner, and all art which Petitioner has provided as exhibits” and that the proposed substitute claims are patentable over this prior art of record. PO Reply to Opp. to Mot. 7–8 (emphasis added).

This, however, fails to satisfy Patent Owner’s burden of showing a patentable distinction of each proposed substitute claim over the prior art of record. *See* Opp. to Mot. 8. Patent Owner fails to explain adequately why making the insulating rail covers a pre-formed part would have been unobvious to one of ordinary skill in the art. *See id.* at 9–10.

Notably, Burns¹¹ is a U.S. patent found in the file history of the ’935 patent and listed as a reference cited on the face of the ’935 patent. Ex. 1001, [56]. Similarly to Griesshammer and Piepszownik, Burns discloses a display for displaying products in trays which may be illuminated

¹⁰ U.S. Patent No. 1,974,050 issued Sept. 18, 1934 (Ex. 2002).

¹¹ U.S. Patent Publication No. 2008/0121146 A1 (published May 29, 2008) (Ex. 3002).

by LEDs on the trays. *Id.* ¶ 56. Figure 7 of Burns is reproduced below, with some labels added.

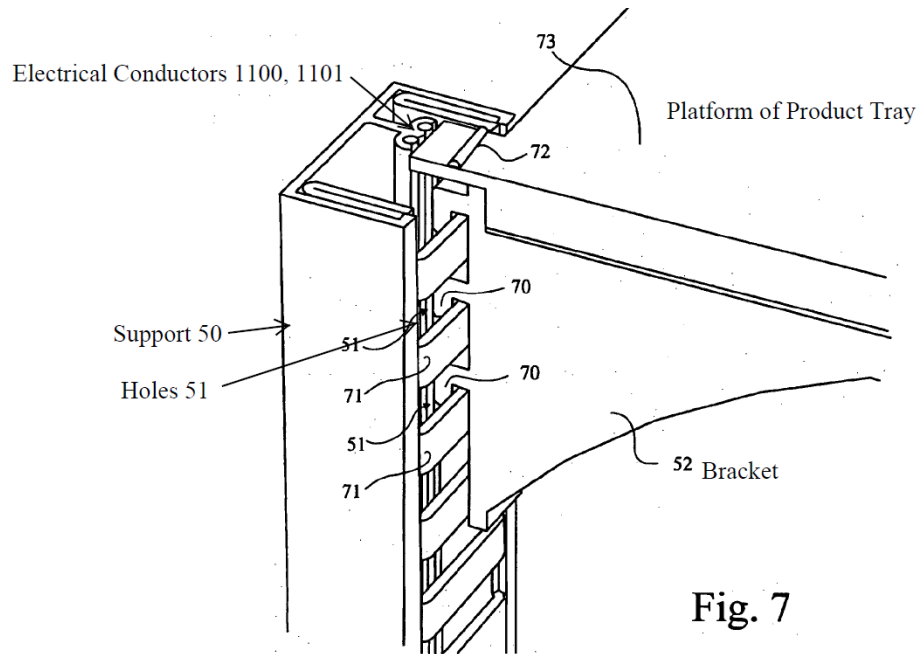


Figure 7 depicts that Burns' display includes upright support 50 containing electrical conductors 1100, 1101. *Id.* ¶ 58. When connected to support 50 by bracket 52, electrical power is supplied to the LEDs of the product tray by contact between electrical conductors 1100, 1101 and electrical connectors (not shown) on the product tray. *Id.* ¶ 56. Burns states that "[t]he support 50 includes a rigid substantially C shaped frame made of a rigid material such as plastic. The plastic may be PVC or ABS or some other electrical insulator." Ex. 3002 ¶ 58. Burns, thus, teaches that the use of rigid plastic, such as ABS¹², as a pre-formed insulating cover part for electric conductors of a product display shelf was known.

Patent Owner fails to explain adequately why making an insulating rail cover a pre-formed part would not have been obvious to one of ordinary

¹² Informal Figure 6, filed as part of the application for the '935 patent, denotes that part 46, the rail cover, is made from ABS. Ex. 2034.

skill in the art, particularly, given the teaching of Burns, the teaching of a rail coating by Griesshammer, and the teaching of an insulating material covering a rail by Piepszownik. The mere existence of differences between the prior art and the claim does not establish non-obviousness. *Dann v. Johnston*, 425 U.S. 219, 230 (1976). The issue is “whether the difference between the prior art and the subject matter in question ‘is a difference sufficient to render the claimed subject matter unobvious to one skilled in the applicable art.’” *Id.* at 228–29 (citation omitted). Patent Owner does not explain why making the rail coating of Griesshammer or the insulating material covering a rail of Piepszownik from ABS plastic, a known insulating material, so as to form a pre-formed rail cover part is more “than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 416

Patent Owner, also, fails to explain adequately why the addition of a plurality of slots, configured to accept one of the conductive support brackets, to substitute claim S3 would not have been obvious to one of ordinary skill in the art. Original claims 2, 6, and 7 require the same slot feature, and, as discussed above and in our Decision to Institute, we determine that the slot feature would have been obvious in light of Griesshammer and Piepszownik. *See* Dec. to Inst. 14, 17. Further, as can be seen from the reproduced Figure 7 above, Burns’ support 50 includes holes 51 which have a configuration that accept bracket 52. Ex. 3002 ¶ 52.

b. Secondary Considerations

Patent Owner argues that its evidence of secondary indicia of non-obviousness establishes the patentability of the proposed substitute claims.

Mot. 5–6; PO Reply to Opp. to Mot. 10–12. The evidence is the same evidence discussed above regarding the original claims. *See id.* Patent Owner incorporates its arguments concerning secondary considerations with regards to the original claims into the Motion to Amend.¹³ *See* Mot. 5–6. For the same reasons as discussed above, we give little weight to Patent Owner’s arguments and evidence of secondary considerations because Patent Owner fails to establish the required nexus between the merits of the proposed substitute claims (i.e., the slotted preformed rail cover parts) and the evidence of secondary considerations. *See* Opp. to Mot. 11–12.

c. Conclusion

Patent Owner fails to satisfy its burden to show a patentable distinction of each proposed substitute claim over the prior art and, thus, Patent Owner’s Motion to Amend is denied.

III. CONCLUSION

We determine that Petitioner demonstrates by a preponderance of the evidence that:

claims 1, 2, 5, and 6 are unpatentable under 35 U.S.C. § 103 over Griesshammer;
claim 3 is unpatentable under 35 U.S.C. § 103 over Griesshammer and Maheu;

¹³ Rule 42.6(a)(3) prohibits arguments from being incorporated by reference from one document into another document. 37 C.F.R. § 42.6(a)(3). Nonetheless, we have considered Patent Owner’s arguments concerning secondary indicia of non-obviousness. *See* Tr. 43–44, 49–52.

claim 1 is unpatentable under 35 U.S.C. § 103 over
Piepszownik and Ter-Hovhannisian; and

claim 7 is unpatentable under 35 U.S.C. § 103 over
Piepszownik.

We also determine that Patent Owner fails to demonstrate that the
proposed substitute claims are patentable.

This is a Final Written Decision of the Board under 35 U.S.C.
§ 328(a). Parties to the proceeding seeking judicial review of this Decision
must comply with the notice and service requirements of 37 C.F.R. § 90.2.

VI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–3 and 5–7 of U.S. Patent No. 8,402,281 B2
are *unpatentable*; and

FURTHER ORDERED that Patent Owner’s Motion to Amend is
denied.

IPR2015-00266
Patent 8,646,935 B2

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