

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

JESCO LIGHTING GROUP, LLC,
Petitioner,

v.

AGS LIGHTING MANAGEMENT LLC,
Patent Owner.

Case IPR2025-01328
Patent No. 11,751,302

PATENT OWNER'S SUR-REPLY

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Petitioner has failed to meet its burden. Ground 1 fails because Edwards and Sadwick do not disclose the claimed LED configurations and Petitioner offers no supported motivation to combine them. Ground 2 adds Jeswani but suffers from the same defects. Ground 3 improperly combines May—a PoE networked lamp design to avoid local switches—with Jeswani’s fixture-mounted controls, without explaining how or why a POSA would make that modification. Ground 4 fails for similar reasons. Each ground rests on hindsight reconstruction rather than evidence and leaves too much to the imagination. The Board should issue a Final Written Decision affirming the patentability of the Challenged Claims.

I. THE CLAIMS OF THE ’302 PATENT ARE PATENTABLE.

- A. Ground 1: The Petition fails to show that Claims 1, 2, 4, 5, 6, 7, 9-20 are obvious over Edwards and Sadwick.

Ground 1 fails because (1) the combination fails to disclose each claim limitation and (2) the proffered motivation to combine is insufficient, resting on impermissible hindsight reconstruction.

1. Edwards Fails to Disclose 1[b] and 1[c]

Petitioner does not dispute that the light produced by the Edwards’ LEDs does not have a color temperature until that non-white light passes through Edwards’ remote phosphor. Nonetheless, Petitioner insists that Edwards’ LEDs meet 1[b] and 1[c], which require “first plurality of LEDs configured to produce a first light having

a first color temperature” and “second plurality of LEDs configured to produce a second light having a second color temperature.” This overbroad reading is contrary to the claim language.

The claim requires that *the first plurality of LEDs* be configured to produce light having a first color temperature, not the fixture as a whole. Under Petitioner’s reasoning, the electrical socket for Edwards’ fixture is “configured to produce a first light having a color temperature” because light with color temperature is *eventually* produced. This is a stretch.

Petitioner misrepresents Patent Owner’s expert’s prior opinion, stating that “he has previously testified that disclosure of colored LEDs [non-white LEDs] meets color temperature limitations.” Reply-6-7. The preceding declaration paragraph (not cited by Petitioner) shows that Patent Owner’s expert referred to white LEDs that were chosen for their warm color temperature, not non-white LEDs like those of Edwards. Patent Owner’s expert stated that the reference “discloses that the LEDs can vary in color *such as white LEDs . . . Thus, [the reference] discloses or suggests using white LEDs, which can have different color temperatures.*” Ex.1030-¶105 (emphasis added). Petitioner’s allegation that Patent Owner’s expert has changed his opinion is wrong.

Petitioner’s insistence that these limitations are met by Edwards (Reply-6) is belied by the Petition itself, which relies on Sadwick for this element. If Edwards met this element, Petitioner should have proposed an anticipation or single-reference obviousness ground. For an obviousness analysis the “court [must] ascertain the principal differences between the patented claim and the prior art.” *Ryko Mfg Co. v. Nu-Star, Inc.*, 950 F.2d 714, 717 (Fed. Cir. 1991). For this element, Petitioner argues that there is *no difference* between Edwards and the claim, so the obviousness analysis fails from the start. Petitioner has not proposed a competing claim construction with alternative references. Instead, Petitioner argues this element is met by Edwards under the plain and ordinary meaning, making Ground 1 fatally flawed.

2. Edwards Fails to Disclose 10[b], 10[i], 18[c], 18[d], 18[o], and 18[p]

Claims 10 and 18 require that the LEDs be “associated with” a color temperature. Petitioner treats these limitations identically to claim 1’s limitations, which is fatal to Ground 1. Reply-5.

3. The Petition Fails to Show that a POSA Would Modify Edwards to Incorporate Sadwick’s LEDs for Cost Savings

Petitioner’s expert contends a POSA would combine Edwards’ circuit with Sadwick’s LEDs for cost savings. Ex.1002-¶¶130-132. This should be disregarded for two reasons.

First, Petitioner’s expert provides no support for his opinion that this substitution would yield cost savings. The Board should not rely on bare assertions—a petitioner cannot satisfy its burden on obviousness by “mere conclusory statements.” *See In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

Second, Petitioner’s expert ignores the additional costs of substituting Sadwick’s LEDs into Edwards’ fixture. The proposed combination removes the remote phosphor, which also diffuses the LED light. Ex.1005-6:32-37. Petitioner’s expert recognizes that a separate diffuser or additional LEDs must then be added when the remote phosphor is removed, stating that “[m]ost interior linear luminaires already include a diffuser or lens, and a diffuser placed over a string of white LEDs produces spatially uniform light without the need for remote phosphor.” Ex.1028-¶14. He never accounts for the cost of the supplemental optical component. The alleged cost-savings motivation is therefore unsupported.

Using Edwards as a base reference dooms this obviousness ground because Edwards *rejects* the use of white LEDs as a design choice. The Edwards inventors described white LEDs where the phosphor material is layered on the LED die in the Background, but opted instead to use a physically separate wavelength conversion component with phosphor to produce white light. Ex.1005-2:17-21;6:8-13;POR-21-

23. Edwards’ rejection of white LEDs establishes that Petitioner’s combination is improper hindsight-based reconstruction of the claimed invention. The Federal Circuit has admonished this kind of mix-and-match combination of elements, stating “[i]t does not suffice to meet the motivation to combine requirement to recognize that two alternative arrangements. . . were both known in the art.” *Virtek Vision Int’l ULC v. Assembly Guidance Sys.*, 97 F. 4th 882, 886 (Fed. Cir. 2024). Because Petitioner’s purported motivation of cost savings is unsupported and negated by additional costs that the combination would require, all Petitioner has shown is that the LED arrangements of Edwards and Sadwick were known in the art—a basis for combining references explicitly rejected in *Virtek Vision*.

4. The Petition Fails to Show that Edwards and Sadwick Meet
1[g]

- a. Edwards Fails to Meet 1[g] because the first current is always coupled to both the first and second LEDs

Petitioner alleges that in Edwards “the brightness of each string of LEDs is controlled by the current and either of the strings of LEDs may be turned off.” Reply-10. This mixes embodiments of Edwards without any proposed motivation. The Petition maps the first and second switches to the control circuit of Fig. 5 of Edwards, but statements regarding “turning off” are not tied to the circuit of Fig. 5, as Patent Owner’s expert testified. Ex.1029-57:24-59:15. Moreover, Patent Owner’s expert testified that current supplied to a string of LEDs may be reduced to a level where

no light output is perceptible to an observer—the LED string can be “turned off” while current is still coupled to it. Ex.1029-57:24-59-15; 61:10-20.

b. A POSA Would Not Modify Edwards to Incorporate Sadwick’s Time-Based Switching.

The Petition’s alternative proposed use of Sadwick’s time-based switching into Edwards fixture also fails. First, the Petition states that this element is met by Edwards and it does not identify any difference between Edwards and the claimed element. *See Ryko Mfg Co.*, 950 F.2d at 717. Without the identification of a difference between Edwards and the claimed invention, Petitioner’s obviousness ground fails from the start.

Moreover, Sadwick fails to disclose this limitation because it never couples “one of the plurality of currents” to both the first and second plurality of LEDs. POR-31-32. In the Reply, Petitioner ignores the claim language and argues that “[t]he current of Sadwick are timeslotted to each bank of LEDs over very small (ms) periods of time such that both appear to be on and thus current is provided to both concurrently over any reasonable period of time.” Reply-11. The claim is not met by the two LED strings “appearing” to both be on. Instead, the claim requires that the second switch couples the current to *both* the first and second set of LEDs.

5. Edwards and Sadwick Do Not Meet 1[h], 10[i], and 18[m]

The claims require coupling fixtures of different lengths together and providing color matching between those different-length fixtures. This feature is not disclosed by the cited references. Petitioner argues that “Edwards thus discloses that arrangements of multiple lamps can include individual lamps of different sizes . . . Any area that is not an even multiple of a lamp size would need multiple lamps of different sizes assembled.” Reply-12. This argument is based on a hindsight reconstruction of the claim limitation. Neither Edwards nor Sadwick disclose coupling fixtures of different lengths. Even if they did, there is no disclosure of how color temperature would match between fixtures of different lengths with corresponding different number of LEDs. Petitioner alleges that such color matching would have been done without any disclosure of *how* the color matching would be accomplished. This type of reasoning has been rejected by the Federal Circuit. *Personal Web Tech. v. Apple*, 848 F.3d 987, 993-994 (Fed. Cir. 2017) (“But that reasoning seems to say no more than that a skilled artisan, once presented with the two references, would have understood that they could be combined. And that is not enough: it does not imply a motivation to pick out those two references and combine them to arrive at the claimed invention.”).

Further, Petitioner’s expert’s opinion that different lengths would be coupled together “to cover a specific area” assumes—without any evidence—that a user would want lighting to span wall-to-wall without any gaps. Reply-12. By contrast, art of record describes employing gaps between fixtures. Ex.1008-¶193 (“A 30 ft×20 ft room, for example, may be illuminated by fifteen T8 (4 foot) lamps, arranged in three rows spaced approximately 6 ft apart and *with 2 ft spacing between the ends of the five lamps in each row.*”)

As required by 18[m], Petitioner’s proposed combination fails to disclose current scaling between two different fixtures of different lengths. That current scaling allows the two fixtures with different lengths and number of LEDs to output the same color temperature, to thereby visually match.

6. Petitioner failed to show that Edwards Has a Plurality of Selectable Positions as Required by Claim 1

Edwards has a dimmer switch continuous dial, and Petitioner contends that “[a]ny position on the dial will necessarily be selectable.” Reply-13. Patent Owner’s expert has shown that POSA would not understand a continuous motion dial as having “selectable positions.” Ex.2025-¶59.

7. Petitioner failed to show that Edwards or Sadwick Have The Claimed Color Temperatures in Claim 4.

It is undisputed that the color temperatures of claim 4 are not disclosed in Edwards or Sadwick. Instead, Petitioner tries to draw from the general knowledge of POSA, which is prohibited. Reply-13; 37 C.F.R § 42.104(b)(4).

8. Petitioner failed to show that Edwards or Sadwick Have The Claimed Current Scaling of Claims 10[m] and 20.

Petitioner relies on *Koninklijke Philips N.V. v. Google LLC* to support its position that a POSA would modify Edwards and Sadwick to have the claimed current scaling. 948 F.3d 1330, 1333 (Fed. Cir. 2020). In *Philips*, the petition relied on a reference to show the feature missing from the other references used in the ground. *Id.* In this IPR, however, Petitioner has not presented any reference to show that a POSA would modify Edwards and Sadwick to have the claimed current scaling. Instead, Petitioner offers only the conclusory opinion of its expert.

Petitioner's citations to *Yeda Research* and *Ariosa Diagnostics* are equally irrelevant because the cited exhibits (discussed below) do not show the claimed current scaling, and the Petition did not rely on the references for the claimed current scaling. Petitioner argues its expert "cited Ex.1010, 1012, and 1020 to demonstrate that a POSA would be motivated to modify Edwards and Sadwick." Reply-15. But Petitioner's expert limits discussion of these exhibits to connecting LEDs in series or parallel and fails to discuss the claimed current scaling. Ex.1002-¶¶219-222.

Even if these references discussed the claimed current scaling—they do not—the Petition only cites these exhibits for the parallel connection of LEDs, so these references therefore cannot be considered for this element under 37 C.F.R. § 42.104(b)(4). Petition-40, 84. Both the Petition and Petitioner’s expert lack support that a POSA would modify Edwards and Sadwick to include the claimed current scaling.

9. Petitioner failed to show that Edwards and Sadwick Meet Dependent Claim 15.

Confusingly, in its Reply, Petitioner argues that it does not need to meet the standard for inherency but then argues that the constant or variable current driver of Sadwick “would necessarily include a current regulator,” which is the standard for inherency. Reply-16-17. Patent Owner previously showed the Petition failed to meet inherency standard. POR-40. With respect to motivation to combine, Petitioner again provides only a benefit of a combination without showing how or why a POSA would make the proposed combination based on Edwards or Sadwick.

B. Ground 2: Why a POSA Would Combine Jeswani with Edwards and Sadwick is Unanswered.

Petitioner’s argument to combine Jeswani with Edwards and Sadwick reduces the references to functionalities of the references, rather than how a POSA would combine them in a circuit. Petitioner argues “[a] POSA would see the benefits of labeled and selectable positions.” Reply-17. But the Petition does not show how the

circuit of Edwards could be modified to incorporate Jeswani's switch. Instead, the Petition relies entirely on hindsight to arrive at the claimed feature.

C. Ground 3: The Petition's Failure to Apply the Claim Language and Set Forth a Motivation to Combine is Further Highlighted in Petitioner's Reply

Ground 3 fails because Petitioner 1) does not meaningfully address Patent Owner's arguments but overgeneralizes them as "undisputed" issues; 2) ignores the actual claim language so it cannot meet its burden; and 3) fails to set forth adequate motivation to combine, which cannot be remedied in Reply.

1. Petitioner's Broad Generalizations of Undisputed Issues Are Incorrect

Petitioner broadly contends there are many undisputed issues. Reply-18. But a review of the POR shows the dispute.

First, Petitioner contends that "Patent Owner does not dispute that May does not discourage or teach away from using physical switches." Reply-18. This is false:

May takes care to describe manufacturing the networking-capable lighting system in a cost-effective manner. Ex.1008-¶0031. In this way, adding any additional circuitry, such as the local controls of Jeswani, would increase the costs associated with manufacturing the lighting system and adversely affect the aesthetics of the lighting system of May. Ex.2018-¶131.

POR-51. “Supplementing” May to add redundant physical switches would increase system costs, undermining one of May’s main goals of being a cost-effective solution. Ex.2018-¶131. It also changes the aesthetics of the system. *Id.* Thus, May does discourage and teach away from using physical switches. That May *never* mentions the need to have local control of its lighting system further establishes that May teaches away from its use, and instead, embraces employing a PoE lighting system. POR-13. May chose to avoid switches, like those of Jeswani.

Petitioner next contends that “Patent Owner does not dispute that . . . the prior art teaches benefits of combining physical and network controls.” Reply-18. This overgeneralization is irrelevant. Petitioner does not provide why a POSA would be motivated to combine the physical switches on the lamp of Jeswani with the network controls of May. Nor does it cite to any benefits in the art to support such a theory. High-level generalities that merely speak to what a POSA “could” have done reveal impermissible hindsight.

Finally, Petitioner contends that “motivation to combine is not cabined by the specific goals of May.” Reply-18. However, Petitioner ignores that May’s and Jeswani’s goals are still relevant to whether a POSA would combine the two references—an issue Petitioner’s reply never addresses. Thus, Petitioner’s broad generalizations of what is “not” disputed are incorrect.

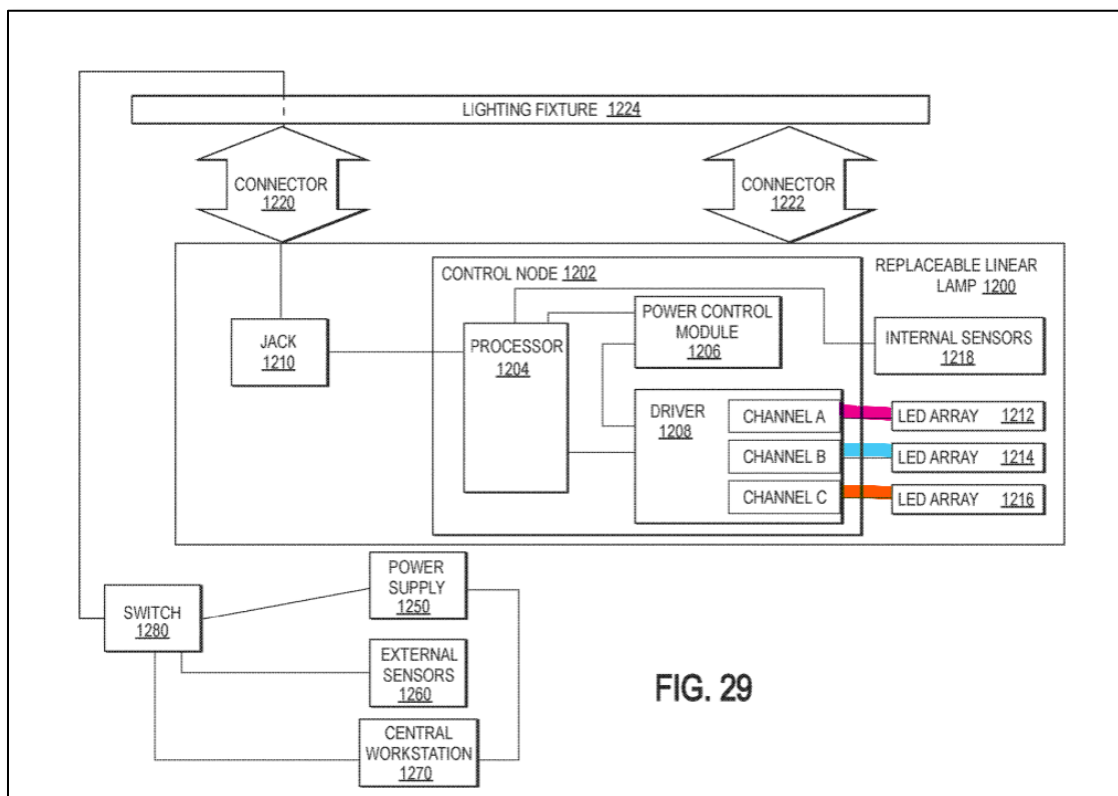
2. Petitioner Does Not Analyze the Actual Claim Language in Its Analysis
 - a. The Combination of May and Jeswani Does Not Render Obvious 1[c]-[g], 18[f]-18[i], and 18[l] and 18[w] because May Does Not Have a Control Mechanism where “the one of the plurality of currents couples to the first plurality of LEDs, the second plurality of LEDs, or both.”

Claim 1[g] requires a second switch configured to cause *the one* of the plurality of currents to couple to the first plurality of LEDs, the second plurality of LEDs, or both.

The Petition relies on “May disclos[ing] a control mechanism whereby color temperature is allocated by varying current between two strings of LEDs and accordingly current is coupled to either or both of the pluralities of LEDs.” Petition-69. This does not satisfy the claim requirement because “*the one* of the plurality of currents” must be able to couple to the first string, the second string, *or both*. That never happens in May. Ex.1029-70:15-71:8. Moreover, since May discloses *separate* drive currents provided to each string, one drive current never couples to both strings. Ex.1008-¶0231.

Petitioner does not dispute that May has sub-driver circuits, but contends that those sub-driver circuits make up one larger driver circuit. Reply-21-22. Even if that is the case, *one of the plurality of currents* output by the driver circuit never couples to both strings. May’s control module 1132 “has current control driver subcircuits

that supply DC drive current *to individual* LED emitter strings.” Ex.1008-¶223 (emphasis added). Figure 28 uses “an independent current-controlling driver that controls the current separately to each string of emitters.” Ex.1008-¶218. Figure 29 illustrates that “[t]his circuit arrangement provides three *independently* controllable LED channels A, B and C within a single lamp to support a wide range of desired lighting effects and operational flexibility.” Ex.1008-¶211. Figure 29 shows each sub-driver circuit permanently coupled to one and only one LED string. One of the plurality of currents output from the driver circuit can never be coupled to two strings.



Current 1 (purple) is coupled to LED Array 1212; current 2 (blue) is coupled to LED Array 1214; and current 3 (orange) is coupled to LED Array 1216. May emphasizes independent control of each LED array through the subcircuits, so May simply cannot meet these limitations of claims 1 and 18.

Petitioner argues that “[t]he claims do not require that a single wire output current to both pluralities of LEDs (Ex.1028-¶51) only . . . that a switch cause ‘the one of the plurality of currents to couple to the first plurality of LEDs, the second plurality of LEDs, or both’ (element 1[g]).” Reply-22. But Petitioner is ignoring the claim requirement that one of multiple currents (e.g., current 1-3 above) output by the driver circuit is coupled to one or both LEDs based on a second switch. The fact that current is “allocated” does not show that May or Jeswani includes the claimed second switch that couples *one* current to one or both strings of LEDs. Indeed, if May’s sub-driver circuits correspond to the plurality of currents output by the driver circuit as Petitioner contends, Fig. 29 clearly illustrates that one of these currents cannot be coupled to the first, second, or both strings of LEDs, as required by 1[g]. Petitioner asks the Board to only look at the overall function and ignore the claim language. Such generalities evidence impermissible hindsight.

b. The Combination of May and Jeswani Does not Render Obvious Claim Limitations 18[l] and 18[w]

Regarding 18[l] and 18[w], because one current cannot be coupled to two LED strings, the Petition fails for these limitations as well. *Supra* Section I.C.2.a.

Petitioner contends that May “would necessarily split the current in half while varying in that range.” But that is not the law. When a general range is disclosed, that is not a disclosure of a specific number within the range. *Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991, 1000 (Fed. Cir. 2006). Disclosure that a color temperature range can be achieved based on the relative magnitude of the drive currents does not disclose a specific relative magnitude of current. Petitioner cannot rely on the general knowledge of a POSA. 37 C.F.R § 42.104(b)(4).

c. May and Jeswani Fail to Render Obvious Limitations 1[h], 10[i], and 18[m]

Element 1[h] has two requirements (different length fixtures with color temperature matching). Petitioner lumps these requirements into one, calling it connecting fixtures of different lengths. But that is not what the claim language states. This is not trivial because if two linear lighting apparatuses have different color temperatures, then the set of two will look mismatched and off-putting to an observer. The scale factor of the fixtures ensures that fixtures of different number of LEDs have matching color temperature. POR-57. May does not describe

connecting multiple lamps that vary by a scale factor that also visually match because May was concerned with sizing the body of a linear LED lamp so that it would fit into an overhead lighting fixture designed to accept linear lamps of standardized nominal length. Ex.1008-claim 40.

Petitioner contends May's lamps of different lengths use the same emitter board configuration with the same first and second string of LED emitters. Reply-24. This argument was not in the Petition, and regardless, the section of May cited by Petitioner (Ex.1008-¶231) does not disclose using lamps of different lengths with the same emitter board configuration or color matching. Matching color temperatures between fixtures of different lengths was addressed by the '302 Patent. Ex.2018-¶27. May and Jeswani do not disclose this matching, and Petitioner's expert assumes it would be done because it would have a desirable outcome. Ex.1028-¶54-55. That circular reasoning fails to show how a POSA would modify May and Jeswani to achieve the outcome of color temperature matching. Petitioner's expert's assertion that "color temperatures are set by the emitter strings and not by the length" entirely ignores the design factors and trade-offs highlighted by Patent Owner's expert. Ex.1028-¶55; Ex.2018-¶99. Without a disclosure in May, Petitioner relies on its expert and "common knowledge" of a POSA, which is impermissible. 37 C.F.R § 42.104(b)(4); *see In re NuVasive*, 842 F.3d at 1383-84

(“the PTAB cannot rely solely on common knowledge or common sense to support its findings”).

May does not contemplate coupling lamps of two different lengths end-to-end to span a space. May’s example describes 15 4 foot lamps arranged in three rows spaced approximately 6ft apart *with 2 ft spacing between the ends of the five lamps in each row*—leaving space between fixtures. Had May contemplated connecting fixtures of different lengths, May would have suggested 2-foot lamps to fill gaps between the 4-foot lamps. In context, May’s silence on this aspect makes sense because May focuses on lamps that retrofit into existing fixtures. Ex.1008-¶193.

As for limitation 10[i], it is not the same as limitation 1[h] because 10[i] is not about length of the fixture. 10[i] requires two fixtures with a second number of LEDs arranged within a second linear form factor associated with the first color temperature wherein the second number of LEDs is greater than the first number of LEDs by a scale factor. Petitioner does not even try to address this limitation, and instead lumps it together with element 1[h].

18[m], likewise, is not the same claim language as 10[i], but Petitioner calls it so. This is insufficient to meet Petitioner’s burden because Petitioner does not analyze the actual claim language.

d. May and Jeswani Do Not Render Obvious Elements 10[m]
and 20

Patent Owner's response goes largely unanswered by Petitioner. Namely, Petitioner ignores the actual claim language yet again because both limitations requiring current scaling.

Neither May nor Jeswani come close to rendering obvious these claims. Without a disclosure in May to support this limitation, Petitioner relies on its expert and impermissible "common knowledge." 37 C.F.R. § 42.104(b)(4); *see In re NuVasive*, 842 F.3d at 1383-84. Petitioner's expert (*see* Ex. 1002-¶¶325-327) does not disclose any underlying facts or cite anything to support his opinion in this regard, does not address the actual claim language, and is entitled to little weight. *See* 37 C.F.R. § 42.65(a).

Moreover, the additional information cited by Petitioner in Reply-15 (Exhibit 1010, 1012, and 1020) are new arguments made for the first time and cannot be used to meet Petitioner's burden to show that a POSA would be motivated to modify May because this was not made in the original Petition. *Virtek Vision*, 97 F. 4th at 886.

3. The Petition Fails to Provide Reasoning Why a POSA Would
Have Been Motivated to Combine May and Jeswani

Originally, for Ground 3, the Petition alleges that "[a] POSA would be motivated to include the external CCT and brightness controls of Jeswani on the outer housing of the lamp 1100 of May to control color temperature and brightness."

Petition-66. Lamp 1100 refers to the embodiment of Figure 28A-28C. “The lamp 1100 is configured to be mounted to a lighting fixture using any of the disclosed snap-fit connectors having an associated Ethernet plug.” Ex.1008-¶0216. Thus, lamp 1100 is a tube light that plugs into an existing lighting fixture. And on that lamp, according to Petitioner, a POSA would add external CCT and brightness controls. This type of combination based on hindsight with no reasoning fails.

The Federal Circuit requires a clear explanation or evidence showing “*how* the combination of the two references was supposed to work.” *Personal Web*, 848 F.3d at 994 (emphasis original). “[S]uch a clear, evidence-supported account of the contemplated workings of the combination is a prerequisite to adequately explaining and supporting a conclusion that a relevant skilled artisan would have been motivated to make the combination and reasonably expect success in doing so.” *Id.* The factual inquiry determining whether to combine references must be thorough and searching, and it must be based on *objective evidence of record*. *In re Lee*, 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). A challenger must (1) “to explain how specific references could be combined,” (2) “which combination(s) of elements in specific references would yield a predictable

result,” and (3) “how any specific combination would operate or read on” the claims. *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1327-28 (Fed. Cir. 2012).

The Board has recognized those requirements, and has repeatedly rejected obviousness grounds that fail to explain how the prior art elements could have been combined to achieve predictable results and arrive at the claimed invention.

- a. The Petition Offers No Explanation Why a POSA would be motivated to modify May with the switches of Jeswani

As the POR showed, the Petition never explains *how* or why a POSA would be motivated to modify May with Jeswani’s switches. May’s entire disclosure relies on executing instructions from control packets sent via Ethernet or another data communication platform, leaving unclear how local switches would be designed into the fixture. POR-50-51. Petitioner’s rationale—enabling control when the network is interrupted—ignores May’s express solution for that very scenario, and neither Petitioner nor May explains why a POSA would abandon it in favor of Jeswani’s local switches. *Id.* It is also unclear where such switches would even be placed on May’s already space-constrained tube lamp, which is “designed for removable mounting to a variety of lighting fixture housings.” Ex.1008-¶¶0024,0030.

Petitioner fails to address those arguments. Rather, Petitioner merely posits that a POSA *could* combine May and Jeswani but does not reconcile the missing

objective evidence in the disclosures or explain how May would work in view of the addition of Jeswani's switches. Reply-20. The Petition—not the Reply or anything else—must show *how* the prior art would have been combined or modified to arrive at the claims. To meet that burden, Petitioner must explain “how any specific combination would operate or read on” the claims. *ActiveVideo*, 694 F.3d 1327-28. The Petition is silent on this, which is dispositive.

Moreover, while Petitioner cites *Allied Erecting v. Genesis Attachments*, that case requires sufficient motivation to combine the teachings of the prior art to achieve the claimed invention. 825 F.3d 1373, 1381 (Fed. Cir. 2016). That motivation is lacking in the Petition.

The key element missing here is the “why”—why a POSA would have been motivated to modify May's lamp with Jeswani's switches to arrive at the claimed invention. Recognizing the deficiencies in its original Petition, the Reply attempts to explain what “could” happen. But the flaw here is that 1) this was not in the Petition; and 2) this still does not explain why a POSA *would* be motivated to make the proposed combination in view of the teachings of May.

This situation is akin to that in *Virtek Vision*. There, the Federal Circuit reversed the Board's determination of obviousness where the IPR petition merely mapped the limitations of the challenged claims to multiple elements of several prior

art references but failed to provide sufficient motivation for combining them. 97 F.4th 882. The Federal Circuit underscored that to prove obviousness, “[i]t does not suffice to simply be known[;] [a] reason for combining must exist.” *Id.* at 886. It also reinforced that the motivation to combine must be provided *in the petition itself* because “a petitioner may not, in its reply and accompanying expert declaration, rely ‘on an entirely new rationale to explain why one of skill in the art would have been motivated to combine.’” *Id.* at n.3.

Here, Petitioner attempts to rely on a new, unsupported rationale in its expert declaration, which is insufficient and should be given no weight. Ex.1028-¶¶42-46. Nor does it address May’s space constraints or explain why a POSA would be motivated to change the described operation of May by deferring to Jeswani’s local switches. POR-50-51;Ex.1008-¶0030.

Finally, Petitioner’s expert misses key distinctions between May and Jeswani’s switches. Ex.1028-¶¶42-46. May describes remotely-located switches and controls that a user can access and change as an override. Ex.1008-¶0215. Jeswani’s switches, on the other hand, are on the fixture itself and are set when the light is installed—not intended for user-level control. Incorporating Jeswani’s switches onto May’s lamp introduces a static input upon installation, and the Petition

has not set forth 1) where the switches would be placed on the lamp; or 2) how these switches would operate within May's network-based system.

The Petition was deficient from the outset, based on hindsight, and fails to establish obviousness.

b. May Teaches Away From the Proposed Modification.

Petitioner states that "May itself describes networking manually-operated light switches into its system," Reply-19. But Petitioner's careful word choice is obvious. That paragraph of May (also cited by Patent Owner in its Response) refers to manual wall mounted switches "to turn one of the LED arrays on or off." As Patent Owner stated, "May never anticipates incorporating local switches on the housing of its lighting systems to control brightness and CCT of the lighting system." POR-49. This is because a PoE LED system already "enables customers to . . . adjust color temperature . . . all while getting a better experience and saving energy." Ex.1008-¶0023. This underscores that there was no reason to include additional local switches on the housing of May's lamp to control brightness and CCT because that aspect of control was already accounted for in the May system.

Petitioner then posits that Jeswani's fixture may be both remotely and manually controlled. Reply-19. But that is irrelevant: the Petition failed to show

why a POSA would be motivated to add both of Jeswani's switches to May's tube lamp. That question remains unanswered.

Petitioner next contends that "adding Jeswani's switches does not change May's operation but merely adds another control mechanism." Reply-19. This statement has absolutely no support—in the art itself or through expert testimony. That systems can be designed with both sensor-based and manual controls does not mean that adding switches to tube lamp in a PoE lighting system that already controls color temperature and dimming through that system would not change the operation of that system. Petitioner's unsupported assertions should be disregarded.

Petitioner finally contends that there is no teaching away because while local controls would increase manufacturing costs, these are ordinary design tradeoffs. But Petitioner's acknowledgment of the increased costs is why, given the teachings of May, a POSA would not add additional switches. May emphasizes the need for cost-effective systems and cost savings. Adding something superfluous that is already controlled through May's system is exactly the opposite of May's stated cost-savings goal. Upon reading May, a POSA "would be led in a direction divergent from the path that was taken by applicant." *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

D. Ground 4: May in view of Jeswani and Sadwick Does Not Render Obvious Claim 15

This Ground fails for the same reason discussed above for claim 15 in Ground

1. *Supra* Section I.A.9.

II. CONCLUSION

The Board should issue a Final Written Decision affirming the patentability of the Challenged Claims.

Respectfully submitted,

Date: August 24, 2026

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Patent Owner's Sur-Reply complies with the type-volume limitations of 37 C.F.R. §§ 42.24(b)(2) because it contains 5,393 words, as determined by the word-processing program used to prepare the brief, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a)(2).

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing PATENT OWNER'S SUR-REPLY was served electronically via email on August 24, 2026, on the following counsel of record for Petitioner:

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