

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FIRST ALERT, INC. and BRK BRANDS INC.,
Petitioner,

v.

WALTER KIDDE PORTABLE EQUIPMENT, INC.,
Patent Owner.

IPR2023-00898
Patent 7,525,445 B2

Before MEREDITH C. PETRAVICK, GREGG I. ANDERSON, and
ROBERT J. WEINSCHENK, *Administrative Patent Judges*.

WEINSCHENK, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. Background and Summary

First Alert, Inc. and BRK Brands Inc. (collectively, “Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 8–11 (“the challenged claims”) of U.S. Patent No. 7,525,445 B2 (Ex. 1001, “the ’445 patent”). Walter Kidde Portable Equipment, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 9, “Prelim. Resp.”) to the Petition.

An *inter partes* review may not be instituted unless “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). Here, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that at least one of the challenged claims is unpatentable. Thus, the Petition is denied, and no trial is instituted.

B. Real Parties in Interest

Petitioner identifies the following real parties in interest: 1) BRK Brands Inc.; 2) First Alert, Inc.; 3) Resideo Technologies, Inc.; and 4) Ademco Inc. Pet. vii. Patent Owner identifies itself as the only real party in interest. Paper 5, 2.

C. Related Matters

The parties indicate that the ’445 patent is the subject of the following district court case: *Walter Kidde Portable Equipment Inc. v. First Alert Inc.*, No. 6:22-cv-00566 (W.D. Tex.). Pet. viii; Paper 5, 2.

D. The ’445 Patent

The ’445 patent relates to “battery powered electronic devices, especially life safety alarms, for example smoke alarms and carbon

monoxide alarms, where the batteries are sealed inside the device to prevent access to the batteries.” Ex. 1001, 1:17–21. The ’445 patent states that “[s]ome battery operated alarms are designed so that the batteries are not replaceable,” but “permit the user to deactivate the alarm and to subsequently reactivate the alarm . . . as many times as the user desires.” *Id.* at 1:60–65. According to the ’445 patent, “[t]here is a need for a smoke alarm or other life safety alarm having an extended life, and which is less prone to user mistakes or improper use during installation as well as during the life of the alarm.” *Id.* at 2:1–4.

To address that purported need, the ’445 patent describes an alarm “designed to automatically activate when the user attaches the alarm portion to the mounting bracket.” *Id.* at 2:23–25. “At the end of the alarm life, . . . [t]he user then removes the alarm portion from the mounting bracket and slides a switch on the alarm to deactivate the alarm.” *Id.* at 2:25–29. “Deactivation of the alarm removes power from the alarm circuitry and drains remaining power from the batteries.” *Id.* at 2:29–31. “Further, when deactivated, the alarm portion is mechanically prevented from being mounted back on the mounting bracket.” *Id.* at 2:31–33.

E. Illustrative Claim

Of the challenged claims, claim 8 is independent. Claim 8 is reproduced below.

8. An electronic device, comprising:
 - a first portion;
 - a second portion configured for attachment to the first portion, the second portion including electronics to operate the device and at least one battery for powering the electronics;
 - an activation mechanism to activate the second portion;

a permanent deactivation mechanism to permit permanent deactivation of the second portion after the second portion has been activated; and

a reattachment prevention mechanism to prevent reattachment of the first and second portions once the second portion is permanently deactivated.

Ex. 1001, 7:48–8:6.

F. Evidence

Petitioner submits the following evidence:

Evidence	Exhibit No.
Declaration of John D. Pratt, Ph.D., P.E. (“Pratt Declaration”)	1002
DeLuca, US 6,160,487, issued Dec. 12, 2000 (“DeLuca”)	1006
Malewski, US 6,433,700 B1, issued Aug. 13, 2002 (“Malewski”)	1007
Report of the Meeting of the Standards Technical Panel of UL for Smoke Detectors and Alarms (Apr. 4, 2003) (“STP2003”)	1008
Byrne, EP 1045354 A2, published Oct. 18, 2000 (“Byrne ’354”)	1009
Byrne, GB 2312311 B, issued Apr. 19, 2000 (“Byrne ’311”)	1010

G. Asserted Grounds

Petitioner asserts that the challenged claims are unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
8–11	103	STP2003
8–11	103	Malewski
8–11	103	Malewski, DeLuca
8–11	103	Malewski, STP2003
8–11	103	Byrne ’354, Byrne ’311
8–11	103	Byrne ’311, DeLuca

II. ANALYSIS

A. Level of Ordinary Skill in the Art

Petitioner argues that a person of ordinary skill in the art would have had “a Bachelor’s Degree in mechanical engineering or similar discipline” and “knowledge of design considerations in the industry and . . . familiar[ity] with then-existing electro-mechanical products and solutions.” Pet. 5 (citing Ex. 1002 ¶ 31). Petitioner’s description of the level of ordinary skill in the art is supported by the testimony of Petitioner’s declarant, Dr. John Pratt. Ex. 1002 ¶ 33. Patent Owner does not dispute Petitioner’s description. Prelim. Resp. 9. We adopt Petitioner’s description for purposes of this Decision.

B. Claim Construction

In an *inter partes* review proceeding, a patent claim is construed using the same standard used in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of the claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b). Neither party proposes an express construction for any claim terms. Pet. 5; Prelim. Resp. 9. We determine that no claim terms require express construction for purposes of this Decision.

C. Obviousness of Claims 8–11 over STP2003

Petitioner argues that claims 8–11 would have been obvious over STP2003. Pet. 11–15. For the reasons discussed below, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over STP2003.

1. Claim 8

Claim 8 recites “an activation mechanism to activate the second portion.” Ex. 1001, 7:54. Petitioner asserts that “STP2003 identifies a ‘means to activate the power’ of non-replaceable-battery smoke alarms.” Pet. 13 (citing Ex. 1008, 6). Petitioner also asserts that “[s]uch ‘means to activate the power’ is an activation mechanism.” *Id.* (citing Ex. 1002 ¶¶ 35–40, 63–85, 127; Ex. 1018).

Patent Owner argues that Petitioner does not show sufficiently that STP2003’s “means to activate the power” is a mechanism. Prelim. Resp. 10–13. On this record, we agree with Patent Owner for two reasons. First, Petitioner states that STP2003’s “means” is a mechanism, but does not provide a specific explanation to support that statement. *See* Pet. 13. In particular, Petitioner does not explain why a person of ordinary skill in the art would have understood (or found it obvious) that STP2003’s “means” is a mechanism. *See id.* Petitioner cites to thirty paragraphs of the Pratt Declaration, but does not explain how any of those paragraphs support its statement in the Petition. *See id.* (citing Ex. 1002 ¶¶ 35–40, 63–85, 127); 37 C.F.R. § 42.104(b)(5) (“The Board may exclude or give no weight to evidence where a party has failed to state its relevance or to identify specific portions of the evidence that the support the challenge.”).

And, in fact, the cited portions of the Pratt Declaration do not support Petitioner’s statement in the Petition. For example, Dr. Pratt states that a person of ordinary skill in the art “would understand ‘means to activate the power’ of a smoke alarm would include an activation mechanism” because “the [Manual of Patent Examining Procedure (“MPEP”)] recognizes that ‘mechanism’ is often a nonce word substitute for the wor[d] ‘means.’”

Ex. 1002 ¶ 127 (citing Ex. 1018, MPEP § 2181). We disagree. MPEP § 2181 indicates that the term “mechanism” in some circumstances “may invoke 35 U.S.C. 112(f).” Ex. 1018, 2. But MPEP § 2181 does not indicate that the terms “means” and “mechanism” are synonymous. *See id.* Nor does it demonstrate that a person of ordinary skill in the art would have understood the term “means” in the context of STP2003 to refer to a mechanism. *See id.*

Second, the evidence of record indicates that the term “mechanism” in claim 8 refers to a mechanical device. Specifically, the ’445 patent describes “an activation mechanism” as including an activate component that rotates in a counterclockwise direction and actuates a slider so that it slides to the left to an activated position. Ex. 1001, 4:63–5:8, Fig. 5; *see id.* at 5:34–43. In addition, the extrinsic evidence identified by Patent Owner indicates that the term “mechanism” refers to a mechanical device. Prelim. Resp. 11; Ex. 2002, 5. Petitioner, though, does not identify any portion of STP2003 that indicates the “means to activate the power” is a mechanical device. *See Pet.* 13. Nor does Petitioner explain why a person of ordinary skill in the art would have understood (or found it obvious) that STP2003’s “means to activate the power” is a mechanical device. *See id.*

For the above reasons, on this record, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claim 8 would have been obvious over STP2003.

2. Claims 9–11

Claims 9–11 depend, directly or indirectly, from claim 8. Petitioner’s arguments and evidence regarding these dependent claims do not compensate for the deficiencies discussed above for claim 8. *See Pet.* 15.

Thus, for the same reasons discussed above, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 9–11 would have been obvious over STP2003.

3. Summary

For the foregoing reasons, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over STP2003.

D. Obviousness of Claims 8–11 over Malewski

Petitioner argues that claims 8–11 would have been obvious over Malewski. Pet. 16–22. For the reasons discussed below, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Malewski.

1. Claim 8

Claim 8 recites “a permanent deactivation mechanism to permit permanent deactivation of the second portion after the second portion has been activated.” Ex. 1001, 8:1–3. Petitioner asserts that “Malewski describes a permanent deactivation mechanism via [U.S. Patent No. 5,578,996 (“Watson”)].” Pet. 18 (citing Ex. 1007, 1:35–58). Specifically, Petitioner asserts that Malewski “via Watson” teaches “rotating [a] ‘single-use, frangible, and rotatable switch mechanism . . . to a battery ‘drain’ position in which a second switch may be actuated to drain the battery.’” *Id.* at 18–19 (citing Ex. 1007, 1:38–40, 1:50–53).

Patent Owner argues that Petitioner does not show sufficiently that it would have been obvious to combine the cited teachings of Malewski and Watson. Prelim. Resp. 20–23. On this record, we agree with Patent Owner. Petitioner simply states that “Malewski describes a permanent deactivation

mechanism via Watson.” Pet. 18. Although Malewski incorporates Watson by reference for its “showing of [the] current state-of-the-art.” (Ex. 1007, 2:35–38), Malewski and Watson describe different devices. Watson describes a detector with a single-use switch that permanently drains the detector’s battery. *Id.* at 1:35–43, 1:50–54. In contrast, Malewski sought to improve upon Watson by providing a detector with “an on/off switching mechanism” that “can be used, repeatedly, to activate/deactivate” the detector. *Id.* at 1:54–58, 3:13–17. Petitioner does not explain why a person of ordinary skill in the art would have combined Malewski’s detector that includes a multiple-use on/off switch with Watson’s single-use deactivation switch. *See* Pet. 18–19; *In re Stepan Co.*, 868 F.3d 1342, 1346 n.1 (Fed. Cir. 2017) (“Whether a rejection is based on combining disclosures from multiple references [or] combining multiple embodiments from a single reference, . . . there must be a motivation to make the combination.”).

Claim 8 also recites “a reattachment prevention mechanism to prevent reattachment of the first and second portions once the second portion is permanently deactivated.” Ex. 1001, 8:4–6. Petitioner asserts that “the ‘activation key 60’ of Malewski and its associated components make up an ‘attachment prevention mechanism.’” Pet. 19 (citing Ex. 1002 ¶¶ 163–164). In particular, Petitioner asserts that “[w]hen [activation] key 20 [(sic)] is in the off position, bottom ledge 68 protrudes from base 14, where it interferes with making the bayonet-type connection between base 14 and mounting bracket 12.” *Id.* (citing Ex. 1007, 8:4–7).

Patent Owner argues that Petitioner does not show sufficiently that Malewski teaches a mechanism that prevents reattachment of the first and second portions once the second portion is permanently deactivated. Prelim.

Resp. 23–28. On this record, we agree with Patent Owner. Malewski teaches that when “key 60 [is] in the off position,” a user cannot attach the detector to the mounting bracket. Ex. 1007, 7:66–8:7. In contrast, “when key 20 is pushed in all the way (i.e., to the ON position),” the key creates “a reliable electrical connection” and allows a user to attach the activated detector to the mounting bracket. *Id.* at 7:51–65, 8:7–9. Thus, according to Malewski, the key “provides a safeguard against installing the device without activating it.” *Id.* at 8:2–4. But the portions of Malewski cited by Petitioner do not indicate that the key also prevents a user from installing a detector that is permanently deactivated. *See id.* at 3:43–45, 7:51–8:7. In fact, Petitioner does not explain what prevents a user from simply pushing the key in a permanently-deactivated detector to the on position and then reattaching it to the bracket. *See* Pet. 19–20.

For the above reasons, on this record, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claim 8 would have been obvious over Malewski.

2. *Claims 9–11*

Claims 9–11 depend, directly or indirectly, from claim 8. Petitioner’s arguments and evidence regarding these dependent claims do not compensate for the deficiencies discussed above for claim 8. *See* Pet. 20–22. Thus, for the same reasons discussed above, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 9–11 would have been obvious over Malewski.

3. *Summary*

For the foregoing reasons, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Malewski.

E. Obviousness of Claims 8–11 over Malewski and DeLuca

Petitioner argues that claims 8–11 would have been obvious over Malewski and DeLuca. Pet. 22–27. For the reasons discussed below, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Malewski and DeLuca.

1. *Claim 8*

Claim 8 recites “a permanent deactivation mechanism to permit permanent deactivation of the second portion after the second portion has been activated.” Ex. 1001, 8:1–3. For this limitation, Petitioner relies on the same assertion discussed above, namely, that “Malewski describes a permanent deactivation mechanism via Watson.” Pet. 18, 25 (“Malewski renders this claim limitation obvious per Section VII.D.1.a.v.”). As discussed above, Petitioner does not show sufficiently that it would have been obvious to combine the cited teachings of Malewski and Watson. *See* Section II.D.1.

Claim 8 also recites “a reattachment prevention mechanism to prevent reattachment of the first and second portions once the second portion is permanently deactivated.” Ex. 1001, 8:4–6. For this limitation, Petitioner relies on the same assertion discussed above, namely, that “the ‘activation key 60’ of Malewski and its associated components make up an ‘attachment prevention mechanism.’” Pet. 19, 26 (“Malewski renders this claim

limitation obvious per Section VII.D.1.a.vi.”). As discussed above, Petitioner does not show sufficiently that Malewski teaches a mechanism that prevents reattachment of the first and second portions once the second portion is permanently deactivated. *See* Section II.D.1.

Petitioner asserts, alternatively, that DeLuca “describes a lockout actuator 56 which can move between obstructing and non-obstructing positions.” Pet. 26 (citing Ex. 1006, 2:23–25, 4:45–47). According to Petitioner, “[i]n the obstructing position, the lockout tab prevents the base from being reattached to the bracket.” *Id.* (citing Ex. 1006, 5:2–9). Petitioner asserts that it would have been obvious to combine the cited teachings of Malewski and DeLuca to provide “a smoke alarm system that, upon deactivation, includes a lockout mechanism for preventing reattachment to the mounting bracket.” *Id.* at 24 (citing Ex. 1002 ¶ 200).

Patent Owner argues that Petitioner does not show sufficiently that the Malewski and DeLuca combination teaches a mechanism that prevents reattachment of the first and second portions once the second portion is permanently deactivated. Prelim. Resp. 37–39. On this record, we agree. DeLuca teaches that “[w]ithout [all of the] batteries in the compartment 26,” the lockout mechanism “prevent[s] the base 12 from mounting to the bracket 20.” Ex. 1006, 4:62–5:10. In contrast, “[w]hen all of the batteries 26 are inserted,” the lockout mechanism does not “interfere with the rotation of the base 12 relative to the bracket 20.” *Id.* at 5:11–19. In other words, DeLuca’s lockout mechanism prevents reattachment of the base to the bracket when a user has removed some (or all) of the batteries. *Id.* at 4:62–5:19. But the portions of DeLuca cited by Petitioner do not indicate that the lockout mechanism prevents reattachment of a base that is permanently

deactivated. *See id.* at 2:23–25, 4:45–47, 4:63–5:10. And Petitioner does not explain what prevents a user from inserting batteries into a permanently-deactivated base and then reattaching it to the bracket.¹ *See* Pet. 26.

For the above reasons, on this record, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claim 8 would have been obvious over Malewski and DeLuca.

2. *Claims 9–11*

Claims 9–11 depend, directly or indirectly, from claim 8. Petitioner’s arguments and evidence regarding these dependent claims do not compensate for the deficiencies discussed above for claim 8. *See* Pet. 26–27. Thus, for the same reasons discussed above, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 9–11 would have been obvious over Malewski and DeLuca.

3. *Summary*

For the foregoing reasons, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Malewski and DeLuca.

F. Obviousness of Claims 8–11 over Malewski and STP2003

Petitioner argues that claims 8–11 would have been obvious over Malewski and STP2003. Pet. 27–31. For the reasons discussed below,

¹ Petitioner appears to also propose combining Malewski and DeLuca so that “when the user pulls the key of Malewski out to deactivate the alarm, [DeLuca’s] lockout mechanism . . . prevent[s] reattachment.” Pet. 24. That combination suffers from the same deficiency discussed above because the cited portions of Malewski do not indicate that the key prevents a user from installing a detector that is permanently deactivated. *See* Ex. 1007, 3:43–45, 7:51–8:7.

Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Malewski and STP2003.

1. Claim 8

Claim 8 recites “a permanent deactivation mechanism to permit permanent deactivation of the second portion after the second portion has been activated.” Ex. 1001, 8:1–3. For this limitation, Petitioner relies on the same assertion discussed above, namely, that “Malewski describes a permanent deactivation mechanism via Watson.” Pet. 18, 29 (“Malewski renders this claim limitation obvious per Section VII.D.1.a.v.”). As discussed above, Petitioner does not show sufficiently that it would have been obvious to combine the cited teachings of Malewski and Watson. *See* Section II.D.1.

Claim 8 also recites “a reattachment prevention mechanism to prevent reattachment of the first and second portions once the second portion is permanently deactivated.” Ex. 1001, 8:4–6. For this limitation, Petitioner relies on the same assertion discussed above, namely, that “the ‘activation key 60’ of Malewski and its associated components make up an ‘attachment prevention mechanism.’” Pet. 19, 29 (“Malewski renders this claim limitation obvious per Section VII.D.1.a.vi.”). As discussed above, Petitioner does not show sufficiently that Malewski teaches a mechanism that prevents reattachment of the first and second portions once the second portion is permanently deactivated. *See* Section II.D.1.

Petitioner asserts, alternatively, that STP2003 teaches a “deactivation means” that “render[s] the unit incapable of being reinstalled.” Pet. 30 (citing Ex. 1008, 6). Petitioner contends that it would have been obvious to

“modify Malewski” in light of STP2003 to produce “a bracket-mounted, sealed-battery smoke alarm system that has a one-time activating means and a one-time deactivating means which serves to discharge the batteries and render the unit incapable of being reinstalled.” *Id.* at 28 (citing Ex. 1002 ¶¶ 35–40, 63–85, 216–217, 281–316).

Patent Owner argues that Petitioner does not show sufficiently that it would have been obvious to combine the cited teachings of Malewski and STP 2003. Prelim. Resp. 40–41. On this record, we agree with Patent Owner. Malewski teaches a detector with an on/off key that “can be used, repeatedly, to activate/deactivate” the detector. Ex. 1007, 3:13–17, 7:51–8:7. Although STP2003 teaches an alarm with a deactivation means that renders the alarm incapable of being reinstalled, STP2003 does not describe any particular structure for doing so. Ex. 1008, 6. And Petitioner does not explain how a person of ordinary skill in the art would have “modif[ied]” Malewski’s multiple-use on/off key to produce a detector that instead has a “one-time deactivating means” that “render[s] the unit incapable of being reinstalled.” *See* Pet. 27–30; *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017) (“[T]he Board nowhere clearly explained, or cited evidence showing, *how* the combination of the two references was supposed to work.”).

For the above reasons, on this record, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claim 8 would have been obvious over Malewski and STP2003.

2. Claims 9–11

Claims 9–11 depend, directly or indirectly, from claim 8. Petitioner’s arguments and evidence regarding these dependent claims do not

compensate for the deficiencies discussed above for claim 8. *See* Pet. 31. Thus, for the same reasons discussed above, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 9–11 would have been obvious over Malewski and STP2003.

3. *Summary*

For the foregoing reasons, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Malewski and STP2003.

G. Obviousness of Claims 8–11 over Byrne ’354 and Byrne ’311

Petitioner argues that claims 8–11 would have been obvious over Byrne ’354 and Byrne ’311. Pet. 31–38. For the reasons discussed below, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Byrne ’354 and Byrne ’311.

1. *Claim 8*

Claim 8 recites “a reattachment prevention mechanism to prevent reattachment of the first and second portions once the second portion is permanently deactivated.” Ex. 1001, 8:4–6. Petitioner asserts that Byrne ’354 teaches an alarm device with a base (i.e., a first portion) and an alarm body (i.e., a second portion) that can be attached together via connection apertures and a snap-fitting fastener. Pet. 33–34 (citing Ex. 1009 ¶¶ 22–23). Petitioner asserts that “Byrne ’311 describes a one-way OFF switch 29 which ‘allows the alarm 1 to be de-activated in an extremely simple manner,’” namely, by “cutting of a [power] wire.” *Id.* at 35–36 (citing Ex. 1010, 4:20–22, 5:4–9, 5:15–19, 6:21–24). According to Petitioner, a person of ordinary skill in the art would understand that “this physical disabling of

the connection between the power source may result in an alarm body (i.e. second portion) that is not capable of reattachment to the base (i.e. first portion) once deactivated.” *Id.* at 37 (citing Ex. 1002 ¶¶ 244–250).

Patent Owner argues that Petitioner does not show sufficiently that the Byrne ’354 and Byrne ’311 combination teaches a mechanism that prevents reattachment of the first and second portions once the second portion is permanently deactivated. Prelim. Resp. 46–49. On this record, we agree with Patent Owner. Byrne ’311 teaches that a user may cut a power wire in the alarm device in order to “disconnect[] the power supply” and “prevent battery-low indications being emitted after it has been discarded.” Ex. 1010, 1:25–29. But the portions of Byrne ’311 cited by Petitioner do not indicate that cutting the power wire prevents a user from reattaching the alarm body to the base. *See id.* at 4:20–22, 5:4–9, 5:15–19, 6:21–24. And Petitioner does not explain what prevents a user from reattaching the deactivated alarm body to the base using the connection apertures and fastener taught by Byrne ’354. *See* Pet. 36–37.

Petitioner appears to assert, alternatively, that a person of ordinary skill in the art would have been “inspire[d]” to add “a mounting prevention function, such as those known in the art” to the Byrne ’354 and Byrne ’311 combination to “prevent[] deactivated and non-operational alarms from being mounted.” Pet. 32 (citing Ex. 1002 ¶¶ 35–40, 63–85, 234–250). Petitioner, however, does not provide sufficient reasoning to support that assertion. Namely, Petitioner does not identify any specific mounting prevention function that is known in the art. *See id.* Nor does Petitioner explain how such a mounting prevention function would have been combined with the Byrne ’354 and Byrne ’311 combination. *See id.*;

Personal Web, 848 F.3d at 994. Further, Petitioner cites to forty-six paragraphs of the Pratt Declaration, but does not explain how any of those paragraphs support its assertion in the Petition. *See id.* (citing Ex. 1002 ¶¶ 35–40, 63–85, 234–250); 37 C.F.R. § 42.104(b)(5).

For the above reasons, on this record, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claim 8 would have been obvious over Byrne ’354 and Byrne ’311.

2. Claims 9–11

Claims 9–11 depend, directly or indirectly, from claim 8. Petitioner’s arguments and evidence regarding these dependent claims do not compensate for the deficiencies discussed above for claim 8. *See* Pet. 37–38. Thus, for the same reasons discussed above, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 9–11 would have been obvious over Byrne ’354 and Byrne ’311.

3. Summary

For the foregoing reasons, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Byrne ’354 and Byrne ’311.

H. Obviousness of Claims 8–11 over Byrne ’311 and DeLuca

Petitioner argues that claims 8–11 would have been obvious over Byrne ’311 and DeLuca. Pet. 38–44. For the reasons discussed below, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Byrne ’311 and DeLuca.

1. Claim 8

Claim 8 recites “a reattachment prevention mechanism to prevent reattachment of the first and second portions once the second portion is permanently deactivated.” Ex. 1001, 8:4–6. Petitioner asserts that DeLuca teaches a detector with a bracket (i.e., a first portion) that can be attached to a base (i.e., a second portion). Pet. 40–41 (citing Ex. 1006, 3:23–34). Petitioner asserts that DeLuca “describes a lockout actuator 56, . . . which may move between obstructing and non-obstructing positions.” *Id.* at 42 (citing Ex. 1006, 2:23–25, 4:45–47). According to Petitioner, “[i]n the obstructing position, ‘the lockout tab 64’ . . . prevents the base from being reattached to the bracket.” *Id.* (citing Ex. 1006, 5:2–9). Petitioner asserts that a person of ordinary skill in the art “would recognize that the lockout mechanism of the DeLuca [] alarm would prevent users from installing a non-operational alarm, such as the deactivated, destroyed alarm of Byrne ’311.” *Id.* at 43 (citing Ex. 1002 ¶¶ 271–274).

Patent Owner argues that Petitioner does not show sufficiently that the Byrne ’311 and DeLuca combination teaches a mechanism that prevents reattachment of the first and second portions once the second portion is permanently deactivated. Prelim. Resp. 53. On this record, we agree with Patent Owner. DeLuca teaches that “[w]ithout [all of the] batteries in the compartment 26,” the lockout mechanism “prevent[s] the base 12 from mounting to the bracket 20.” Ex. 1006, 4:62–5:10. In contrast, “[w]hen all of the batteries 26 are inserted,” the lockout mechanism does not “interfere with the rotation of the base 12 relative to the bracket 20.” *Id.* at 5:11–19. In other words, DeLuca’s lockout mechanism prevents reattachment of the base to the bracket when a user has removed some (or all) of the batteries.

Id. at 4:62–5:19. But the portions of DeLuca cited by Petitioner do not indicate that the lockout mechanism prevents reattachment of a base that is permanently deactivated. *See id.* at 2:23–25, 4:45–47, 4:63–5:10. And Petitioner does not explain what prevents a user from inserting batteries into a permanently-deactivated base and then reattaching it to the bracket. *See* Pet. 42–43.

Patent Owner also argues that Petitioner does not show sufficiently that it would have been obvious to combine the cited teachings of Byrne ’311 and DeLuca. Prelim. Resp. 49–53. On this record, we agree with Patent Owner. Byrne ’311 teaches an alarm device in which a “user[] do[es] not have access to the power supply because there is no need to replace the battery.” Ex. 1010, 1:11–15. On the other hand, DeLuca’s lockout mechanism is activated when a user removes batteries. Ex. 1006, 4:62–5:19. Petitioner contends that “[i]n the proposed combination, each of the respective disclosures of Byrne ’311 and DeLuca [] function in the same manner as in their respective sources and are therefore simply a rearranging of known components.” Pet. 39. But Petitioner does not explain how a person of ordinary skill in the art would have combined Byrne ’311’s alarm device that has an inaccessible battery with DeLuca’s lockout mechanism that requires a user to removes batteries. *See* Pet. 38–39, 42–43; *Personal Web*, 848 F.3d at 994.

For the above reasons, on this record, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claim 8 would have been obvious over Byrne ’311 and DeLuca.

2. Claims 9–11

Claims 9–11 depend, directly or indirectly, from claim 8. Petitioner’s arguments and evidence regarding these dependent claims do not compensate for the deficiencies discussed above for claim 8. *See* Pet. 43–44. Thus, for the same reasons discussed above, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 9–11 would have been obvious over Byrne ’311 and DeLuca.

3. Summary

For the foregoing reasons, Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that claims 8–11 would have been obvious over Byrne ’311 and DeLuca.

III. CONCLUSION

Petitioner does not demonstrate a reasonable likelihood of prevailing in showing that at least one of the challenged claims of the ’445 patent is unpatentable.

IV. ORDER

It is hereby

ORDERED that the Petition is denied, and no trial is instituted.

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Patent 7,525,445 B2

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