

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ZIMMER SURGICAL, INC.,
Petitioner,

v.

STRYKER CORPORATION,
Patent Owner.

Case IPR2016-00257
Patent 6,481,019 B2

Before BARBARA A. PARVIS, ZHENYU YANG, and
MICHELLE N. WORMMEESTER, *Administrative Patent Judges*.

WORMMEESTER, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

Zimmer Surgical, Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting *inter partes* review of claims 48, 56, and 125–129 of U.S. Patent No. 6,481,019 B2 (Ex. 1001, “the ’019 patent”). Stryker Corporation (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”). We have jurisdiction under 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” For the reasons that follow, we have decided not to institute an *inter partes* review.

I. BACKGROUND

A. *Related Proceedings*

The parties identify the following case involving the ’019 patent: *Stryker Corp. v. Zimmer, Inc.*, Case No. 1:14-cv-01201 (W.D. Mich., filed Nov. 21, 2014). Pet. 1; Paper 5, 2.

Petitioner further advises us that it “is concurrently filing petitions for *inter partes* review” of three other patents. Pet. 1; *see also* Paper 5, 2.

B. *The ’019 Patent*

The ’019 patent is titled “Air Filtration System Including a Helmet Assembly.” Ex. 1001, at [54]. Medical professionals, such as surgeons, wear air filtration systems and helmet assemblies during surgical procedures to filter air between the surgeon’s head and body and the “clean room.” *Id.* at 1:21–26. According to the ’019 patent, drawbacks of conventional air filtration systems and helmet assemblies include time-consuming and burdensome self-gowning methods. *Id.* at 2:4–21.

The invention of the '019 patent provides a positioning and supporting system, which includes a mounting clip on the helmet assembly and an aperture on a face shield with a gown attached to it. *Id.* at 10:24–44, 65–66. The mounting clip interlocks with the aperture, both automatically centering the face shield relative to the helmet assembly and supporting the weight of the face shield and attached gown. *Id.* at 11:12–18. Thus, a user can easily self-gown by partially placing his arms into the sleeves of the gown and then hanging the face shield on the mounting clip. *Id.* at 11:21–25. Once the mounting clip and aperture interlock, the user can roll the gown over the helmet assembly and the user's body while maintaining sterility. *Id.* at 11:30–34.

The invention of the '019 patent also provides a visual positioning system, which includes a marker on the face shield and a marker on the helmet assembly, both “for the user to look at as he or she is self-gowning.” *Id.* at 11:43–45, 52–57, 11:60, 12:6–10; *see id.* at Figs. 3, 9. The markers allow for the user to visually align the face shield with the helmet assembly. *Id.* at 11:52–55. The markers also automatically center the face shield over the facial opening of the helmet assembly, thereby assisting the user in self-gowning while maintaining sterility. *Id.* at 11:64–12:2.

C. Illustrative Claims

Petitioner challenges claims 48, 56, and 125–129. Claims 48, 56, 125, and 129 are independent. Independent claims 48 and 125 are illustrative of the claimed subject matter and are reproduced below.

48. A positioning and supporting system for assisting a single user in self-gowning as the user maintains sterility, said positioning and supporting system comprising:

a helmet assembly adapted to be mounted on a head of the user, said helmet assembly including a base section and a facial section extending from said base section to define a facial opening;

a gown including a body portion for covering at least a portion of the body of the user and a head portion for covering said base section of said helmet assembly;

a face shield mounted to said head portion of said gown to cover said facial opening thereby permitting the user to view through said head portion of said gown, said face shield including a mounting mechanism on said face shield to support said face shield on said helmet assembly; and

said base section of said helmet assembly including a mounting device positioned relative to said facial opening, said mounting device interlocking with said mounting mechanism on said face shield to automatically center said face shield over said facial opening and to support said gown and said face shield thereby assisting the single user in self-gowning while maintaining a relative position between said gown and face shield and said helmet assembly as the user maintains sterility.

125. A visual positioning system for assisting a single user in self-gowning as the user maintains sterility, said visual positioning system comprising:

a helmet assembly adapted to be mounted on a head of the user, said helmet assembly including a base section and a facial section extending from said base section to define a facial opening;

a gown including a body portion for covering at least a portion of the body of the user and a head portion for covering said base section of said helmet assembly;

a face shield mounted to said head portion of said gown to cover said facial opening thereby permitting the user to view through said head portion of said gown, said face shield including a first visual indicator on said face shield to enable the

user to visually align said face shield with said helmet assembly;
and

said base section of said helmet assembly including a second visual indicator positioned relative to said facial opening for alignment with said first visual indicator on said face shield to automatically center said face shield over said facial opening thereby assisting the single user is self-gowning while maintaining a relative position between said gown and face shield and said helmet assembly a's the user maintains sterility.

D. Asserted Grounds of Unpatentability

Petitioner challenges claims 48, 56, and 125–129 of the '019 patent on the following grounds. Pet. 2–3, 13–60.

References	Basis	Claims Challenged
Bare ¹ and Desy ²	§ 103	48, 56, and 125–129
Bare, Desy, and Bjorklund ³	§ 103	48, 56, and 125–129
Bare and Shedrow ⁴	§ 103	125–129
Bare, Shedrow, and Bjorklund	§ 103	125–129

E. Claim Construction

We construe claims in an unexpired patent by applying the broadest reasonable interpretation in light of the specification of the patent in which they appear. *See* 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). Under this standard, claim terms are given their ordinary and customary meaning, as

¹ Bare, U.S. Patent No. 5,054,480, issued Oct. 8, 1991 (Ex. 1004).

² Desy, U.S. Patent No. 4,856,109, issued Aug. 15, 1989 (Ex. 1005).

³ Bjorklund, U.S. Patent No. 4,783,854, issued Nov. 15, 1988 (Ex. 1006).

⁴ Shedrow, U.S. Patent No. 3,787,113, issued Jan 22, 1974 (Ex. 1007).

would be understood by one of ordinary skill in the art in the context of the entire disclosure. See *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). On the other hand, a “claim term will not receive its ordinary meaning if the patentee acted as his own lexicographer” and clearly set forth a definition of the claim term in the specification. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002).

In light of Petitioner’s challenges to patentability of the claims, we address the following term in the challenged claims: “a second visual indicator.” Petitioner contends that “the [broadest reasonable interpretation] of the second visual indicator should encompass an indicator that is not in the user’s field of view while the user is self-gowning.” Pet. 9–10, 11. Petitioner explains that “the ’019 patent discloses that second visual indicator 109 may be disposed on outer shell 20 of helmet assembly 12, a location not visible to a user.” *Id.* at 10 (citing Ex. 1001, 12:6–10). Petitioner also explains that claim 128 “makes clear that the second visual indicator may be outside of the helmet, indicating that the second visible indicator may be in a visible or not visible location to the user.” *Id.* (citing Ex. 1001, 28:46-48 (claim 128)). According to Petitioner, a user would “align[] a visible first visual indicator with a non-visible second visual indicator by remembering its location . . . or sensing it another way, such as by touch.” *Id.* (citing Ex. 1001, 11:55–12:2).

On this record, we are not persuaded that the recited second visual indicator encompasses an indicator that is not visible to the user. The ’019 patent teaches explicitly that “the second visual indicator 109 is a marker or other suitable *visual* indicator.” Ex. 1001, 11:60–61 (cited at Pet. 10) (emphasis added). The term “visual” means “[c]apable of being seen by the

eye : VISIBLE.” WEBSTER’S II NEW COLLEGE DICTIONARY 1235 (2001). This dictionary definition is consistent with the specification of the ’019 patent, which also teaches that the second visual indicator 109 is “preferably disposed on either one of the inner and outer shells 18, 20 of the helmet assembly 12 in a suitable location *for the user’s eyes to pick up or notice* as he or she is self-gowning.” Ex. 1001, 12:6–10 (cited at Pet. 10) (emphasis added); *see also id.* at 11:55–57 (“[t]he first visual indicator 107 is a marker or other suitable visual indicator *for the user to look at* as he or she is self-gowning.”) (cited at Pet. 10) (emphasis added). According to Patent Owner, such teaching means that “the second visual indicator could be located in another spot that is visible to a user, other than the inner or outer shell.” Prelim. Resp. 24. We agree with Patent Owner in this regard. Petitioner does not direct us to any disclosure in the ’019 patent that describes the outer shell as being “a location not visible to a user.”

Based on the record presented, we determine that, under a broadest reasonable construction in light of the specification of the ’019 patent, the recited term “second visual indicator” means an indicator that is visible to a user while he or she is self-gowning.

Other terms in the challenged claims need no express construction for the purposes of this Decision.

II. ANALYSIS

A. Obviousness over Bare and Desy

Petitioner contends that claims 48, 56, and 125–129 of the ’019 patent would have been obvious over Bare and Desy, relying on supporting testimony of Michael L. Jones. *See* Pet. 13–37 (citing Ex. 1002). For the

reasons explained below, we are not persuaded that Petitioner has established a reasonable likelihood of prevailing on its asserted ground.

1. *Bare*

Bare describes a headgear structure that allows the user to control and filter air flow during a procedure, such as a surgery. Ex. 1004, at [57] (Abstract), 1:8–10. The headgear structure includes a connection mechanism on an upper front portion of the headgear structure. *Id.* at 3:7–11. A shroud that covers the headgear structure includes a complementary connection mechanism on an inner surface of the shroud. *Id.* at 3:13–16. When mated together, the connection mechanisms retain the shroud in a “preferred orientation” and prevent inadvertent movement of the shroud. *Id.* at 3:11–13.

The shroud also includes a transparent shield that is secured in an opening in the shroud and mounted in front of the headgear structure so that the user can see through the shield. *Id.* at 5:51–65.

2. *Desy*

Desy describes a face protective device that comprises a crown and a faceshield. Ex. 1005, 1:5–10. The crown includes an integrally molded detent in the shape of a wedge or a ramp that extends outwardly from the crown. *Id.* at 3:33–35. The faceshield includes a rectangular opening that is sized for locking engagement with the detent. *Id.* at 3:60–64. According to *Desy*, the integrally molded detent allows for lower materials, manufacturing, and labor costs. *Id.* at 2:12–17.

3. *Claims 48 and 56*

Independent claim 48 recites a “base section of said helmet assembly including a mounting device . . . interlocking with said mounting mechanism on said face shield to automatically center said face shield over said facial opening and to support said gown and said face shield.” Independent claim 56 similarly recites a “base section including a mounting device . . . being adapted to interlock with the face shield to automatically center the face shield over said facial opening and to support the gown and the face shield.” For these limitations, Petitioner relies on Bare. Petitioner first directs us to Figure 1 of Bare, which shows one embodiment of a headgear structure (which Petitioner identifies as a “helmet assembly”) including a connection mechanism 175 (which Petitioner identifies as “a mounting device”) on an upper front portion of the headgear structure that mates with a connection mechanism 275 (which Petitioner identifies as a “mounting mechanism”) on a shroud (which Petitioner identifies as a “gown”). Pet. 14, 32, 34, 37; Ex. 1004, Fig. 1. Petitioner notes that the connection mechanism 275 is located above a transparent shield (which Petitioner identifies as a “face shield”). Pet. 14, 32. Petitioner then directs us to Figure 4 of Bare, which shows a different embodiment of a headgear structure, where the transparent shield extends past the upper front portion of the headgear structure. *Id.*; Ex. 1004, Fig. 4. Relying on testimony of Mr. Jones, Petitioner contends that, “[w]hen transparent shield 201 [of Figure 1] is modified in this way [i.e., to extend past the upper front portion of the headgear structure], a person of ordinary skill in the art at the time of the alleged invention would have known to locate connection mechanism 275 on transparent shield 201 to mate with connection mechanism 175 located on the upper front portion of the

headgear structure.” Pet. 14 (citing Ex. 1002 ¶ 31). According to Petitioner, either the shield or the shroud can be mounted to the headgear structure without affecting Bare’s system because the shield is secured to the shroud. *Id.* (citing Ex. 1002 ¶ 31).

Based on the record presented, we are unpersuaded by Petitioner’s contentions. Petitioner must provide “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 44 F.3d 977, 988 (Fed. Cir. 2006). Bare teaches that the “connection mechanism 275 is, typically, provided on the inner surface of the *shroud* 200 to mate with connection mechanism 175.” Ex. 1004, 3:13–16 (emphasis added); *see* Pet. 14. Bare also teaches that the connection mechanism 175 “operates to retain *shroud* 200 in the preferred orientation.” Ex. 1004, 3:11–12 (emphasis added) (cited at Pet. 15). In light of these teachings in Bare, Petitioner does not explain sufficiently *why* a skilled artisan would have considered providing a connection mechanism on the transparent shield, even if modifying Figure 1 “would have been a simple design choice,” as Petitioner contends. *See* Pet. 14. Further, Mr. Jones does not direct us to sufficient underlying facts or data, which provide a basis for his opinion that one of ordinary skill in the art would have known to alternatively provide the connection mechanism 275 on the transparent shield. *See* Ex. 1002 ¶ 31. Moreover, we note that Figure 4 of Bare does not show a connection mechanism at all. Accordingly, on this record, we are not persuaded that Bare teaches or suggests a mounting device that interlocks with either a face shield or a mounting mechanism on a face shield.

Alternatively, Petitioner relies on Bare and Desy for teaching the mounting device recited in claims 48 and 56. With respect to Desy, Petitioner directs us to disclosure describing a face protective device with a crown and a faceshield that are removably attached to one another. Pet. 15 (citing Ex. 1005, 1:7–10). The crown includes a detent structure that locks with an opening in the faceshield. *Id.* (citing Ex. 1005, 3:60–64, Figs. 7, 7A). The detent structure and opening appear to be located centrally on the crown and faceshield, respectively. Ex. 1005, Figs. 7, 7A (cited at Pet. 15). Referring to Petitioner’s proposed modification of Figure 1 of Bare, where the transparent shield extends past the upper front portion of the headgear structure, Petitioner contends that “a person of ordinary skill in the art at the time of the alleged invention would have known to centrally dispose connection mechanism 275 on shield 201, similar to the rectangular opening 44 in *Desy*,” and “to centrally dispose connection mechanism 175 on the upper front portion 102 of headgear structure 100, like the central detent 32 in *Desy*.” Pet. 15–16, 35. Petitioner relies on testimony of Mr. Jones to support its contention. *Id.* (citing Ex. 1002 ¶ 34).

Based on the record presented, we are unpersuaded by Petitioner’s contention. As discussed above, Petitioner must provide “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Kahn*, 44 F.3d at 988. In that regard, Petitioner contends that applying the combined teachings in Bare and Desy to center Bare’s connection mechanisms “would have been a mere rearrangement of *Bare*’s connection mechanisms 175 and 275 according to a known technique, as disclosed by *Desy*, to yield predictable results.” Pet. 16. Petitioner also contends that “[o]ne of skill would have recognized that the functionality of

Bare's headgear structure 100 and shroud 200 would not have been affected, and that *Bare*'s stated goal of achieving a preferred orientation of shield 200 with headgear structure 100 would have been furthered." *Id.* Finally, Petitioner contends that centering *Bare*'s connection mechanisms "would have been common sense, predictable, and within the realm of knowledge of one skilled in the art at the time of the alleged invention." *Id.* Petitioner relies on testimony of Mr. Jones to support these contentions. *Id.* (citing Ex. 1002 ¶ 35).

Petitioner does not explain sufficiently *why* one of ordinary skill in the art would have considered combining elements of *Bare* with elements of *Desy*, or *why* one of ordinary skill in the art would have considered modifying the teachings of *Bare* in view of the teachings of *Desy*, to arrive at the claimed invention. For example, claims 48 and 56 require that the mounting device on the base section interlock with the face shield or a mounting mechanism on the face shield. Neither Petitioner nor Mr. Jones explains persuasively how centering *Bare*'s connection mechanisms would have arrived at the claimed invention, given that the connection mechanisms are disclosed as being provided on the upper front portion of the headgear structure and the shroud. *See* Ex. 1004, 3:7–16; Pet. 14 ("*Bare* discloses that a connection mechanism 275 is located on an inner surface of shroud 200"). On this record, we are not persuaded that Petitioner has provided adequately articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *See Kahn*, 441 F.3d at 988.

Petitioner additionally contends that "a person of ordinary skill in the art at the time of the alleged invention would have also known to replace connection mechanisms 175 and 275 located on the modified transparent

shield 201 of *Bare* with the central detent and rectangular opening of *Desy*.” *Id.* at 16–17 (citing Ex. 1002 ¶ 37), 35. Petitioner explains that “doing so would have decreased material, manufacturing, and labor costs.” *Id.* at 17 (citing Ex. 1005, 2:5–17). Petitioner further explains that “[d]oing so would also have been a simple substitution of one known element for another to obtain predictable results.” *Id.* Finally, Petitioner explains that such substitution “would have been a simple design choice that would not have affected the functionality of the headgear structure 100 and shroud 200,” and also “would have been common sense, predictable, and within the realm of knowledge of one skilled in the art at the time of the alleged invention.” *Id.*

Based on the record presented, we also are unpersuaded by Petitioner’s contentions in this regard. Again, Petitioner does not explain sufficiently *why* one of ordinary skill in the art would have considered combining elements of *Bare* with elements of *Desy*, or *why* one of ordinary skill in the art would have considered modifying the teachings of *Bare* in view of the teachings of *Desy*, to arrive at the claimed invention. As discussed above, claims 48 and 56 require that the mounting device on the base section interlock with the face shield or a mounting mechanism on the face shield. Neither Petitioner nor Mr. Jones explains persuasively how substituting *Desy*’s detent and opening for *Bare*’s connection mechanisms would have arrived at the claimed invention, given that the connection mechanisms are disclosed as being provided on the upper front portion of the headgear structure and the shroud. *See* Ex. 1004, 3:7–16; Pet. 14. Accordingly, on this record, we are not persuaded that Petitioner has provided adequately articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *See Kahn*, 441 F.3d at 988.

In view of the foregoing, we determine that Petitioner has not established a reasonable likelihood of prevailing in showing that independent claims 48 and 56 would have been obvious over Bare and Desy.

4. Claims 125–129

Independent claims 125 and 129 recite “a second visual indicator.” As discussed above, we interpret the recited second visual indicator as being visible to the user while self-gowning. Petitioner identifies Bare’s connection mechanism 175 as a “second visual indicator.” Pet. 24. Bare teaches that the connection mechanism 175 may comprise a snap, a tacky adhesive strip, or a hook-and-loop material. Ex. 1001, 3:7–11, 5:38–40 (cited at Pet. 16). Relying on testimony of Mr. Jones, Petitioner further contends that Figure 1 of Bare shows that connection mechanism 175 is “visible.” Pet. 21, 24 (citing Ex. 1002 ¶ 38). According to Mr. Jones, “a person of skill in the art would have understood at the time of the alleged invention that snaps, a tacky adhesive strip, or hook-and-loop material such as Velcro to have been visible on the shroud and headgear structure 100 as shown in Figure 1.” Ex. 1002 ¶ 38 (claim element 125.f); *see also id.* (“Velcro, for instance, is typically visible to a user”).

We are unpersuaded by Petitioner’s contentions in this regard. As Patent Owner points out, “[Petitioner] only alleges that the connection mechanism 175 is ‘visible’ . . . , but does not allege that the connection mechanism 175 is visible to a single user while self-gowning.” Prelim. Resp. 29. Although Bare’s connection mechanism 175 may be visible, neither Petitioner nor Mr. Jones explains persuasively how Figure 1 shows that the connection mechanism 175 is visible *to the user while he or she is*

self-gowning. Indeed, Figure 1 appears to show that the connection mechanism 175 would not be visible to the user while he or she is self-gowning because the connection mechanism 175 is located on an outside surface of the headgear structure, above the transparent shield. See Ex. 1001, Fig. 1; Prelim. Resp. 28–29 (“Bare only discloses a connection mechanism 175 on the helmet that is located on the outside of the helmet, above the wearer’s head, in a location that would not be visible to the wearer.”). Based on the record presented, we are not persuaded that Bare’s connection mechanism 175 teaches the recited second visual indicator.

Petitioner appears to argue that Bare’s slot 453 alternatively teaches the recited second visual indicator. See Pet. 24–25 (“Bare also discloses additional visual indicators such as slot 453”). Relying on testimony of Mr. Jones, Petitioner contends that, “[s]ince slot 453 is disposed near the forehead of the wearer at the underside of the headgear structure and in opposition to the connection mechanism 275, a skilled artisan would have understood that the wearer could see the slot 453 and use it for aligning connection mechanism 175 with the connection mechanism 275.” *Id.* at 25 (citing Ex. 1002 ¶ 38 (claim element 125.f)). We also are unpersuaded by Petitioner’s contentions in this regard. Neither Petitioner nor Mr. Jones explains persuasively why a skilled artisan would have understood that the slot is visible to the user while he or she is self-gowning. Although the slot may be “near the forehead of the wearer,” (Ex. 1004, 7:26–28), neither Petitioner nor Mr. Jones directs us to any disclosure in Bare that describes the location of the slot relative to the wearer’s field of view while he or she is self-gowning. We note Petitioner’s assertion that the slot is disposed “at the underside of the headgear structure.” Pet. 25. Petitioner does not,

however, point us to any persuasive evidence supporting this assertion. Based on the record presented, we are not persuaded that Bare's slot teaches the recited second visual indicator.

Finally, Petitioner appears to further argue that the detent in *Desy* alternatively teaches the recited second visual indicator. See Pet. 41 (“[a]s discussed in Ground 1, *Bare* and *Desy* teach . . . a second visual indicator (175 or 453 or central detent 32)”). According to Petitioner, “[a] skilled artisan would have also known to replace connection mechanisms 175 and 275 of *Bare* with the central detent 32 and rectangular opening 44 of *Desy*, respectively.” Pet. 25–26. Petitioner explains that “doing so would have decreased material, manufacturing, and labor costs.” *Id.* at 17. Petitioner further explains that “[d]oing so would have been a simple substitution of one known element for another to obtain predictable results as it would have accomplished *Bare*'s stated goal of engaging and aligning shield 201 with headgear structure 100 in a preferred orientation.” *Id.* at 26; *accord id.* at 17. Petitioner also explains that such substitution “would have been a simple design choice that would not have affected the functionality of headgear structure 100 and shroud 200 described in *Bare*,” and “would have been common sense, predictable, and within the realm of knowledge of one skilled in the art at the time of the alleged invention.” *Id.* at 17.

Based on the record presented, we are unpersuaded by Petitioner's contentions. Petitioner does not explain sufficiently *why* one of ordinary skill in the art would have considered combining elements of *Bare* with elements of *Desy*, or *why* one of ordinary skill in the art would have considered modifying the teachings of *Bare* in view of the teachings of *Desy*, to arrive at the claimed invention. Neither Petitioner nor Mr. Jones

explains persuasively how substituting Desy's detent for Bare's connection mechanism 175 would have provided the recited second visual indicator, given that the connection mechanism 175 is not disclosed as being visible to the user while he or she is self-gowning. *See* Ex. 1004, Fig. 1. Accordingly, on this record, we are not persuaded that Petitioner has provided adequately articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *See Kahn*, 441 F.3d at 988.

In view of the foregoing, we determine that Petitioner has not established a reasonable likelihood of prevailing in showing that independent claims 125 and 129 would have been obvious over Bare and Desy. Claims 126–128 depend from claim 125. Accordingly, we also determine that Petitioner has not established a reasonable likelihood of prevailing in showing that these dependent claims would have been obvious over Bare and Desy.

B. Obviousness Bare, Desy, and Bjorklund

Petitioner argues that claims 48, 56, and 125–129 of the '019 patent would have been obvious over Bare, Desy, and Bjorklund. *See* Pet. 37–47. Petitioner relies on supporting testimony of Mr. Jones. *See id.* (citing Ex. 1002). For the reasons explained below, we are not persuaded that Petitioner has established a reasonable likelihood of prevailing on its asserted ground.

1. Bjorklund

Bjorklund describes a protective hospital garment (gown) that allows for a user to self-gown without compromising sterility. Ex. 1006, 1:4–8,

23–35. The gown is delivered to the user folded into a package that is enclosed in a sterility wrapping. *Id.* at 1:6–8, 15–16. When putting on the gown, the user can slip his hands into an opening at the side of the package and then lift up the gown so that the gown folds out, allowing the user to slide his hands and arms further into the gown. *Id.* at 2:2–7. Afterward, the user can lift the gown up further and ease it down over his head as he moves his arms into the sleeves and the gown falls down around his waist. *Id.* at 2:7–10. Bjorklund teaches that “these operations can be carried out without the user’s fingers coming into contact with the outside of the garment.” *Id.* at 2:10–12.

2. Claims 48 and 56

As noted above, independent claim 48 recites a “base section of said helmet assembly including a mounting device . . . interlocking with said mounting mechanism on said face shield.” Independent claim 56 similarly recites a “base section including a mounting device . . . being adapted to interlock with the face shield.” With respect to these limitations, Petitioner contends that, “[a]s discussed above in Ground 1 [in] connection with claim 48, *Bare* and *Desy* teach that the base section (150) includes a mounting device (175 or central detent 32) . . . interlocking with the mounting mechanism (275) on the face shield (201).” Pet. 45. Petitioner also contends that, “[a]s discussed above in Ground 1 [in connection with claim 56], *Bare* and *Desy* teach that the base section (150) includes a mounting device (175 or central detent 32) being adapted to interlock with the face shield (201).” Pet. 46. For the reasons given above, we are not persuaded that *Bare* and *Desy* teach the mounting device recited in claims 48 or 56.

Petitioner further relies on Bjorklund for teaching certain other limitations recited in claims 48 and 56. *See* Pet. 44 (“one of skill in the art would have known to use a folding technique and self-gowning method like that disclosed in *Bjorklund* with the shroud of *Bare* to allow a user to self-gown while maintaining sterility”); *accord id.* at 45–47. As Patent Owner points out, “[b]ecause [Petitioner] does not even allege that Bjorklund discloses any helmet or face shield at all, much less . . . mounting mechanisms for aligning the helmet and face shield, Bjorklund cannot satisfy” the mounting devices recited in claims 48 and 56. Prelim. Resp. 39. Accordingly, based on the record presented, we are not persuaded that *Bare*, *Desy*, and *Bjorklund* teach all the limitations recited in claims 48 and 56.

In view of the foregoing, we determine that Petitioner has not established a reasonable likelihood of prevailing in showing that independent claims 48 and 56 would have been obvious over *Bare*, *Desy*, and *Bjorklund*.

3. Claims 125–129

As noted above, independent claims 125 and 129 recite “a second visual indicator.” With respect to this limitation, Petitioner contends that, “[a]s discussed above in Ground 1, *Bare* and *Desy* teach that the base section (150) of the helmet assembly includes a second visual indicator (175 or 453 or central detent 32). Pet. 41; *see id.* at 43 (“As discussed with claim 125, the combined teachings of *Bare*, *Desy*, and *Bjorklund* teach that the base section (150) includes a second visual indicator (175 or 453 or central detent 32). For the reasons given above, we are not persuaded that *Bare* and *Desy* teach the recited second visual indicator.

Petitioner further relies on Bjorklund for teaching certain other limitations recited in claims 125 and 129. *See* Pet. 40 (“one of skill in the art would have known to use a folding technique and self-gowning method like that disclosed in *Bjorklund* with the shroud of *Bare* to allow a user to self-gown while maintaining sterility”); *accord id.* at 41–43. As Patent Owner points out, “[b]ecause [Petitioner] does not even allege that Bjorklund discloses any helmet or face shield at all, much less visual indicators . . . for aligning the helmet and face shield, Bjorklund cannot satisfy” the second visual indicator recited in claims 125 and 129. Prelim. Resp. 39. Accordingly, based on the record presented, we are not persuaded that Bare, Desy, and Bjorklund teach all the limitations recited in claims 125 and 129.

In view of the foregoing, we determine that Petitioner has not established a reasonable likelihood of prevailing in showing that independent claims 125 and 129 would have been obvious over Bare, Desy, and Bjorklund. Claims 126–128 depend from claim 125. Accordingly, we also determine that Petitioner has not established a reasonable likelihood of prevailing in showing that these dependent claims would have been obvious over Bare, Desy, and Bjorklund.

C. Obviousness over Bare and Shedrow

Petitioner argues that claims 125–129 of the ’019 patent would have been obvious over Bare and Shedrow, relying on supporting testimony of Mr. Jones. *See* Pet. 47–54 (citing Ex. 1002). For the reasons explained below, we are not persuaded that Petitioner has established a reasonable likelihood of prevailing on its asserted ground.

1. *Shedrow*

Shedrow describes mounting a pair of eyeglasses within a protective mask with a viewing glass. Ex. 1007, at [57] (Abstract). The viewing glass includes attaching means comprising a straight bar with notches. *Id.* at [57], 2:44–46. The attaching means is marked with an indicium to indicate the center of the bar. The eyeglasses are provided on a carrier with tabs to be received in the notches of the attaching means. *Id.* at [57].

To mount the eyeglasses within the mask, the viewing glass is first marked with a crayon to indicate a vertical centerline. *Id.* at 3:31–33. Then, a perpendicular is constructed at the upper portion of the viewing glass. *Id.* at 3:33–34. The lower edge of the attaching means is aligned with the perpendicular, and the indicium is aligned with the centerline. *Id.* at 3:36–39. The attaching means can be fixed to the viewing glass with epoxy glue. *Id.* at 3:39–41. Finally, the carrier is aligned with the attaching means so that the tabs are received within the notches. *Id.* at 3:57–59.

2. *Analysis*

Petitioner contends that Bare teaches the limitations recited in claims 125 and 129, except for the first and second visual indicators. See Pet. 47–52. As to these limitations, Petitioner identifies each of Shedrow’s indicium and vertical centerline as a “visual indicator.” See *id.* at 48. Petitioner further contends that “one of skill would have known to include a vertical centerline marking on shield 201 of *Bare* at or under connection mechanism 275 like the vertical centerline 40 on the viewing glass G of *Shedrow*” and “to include an indicium on headgear structure 100 of *Bare* at or under connection mechanism 175 like the indicium 19 on the attaching means 10

of *Shedrow*.” *Id.* at 48–49, 51 (a skilled artisan “would have also known to include an indicium on the inner side of the upper portion 150 of the headgear structure 100 of *Bare*”). Petitioner explains that “[d]oing so would have been use of a known technique to improve similar devices in the same way and would not have affected the functionality of the headgear structure 100 and shroud 200 described in *Bare*.” *Id.* at 49. Petitioner also explains that “it would have been common sense, predictable, and within the realm of knowledge of one skilled in the art at the time of the alleged invention.” *Id.* Finally, Petitioner explains that “modifying *Bare*’s headgear structure and shield to include an indicium and vertical centerline would have furthered *Bare*’s stated goal of achieving a preferred orientation of the shield and headgear structure and would have been used to automatically center shield 201 over the facial opening of headgear structure 100.” *Id.* 49, 51. Petitioner relies on testimony of Mr. Jones to support its contentions. *Id.* at 48–49 (citing Ex. 1002 ¶¶ 59–60).

Based on the record presented, we are unpersuaded by Petitioner’s contentions. Petitioner does not explain sufficiently *why* one of ordinary skill in the art would have considered combining elements of *Bare* with elements of *Shedrow*, or *why* one of ordinary skill in the art would have considered modifying the teachings of *Bare* in view of the teachings of *Shedrow*, to arrive at the claimed invention. For example, Petitioner asserts that *Bare*’s connection mechanisms already achieve *Bare*’s “preferred orientation” goal. Pet. 47 (citing Ex. 1003, 3:11–13); *see also id.* at 21, 24. Neither Petitioner nor Mr. Jones explains persuasively why a person of ordinary skill in the art would have considered adding *Shedrow*’s indicium and vertical centerline to *Bare*’s system to achieve *Bare*’s “preferred

orientation” goal, when Bare’s connection mechanisms already achieve that goal. *See* Ex. 1003, 3:11–13. Moreover, neither Petitioner nor Mr. Jones explains persuasively why a person of ordinary skill in the art would have considered adding a vertical centerline marking on the *shield* in Bare, when the connection mechanism 275 is provided on the *shroud*. In addition, as Patent Owner points out, neither Petitioner nor Mr. Jones directs us to evidence persuasively showing “that a person wearing the helmet would have ‘necessarily’ been able to see such an indicium on the inner side of the upper portion 150 of the headgear structure.” Prelim. Resp. 45. On this record, we are not persuaded that Petitioner has provided adequately articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *See Kahn*, 441 F.3d at 988.

In view of the foregoing, we determine that Petitioner has not established a reasonable likelihood of prevailing in showing that independent claims 125 and 129 would have been obvious over Bare and Shedrow. Claims 126–128 depend from claim 125. Accordingly, we also determine that Petitioner has not established a reasonable likelihood of prevailing in showing that these dependent claims would have been obvious over Bare and Shedrow.

D. Obviousness over Bare, Shedrow, and Bjorklund

Petitioner argues that claims 125–129 of the ’019 patent would have been obvious over Bare, Shedrow, and Bjorklund, relying on supporting testimony of Mr. Jones. *See* Pet. 55–60 (citing Ex. 1002). For the reasons explained below, we are not persuaded that Petitioner has established a reasonable likelihood of prevailing on its asserted ground.

As noted above, claims 125 and 129 recite first and second visual indicators. With respect to these limitations, Petitioner contends that, “[a]s discussed in Ground 3, *Bare* and *Shedrow* teach that the base section (150) of the helmet assembly includes a second visual indicator (indicium 19) positioned relative to the facial opening for alignment with the first visual indicator (vertical centerline 40) on the face shield (201).” Pet. 58; *accord id.* at 60. For the reasons give above, we are not persuaded that *Bare* and *Shedrow* teach the recited first and second visual indicators.

Petitioner further relies on *Bjorklund* for teaching certain other limitations recited in claims 125 and 129. *See* Pet. 57 (“one of skill in the art would have known to use a folding technique and self-gowning method like that disclosed in *Bjorklund* with the shroud of *Bare* to allow a user to self-gown while maintaining sterility”); *accord id.* at 58–59. As Patent Owner points out, “[b]ecause [Petitioner] does not even allege that *Bjorklund* discloses any helmet or face shield at all, much less . . . visual indicators for aligning the helmet and face shield, *Bjorklund* cannot satisfy” the first and second visual indicators recited in claims 125 and 129. Prelim. Resp. 55. Accordingly, based on the record presented, we are not persuaded that *Bare*, *Shedrow*, and *Bjorklund* teach all the limitations recited in claims 125 and 129.

In view of the foregoing, we determine that Petitioner has not established a reasonable likelihood of prevailing in showing that independent claims 125 and 129 would have been obvious over *Bare*, *Shedrow*, and *Bjorklund*. Claims 126–128 depend from claim 125. Accordingly, we also determine that Petitioner has not established a

reasonable likelihood of prevailing in showing that these dependent claims would have been obvious over Bare, Shedrow, and Bjorklund.

III. CONCLUSION

For the foregoing reasons, we are not persuaded that Petitioner has demonstrated a reasonable likelihood that it would prevail on any of the challenges to patentability of the '019 patent set forth in the Petition.

IV. ORDER

For the reasons given, it is

ORDERED that the Petition is *denied* as to all challenged claims, and no trial is instituted.

PETITIONER:

Naveen Modi
Srilaka Atluri
Paromita Chatterjee
Paul Hastings LLP

PH-Zimmer-Stryker-IPR@paulhastings.com

PATENT OWNER:

Eligio C. Pimentel
Christopher M. Scharff
Stephanie F. Samz
McAndrews, Held & Malloy Ltd.

epimentel@mcandrews-ip.com
cscharff@mcandrews-ip.com
ssamz@mcandrews-ip.com
Stryker-ZimmerIPR@mcandrews-ip.com