

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SHARKNINJA, INC.,
SHARKNINJA OPERATING LLC,
SHARKNINJA MANAGEMENT LLC, AND
SHARKNINJA SALES COMPANY,
Petitioners,

v.

DYSON TECHNOLOGY LIMITED
Patent Owner.

Case No. IPR2024-00219

U.S. Patent No. 11,589,660

**PATENT OWNER'S SUR-REPLY TO PETITIONERS' REPLY
TO PATENT OWNER'S RESPONSE**

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PATENT OWNER’S EXHIBIT LIST

Exhibit	Description
2001	https://web.archive.org/web/20160812223637/https://www.merriam-webster.com/dictionary/handheld
2002	https://web.archive.org/web/20160830192326/https://www.dictionary.com/browse/handheld
2003	https://web.archive.org/web/20160728065930/https://www.dictionary.com/browse/appliance
2004	https://web.archive.org/web/20160819123655/https://dictionary.cambridge.org/us/dictionary/english/appliance
2005	https://web.archive.org/web/20160819193036/https://www.merriam-webster.com/dictionary/appliance
2006	https://web.archive.org/web/20160822115546/https://www.merriam-webster.com/dictionary/attachment
2007	https://web.archive.org/web/20160726213831/https://dictionary.cambridge.org/us/dictionary/english/attachment
2008	https://web.archive.org/web/20160803090731/https://www.dictionary.com/browse/attachment
2009	U.S. Patent No. 3,280,439 (“McCarthy”)
2010	Declaration of Brianna Lynn Silverstein in Support of Motion for <i>Pro Hac Vice</i> Admission
2011	Declaration of Joel Delman
2012	Supplemental Declaration of Joel Delman

I. Introduction

Patent Owner provides the following Sur-reply to the Reply filed by Petitioners to Patent Owner's Response to the Petition requesting *inter partes* review of Claims 1-9, 15, 18, 23, 24, and 30-34 ("the Challenged Claims") of U.S. Patent No. 11,589,660 ("'660 Patent"). For at least the reasons set forth below, Patent Owner requests that the Board confirms patentability of the Challenged Claims.

Petitioners' Reply fails to sufficiently address Patent Owner's arguments in the Response. For at least the reasons set forth in Patent Owner's Response and clarifying statements below, the alleged grounds set forth in the Petition fail to show by a preponderance of the evidence that any of Claims 1-9, 15, 18, 23, 24, and 30-34 are unpatentable.

Specifically, none of Petitioners' grounds involving Hoblingre show that Hoblingre discloses "wherein in the first position the actuator at least partially obscures the first slot." Instead, Petitioners argue for an unreasonably broad interpretation of the phrase which disregards the specific language in the claim that "the actuator at least partially obscures the first slot" (emphasis added) and instead focuses on movement of a protrusion within the slot. Similarly, none of Petitioners' grounds show that Hoblingre discloses "wherein the surface is configured to at least partially define the first slot at or near the second position."

Again, Petitioners argue for an unreasonably broad interpretation of the phrase which disregards the specific language in the claim that “the surface is configured to at least partially define the first slot at or near the second position” (emphasis added) and instead focuses on movement of a protrusion within the slot.

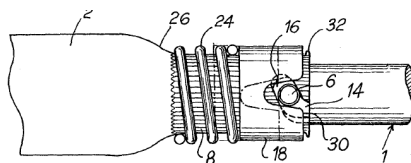
Further, none of Petitioners’ grounds involving Mouhot show that Mouhot discloses “an actuator,” which is present in all the Challenged Claims. Specifically, Petitioners fail to properly consider the intrinsic record when analyzing whether Mouhot discloses an “actuator.”

Finally, Petitioners fail to add any additional evidence of motivation to combine as to any of the obviousness grounds, and instead creates straw man arguments. For example, rather than explain or provide evidence for why it would have been obvious to use the apparatus of Hoblingre or Mouhot for hair care, as presented in the Petition, Petitioners argue that the order of references has no legal significance and that the law does not require bodily incorporation. Patent Owner presented neither of these arguments. Instead, Patent Owner argues why the evidence provided in the Petition, which is in no way supplemented in the Reply, fails to explain why the specific combination recited in the Petition would have been obvious.

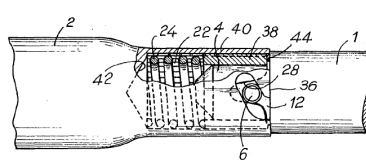
For at least the reasons set forth below, the Board should find that none of the Challenged Claims are unpatentable.

II. Hoblingre fails to disclose “wherein in the first position the actuator at least partially obscures the first slot” as recited in Challenged Claim 2

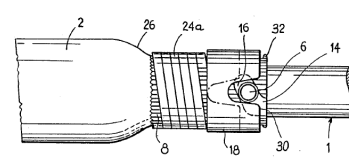
Petitioners maintain its improper conflation of the term “partly closes” in Hoblingre, which discloses that ring 18 partly closes the entrance of slot 12 to the movement of elongated stem 4 inside socket 8, with the term “partially obscures” in the phrase “the actuator at least partially obscures the first slot” recited in Claim 2. However, there is a clear distinction between Hoblingre’s teaching and the claim limitation. When referring to ring 18 partly closing the entrance of slot 12, Hoblingre is not referring to any obscurity of slot 12. Instead, Hoblingre is referring to closing the slot to movement of elongated stem 4 within slot 12. In other words, slot 28 in ring 18 merely guides and influences movement of driving pin 6, and it never fills or otherwise obscures slot 12. EX2011 ¶59. As shown in Hoblingre Figures 2-4 (below), the only element that physically enters into or otherwise obscures any portion of slot 12 is driving pin 6 of elongated stem 4. EX2011 ¶59.



EX1004, Fig. 2



EX1004, Fig. 3



EX1004, Fig. 4

In other words, the guiding and locking means comprising ring 18 and coil spring 24 closes the entrance of slot 12 with respect to movement of pin 6 without obscuring or making any other change to slot 12 itself.

Rather than explain how the offset positioning of slot 28 in ring 18 and slot 12 in socket 8 “at least partially obscures the first slot,” Petitioners argue Patent Owner is asserting a special definition for the phrase. Patent Owner disagrees. Patent Owner asserts the plain and ordinary meaning of the phrase “at least partially obscures the first slot” requires there is partial obscurity of the first slot by the actuator, and the guiding and locking means in Hoblingre merely sets forth a way to close or block movement of pin 6 without obscuring or in any other way affecting slot 12.

Regardless of whether the meaning of the phrase “at least partially obscures the first slot” provided in Patent Owner Response is the plain and ordinary meaning or a special definition, it is consistent with the intrinsic record. The specification of the ’660 Patent consistently uses the term “obscure” the first slot to refer to the actuator entering the slot to fill or obscure a portion of the slot (*see, e.g.,* abstract, general description, and when describing Figures 1a and 1b), and not to describe merely whether the user can see the slot. EX2011 ¶53.

Although quoting the Specification on page 4 of Petitioners Reply when stating “a user can ‘cause[] the actuator 50 to move . . . against the biasing force of the spring 214’ until ‘slot 232a is no longer obscured by the actuator 50,” Petitioners come to the wrong conclusion. Based on the accompanying Figures in the patent-at-issue, it is clear actuator 50 slides out of slot 232a when a user works

actuator 50 against the biasing force of spring 214, and thus the use of the word “obscured” in the quoted phrase is relating to actuator 50 no longer filling a portion of slot 232a. Although actuator 50 partially filling slot 232a determines whether protrusion 30 can move along slot 232a, the use of the term “obscure” in the quoted phrases in the Specification as well as Claim 2 relates to partially filling or not filling slot 232a, not the ability for protrusion 30 to move within slot 232a.

Accordingly, no portion of Hoblingre’s guiding and locking means comprising ring 18 and coil spring 24, which Petitioners allege corresponds to the claimed actuator, obscures any portion of slot 12, which Petitioners allege corresponds to the claimed first slot. EX2011 ¶61. Although slot 12 and slot 28 being offset may guide the movement of pin 6 within slot 12, Hoblingre fails to disclose “wherein in the first position the actuator at least partially obscures the first slot.” Ground 1 fails with respect to Challenged Claim 2 for at least this reason.

III. Hoblingre fails to disclose “wherein the surface is configured to at least partially define the first slot at or near the second position” as recited in Challenged Claim 4

Petitioners maintain its improper conflation of the term “partially define” in Hoblingre, which discloses ring 18 partly closes the entrance of slot 12 to the movement of elongated stem 4 inside socket 8, with the term “partially define” in the phrase “the surface is configured to at least partially define the first slot at or

near the second position” recited in Claim 4. However, when referring to ring 18 partly closing the entrance of slot 12, Hoblingre is not referring to any feature that defines slot 12. Instead, Hoblingre is referring to driving pin 6 being trapped between edges of slots 12 and 28. Pet. 27-28; EX1003, ¶95.

Patent Owner’s argument does not require a special definition of the term “define.” Instead, Patent Owner’s argument merely requires a proper understanding of the plain and ordinary meaning of “wherein the surface is configured to at least partially define the first slot.” Petitioners’ argument fails because Claim 4 does not specify a surface of the actuator configured to trap the first protrusion, but a surface of the actuator to define the first slot. EX2011 ¶63. A slot is defined by the surfaces forming the outer boundary of empty space, which is the slot. Thus, for the surface of the actuator to at least partially define the first slot, the surface of the actuator must form at least part of the surfaces forming the outer boundary of empty space forming the slot. *Id.* Accordingly, a POSITA would have understood that “defining[ing] the first slot” requires the surface introduced in Claim 3 to change the shape or size of the slot by being a portion of the surface forming the empty space forming the slot. *Id.*

As discussed above in Section II., ring 18 is able to trap driving pin 6 within slot 12 without defining any portion of slot 12. EX2011 ¶64. In other words, slot

28 in ring 18 merely guides driving pin 6, but does not in any way define slot 12.

EX2011 ¶64.

Thus, no portion of slot 28 of ring 18, which Petitioners allege corresponds to the claimed surface of the actuator, defines any portion of slot 12, which Petitioners allege corresponds to the claimed first slot. EX2011 ¶65. Accordingly, Hoblingre fails to disclose “wherein the surface is configured to at least partially define the first slot at or near the second position.” EX2011 ¶65. Ground 1 fails with respect to Challenged Claim 4 for at least this reason.

Regardless of whether the meaning of the phrase “wherein the surface is configured to at least partially define the first slot” provided in Patent Owner’s Response is the plain and ordinary meaning or a special definition, it is consistent with the intrinsic record. The specification of the ’660 Patent consistently uses the term “define” the first slot to refer to the actuator entering the slot to fill and thus change the shape and/or size of the first slot (*see, e.g.*, when describing Figures 1a and 1b). EX2011 ¶63. For example, Figure 1a shows the actuator in the first position where the actuator defines the slot 232a by filling or otherwise physically falling within the confines of the first slot. EX1001, 6:39-45; EX2011 ¶53. During removal of the attachment, the actuator slides out of the slot to allow the protrusion to move through the slot that is no longer partially defined by the actuator. EX1001, 7:1-8; EX2011 ¶53.

For the first time in their Reply, Petitioners allege that the “surface” in Hoblingre that corresponds to the “surface” introduced in Challenged Claim 3 is the continuous upper surface of ring 18, rather than just the edges of slots 28. This new argument appears inconsistent with Petitioners’ annotated figure on page 27 of the Petition showing two different sections of the continuous upper surface of ring 18 and inconsistent with the statement on page 26 of the Petition that “a portion of the actuator (the edge of one of the slots 28, illustrated in orange) of ring 18 comprises a surface that interacts with the first protrusion as it engages the first slot in the locked position.” The annotated figure and statement in the Petition make it clear that Petitioners are referring to only the edge of one of slots 28 as being comparative to the “surface” recited in Challenged Claims 3-6. In fact, the Petition consistently refers to only the edge of one of slots 28 as the corresponding feature to the “surface” recited in Challenged Claims 3-6 on pages 26-30, and there is no statement in the Petition that the entire continuous upper surface of ring 18 corresponds to the “surface” recited in Challenged Claims 3-6.

IV. Hoblingre in view of Maclaine would not have rendered obvious claims 1-9, 15, 18, 23, 24, and 30-32

Rather than address the deficiencies in the Petition that were set forth in Patent Owner’s Response, Petitioners attempt to refocus the argument to ones not made by Patent Owner, namely the order of references matter in an obviousness

rejection and whether it is necessary to bodily incorporate structure of a reference into the structure of the primary reference to prove obviousness.

Patent Owner is not arguing that the obviousness rejection should fail because Petitioners presented Hoblingre as the primary reference and Maclaine as the secondary reference. Patent Owner's argument relates to the inconsistencies between Petitioners' motivations to combine Hoblingre and Maclaine and its mapping of the references to the prior art. In particular, the Petition relies solely on Hoblingre for all the features except the preamble's requirement that the appliance be "handheld." Pet., 35 (incorporating by reference analysis from Ground 1); *see also* Pet., 43-49 (no analysis of the limitations of Claim 1 other than the preamble). Therefore, while the grounds of rejection presented in the Petition relies solely on Hoblingre for all structural features in claim 1 except being handheld, the alleged motivations to combine fail to provide any rationale for why it would have been obvious to use the structural features in Hoblingre as a handheld device. Conversely, while the alleged motivations to combine appear to relate to incorporating the attachment mechanism of Hoblingre in a device like Maclaine, there is no explanation for why the combination would result in Hoblingre's "appliance", "body", and "attachment" rather than features of Maclaine. Patent Owner notes that the Board recognized these inconsistencies on page 38 of the Institution Decision. In accordance with the statements on page 38 of the

Institution Decision, Patent Owner has further developed this argument in Patent Owner's Response. Petitioners have not provided any additional explanation or evidence other than to misinterpret Patent Owner's argument.

Petitioners further mischaracterize Patent Owner's position as requiring Petitioners to prove bodily incorporation of features of one reference in another. Like the petitioner in *Unified Patents Inc. v. Divk, LLC*, IPR2019-01379, 2021 WL 451027 (Feb. 8, 2021), Petitioners' argument improperly attempts to shift the burden to Patent Owner. Although proof of "bodily incorporation is not required, a satisfactory explanation of 'how the combination of the . . . references [is] supposed to work' is necessary to support 'a conclusion that a relevant skilled artisan would have been motivated to make the combination and reasonably expect success in doing so.'" *Id.* at 14 (quoting *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017)). When determining whether there would be a motivation to combine, the Board must weigh the benefits and drawbacks of the modification against each other. *Artic Cat Inc. v. Polaris Indus., Inc.*, 795 F. App'x 827, 833 (Fed. Cir. 2019).

Petitioners fail to address drawbacks of the modification and only provide conclusory statements about simple substitution, alleged advantages, and alleged improvement of the handheld appliance without providing any explanation for such conclusory statements. EX2011 ¶70. For example, Petitioners fail to address

how the rapid fastener of Hoblingre would have been expected to be useable in a handheld hair care appliance of Maclaine, when the rapid fastener of Hoblingre includes an exposed coil spring 24 and at least one driving pin 6 that slides within slot 12 when ring 18 is slid vertically towards coil spring 24. EX2011 ¶ 71. In contrast to Petitioners' lack of consideration of safety and end use, Patent Owner's expert, Mr. Delman, explains that safety and ease of use are always paramount considerations in a POSITA's work. EX2011 ¶73.

As in *Unified Patents*, the evidence demonstrates that a POSITA would not have expected to achieve Petitioners' stated rationales in combining the references' teachings in the way Petitioners propose. While Petitioners cite Hoblingre's recited advantages of its fastener, they fail to show how those advantages would have motivated a POSITA to make the proposed combination. Instead, in their Reply, Petitioners attempt to dismiss the argument by mischaracterizing it as a requirement that Petitioners prove the proposed combination to be the best option. Reply at 12-13. However, in the Petition, Petitioners chose to argue that a POSITA would have been motivated to combine Hoblingre and Maclaine because "Hoblingre's improved 'coupling of the bayonet type' [] 'ensures a connection with no axial or angular clearance permitting, on one hand, the transmission of even large torques and, on the other hand, the establishment of the connection by a single shifting and being capable of being disassembled at any moment' in a

handheld hair care appliance,” without any discussion of why these advantages are relevant or useful to the handheld hair care appliance of Maclaine. Pet., 41 (quoting EX1004, 1:28-35). Thus, to support its alleged conclusion of obviousness, it is Petitioners burden to show that this alleged advantage in Hoblingre compared to other couplings of the bayonet type would be applicable to Maclaine.

Neither Hoblingre nor Petitioners provide any rationale for why a bayonet type coupling, much less the one taught by Hoblingre, should be used in a handheld hair care appliance or substituted for the collar and twist lock joint in Maclaine. EX2011 ¶76. The collar and twist lock joint of Maclaine already provides for easy assembly and disassembly. EX2011 ¶76. Further, Petitioners fail to provide any explanation for why the attachment mechanism would be better or even as good as the collar and twist lock joint of Maclaine for establishing a connection by a single shifting and being capable of being disassembled at any moment. EX2011 ¶77.

Similarly, Petitioners’ allegation that the combination is nothing more than using a known technique to improve devices in the same way to yield predictable results lacks evidentiary support. Petitioners allege without any evidence that the substitution would result in a fast, simple, and reliable coupler mechanism. Pet., 42; EX1003 ¶126. However, a POSITA would have known that the collar and twist lock joint of Maclaine is already a fast, simple, and reliable coupler mechanism,

especially for a hair care appliance, whereas the exposed elements of coupling mechanism of Hoblingre would have been expected to cause potential issues with use of the hair care appliance. EX2011 ¶78.

For at least these reasons, Petitioners fail to meet their burden with regard to the proposed obviousness grounds of unpatentability.

V. Hoblingre in view of Maclaine would not have rendered obvious claim 18

Again, rather than address the deficiencies in the Petition that were set forth in Patent Owner's Response, Petitioners attempt to refocus the argument to one not made by Patent Owner, namely whether it is necessary to bodily incorporate structure of a secondary reference into the structure of the primary reference to prove obviousness. It was Petitioners who chose, in the Petition, to rely solely on Hoblingre for all structural features in claim 1 other than the preamble limitation of "handheld." Pet., 35 (incorporating by reference analysis from Ground 1); *see also* Pet., 43-49 (no analysis of the limitations of Claim 1 other than the preamble). Then, for Challenged Claim 18, which includes the limitations of Challenged Claim 1, Petitioners chose to rely on Maclaine only for the missing collar. Pet., 46-48. Thus, to support its alleged conclusion of obviousness, it is Petitioners burden to show that it would have been obvious to incorporate the collar of Maclaine into the structural features of Hoblingre.

However, no rationale or motivation is provided for such a combination.

Instead, Petitioners allege a POSITA would have been motivated to combine Hoblingre and Maclaine for the reasons set forth in Section IV.B.1.b of the Petition, which relate to modifying Maclaine to substitute the connection of Hoblingre for the connection disclosed in Maclaine. Pet., 40-43. Thus, in their alleged ground of obviousness for claim 18, Petitioners set forth an alleged motivation to substitute the connection between body and attachment in Maclaine with an attachment mechanism from Hoblingre and then allege that the collar portion of the attachment mechanism of Maclaine that was replaced by the attachment mechanism in Hoblingre would have been preserved or added back into the modified appliance, without any evidentiary support. For at least the above reasons, Petitioners fail to meet their burden with respect to Challenged Claim 18.

VI. Hoblingre in view of Maclaine would not have rendered obvious Claims 30-31

Again, Petitioners attempt to refocus the argument to whether it is necessary to bodily incorporate structure of a reference into the structure of the primary reference to prove obviousness. Again, it was Petitioners who chose, in the Petition, to rely solely on Hoblingre for all structural features in claim 1 other than the preamble limitation of “handheld.” Pet., 35 (incorporating by reference analysis from Ground 1); *see also* Pet., 43-49 (no analysis of the limitations of Claim 1 other than the preamble). Thus, Petitioners set forth that the “body” and

“attachment” are taught in Hoblingre. Then, for Challenged Claims 30 and 31, Petitioners chose to rely on Maclaine only for teaching a hair care appliance, and specifically a hot styling appliance, without any structural features in Maclaine. Pet., 48-49. Thus, to support its alleged conclusion of obviousness, it is Petitioners burden to show that it would have been obvious to use or modify to use the features of Hoblingre referred to as a body and attachment, as a hair care appliance or specifically hot styling appliance.

However, no rationale or motivation is provided for why it would have been obvious to use the alleged body and attachment of Hoblingre as a hair care appliance, much less a hot styling appliance. Nor have Petitioners provided any rationale or motivation to modify the alleged body and attachment of Hoblingre having no air flow or heating capability to be capable of being used as a hair care appliance or hot styling appliance. EX2011 ¶90. For at least the above reasons, Petitioners fail to meet their burden with respect to Challenged Claims 30-31.

VII. Hoblingre in view of Maclaine and Jeannet would not have rendered obvious claims 1-9, 15, 18, 23, 24, and 30-34

Again, Petitioners attempt to refocus the argument to whether it is necessary to bodily incorporate structure of a secondary reference into the structure of the primary reference to prove obviousness. It was Petitioners who chose, in the Petition, to rely solely on Hoblingre for all structural features in claim 33 other than the preamble limitation of “handheld,” allegedly taught in Maclaine, and the

limitation “further comprising a user operated button which engages with the actuator,” allegedly taught in Jeannet. *See*, Pet., 53-54 (incorporating by reference analysis from Grounds 1 and 2). Specifically, for Challenged Claims 33 and 34, Petitioners chose to rely on Maclaine only for teaching “handheld” and on Jeannet only for teaching “a user operated button which engages with the actuator.” *Id.* Thus, to support its alleged conclusion of obviousness, it is Petitioners burden to show it would have been obvious to add a user operated button to the features of Hoblingre the Petitioners rely on for the body and attachment.

However, no rationale or motivation is provided for why it would have been obvious to add a user operated button to the alleged body and attachment of Hoblingre. For at least the above reasons, Petitioners fail to meet their burden with respect to any of the Challenged Claims, including Claims 33-34.

VIII. Petitioners fail to show that Mouhot teaches the claimed “actuator” present in all Challenged Claims

It is Petitioners burden to provide evidence to support each grounds of unpatentability. Petitioners fail to provide any explanation how locking means 4 that comprises ring 11 and coil spring 12 constitutes the claimed “actuator.” The ’660 Patent discloses that the purpose of actuator 50 is “to retain attachment 20 on the body 210 until the user wishes to change the attachment or remove the attachment for storage purposes.” EX1001, 5:1-4; EX2011 ¶104. Actuator 50 includes both “a first part 52 which physically retains a protrusion 30 within slot

232a and a second part 54 which a user interacts with” and “[t]he first part 52 of the actuator 50 functions to retain the protrusion 30 in slot 232a until the user moves the actuator 50 to allow the protrusion 30 to be removed from the slot 232a.” EX1001, 5:4-14; EX2011 ¶104. This is consistent with how a POSITA would have interpreted the meaning of “actuator” as allowing a user to apply force to both retain an attachment as well as remove an attachment. EX2011 ¶104.

Unlike the claimed “actuator” in the ’660 Patent, Mouhot fails to provide any description of the user applying a force to locking means 4 to change the locking position of locking means 4. EX2011 ¶105. Instead, based on the wedge shape of wedge-shaped means 14, it appears that ring 11 is merely a blocking element similar to a wall in slot 7 that prevents protruding part 6 from moving further down slot 7. EX2011 ¶105. Also, there is no disclosure or suggestion in Mouhot that a user applies any force to ring 11 to disassemble shank 3 from socket 2 and locking means 4. EX2011 ¶105. Accordingly, a POSITA would have recognized that ring 11 of locking mechanism 4 acts like a blocking mechanism or wall rather than the claimed “actuator.” EX2011 ¶105. Thus, Petitioners have not shown by a preponderance of the evidence that Mouhot discloses the claimed “actuator,” and Ground 4 fails on that basis.

IX. Mouhot in view of Maclaine would not have rendered obvious claims 1-9, 15, 18, 23, 24, and 30-32

In the same manner as Ground 2, Petitioners attempt to refocus the argument to arguments that were not made by Patent Owner, namely whether the order of references matter in an obviousness rejection and whether it is necessary to bodily incorporate structure of a reference into the structure of the primary reference to prove obviousness.

Patent Owner's argument relates to the inconsistencies between Petitioners' motivations to combine Mouhot and Maclaine and its mapping of the references to the prior art. In particular, the Petition relies solely on Mouhot for all the features except the preamble's requirement that the appliance be "handheld." Pet., 88 (incorporating by reference analysis from Ground 4); *see also* Pet., 91-94 (no analysis of the limitations of Claim 1 other than the preamble). Therefore, while the grounds of rejection presented in the Petition relies solely on Mouhot for all structural features in claim 1 except being handheld, the alleged motivations to combine fail to provide any rationale for why it would have been obvious to use the structural features in Mouhot as a handheld device. Conversely, while the alleged motivations to combine appear to relate to incorporating the attachment mechanism of Mouhot in a device like Maclaine, there is no explanation for why the combination would result in Mouhot's "appliance", "body", and "attachment" rather than features of Maclaine. Patent Owner notes, just like with Hoblingre, the

Board recognized these inconsistencies in the Institution Decision, Patent Owner further developed this argument in Patent Owner's Response, and Petitioners have not provided any additional explanation or evidence.

Petitioners mischaracterize Patent Owner's position as requiring Petitioners to prove bodily incorporation of features of one reference in another. As set forth above regarding Ground 2, although proof of bodily incorporation is not required, Petitioners do need to support their obviousness conclusion with a satisfactory explanation of how the combination of the references is supposed to work. Similar, to the proposed combination of Hoblingre and Maclaine, Petitioners fail to provide this minimum level of proof for the proposed combination of Mouhot and Maclaine.

Petitioners fail to address drawbacks of the modification and only provide conclusory statements about simple substitution, alleged advantages, and alleged improvement of the handheld appliance without providing any explanation for such conclusory statements. EX2011 ¶108. For example, Petitioners fail to address why a POSITA would have found substituting the above coupling mechanism with a myriad of hair catching elements for the collar enclosed attachment mechanism of Maclaine, which has no exposed elements that would be expected to catch hair during use, would have improved the usability of the hair care appliance.

As in *Unified Patents*, the evidence demonstrates that a POSITA would not have expected to achieve Petitioners' stated rationales in combining the references' teachings in the way Petitioners propose. In the Petition, Petitioners chose to argue that a POSITA would have been motivated to combine Mouhot and Maclaine because Mouhot's coupling mechanism is "extremely simple, reliable and easy to manufacture." Thus, to support its alleged conclusion of obviousness, it is Petitioners' burden to show at least that Mouhot's coupling mechanism is better than what is already disclosed in Maclaine. Otherwise, if Maclaine's coupling mechanism is already "extremely simple, reliable and easy to manufacture," then Petitioners' reason for combining Mouhot and Maclaine is not relevant. Petitioners provide no explanation as to why the coupling of Maclaine is not at least as simple, reliable, and easy to manufacture as the coupling mechanism of Mouhot. In contrast, Mr. Delman declares a POSITA would have known that the collar and twist lock joint of Maclaine is already a fast, simple, reliable, and easy to manufacture coupler mechanism especially with regard to a hair care appliance, whereas the exposed elements of coupling mechanism of Mouhot would have been expected to cause potential issues with use of the hair care appliance. EX2011 ¶113. Therefore, Petitioners fail to provide any reason to expect improvement from replacing an already simple and easy to use coupling mechanism in Maclaine with the coupling mechanism of Mouhot.

For at least these reasons, Petitioners fail to meet their burden regarding the proposed obviousness grounds of unpatentability.

X. Mouhot in view of Maclaine would not have rendered obvious claim 18

Again, Petitioners attempt to refocus the argument to whether it is necessary to bodily incorporate structure of a secondary reference into the structure of the primary reference to prove obviousness. It was Petitioners who chose, in the Petition, to rely solely on Mouhot for all structural features in claim 1 other than the preamble limitation of “handheld.” Then, for Challenged Claim 18, which includes the limitations of Challenged Claim 1, Petitioners chose to rely on Maclaine only for the missing collar. Pet., 46-48. Thus, to support its alleged conclusion of obviousness, it is Petitioners burden to show it would have been obvious to incorporate the collar of Maclaine into the structural features of Mouhot. However, no rationale or motivation is provided for such a combination. Thus, in their alleged ground of obviousness for claim 18, Petitioners set forth an alleged motivation to substitute the connection between body and attachment in Maclaine with an attachment mechanism from Mouhot and then allege that the collar portion of the attachment mechanism of Maclaine that was replaced by the attachment mechanism in Mouhot would have been preserved are added back into the modified appliance, without any evidentiary support. For at least the above reasons, Petitioners fail to meet their burden with respect to Challenged Claim 18.

XI. Mouhot in view of Maclaine would not have rendered obvious Claims 30-31

Again, Petitioners attempt to refocus the argument to whether it is necessary to bodily incorporate structure of a secondary reference into the structure of the primary reference to prove obviousness. It was Petitioners who chose, in the Petition, to rely solely on Mouhot for all structural features in claim 1 other than the preamble limitation of “handheld.” Thus, Petitioners set forth that the “body” and “attachment” are taught in Mouhot. Then, for Challenged Claims 30 and 31, Petitioners chose to rely on Maclaine only for teaching a hair care appliance, and specifically a hot styling appliance, not any structural features of Maclaine. Thus, to support its alleged conclusion of obviousness, it is Petitioners burden to show that it would have been obvious to use or modify to use the features of Mouhot referred to as a body and attachment, as a hair care appliance or specifically hot styling appliance.

However, no rationale or motivation is provided for why it would have been obvious to use the alleged body and attachment of Mouhot as a hair care appliance, much less a hot styling appliance. Nor have Petitioners provided any rationale or motivation to modify the alleged body and attachment of Mouhot without any air flow or heating capability to be capable of being used as a hair care appliance or hot styling appliance. For at least the above reasons, Petitioners fail to meet their burden with respect to Challenged Claims 30-31.

XII. Mouhot in view of Maclaine and Jeannet would not have rendered obvious claims 1-9, 15, 18, 23, 24, and 30-34

Again, Petitioners attempt to refocus the argument to whether it is necessary to bodily incorporate structure of a reference into the structure of the primary reference to prove obviousness. It was Petitioners who chose, in the Petition, to rely solely on Mouhot for all structural features in claim 33 other than the preamble limitation of “handheld,” allegedly taught in Maclaine, and the limitation “further comprising a user operated button which engages with the actuator,” allegedly taught in Jeannet. Thus, to support its alleged conclusion of obviousness, it is Petitioners burden to show that it would have been obvious to add a user operated button to the appliance of Mouhot, including the features that the Petitioners rely on for the body and attachment.

However, no rationale or motivation is provided for why it would have been obvious to add a user operated button to the alleged body and attachment of Mouhot. For at least the above reasons, Petitioners fail to meet their burden with respect to any of the Challenged Claims, including Claims 33-34.

XIII. CONCLUSION

For the foregoing reasons, the Challenged Claims should be found not unpatentable.

Respectfully submitted,

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Date: January 9, 2025

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), counsel for Patent Owner certifies that this document complies with the type-volume limitations of 37 C.F.R. § 42.24(b).

According to Microsoft Office Word's word count, this document contains approximately 5,572 words, including any statement of material facts to be admitted or denied in support, and excluding the table of contents, table of authorities, exhibit list, certificate of service or word count, or appendix of exhibits or claim listing.

Date: January 9, 2025

/Christopher P Bruenjes/
Christopher P. Bruenjes

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing **PATENT OWNER'S
SUR-REPLY TO PETITIONERS' REPLY TO PATENT OWNER'S
RESPONSE PURSUANT TO 37 C.F.R. § 42.23** was served upon Petitioners by
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Date: January 9, 2025

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