Paper 22 Date: August 18, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SILENCERCO WEAPONS RESEARCH, LLC, Petitioner,

v.

HUXWRX SAFETY CO. LLC, Patent Owner.

IPR2024-01214 Patent 8,286,750 B1

Before KEN B. BARRETT, SEAN P. O'HANLON, and ANDREAS BALTATZIS, *Administrative Patent Judges*.

O'HANLON, Administrative Patent Judge.

PRELIMINARY GUIDANCE
PATENT OWNER'S MOTION TO AMEND
37 C.F.R. § 42.121(e)

I. INTRODUCTION

On February 4, 2025, we instituted trial as to claims 1–22 of U.S. Patent No. 8,286,750 B1 ("the '750 patent"). Paper 7 ("Institution Decision" or "Inst. Dec."). After institution, Patent Owner filed a Motion to Amend that is contingent on the patentability of claims 2, 3, 6, 9, 12–14, and 20, and is not contingent on the patentability of claims 1, 4, 5, 7, 8, 10, 11, 15–17, 19, 21, and 22. Paper 18 ("Motion" or "Mot."). Petitioner filed an Opposition to the Motion on July 22, 2025. Paper 21 ("Opposition" or "Opp.").

In the Motion, Patent Owner requested that we provide preliminary guidance concerning the Motion in accordance with 37 C.F.R. § 42.121(a)(1)(ii). Mot. 1; see 37 C.F.R. § 42.121(e)(1); see also Rules Governing Motion to Amend Practice and Procedures in Trial Proceedings under the America Invents Act before the Patent Trial and Appeal Board, 89 Fed. Reg. 76,421 (Sept. 18, 2024) ("Final Rule"). We have considered Patent Owner's Motion and Petitioner's Opposition.

In this Preliminary Guidance, we provide information indicating our initial, preliminary, non-binding views on whether Patent Owner has shown a reasonable likelihood that it has satisfied the statutory and regulatory requirements associated with filing a motion to amend in an *inter partes* review and whether Petitioner establishes a reasonable likelihood that the substitute claims are unpatentable. 37 C.F.R. § 42.121(e)(1), (2); *see also* 35 U.S.C. § 316(d) (statutory requirements for a motion to amend); 37 C.F.R. § 42.121(a)(2), (a)(3), (b) (regulatory requirements and burdens for a motion to amend); *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 15 (PTAB Feb. 25, 2019) (precedential) (providing information and guidance regarding motions to amend). The reasonable likelihood standard this Preliminary Guidance applies is different than the preponderance of the evidence standard applied when ultimately deciding the Motion. *Compare*

37 C.F.R. § 42.121(e)(1), with id. § 42.121(d). Finally, this Preliminary Guidance is not a "decision" for purposes of rehearing under 37 C.F.R. § 42.71(d). 37 C.F.R. § 42.121(e)(2).

For purposes of this Preliminary Guidance, we focus on the proposed substitute claims, and specifically on the amendments proposed in the Motion. *See* 37 C.F.R. § 42.121(e)(1); Final Rule, 89 Fed. Reg. at 76,425. We do not address the patentability of the originally challenged claims. *See* Final Rule, 89 Fed. Reg. at 76,425. Moreover, in formulating our preliminary views on the Motion and Opposition, we have not considered the parties' other substantive papers on the underlying merits of Petitioner's challenges. We emphasize that the views expressed in this Preliminary Guidance are subject to change upon consideration of the complete record, including any revision to the Motion filed by Patent Owner. Thus, this Preliminary Guidance is not binding on the Board when rendering a final written decision or any other subsequent decision in this proceeding. 37 C.F.R. § 42.121(e)(2); *Medytox, Inc. v. Galderma S.A.*, 71 F.4th 990, 1000 (Fed. Cir. 2023).

II. PRELIMINARY GUIDANCE

A. Statutory and Regulatory Requirements

Patent Owner bears the ultimate burden to show that its motion to amend complies with the requirements of 35 U.S.C. § 316(d)(1), (3) and 37 C.F.R. § 42.121(a)(2), (a)(3), (b)(1), and (b)(2). 37 C.F.R. § 42.121(d)(1). For the reasons discussed below, at this stage of the proceeding, and based on the current record, it appears that Patent Owner has shown a reasonable likelihood that it has satisfied some, but not all, of the statutory and regulatory requirements associated with filing a motion to amend. *See* 37 C.F.R. § 42.121(e)(1).

1. Reasonable Number of Substitute Claims

A motion to amend must propose a reasonable number of substitute claims. 35 U.S.C. § 316(d)(1)(B); 37 C.F.R. § 42.121(a)(3). Patent Owner has shown it proposes a reasonable number of substitute claims. The Petition challenges claims 1–22, and the Motion proposes substitute claims 23–43,¹ which is one less claim than the challenged claims (claim 18 does not include a corresponding proposed substitute claim). Mot. 4. Thus, Patent Owner proposes no more than one substitute claim for each of the challenged claims. Mot. i–vii, Claims App. A. Petitioner does not argue otherwise. *See generally* Opp.

2. Respond to Ground of Unpatentability

A motion to amend must respond to a ground of unpatentability involved in the proceeding. 37 C.F.R. § 42.121(a)(2)(i). Patent Owner has responded to a ground of unpatentability involved in this proceeding. Upon review of Patent Owner's arguments, we agree that proposed substitute independent claims 23, 40, and 43 and proposed substitute dependent claims 24–39, 41, and 42 recite new limitations, and new combinations of limitations, that directly respond to the grounds of unpatentability involved in the trial. *See* Mot. 22–25, Claims App. A. Petitioner does not argue otherwise. *See generally* Opp.

3. Scope of Amended Claims

A motion to amend may not enlarge the scope of the claims of the patent. 35 U.S.C. § 316(d)(3); 37 C.F.R. § 42.121(a)(2)(ii). Patent Owner's Motion has

¹ Several times, Patent Owner refers to Proposed Substitute Claims 23–42. *See, e.g.*, Mot. 1. We understand these instances to be typographical errors, given that the listing of claims in Table 1 and the Claims Appendix includes claims 23–43.

not enlarged the scope of claims 1–19, 20, and 21 of the '750 patent. Proposed substitute independent claims 23 and 40 include narrowing limitations compared to their corresponding original independent claims, and the proposed substitute dependent claims incorporate the narrowing limitations added to their respective proposed substitute independent claims. *See* Mot. i–vii, Claims App. A. Petitioner does not argue otherwise. *See generally* Opp.

However, in proposed substitute independent claim 43, which corresponds to original independent claim 22, Patent Owner proposes to delete "high energy device" and replace it with "weapon." Mot. vi–vii. This proposed amendment improperly broadens the claim scope, as Patent Owner has not shown that all weapons are high energy devices. *See Lectrosonics*, IPR2018-01129, Paper 15 at 6 ("[A] proposed substitute claim may not remove a feature of the claim in a manner that broadens the scope of the claims of the challenged patent.").

4. New Matter

A motion to amend may not introduce new subject matter. 35 U.S.C. § 316(d)(3); 37 C.F.R. § 42.121(a)(2)(ii). Patent Owner appears not to have identified adequate written description support for all of the limitations of the proposed substitute claims. Mot. 3–22.

Patent Owner argues that Figure 14 illustrates a radially serpentine pathway. Mot. 12–13. We disagree. As we explained in the Institution Decision, "we interpret 'radially serpentine' as recited in the claims of the '750 patent to mean a back and forth flow *around a radius of the off axis chamber*." Inst. Dec. 14 (emphasis added). Patent Owner agrees with this interpretation. Paper 17 (Patent Owner Response), 10 ("Patent Owner agrees with the Board's conclusion in the [Institution Decision] that 'radially serpentine' as recited in the claims of the

'750 patent means a back and forth flow around a radius of the off axis chamber." (citation modified)), 12 ("As the Board noted, the '750 patent's specification states that a 'radially serpentine fluid pathway' causes the fluids received in the off axis chamber to flow back and forth around a radius of the off axis chamber." (citation modified) (citing Ex. 1001, 4:34–37)). In the Motion, however, Patent Owner identifies a back and forth flow path around a longitudinal axis of the off axis chamber; that is, a circumferentially serpentine pathway. Mot. 12–13; *see also* Inst. Dec. 14 (discussing Figure 14 of the '750 patent). Patent Owner does not identify any flow around a *radius* of the off axis chamber, and therefore has not provided written description support for a radially serpentine fluid pathway.²

Accordingly, Patent Owner has not provided written description support for any of the proposed substitute claims.

B. Unpatentability Arguments by Petitioner

Petitioner bears the ultimate burden to show that any proposed substitute claims are unpatentable. 37 C.F.R. § 42.121(d)(2). For the reasons discussed below, at this stage of the proceeding and based on the current record,³ it appears that Petitioner has not shown a reasonable likelihood that proposed substitute claims 23–43 are unpatentable. *See* 37 C.F.R. § 42.121(e)(1).

² We note that we provided our interpretation of "radially serpentine fluid pathway" with support in the specification of the '750 patent at pages 11–14 of the Institution Decision.

³ We express no view on the patentability of original claims 1–22 in this Preliminary Guidance. Instead, we focus on limitations added to those claims in the Patent Owner's Motion.

- 1. Asserted Obviousness of Proposed Substitute Claims 23, 26–30, 32, 33, 37–39, 40, and 43 Based on Thurler, Kenney,⁴ and WerBell⁵
 - a. Proposed Substitute Claim 23

Proposed substitute claim 23 replaces original independent claim 1 and adds four new limitations as identified below with brackets added for clarity. *See* Mot. i, Claims App. A. In particular, proposed substitute claim 23 amends original claim 1 to recite, "[a]n energy capture and control device [1] for use with a weapon, comprising: a) a central chamber oriented along a central axis within an outer shell [2] oriented along the central axis, said central chamber having an inlet configured to receive a high energy material [3] comprising a projectile and gases from a high energy outlet of the weapon," and "b) a common off axis chamber . . . having a fluid outlet . . . [4] wherein the fluid outlet is located at an opposite end of the energy capture and control device as the inlet."

Petitioner asserts that, as set forth in the Institution Decision, Thurler discloses many of the limitations of claim 1, each of which is also recited in proposed substitute claim 23, including:

(1) an energy capture and control device; (2) a central chamber oriented along a central axis within an outer shell, said central chamber having an inlet configured to receive a high energy material from a high energy outlet; (3) a common off axis chamber oriented within the outer shell in fluid communication with the central chamber and having a fluid outlet and multiple internal walls defining a serpentine fluid pathway which is at least one of axially serpentine and radially serpentine and which dissipates energy transferred from the high energy material; and (4) a plurality of deflectors oriented in series along the central axis of the central

⁴ Kenney, U.S. 1,017,013, issued February 13, 1912 (Ex. 1039).

⁵ WerBell, III, U.S. 3,667,570, issued June 6, 1972 (Ex. 1038).

chamber and configured to deflect the energy from the high energy material to the common off axis chamber.

Opp. 7 (citing Inst. Dec. 22–27). As to Patent Owner's proposed amendments, Petitioner asserts that "Thurler in view of Kenney and WerBell renders these limitations in the proposed amended claims obvious." *Id.* at 8. We address Patent Owner's four new limitations below.

i. For Use with a Weapon

Petitioner asserts that, based on Thurler's title and disclosure, Thurler teaches this limitation. Opp. 8 (citing Ex. 1015, 1:9–40). Petitioner asserts that both Kenney and WerBell also disclose "energy capture and control devices for use with a weapon," as seen by their titles. *Id*.

Thurler discloses devices for lessening the report of firearms. Ex. 1015, 1:9–19. Thus, Thurler supports Petitioner's contentions.

ii. An Outer Shell Oriented Along the Central Axis

Thurler discloses an eccentric outer shell. *See* Ex. 1015, Figs. 1, 2; *see also* Opp. 9. Petitioner asserts that the only reason that Thurler has an eccentric outer shell is "so that the sight c projects over the device for a few millimeters." *Id.* (citing Ex. 1015, 1:70–81, Fig. 2). Petitioner argues that, "when viewed in light of the teachings of both Kenney and WerBell, [an ordinarily skilled artisan] would have been motivated to modify Thurler's eccentric outer shell to be oriented along the central axis, i.e., in a concentric orientation." *Id.* (citing Ex. 1037 ¶ 106–112). According to Petitioner, Kenney discloses that a concentric suppressor is desirable to provide a "predictable, symmetric gas expansion." *Id.* (citing Ex. 1039, 1:19–28; Ex. 1037 ¶ 109). Petitioner asserts that WerBell teaches using a concentric suppressor in conjunction with a rifle having a high sight. *Id.*

Petitioner therefore asserts that "modifying the Thurler suppressor to be concentric so as to achieve the benefits taught by Kenney would yield a device useable with any rifle having high iron sights or a scope, obviating Thurler's only rationale for eccentricity." *Id.* at 10 (citing Ex. 1037 ¶¶ 106–112). Petitioner contends that an ordinary artisan would have been motivated to modify Thurler in this manner "which would not have obstructed the user's line of sight in light of WerBell's disclosure and would have resulted in symmetric gas flow and even, protective gas jacket formed by the concentric suppressor's exhaust, as taught by Kenney. *Id.* (citing Ex. 1037 ¶¶ 106–112); *see also* Ex. 1013 ¶¶ 209–210.

Petitioner's arguments are not persuasive. Petitioner purports to modify Thurler's eccentric arrangement of tubes g and h to be concentric about tube e in order to provide a concentric arrangement of gases exiting firearm. Opp. 9–12. However, Petitioner does not explain adequately how modifying Thurler's tubes to be concentric would yield the purported concentric exit of exhaust gases. Notably, Thurler discloses that the gases generated by firing projectile P exit through openings in tube h, which is oriented at the side of the device. *See* Ex. 1015, 1:84–99, Fig. 1. Furthermore, to the extent Petitioner suggests that it would have been obvious to modify Thurler's device to have the gas flow paths of WerBell or Kenney, Petitioner has not shown adequately how such a flow path would be axially or radially serpentine as required by proposed substitute claim 23.

Finally, we note that the parties appear to interpret an outer shell "oriented along the central axis" to mean the outer shell is arranged concentric to the central axis. *See*, *e.g.*, Mot. 8–9, 23; Opp. 9. We question whether "along" means "concentric with" as suggested by the parties. Rather, it seems that Thurler's tubes g and h, although eccentric to the longitudinal axis of tube e, nonetheless are

"oriented along" that longitudinal axis. *See* Ex. 1015, Fig. 1. We invite the parties to address the proper interpretation of "along" further during the trial.

iii. A High Energy Material Comprising a Projectile and Gases

Petitioner asserts that "Thurler, Kenney and WerBell all disclose [high energy material comprising a projectile and gases], as all are directed to firearm suppressors." Opp. 11 (citing Ex. 1015, 1:9–37, 1:64–91; Ex. 1038; Ex. 1039).

Thurler discloses a device for lessening the report of combustion gases generated when discharging a projectile from a firearm. Ex. 1015, 1:9–19, 1:60–62. Thus, Thurler supports Petitioner's contentions.

iv. The Fluid Outlet Is Located at an Opposite End of the Energy Capture and Control Device as the Inlet

Petitioner asserts that "Thurler's ESD, in view of Kenney and WerBell, further discloses or renders obvious" a fluid outlet located at an opposite end of the device as the inlet. Opp. 11. Petitioner asserts that "Kenney discloses a silencer with an end cap for the gases to forwardly discharge the device at the opposite end than where the high energy material enters. *Id.* According to Petitioner, this configuration provides "the benefits of keeping the gases concentric throughout the device, including upon the gases' exit, [which] is linked directly to predictable, symmetric gas expansion." *Id.* (citing Ex. 1039, 1:19–28, 1:91–108; Ex. 1037 ¶¶ 113–118). Thus, according to Petitioner, "it would have been obvious to [an ordinarily skilled artisan] to implement an endcap that allows the energy to escape from the outlet end of the central chamber" because it "would improve predictable symmetric gas expansion, increase noise suppression by increasing a path length, and improve the expansion area for the deflected energy." *Id.* at 11–12 (citing Ex. 1001, 4:29–31; Ex. 1037 ¶¶ 113–118).

Petitioner's arguments are not persuasive for three reasons. First, it is not apparent that modifying Thurler's device to include Kenney's end cap would "increase noise suppression by increasing a path length," as Petitioner posits. Thurler's device, similar to Kenney's device, has gas that expands outwardly, but instead of exiting as in Kenney, Thurler's device redirects the gases through a set of "narrow openings," which then travels through a "filling of metal shavings" before escaping through another set of openings, with the sets of openings being located at different parts of concentric tubes to provide a circuitous path. Given that the gas path in Thurler is circuitous whereas the gas path in Kenney is essentially linear, Petitioner does not explain adequately how having a path as in Kenney would increase Thurler's path length.

Second, given that Petitioner maps Thurler's tube e to the recited central chamber (Pet. 32; Opp. 11), it is not apparent how gas exiting the central chamber would still be guided "through a certain number of chambers which are arranged at a certain distance apart the one before the other" and which would be "deviated from the trajectory and made to expand generally in said chambers" consistent with the disclosure of Thurler. *See* Ex. 1015, 1:13–19. Nor has Petitioner explained how "implement[ing] an endcapthat allows the energy to escape from the outlet end of the central chamber" (Opp. 12) would still include "a serpentine fluid pathway which is at least one of axially serpentine and radially serpentine and which dissipates energy transferred from the high energy material," as required by proposed substitute claim 23.

Third, Thurler discloses that "[t]he solid wall of the forward part of the tube e prevents the gas from entering the sleeves d thus escaping by the central channel before the shot." Ex. 1015, 1:99–102. Based on this disclosure, Petitioner does not explain adequately why an ordinarily skilled artisan would modify

Thurler to "implement an endcap that allows the energy to escape from the outlet end of the central chamber" (Opp. 12) when Thurler discloses a contrary structure.

v. Conclusion

At this stage of the proceeding, it appears that Petitioner has not sufficiently shown that the combination of Thurler, Kenney, and WerBell renders obvious "an outer shell oriented along the central axis" and "wherein the fluid outlet is located at an opposite end of the energy capture and control device as the inlet," as recited in proposed substitute claim 23. Further, Petitioner does not explain how an ordinarily skilled artisan would have modified the prior art to result in the claimed configuration. Thus, Petitioner has not shown a reasonable likelihood, based on its current arguments, that proposed substitute claim 23 would have been obvious.

b. Proposed Substitute Claims 26–30, 32, 33, and 37–39

In proposed substitute claims 26–30, 32, 33, and 37–39, Patent Owner only proposes to change the dependence from claim 1 to claim 23 and does not include any proposed claim amendments. Mot. ii–iv, Claims App. A. "The only substantive amendments that Patent Owner proposes are to original independent claims 1, 19, and 22. Patent Owner proposes substituting these claims with Proposed Substitute Claims 23, 40, and 43." *Id.* at 3. For the same reasons discussed above as for proposed substitute independent claim 23, Petitioner has not shown a reasonable likelihood, based on its current arguments, that proposed substitute claims 26–30, 32, 33, and 37–39 would have been obvious.

c. Proposed Substitute Claim 40

Petitioner asserts that "Thurler's ESD discloses all limitations recited in Proposed [Substitute] Claim 40, which is identical to Claim 19 other than the identical amendments proposed by [Patent Owner] for Proposed [Substitute] Claim 23." Opp. 18 (citing Mot. App. A). "Petitioner relies on the arguments set forth in this Opposition and the Petition with respect to Claim 19, as well as those set forth herein with respect to Proposed [Substitute] Claim 23." *Id*. 6

For the same reasons discussed above for proposed substitute claim 23, Petitioner has not shown a reasonable likelihood, based on its current arguments, that proposed substitute claim 40 would have been obvious.

d. Proposed Substitute Claim 43

Petitioner asserts that "Thurler's ESD discloses all limitations recited in Proposed [Substitute] Claim 43, which is identical to Claim 22 other than the substantively identical amendments (differing slightly in wording because Proposed [Substitute] Claim 43 is a method claim, *see* [Mot.] 4) proposed by [Patent Owner] for Proposed [Substitute] Claim 23." Opp. 18–19 (citing Mot. App. A). "Petitioner relies on the arguments set forth in this Opposition and the Petition with respect to Claim 22, as well as those set forth herein with respect to Proposed [Substitute] Claim [23]." *Id.* at 19.

For the same reasons discussed above as for proposed substitute claim 23, Petitioner has not shown a reasonable likelihood, based on its current arguments, that proposed substitute claim 43 would have been obvious.

2. Asserted Obviousness of Proposed Substitute Claims 34–36, 41, and 42 Based on Thurler, Kenney, WerBell, and Barlowatz

Proposed substitute claims 34–36 depend from proposed substitute claim 23, and proposed substitute claims 41 and 42 depend from proposed substitute

⁶ We note that our rules do not allow incorporating arguments from one document to another. 37 C.F.R. § 42.6(a)(3).

claim 40. Petitioner's use of Barlowatz does not remedy the deficiencies noted above based on the combination of Thurler, Kenney, and WerBell. For the same reasons, Petitioner has not shown a reasonable likelihood, based on its current arguments, that proposed substitute claims 34–36, 41 and 42 would have been obvious.

3. Asserted Obviousness of Proposed Substitute Claim 24 Based on Thurler, Kenney, WerBell, Barlowatz, and Reeves.

Proposed substitute claim 24 depends from proposed substitute claim 23. Petitioner's use of Barlowatz and Reeves does not remedy the deficiencies noted above based on the combination of Thurler, Kenney, and WerBell. For the same reasons, Petitioner has not shown a reasonable likelihood, based on its current arguments, that proposed substitute claim 24 would have been obvious.

4. Asserted Obviousness of Proposed Substitute Claims 25 and 31 Based on Thurler, Kenney, WerBell, Barlowatz, and Eichenseher.

Proposed substitute claims 25 and 31 depend from claim 23. Petitioner's use of Barlowatz and Eichenseher does not remedy the deficiencies noted above based on the combination of Thurler, Kenney, and WerBell. For the same reasons, Petitioner has not shown a reasonable likelihood, based on its current arguments, that proposed substitute claims 25 and 31 would have been obvious.

III. CONCLUSION

This concludes our Preliminary Guidance. Patent Owner has the option to reply to this Preliminary Guidance *or* to file a revised MTA by DUE DATE 3. 37 C.F.R. § 42.121(e)(3), (f); Paper 8. Patent Owner's reply or revised MTA may only respond to this Preliminary Guidance or Petitioner's Opposition, and may be accompanied by new evidence (including declarations). 37 C.F.R. § 42.121(e)(3).

Petitioner has the option to file a sur-reply responsive to this Preliminary Guidance, Patent Owner's reply, or Patent Owner's revised MTA, but may not present new evidence in any case. 37 C.F.R. § 42.121(e)(3). Petitioner may also file a reply to the preliminary guidance in the case Patent Owner does not file a reply or revised MTA. 37 C.F.R. § 42.121(e)(4).

In addition, Patent Owner is reminded that amendments of the challenged claims may also be pursued in a separate reissue or reexamination proceeding before, during, or after an AIA trial proceeding, including subsequent to the issuance of the Final Written Decision. We draw Patent Owner's attention to the April 2019 Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

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