

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DEAD AIR ARMAMENT, LLC D/B/A DEAD AIR SILENCERS,
PETITIONER

v.

JARVIS ARMS LLC D/B/A MISSION SILENCERS,
PATENT OWNER

CASE No. IPR2026-00013
PATENT 12,018,906

PATENT OWNER/RESPONDENT'S PRELIMINARY
RESPONSE PURSUANT TO 37 C.F.R § 42.107

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2005	Declaration of John Spurrier in Support of Preliminary Response of Patent Holder.
2006	Curriculum Vitae of John Spurrier.
2007	<i>Merriam Webster’s Collegiate Dictionary</i> , “Circumscribe,” Eleventh Edition, https://www.merriam-webster.com/dictionary/circumscribe (last accessed January 26, 2026).
2008	Statutory Disclaimer of Claims 2 – 7 and 9 -11. Previously filed exhibits are incorporated by reference per 37 C.F.R. § 42.6(a)(3) discouraging duplicative filings, including Patent’s Owners Exs. 2001 (Answer and Counterclaims, <i>Dead Air Armament, LLC d/b/a Dead Air Silencers v. Jarvis Arms LLC d/b/a Mission Silencers</i> , 4:25-cv-00497 (Oct. 13, 2025)); 2002 (Affirmative Defenses, <i>Dead Air Armament, LLC d/b/a Dead Air Silencers v. Jarvis Arms LLC d/b/a Mission Silencers</i> , 4:25-cv-00497 (Nov. 3, 2025); 2003 (Stipulated Order Granting Stay, <i>Dead Air Armament, LLC d/b/a Dead Air Silencers v. Jarvis Arms LLC d/b/a Mission Silencers</i> , 4:25-cv-00497 (Nov. 6, 2025); and 2004 (Docket Report, <i>Dead Air Armament, LLC d/b/a Dead Air Silencers v. Jarvis Arms LLC d/b/a Mission Silencers</i> , 4:25-cv-00497).

Pursuant to 37 C.F.R. § 42.107, Patent Owner Jarvis Arms LLC d/b/a/ Mission Silencers (“Jarvis Arms”) submits its Preliminary Response to Dead Air Armament, LLC d/b/a Dead Air Silencer’s (“Dead Air”) Petition, Paper No. 16 (“Petition” or “Pet.”) seeking inter partes review (“IPR”) of U.S. Patent No. 12,018,906 (“the ‘906 patent”), Case No. IPR2026-00013. This filing is timely under 35 U.S.C. § 313, 37 C.F.R. § 42.107, and in accordance with the Order of the Patent Trial and Appeal Board (“the Board”) entered October 30, 2025 (Paper No. 3).

This Preliminary Response is supported by the declaration of John Spurrier (“Spurrier Decl.”) which is filed concurrently herewith. *See* Ex. 2005.

I. INTRODUCTION.

Petitioner’s challenge collapses under technical scrutiny because:

1. The asserted prior art does not disclose or suggest the continuous circumferential pressure-equalizing channel required by the independent claims of the ‘906 Patent.
2. Petitioner repeatedly mischaracterizes discrete voids, incidental gaps, and stepped annular spaces in the cited art as “channels,” despite their interrupted, non-circumferential, and non-axial structure.

3. The Petition's theory ignores the fluid-dynamic consequences of threaded joints, stepped housings, and baffle geometry that prevent axial pressure equalization.

4. Petitioner's expert declaration (Ex. 1008) presents ipse dixit assertions contradicted by the references' own figures and text.

5. The Petition improperly relies on extrinsic attorney correspondence (Ex. 1011) to redefine claim scope—contrary to the Phillips standard and PTAB precedent.

6. Petitioner's motivations-to-combine are generic and unsubstantiated, ignoring technical incompatibilities between references.

7. A parallel district-court declaratory-judgment action (Ex. 1012) supports § 314(a) discretionary denial.

For these reasons, institution should be denied.

Accordingly, the Board should deny inter partes review as to all grounds set forth in the Petition.

II. PETITIONER'S ALLEGED INVALIDITY CLAIMS.

The Petition challenges the claims of the '906 Patent as follows:

- A. Claims 1 - 6 and 9 – 11 are challenged as obvious under 35 U.S.C. § 103 by Belykov in view of Sclafani.

- B. Claims 6 and 7 are challenged as obvious under 35 U.S.C. § 103 by Belykov in view of Sclafani and Noonan.
- C. Claims 1 and 3 – 7 are anticipated or rendered obvious by Noonan.
- D. Claim 2 is challenged as obvious under 35 U.S.C. § 103 by Noonan in view of Slack and Sclafani.
- E. Claims 4 and 9 – 11 are challenged as obvious under 35 U.S.C. § 103 by Noonan in view of Belykov.
- F. Claims 1 – 2, 4, 10, and 11 are challenged as obvious under 35 U.S.C. § 103 by Muceus in view of Slack.
- G. Claims 3 and 4 are challenged as obvious under 35 U.S.C. § 103 by Muceus in view of Belykov.
- H. Claims 6 and 7 are challenged as obvious under 35 U.S.C. § 103 by Muceus in view of Slack and Noonan.

III. OVERVIEW OF THE '906 PATENT.

The '906 Patent describes a modular firearm suppressor engineered to:

- Distribute expanding gases,
- Reduce pressure gradients along the suppressor length,
- Improve heat dispersion, and
- Reduce blowback into the host firearm.

The invention's core feature is a circumferential channel between a removable core and a uniform-diameter suppressor housing, allowing axial pressure equalization from the first end to the second end. This structure enables controlled gas expansion in ways not achievable by the discontinuous annular gaps or discrete baffle chambers of the asserted prior art.

IV. CLAIMS

The following claims existed in the '906 Patent at the time the present action was accorded a filing date, however Patent Owner has now disclaimed dependent claims 2 -7 and 9 -11. The Original claims are included for completeness.

1. **Claim 1.** A firearm suppression system comprising:

a housing comprising a first end and a second end, the housing comprising:

a first aperture at the first end,

a second aperture at the second end;

an inner compartment interposed between the first aperture and the

second aperture, the inner compartment being substantially the same

circumference from the first end to the second end;

an end cap with a projectile aperture; and

a core removably attachable to the housing and positioned therein, wherein

the core comprises a plurality of core apertures on an outer surface that

allow gas passing from a projectile and cartridge to pass to a channel

between the inner surface of the housing and an outer surface of the core, the channel circumscribes the outer surface of the core and equalizes pressure that begins at the first end of the housing and terminates at the second end of the housing.

2. **Claim 2.** Claim 1, wherein the core is printed from a three-dimensional printer.

3. **Claim 3.** Claim 1, wherein the end cap comprises a plurality of vent apertures.

4. **Claim 4.** Claim 1, further comprising a muzzle adapter.

5. **Claim 5.** Claim 1, wherein the end cap comprises a second side that comprises a ledge that rests upon and is flush with the second end.

6. **Claim 6.** Claim 1, wherein the end cap comprises a sidewall that is positioned in the inner compartment and rests against an inner surface of the housing.

7. **Claim 7.** Claim 6, wherein the sidewall comprises threads that couple to the housing.

8. **Claim 9.** Claim 1, wherein the plurality of core apertures is substantially hexagonal shaped.

9. **Claim 10.** Claim 1, wherein the core comprises an inner surface that includes baffles that interact with the plurality of core apertures.

10. **Claim 11.** Claim 10, wherein the baffles are extruded inward.

V. STATUTORY DISCLAIMER OF CLAIMS 2 – 7 AND 9 – 11.

Pursuant to 35 U.S.C. § 253(a) and 37 C.F.R. § 1.321(a), Patent Owner disclaims, and has disclaimed (as shown in Ex. 2008), claims 2 – 7 and 9 – 11. As such, Patent Owner submits that only Claim 1 is at issue in determining whether to institute this IPR. Under 35 U.S.C. § 253(a), a patent owner may file a statutory disclaimer disclaiming one or more claims in a patent.

“No inter partes review will be instituted based on disclaimed claims.” 37 C.F.R. § 42.107(e). Claim 1 remains the only the claim at issue in this IPR. 35 U.S.C. § 314.

As such, Patent Owner asserts that the Board need only consider Grounds 1, 3 and 6 asserted in the Petition. In case Petitioner disagrees, preliminary responses to the remaining grounds are also summarized below. Patent Owner asserts they are obviated in light of the disclaimer. *See* Ex. 2008.

VI. CLAIM CONSTRUCTION AND KEY TERM DEFINITIONS.

A. Patent Owner’s Construction of “Channel”

Patent Owner applies the *Phillips* standard for construing claims. Under this standard, claim terms receive their ordinary and customary meaning as understood by a person of ordinary skill in the art (“POSITA”) at the time of the invention, viewed in the context of the specification, prosecution history, and the claims

themselves. The Petition does not offer express constructions, but instead applies overbroad interpretations that contradict both the intrinsic record and fundamental engineering principles relevant to suppressor design. Proper construction of the key claim terms demonstrates that the Petition's grounds fail as a matter of law and fact.

1. The "Channel" (Claim 1)

The Patent Owner's construction of "channel" is "a continuous, unbroken, annular path capable of longitudinal gas propagation." *See* Ex. 2005 ¶ 31. This is supported by the specification which repeatedly describes the channel as a continuous annular void intentionally created between the core and housing to allow axial gas movement along the suppressor's length. Nothing in the patent suggests intermittent gaps, stepped chambers, radial voids, or baffle interstices qualify as the claimed "channel." *See* Ex. 2005 ¶ 35.

2. Claim Language

Claim 1 requires that the channel "circumscribes the outer surface of the core and equalizes pressure that begins at the first end ... and terminates at the second end." To "equalize pressure" axially, the channel must be unbroken and able to transmit pressure waves along the entire length.

3. Prosecution

During prosecution (Ex. 1002), the Patent Owner distinguished prior art references that lacked continuous circumferential flow paths, confirming that “channel” does not mean “any void,” “any gap,” or “any annulus.” Ex. 1002, 105.

4. POSITA Technical Understanding

The essential inquiry is “whether the words of the claim are understood by persons of ordinary skill in the art to have sufficiently definite meaning as the name for structure.” *Team Worldwide Corp. v. Intex Recreation Corp.*, No. 2020-1975, 2021 WL 4130634, at *5 (Fed. Cir. Sept. 9, 2021) (quoting *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015)).

A POSITA would not characterize intermittent expansion chambers, radial apertures, or partial gaps as a “circumferential channel,” because such structures do not support axial equalization; barriers, stepped bore surfaces, or baffles block propagation of pressure waves.

a. Petitioner’s Error

The Petitioner errors in repeatedly identifying as channels:

- small annuli created by machining tolerances,
- stepped internal bores,
- discrete expansion chambers,
- baffle-to-wall clearance, or
- incidental voids ...as “channels.”

This is incorrect, mechanically and legally.

B. Patent Owner’s Construction of “Equalizes pressure that begins at the first end . . . and terminates at the second end”

A function performed by a continuous circumferential channel in which expanding gases may move longitudinally along the suppressor such that pressure gradients between the front and rear ends are reduced. As support for this construction, Patent Owner asserts:

- This requires axial pressure flow, not localized venting;
- The channel also requires communication between the front and rear ends of the housing via the channel; and
- Stepped chambers, isolated voids, and sealed threaded joints interrupt flow and cannot equalize pressure along the required path.

See Ex. 2005 ¶¶ 37 – 39 and 42.

1. Petitioner’s Misinterpretation

Petitioner treats any pressure relief, even local turbulence or venting, as “equalization.” That is wrong. The claims require axial equalization along the length, not merely local balancing.

C. Patent Owner’s Construction of “Circumscribes the outer surface of the core”

Encircles the core's outer surface 360 degrees such that the channel forms a complete ring around the core along its longitudinal axis. As support, Patent Owner asserts:

- “Circumscribe” means to “draw a line around” or “to surround by or as if by a boundary.” *Merriam Webster's Collegiate Dictionary*, “Circumscribe,” Eleventh Edition, <https://www.merriam-webster.com/dictionary/circumscribe> (last accessed January 26, 2026) (Ex. 2007). “Judges may consult dictionary and treatises to help interpret claim terms, particularly when the intrinsic evidence does not resolve ambiguity.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1324 (Fed. Cir. 2005). This is consistent with Mr. Spurrier's construction. *See* Ex. 2005 ¶ 31.
- Discrete pockets or partial annuli do not circumscribe.
- A POSITA would understand “circumscribing channel” to exclude irregular, interrupted voids or regions blocked by baffles, threads, channels filled with sound-absorbing material, or end-cap structures. *Id.*

1. Petitioner's Misinterpretation:

Petitioner identifies gaps in prior art references, which it identifies as “circumscribing”, which include:

- polygonal,
- segmented,

- interrupted by baffles,
- obstructed by sound-absorbing material;
- obstructed by thread engagement, or
- absent along significant axial portions.

This is technically and linguistically unsupportable.

D. Patent Owner’s Construction of “Plurality of core apertures on an outer surface”

Multiple apertures positioned on the outer surface of the core that open directly into the continuous channel. A key technical constraint is that these apertures must feed a continuous channel. If there is no continuous channel, the apertures cannot serve their intended function. *See* Ex. 2005 ¶¶ 36 - 37.

Petitioner points to prior art, including Belykov, having internal baffle ports or radial apertures that open into discrete expansion chambers rather than a unified channel. Such structures do not satisfy this limitation. *See* Ex. 2005 ¶ 40.

The ‘906 Patent recites a suppressor having a continuous circumferential channel in which expanding gases may move longitudinally along the suppressor from end to end. Belykov does not shown this. *See* Ex. 1003, Fig. 3 (showing sonic walls obstructing end-to-end gas flow); *see also* Ex. 2005 ¶ 44. It also requires communication between the front and rear ends of the housing via the channel.

Isolated voids and sealed threaded joints interrupt flow and cannot equalize pressure along the required path.

Petitioner, however, treats any pressure relief, even local turbulence or venting, as “equalization.” That is wrong. The claims require pressure equalization along the length, not merely local balancing.

E. Summary

According to the ‘906 Patent, to equalize pressure along the suppressor body, a continuous path must exist, this path must be circumferential, preventing bottlenecks; and the path must be axially aligned, allowing pressure propagation. If any part of the path is interrupted, by baffles, ledges, stepped interfaces, pressure equalization is not feasible.

The ‘906 Patent achieves:

- Controlled longitudinal gas movement;
- Reduction of pressure spikes;
- Improved blowback reduction;
- Predictable heat distribution;
- Modular disassembly while maintaining channel continuity.

This is not disclosed or suggested in the prior art.

1. *“Circumscribes the outer surface of the core”.*

The '906 Patent teaches that the core's outer surface 360 degrees such that the channel forms a complete ring around the core along its longitudinal axis. "Circumscribe" means to "form a boundary around."

Discrete pockets or partial annuli do not circumscribe. A POSITA would understand "circumscribing channel" to exclude irregular, interrupted voids or regions blocked by baffles, sound-absorbing material, threads, or end-cap structures. *See* Ex. 2005 ¶ 40.

Petitioner identifies as "circumscribing" gaps in prior art references that are:

- polygonal,
- segmented,
- interrupted by baffles and helical structures,
- obstructed by sound-absorbing materials;
- containing apertures which force gases backwards behind the projectile;
- obstructed by thread engagement, or
- absent along significant axial portions

This is both technically and linguistically unsupportable.

2. *"Plurality of core apertures on an outer surface"*

The Patent Owner construes this term as multiple apertures on the outer surface of the core that open directly into the continuous channel. These apertures

must feed the channel. If there is no continuous channel from end to end, the apertures cannot serve their intended function. *See* Ex. 2005 ¶ 72.

Petition, on the other hand, points to prior art like Belykov having internal baffle-like ports which open into discrete expansion chambers rather than a unified channel and do not satisfy this limitation. *See* Ex. 2005 ¶ 43.

VII. TECHNICAL BACKGROUND.

To fully understand the '906 Patent's improvement, it is necessary to explain how suppressors handle gas dynamics.

A. Conventional Suppressor Architecture.

Conventional suppressors include stepped diameters, baffle chambers, and isolated walls, which do not equalize pressure axially in a continuous manner. When a bullet in a firearm discharges, high-pressure gas exits the muzzle behind the bullet in traditional firearms. In firearms equipped with a suppressor, this gas expands through the suppressor around the bullet and a pressure wave propagates forward and backward. Typical suppressors include:

- Baffles that slow expanding gases;
- Expansion chambers that allow gas volume increase;
- Endcaps that retain internal components;
- A core or monocoil (if removable or integrally machined); and
- A housing tube surrounding the assembly.

These designs often involve stepped diameters, baffle chambers, or isolated voids. As a result, they do not equalize pressure axially in a continuous manner.

B. Gas Dynamics Relevant to Suppressor Function.

When a firearm discharges:

1. High-pressure gas exits the muzzle;
2. The gas expands rapidly into the suppressor; and
3. Pressure waves propagate forward and backward.

To equalize pressure along the suppressor body:

- A continuous path must exist.
- The path must be circumferential, preventing bottlenecks.
- The path must be axially aligned, allowing pressure propagation.

If any part of the path is interrupted — by baffles, threads, ledges, stepped interfaces — pressure equalization is infeasible.

C. Why the Claimed Channel Is Technically Distinct.

The '906 Patent achieves:

- Controlled longitudinal gas movement;
- Reduction of pressure spikes;
- Improved blowback reduction;
- Predictable heat distribution; and
- Modular disassembly while maintaining channel continuity.

This is not disclosed, taught or suggested in the prior art.

VIII. OVERVIEW OF PRIOR ART DEFICIENCIES.

Before addressing Petitioner's grounds individually, it is important to emphasize the global flaw in the Petition:

- No asserted reference — individually or combined — discloses a continuous circumferential channel extending from the first to the second end of the suppressor.

In every reference:

- Baffles and other obstructions interrupt flow;
- Endcaps block or seal joints;
- Stepped interfaces disrupt axial continuity;
- Apertures vent into discrete chambers, not channels;
- Housing geometries preclude circumferential flow; and/or
- Threaded joints create sealed or partially sealed regions.

Thus, Petitioner's theory collapses under any correct claim construction.

IX. OVERVIEW OF PETITIONER'S TECHNICAL FAILURES.

Petitioner challenges the '906 Patent on eight grounds (all but one under § 103), each ground asserting a mix of:

- Belykov,
- Noonan,

- Sclafani,
- Slack, and
- Muceus.

All of these references are paired with conclusory statements from Ex. 1008.

Across all grounds, the Petition relies on the same fundamental misinterpretation: Petitioner equates any annular space, or discrete expansion chamber in the prior art with the claimed “channel” — even when those structures are not circumferential, continuous, or capable of longitudinal pressure equalization. *See, e.g.*, Ex. 2005 ¶ 43.

This is not merely a subtle technical disagreement: it is a categorical structural mismatch between the claimed invention and the prior art.

A. Global Defects Across All Grounds.

The PTAB may not consider a petition unless “the petition identifies, in writing and with particularity each claim challenged...and the evidence that supports the grounds for the challenge to each claim.” 35 U.S.C. § 312(a)(3); *Intelligent Biosys. Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) (“It is of the utmost importance that petitioners identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim’”). The PTAB’s rules further require that a petition “must include...[a] full statement of the reasons for the relief requested, including a detailed explanation of the

significance of the evidence[.]” and “specify where each element of the claim is found in the prior art patents or printed publications relied upon.” 37 C.F.R. §§ 42.22(a)(2), 42.104(b)(4). The Petition fails to comply with these requirements. Instead, in several instances, the Petition includes only brief, unclear, or incomplete statements that fall short of the particularity and specificity required. Accordingly, the Board should conclude that Petitioner has failed to establish a reasonable likelihood that the challenged claims identified below, and any dependents therefrom, are unpatentable.

Across every ground, the following global defects exist:

- (1) No asserted reference discloses a continuous circumferential channel extending from first end to second end. Rather, they show disconnected cavities, baffle-interrupted chambers, thread-blocked sections, or segmented voids that cannot support axial flow;
- (2) None of the combinations provide the functional requirement of equalizing pressure along the suppressor’s length. Suppressors with isolated chambers cannot equalize longitudinal pressure;
- (3) The references that Petitioner combines are structurally incompatible. Belykov’s polygonal monocore and Sclafani’s modular ring-baffle assemblies are not combinable with hindsight reconstruction;
- (4) Petitioner’s expert ignores actual physical constraints such as:

- Threaded interface sealing,
- Thermal expansion,
- Pressure-wave propagation,
- Wall blow-off directions,
- Baffle geometries.

(5) Motivations to combine are generic and are unsupported by reference-specific logic. The Petitioner’s rational to combine is essentially “improve suppressor performance” which is insufficient under *KSR*.

X. GROUND 1 FAILS.

A. Belykov’s Structure Cannot Provide a Circumferential Channel.

Belykov’s structure cannot provide a continuous circumferential channel because Belykov’s suppressor teaches:

- a central through tube;
- positioned inside a surrounding housing;
- creating an annular gap;
- which Petitioner identifies as the claimed “channel.”

Belykov’s annulus is NOT the claimed channel because it is not continuous along the suppressor length. The annulus is repeatedly interrupted by:

- baffles;
- welded joints;

- spacers;
- support elements;
- areas in which the tube and housing abut;
- In many regions, support ribs and baffle surfaces create noncircumferential contact, eliminating annular continuity.
- Belykov does not teach a structure capable of axial pressure equalization. Pressure in Belykov expands into isolated chambers, not a continuous path.
- Belykov teaches a classic multi-chamber suppressor, not a channel-base equalization device.

However, neither reference discloses the claimed channel, and neither can be modified to create one. Additionally, both teach that the annular gap can be filled with sound-absorbing material, which teaches away from pressure equalization.

1. Belykov's structure cannot provide a continuous circumferential channel.

Belykov's suppressor consists of:

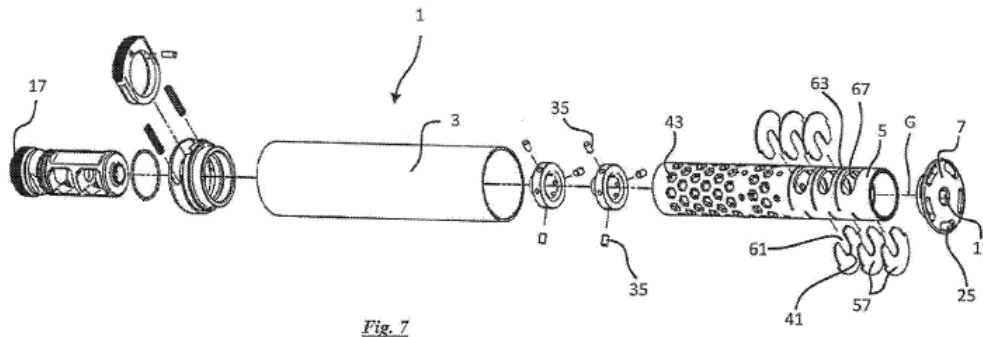
- a central through tube,
- positioned inside a surrounding housing,
- creating an annular gap,
- which Petitioner identifies as the claimed "channel."

- But Belykov's annulus is NOT the claimed channel because it is not continuous along the suppressor length.

The annulus taught by Belykov is repeatedly interrupted by:

- baffles,
- welded joints,
- spacers, and
- support elements.

See Ex. 2005 ¶ 44.



Belykov Fig. 7

Additionally, it is not circumferential as in many regions, its support ribs, sonic walls, pins, and baffle surfaces create non-circumferential contact, eliminating annular continuity. It cannot perform axial pressure equalization because pressure in Belykov expands into isolated chambers, not a continuous path longitudinally. The structure is a classic multi-chamber suppressor, not a channel-based equalization device.

The annular space shown is segmented by various structures which create mechanical and gas-flow discontinuities. These discontinuities prevent gas from traveling longitudinally along the entire suppressor. Therefore, no continuous circumferential channel exists.

B. The References that Petitioner Combines Are Structurally Incompatible.

Sclafani and Belykov are not combinable without hindsight reconstruction. Petitioner's expert ignores actual physical constraints such as:

- threaded interface sealing,
- thermal expansion,
- pressure-wave propagation,
- wall blow-off directions, and
- baffle geometries.

Motivations to combine are generic and are unsupported by reference-specific logic. As a result, the Petition fails to show “[h]ow the construed claim is unpatentable.” 37 C.F.R. § 42.104(b)(4) (emphasis added).

C. Belykov and Sclafani Do Not Render Claim 1 Obvious.

Petitioner asserts that combining Belykov with Sclafani allegedly teaches the claimed:

- removable core,

- core apertures,
- a circumferential channel, and
- longitudinal pressure equalization.

This is incorrect. The references address fundamentally different design philosophies and are structurally incompatible.

D. Sclafani Does Not Disclose a Circumferential Channel of Any Kind.

Sclafani describes:

- A modular suppressor using threaded elements,
- Baffles that stack axially,
- Interlocking structures that produce radial gas deflection,
- Chambers separated by solid partition walls,
- No circumferential void around a central core.

With regard to technical considerations, no continuous axial flow path exists. Sclafani's baffles create *sealed expansion chambers*, not axial channels. No "circumscribing" geometry exists. The chambers are partitioned, not circumferential. Core apertures in Sclafani do not feed a unified channel, but instead open into individual expansion chambers. Threaded joints between baffles create pressure seals, preventing axial equalization. *See Ex. 2005 ¶ 46.*

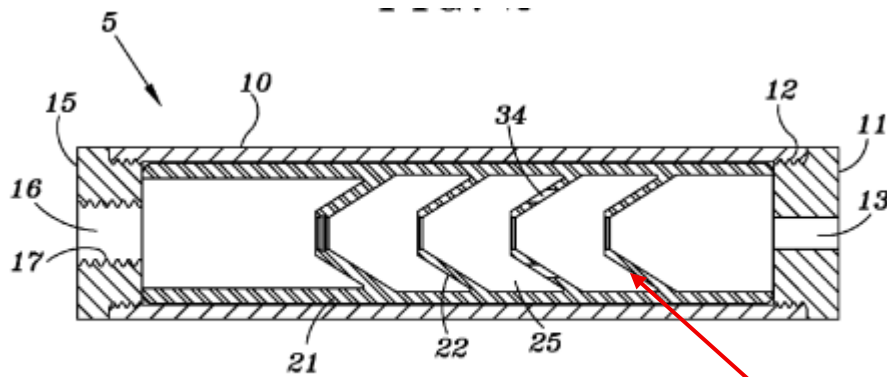


FIG. 3

Interruptions

Thus, Sclafani does not teach — or even suggest — the claimed channel.

E. Combining Sclafani with Belykov Would Destroy Both Devices' Intended Function.

Threaded baffles (Sclafani) eliminate any annular continuity (Belykov). Threads form tight mechanical seals and block circumferential flow. Belykov's coaxial-tube annulus cannot be preserved once Sclafani's stacked baffle segments are introduced — the chambers become radially compartmentalized, isolating pressure. The references are geometrically incompatible because: Belykov uses a smooth interior housing, and Sclafani requires threaded internal interfaces — a direct contradiction.

A POSITA would never combine these systems, and Sclafani seeks isolated chambers for stage-wise expansion. These goals are mutually exclusive.

F. The Petition Ignores Fundamental Gas-Dynamic Physics.

Pressure equalization requires:

- uninterrupted longitudinal communication,

- circumferential freedom of flow,
- the absence of baffle-induced discontinuities.

Sclafani's exact purpose is to *eliminate* such axial communication between chambers. Thus, combining Sclafani with Belykov removes the very structures Petitioner claims to be adding.

G. Motivation to Combine Is Conclusory Hindsight.

Petitioner asserts only that the combination would “improve suppressor performance.” This is precisely the kind of unsupported, hindsight-driven motivation that the Federal Circuit repeatedly rejects.

Ground 1 must be rejected because:

- Sclafani lacks a circumferential channel, and has isolated, threaded baffle segments.
- Sclafani eliminates axial equalization;
- Belykov cannot be modified to produce the claimed structure;
- The references are incompatible; and
- Petitioner offers no plausible motivation to combine.

H. Petitioner's Motivations to Combine are Unsupported.

Petitioner asserts that the references could be combined “to improve suppressor performance” and “provide removable cores.” These are precisely the kinds of hindsight-driven rationales that the Federal Circuit has repeatedly rejected.

See Kingston Tech. Co. v. SPEXTEchs., Inc., IPR2017-00824, Paper 8 at 18–19 (PTAB Aug. 17, 2017) (“An unpatentability determination with respect to claims subject to construction under § 112 ¶ 6 requires structural analysis demonstrating that the corresponding structure in the challenged patent . . . is present in the prior art. . . . Petitioner’s failure to perform any structural comparison . . . is fatal to Petitioner’s contentions.”); *Apple Inc. v. Red.com*, IPR2019-01065, Paper 17 at 13 (PTAB Nov 8, 2019) (finding that the petitioner had not shown a reasonable likelihood that it would prevail where the petitioner provided only a conclusory statement that the prior art disclosed the claim limitation and the petitioner did not discuss its proposed construction).

However, neither Belykov nor Sclafani (nor Noonan described below) teaches the claimed channel, and none can be modified to create one.

1. Ground 1 Fails as a Matter of Law.

Ground 1 therefore fails as a matter of law and fact because there are no continuous circumferential channels existing in either reference; no axial pressure equalization is possible; the prior art is structurally incompatible. Petitioner’s motivations-to-combine are boilerplate, and the expert declaration provides insufficient technical explanation.

XI. GROUNDS 3 FAILS.

Petitioner asserts that Noonan alone renders obvious Claim 1 and 3 – 7 disclosing or suggesting:

- a removable core;
- apertures in the core;
- a channel between core and housing; and
- pressure equalization.

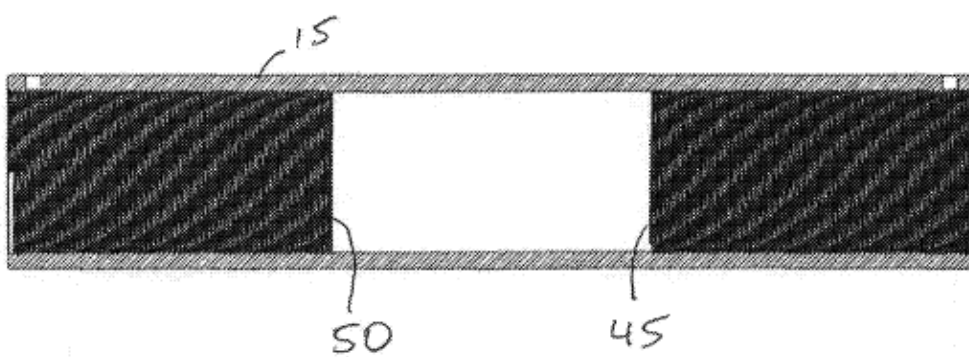
A. Noonan Does Not Disclose or Suggest the Claimed Channel.

Petitioner asserts that Noonan teaches:

- a removable core,
- apertures in the core,
- a channel between core and housing, and
- pressure equalization.

Noonan does not disclose a continuous channel. Noonan's channel is interrupted by threading, sound-absorbing materials, and aperture-less segments which cannot equalize pressure. Noonan's recess is for gas expansion, not pressure equalization. *See* Ex. 2005 ¶ 44.

A POSITA would recognize that Noonan's channel is interrupted by threading and sound-absorbing material, including gas expansion out of the device toward the shooter, allow for partial gas expansion but not pressure equalization. Noonan traps, slows, and redirect pressure, rather than equalizing it along the



length. *See* Ex. 2005 ¶ 45. Noonan cannot equalize pressure along the entire suppressor length.

B. Noonan is Mechanically Incompatible.

Noonan discloses a gas expansion chamber exits rearwardly behind the projectile and that the housing may have additional apertures for releasing expanding gas. Ex. 1004, 4: 23 – 26.

C. Noonan Lacks the Claimed Channel and Pressure Equalization.

Petitioner asserts Noonan alone renders Claim 1 obvious (under Ground 3). This is untenable. Noonan teaches that the inner surface of the housing, forming a channel, is interrupted by threading (indicated at reference character 45). Ex. 1004, Fig. 3B. Additionally, Noonan teaches filling its recess with material.

Noonan provides that its channel may be filled with sound absorbing material (indicated at 105), and that discrete pockets position between this sound-absorbing material. *See* Ex. 2005 ¶ 44.

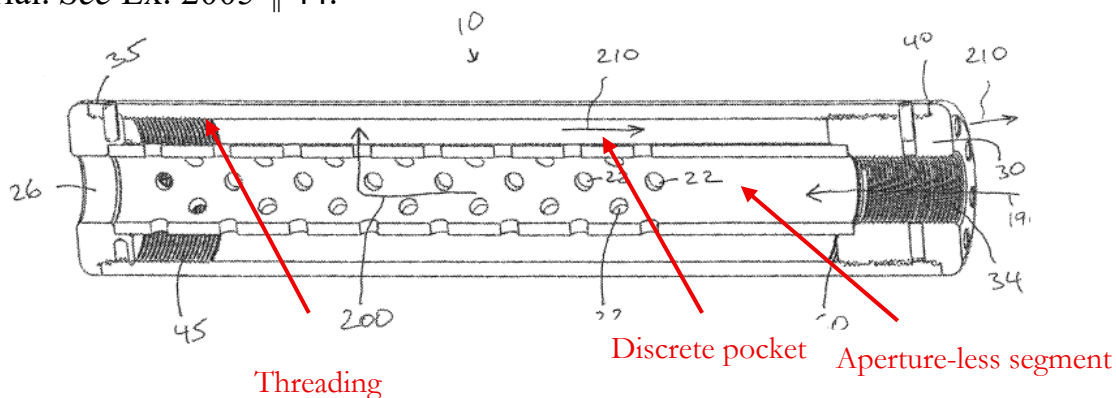


Figure 3a

Noonan Fig. 3B

These pockets between sound-absorbing material (indicated at 105) are independent expansion pockets — NOT a continuous circumferential channel.

Noonan also teaches that the gases in the channel may exit the channel backwards, through rearward apertures (or out of additional apertures on the housing), which teaches away from pressure equalization in front of the projectile. Ex. 1004, 4:38 – 45.

Noonan shows in Figures 3A – 3C and 7A -7B that the core is missing apertures from approximately the first one third of its length, again showing Noonan teaches away from pressure equalization. Nowhere does Noonan teach pressure equalization, rather Noonan teaches gas expansion within a discrete chamber (and claims “expanding gases”).

Noonan fails because there is no circumferential channel. Noonan’s channel is not continuous and has obstructions. Noonan apertures are meant to vent into a chamber for releases gases from the device and muffling sound, and do not form a channel, rather a passage interrupted by threading and fillers, not a continuous flow path.

The core apertures in Noonan do not map to the claimed apertures. Rather, Noonan's apertures are missing from segments, vent radially, not into a continuous channel, and feed into discrete chamber(s).

Therefore, Claim 1 is not met.

D. Petitioner's Expert Misreads Noonan.

Ex. 1008 claims that Noonan teaches "a channel" because gas can "flow around the core" but Noonan's channel is interrupted by threading, sound-absorbing material, and segments with missing apertures:

E. Grounds 2 and 3 Must Be Rejected.

Ground 3 must be rejected because:

- Noonan lacks the claimed continuous channel;
- Noonan lacks pressure equalization; and
- Noonan lacks outer-surface core apertures feeding such a channel in certain segments.

XII. UNDERSTANDING SLACK (AND GROUND 4)

A. Noonan, Slack and Sclafani Do Not Teach or Suggest the Claimed Channel.

Ground 4 asserts obviousness of Claim 2 by Noonan combined with Slack and Sclafani. Slack describes a suppressor with:

- conical baffles,

- QD attachment hardware,
- select vent ports, and
- radially oriented deflection chambers.

Slack does not disclose a circumferential channel or axial equalization.

B. Slack’s Baffle Chambers are Discrete and Separated.

Slack’s internal geometry features:

- alternating conical/helical baffles,
- side vents into local pockets,
- radial deflection pathways.
- These structures block axial continuity.

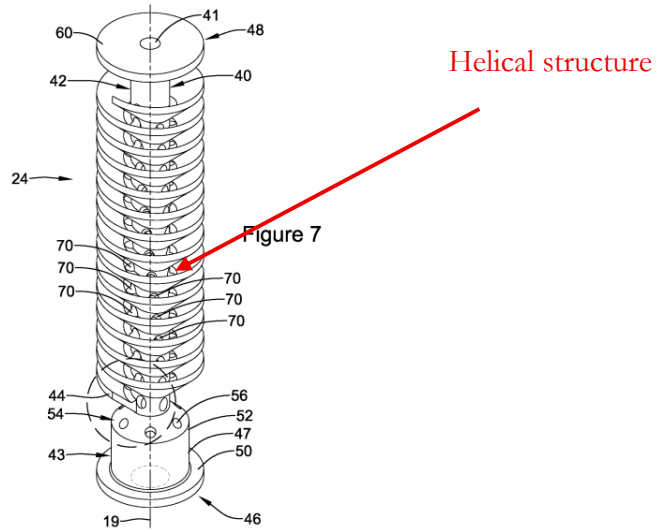
Slack’s chambers function as individual expansion stages, not as components or any continuous or annular channel. There is no circumferential flow path. There is not axial continuity. There is no equalization from first end to second end. *See* Ex. 2005 ¶ 47.

C. Slack’s Gas Flow is Radial, Not Axial.

Slack repeatedly emphasizes:

- lateral redirection of gases,
- turbulence creation,
- helical interrupting structures in the channel, and
- disruption of axial flow to generate “turbulent energy rejection”.

These mechanics are opposite of what the '906 Patent teaches.



D. Slack's Baffle Walls and Chamber Walls Interrupt Annular Voids.

Even if Slack had the partial annular it is missing, Slack explicitly places:

- threaded engagements,
- snap-fit components,
- baffle walls,

All of which interrupt the axial flow path. Thus Slack does not teach the claimed channel.

E. Combining Slack with Noonan is Technically Impossible.

Slack's conical-baffle geometry is incompatible with the other Prior Art References, including Noonan. Additionally, Slack requires internal diameter changes in the form of expansion stages.

The '906 Patent explicitly requires a uniform inner compartment, contradicting Slack's stepped chambers. Thus, the combination proposed by Petitioner is impossible without complete redesign.

F. Petitioner's Rationale is Boilerplate and Unsupported.

Petitioner again claims the references could be combined "to improve suppressor performance." This generic reasoning:

- does not identify a specific technical improvement,
- ignores geometric incompatibility, and
- lacks any POSITA-supported rationale.

This is legally insufficient.

Neither Slack, Sclafani nor Noonan teaches the claimed channel, nor do they suggest longitudinal pressure equalization. The references are incompatible, and the Petition offers no legitimate motivation to combine them.

G. Adding Sclafani Does Not Cure the Channel Deficiency.

As established herein:

- Belykov lacks a continuous circumferential channel.
- Noonan lacks a continuous circumferential channel.
- Sclafani lacks a continuous circumferential channel.

Adding references that each lack the required structure cannot yield that structure. *See In re NuVasive*, 842 F.3 1376 (Fed. Cir. 2016).

H. The Combined Geometry Becomes Self-Contradictory.

If the POSITA attempted to integrate the three designs:

1. Noonan's monocore blocks the annulus needed by Belykov;
2. Belykov's coaxial tube eliminates Noonan's radial chambers; and
3. The multipart stack of one reference negates the structural logic of the

next.

The result is not a suppressor — it is a contradictory schematic. There is no way to “merge” these systems without discarding their functionality. Thus, the combination is nonobvious.

I. Motivation to Combine is Absent.

Petitioner again asserts the same boilerplate that “A POSITA would combine them to improve suppressor performance.” The Board routinely rejects this as insufficient.

The combination would:

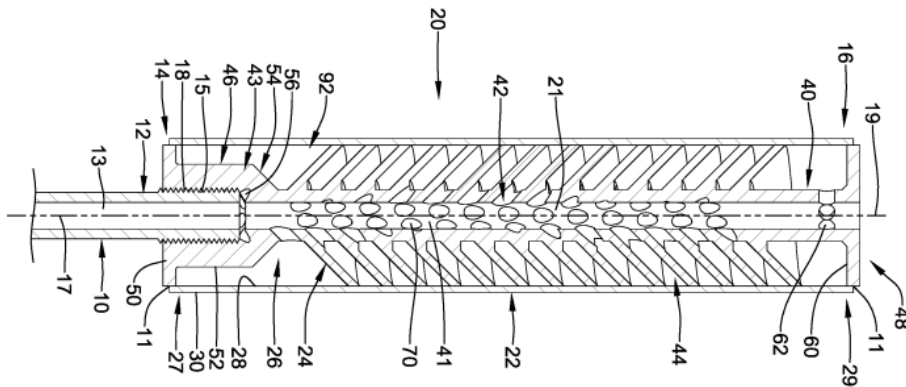
- destroy the annulus in Belykov,
- destroy the venting architecture in Noonan.

Destroying essential features of each reference is not a motivation to combine.

XIII. GROUND 6 FAILS

A. Alleged Obviousness of Muceus in View of Slack.

Slack and Muceus cannot be combined without destroying each other's function. Slack requires conical baffles which cannot coexist with the '906 Patent.



Slack Fig. 1

Slack's conical baffles require:

- specific taper angles,
- axial seating surfaces,
- turbulence channels,
- radial deflection geometry.

B. Muceus Does Not Disclose a Circumferential Channel.

Muceus teaches:

- a linear compensator,
- front-venting geometry,

- chambers with radially oriented deflectors.

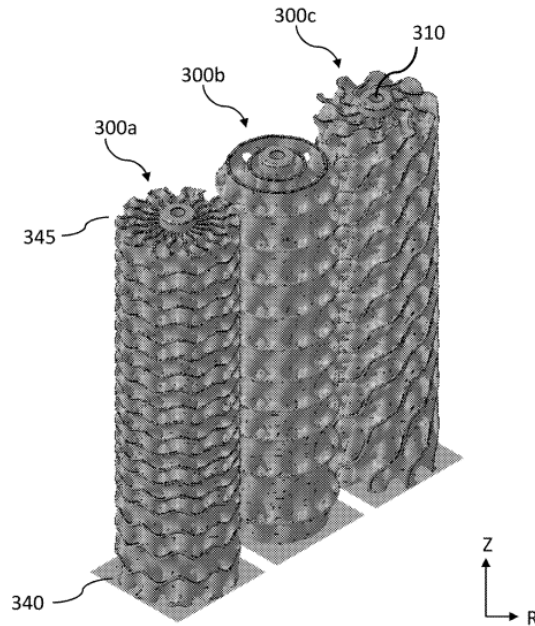


FIG. 3

Muceus Fig. 3

Muceus does *not* disclose axial equalization. Key structural gaps include:

1. No annular channel.
2. No circumferential structure.
3. No end-to-end axial communication of gases.
4. No removable core with outer-surface apertures.

Thus, Muceus cannot supply the missing “channel” limitation.

The stated purpose of Muceus:

- direct blast forward,

- reduce flash signature,
- prevent lateral gas leakage.

The stated purpose of the '906 Patent is to enable axial pressure equalization in a continuous channel. None of these design philosophies align. A POSITA would not incorporate Muceus's radial vents into a suppressor designed around enclosed chambers.

C. The Asserted Combination Would Destroy Structure.

Implementing Muceus' radially oriented geometry into Slack's internal housing would:

- break annular continuity,
- add radial vents that destroy axial communication,
- contradict the '906 Patent's uniform cylindrical design.

Thus, combining them cannot yield the claimed channel. Muceus fails to supply the missing claim limitations. The references are fundamentally incompatible.

There is no rationale for this combination — without detailed engineering analysis or compatibility discussion is improper under *KSR*.

Ground 6 fails due to structural incompatibility, insufficient rationale, and failure to disclose the required limitations.

Neither reference provides:

- a continuous annular void,
- longitudinal axial flow, or
- pressure equalization.

Patent Owner is left to speculate on where the channel is taught. *See Feit Elec. Co., Inc. v. Philips Lighting N. Am. Corp.*, IPR2018-00790, Paper 9 at 15 (Board finding Petitioner failing to meet their burden under 35 U.S.C. § 312(a)(3) when Petitioner failed to “explain how” the identified prior art components meet “the structures Petitioner identifies”); *Becton, Dickinson and Co. v. Baxter Int’l Inc.*, IPR2018-01741, Paper 8 at 16 (PTAB Mar. 18, 2019) (“Patent Owner should not be required to speculate the basis for Petitioner’s contentions that the relied-upon structures are the same as or equivalent to the corresponding structure in the [asserted] patent.”); *Impinj, Inc. v. NXP B.V.*, IPR2020-01629, Paper 13 at 14–16 (Denying institution because the “Petitioner does not provide sufficient evidence and argument to support structural equivalence” and denying institution).

D. Motivation to Combine is Absent.

The references cannot be combined to disclose the claimed channel or the claimed functional behavior. This is not permissible under:

- *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007);
- *In re NuVasive*, 842 F.3d 1376 (Fed. Cir. 2016);
- *Arendi S.A.R.L. v. Microsoft Corp.*, No. 16-1249 (Fed. Cir. 2018); and

- *Metalcraft v. Mayville, Inc. v. Toro Co.*, 848 F.3d 1358 (Fed. Cir. 2017).

PTAB precedents require non-hindsight, reference-specific motivation.

XIV. GLOBAL DEFICIENCY SUMMARY AND TABLES.

Claim Requirement	Required by '906 Patent	Belykov	Noonan	Sclafani	Slack	Muceus	Conclusion
Continuous circumferential channel	Must encircle core 360° from first to second end	✗ Interrupted by baffles & supports	✗ monocore chambers	✗ Threaded chambers	✗ Conical radial chambers	✗ radial ports	None disclose
Axial pressure equalization	Must equalize pressure from first end → second end	✗ Multiple sealed chambers	✗ Sealed chambers	✗ Thread-seal chambers	✗ Radial turbulence	✗ Forward blast routing	None disclose
Channel between housing & core	Must be deliberately engineered	✗ Not continuous	✗ No annular gap	✗ No annular gap	✗ No annular gap	✗ No annular gap	None disclose
Core apertures feeding channel	Outer-surface apertures feeding circumferential path	✗ Radial pockets	✗ Side vents to discrete chambers	✗ Local ports	✗ Local vents	✗ Blast ports	None disclose
Uniform inner compartment	Housing must maintain single circumference	✗ Baffle supports	✗ Polygonal chambers	✗ Threaded interfaces	✗ Conical steps	✗ Radial ports	None disclose
Removable core with functional annulus	Core must be removable while maintaining channel	✗ Annulus blocked	✗ Monocore geometry, incompatible	✗ Threaded stack incompatible	✗ Baffle alignment incompatible	✗ Flash-hider incompatible	None disclose nor suggest

A. Claim Deficiency Summary.

Below is a direct mapping showing why challenged claim remains patentable.

Claim	Challenged Feature(s)	Rebuttal Summary	Conclusion
1 (Independent)	1. Circumferential channel, 2. Channel from first to second end 3. Longitudinal pressure equalization 4. Uniform inner compartment 5. Core apertures opening into channel 6. Removable core maintaining annular continuity	None of the asserted references discloses or suggests the above six features, either individually or in combination. Each ground fails independently.	All Grounds (1–8) fail; Claim 1 remains patentable.
2	3D-printed removable core	All references rely on machined, welded, or stacked components; Prior art assumptions are structurally incompatible. Cited art uses threaded, conical, snap-fit, or welded caps. No disclosure of a ledge that supports a removable core/channel system.	Claim 2 remains patentable.
3	Endcap with plurality of vent apertures	Petitioner mischaracterizes prior art vents. Claimed vents interact with a continuous circumferential channel—absent from all references.	Claim 3 remains patentable.
4	Muzzle adapter with specific configuration	Prior art muzzle adapters cannot function with a removable core, uniform bore, or circumferential channel.	Claim 4 remains patentable.
5	Endcap ledge flush with second end	Cited art uses threaded, conical, snap-fit, or welded caps. No disclosure of a ledge that supports a removable core/channel system.	Claim 5 remains patentable.
6 & 7	Endcap sidewall within inner compartment; threaded sidewall.	These depend on the uniform compartment, removable core, and circumferential channel. All are missing from prior art.	Claims 6–7 remains patentable.
10 & 11	Baffles interacting with outer core apertures, inward baffle extrusion	No reference teaches baffles on the inner removable core surface interacting with outer apertures and a circumferential channel.	Claims 10–11 remains patentable.

B. Reference Deficiency Table.

Reference	Why It Fails
Belykov	No axial continuity; annulus blocked by baffles/support ribs; no circumferential channel; no pressure equalization
Noonan	Monocore blocks annulus; polygonal chambers; no axial flow; no circumferential channel
Sclafani	Threaded baffle stack; radially isolated chambers; no 360° flow; no axial communication
Slack	Conical baffles; stepped chambers; radial vents; axial flow intentionally obstructed
Muceus	radial outward blast; no annulus; no suppressor-style channel; geometry
Conclusion:	None can plausibly supply the claimed channel, and none can be combined to produce it.

C. Overall Finding: All Grounds Fail.

Every claim survives because the Petition never identifies — and cannot identify — any structure in the art that corresponds to the continuous circumferential pressure-equalizing channel of the '906 Patent. The dependent claims survive for the same reason, and additionally because their secondary limitations (3D-printing, vent apertures, endcap structures, hexagonal geometry, inward-extruded baffles) are wholly absent from the art.

XV. REBUTTAL OF PETITIONER'S EXPERT WITNESS

A. Rebuttal to Expert's Analysis of Belykov.

Petitioner's expert Robert Silvers opines that Belykov's annular clearance teaches a continuous circumferential channel.

However, Belykov's annulus is interrupted by baffle walls. Structural ribs eliminate circumferential continuity. Axial flow is blocked at multiple points. No axial pressure equalization is possible. Core apertures do not feed this "channel."

The expert never reconciles these discontinuities.

B. Rebuttal to Expert's Analysis of Noonan.

Petitioner's expert Robert Silvers opines that Noonan's monocore chambers are "effectively a channel."

However, Noonan's chambers are interrupted by threading and sound-absorbing material. Noonan teaches expulsion of gases backwards.

A “channel” cannot be composed of unconnected sealed chambers. Noonan teaches the opposite of axial equalization.

C. Rebuttal to Expert’s Analysis of Sclafani.

Petitioner’s expert opines that threaded ring baffles in Sclafani permit circumferential flow.

However, Sclafani’s threads block circumferential flow. A POSITA would know that Sclafani’s chambers are sealed by baffle geometry and formed specifically to prevent axial flow between stages.

The expert’s statement is mechanically impossible.

D. Rebuttal to Expert’s Analysis of Slack.

Petitioner’s expert opines that Slack’s baffle and radial vents create a continuous flow path.

However, Slack is explicitly designed to create: turbulence, radial venting, and isolated chambers.

Slack’s device disrupts axial flow on purpose. The expert identifies no mechanism for pressure equalization.

E. Rebuttal to Expert’s Analysis of Muceus.

Petitioner’s expert opines that Muceus’s ports teach a circumferential channel. However, Muceus is not designed for internal gas management along a housing bore, and contains no annular void (continuous or not).

The expert mischaracterizes expelled gas volume outside the device as internal flow inside a channel.

This is a category error of Mr. Silvers.

F. The Expert Declaration Should Receive Little or No Weight.

Given the errors above, Ex. 1008 fails to provide the analysis required under PTAB and Federal Circuit standards:

- It is conclusory.
- It is contradictory.
- It is physically implausible.
- It is structurally incorrect.
- It conflicts with the intrinsic record.

Accordingly, the Board should give the Declaration minimal weight.

XVII. DISCRETIONARY DENIAL UNDER 35 U.S.C. § 314(a)

Patent Owner previously asserted its arguments below regarding discretionary denial in its separately brief Request for Discretionary Denial, and refers to Patent Owner's exhibits 2001 – 2004 here without refiling the same. These arguments are made again here in the preliminary response.

On August 29, 2025, Petitioner Dead Air filed a civil action in federal court (the "Civil Action" or "Parallel Litigation") against Jarvis Arms including claims for, *inter alia*, a declaratory judgment of non-infringement of the '906 Patent. (Ex.

1012 ¶¶ 22 - 34). Defendant Jarvis Arms interposed counterclaims in its Answer and Counterclaims on October 13, 2025. Ex. 2001. Petitioner thereafter asserted invalidity as an affirmative defense to these Counterclaims on November 3, 2025. Ex. 2002. Nearly two months after filing the Civil Action, Petitioner Dead Air filed its above-captioned IPR Petition before the Board. Dead Air filed the Parallel Action, which now involves invalidity of the '906 Patent, in U.S. District Court prior to its Petition. As further asserted below, Patent Owner asserts the Petition should be barred by 35 U.S.C. § 315(a), and the Board should deny institution of *inter partes* review as to all grounds set forth in the Petition.

With respect to the *Fintiv* factors, the Petition should be denied because there is likely to be overlap between the assertions in this IPR and the Parallel Litigation, and because the Petitioner in this IPR is the same as the Plaintiff in the Parallel Litigation. The policies behind *Fintiv*, including reducing the potential for duplicative efforts and inconsistent results, thus favor discretionary denial. There can be no doubt that in filing the Parallel Litigation before this IPR, Petitioner knew it was commencing a case in which validity would become at issue.¹

The Petitioner has failed to meet its burden under 35 U.S.C. § 314(a) and 37 C.F.R. § 42.108(c) of establishing a reasonable likelihood of success that any of the challenged claims would be unpatentable because: (1) the asserted prior art

¹ *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019 (PTAB Mar. 20, 2020).

fails to disclose all claim limitations; (2) motivation to combine is deficient; and (3) Petitioner is seeking to apply prior art already considered by the Examiner, including Sclafani, in combination with cumulative art.

The Petition fails to show there is a reasonable likelihood that Dead Air will prevail on any challenged claims.

A. Petitioner Has Commenced Parallel Litigation Involving Validity.

Prior to filing its present Petition, Dead Air filed the Civil Action challenging the validity of the '906 patent, in which Civil Action Dead Air has interposed affirmative defenses for patent invalidity. *Cf.* Exs. 1012 and 2002. Section 315(a)(1) mandates that an IPR “may not be instituted if, before the date on which the petition for such a review is filed, the petitioner or real party in interest filed a civil action challenging the validity of a claim of the patent.”

Dead Air is the plaintiff in this Parallel Litigation and it “filed a civil action” within the meaning of section 315(a) before filing this IPR. A “civil action” simply refers to a claim in federal court instituted by filing a complaint. *See* Fed. R. Civ. P. 2 (“there is one form of action – the civil action”); Fed. R. Civ. P. 3 (“A civil action is commenced by filing a complaint with the court”); *Hallstrom v. Tillamook Cty.*, 493 U.S. 20, 26 (1993) (stating same proposition).

Although Dead Air asserted a single claim at filing for declaratory judgment of patent noninfringement, Dead Air knew when filing that validity would become

an issue in the Parallel Litigation and Dead Air has since interposed affirmative defenses in the Civil Action challenging the validity of the '906 Patent, which constitutes an amendment to pleadings effective as of filing. As such, the Board should deny institution of the IPR under 35 U.S.C. § 315(a)(1).

It is irrelevant that Petitioner's invalidity claim was not asserted at the time it filed its initial complaint. *See* Fed. R. Civ. P. 15(a) (relation back of amended pleading to the date of the original pleading). It is also irrelevant that Dead Air has tried to stylize its invalidity claim as an affirmative defense rather than a direct claim in hopes of avoiding an automatic bar under 35 U.S.C. § 315(a)(1). Dead Air's counterclaim in reply should be treated in the same way as if Dead Air had amended its complaint under Fed. R. Civ. P. 15 to add its invalidity claim. No distinction can be drawn between an invalidity claim stylized as an affirmative defense and an invalidity claim made directly. Nothing in the statute or the federal rules limits "a civil action" to only the first pleading filed by the plaintiff. As such, the invalidity claim/defense is treated as an amendment to its complaint. *See Century Pac., Inc. v. Hilton Hotels Corp.*, 528 F. Supp. 2d 206, 213 n. 3 (S.D.N.Y. 2007) ("a reply counterclaim is to be treated as a motion to amend the complaint under Rule 15(a)"); *Southeastern Indus. Tire Co., Inc., v. Duraprene Corp.*, 70 F.R.D. 585, 588 (E.D. Pa. 1976) ("counterclaim in reply [treated] as an amendment to the complaint"); *see also Heath v. Audatex N. Am., Inc.*, 2012 WL 177413, at *3

(E.D. Pa. 2012) (motion for leave to file counterclaim in reply treated as motion to amend complaint) (Ex. 2016); *Baker v. Borg Warner Morse Tec, Inc.*, 2012 WL 195011, at *3 (S.D.W. Va. 2012) (treating motion to file counterclaim in reply as motion to amend the complaint) (Ex. 2017); *Polymer Indus. Prod. Co. v. Bridgestone/Firestone, Inc.*, 211 F.R.D. 312, 315 n. 5 (N.D. Ohio 2002) (“a counterclaim to a counterclaim, or a counter-counterclaim, would be effected by simply amending the complaint”).

Dead Air thus “filed a civil action challenging the validity of a claim of the patent,” and did so “before the date on which the petition [was] filed.” *See* 35 U.S.C. § 315(a)(1). The Petition is barred by 35 U.S.C. § 315(a)(1). The Board lacks jurisdiction to institute or conduct an IPR. *See id.*; *GTNX, Inc. v. Intra, Inc.*, CBM 2014-00072, Paper 20, at 4 (Dec. 10, 2014) (time limits are “a Congressional limitation on the Board’s jurisdiction”), *aff’d*, 789 F.3d 1309 (Fed. Cir. 2015).

Patent Owner asserts that Petitioner’s affirmative defense of invalidity was not a “counterclaim” in “response to an action for patent infringement” but an amendment to the original complaint in the Parallel Litigation filed by Petitioner, and therefore the present Petition falls outside the “counterclaim” exception of 35 U.S.C. § 315(a)(3). A key distinction is that it is Petitioner who chose the Idaho forum before filing the IPR and hailed Patent Owner there, not the Patent Owner.

B. Petitioner’s Affirmative Defense Should Be Construed as a Claim.

Construing “counterclaim” to include Dead Air’s affirmative defense in reply would render section 315(a)(1) meaningless and frustrate Congress’ intent that an infringer decide between (i) challenging validity in court or (ii) seeking an IPR, in order to avoid harassing the patentee. *See Clio USA, Inc. v. Procter & Gamble Co.*, IPR 2013-00438, Paper 9, 8 (Jan. 9, 2014) (§ 315(a)(1) serves to prevent use of IPR “for harassment or delay”). Congress explicitly articulated these concerns in the context of a predecessor bill to the AIA. *see St. Jude Med., Cardiology Div., Inc. v. Volcano Corp.*, IPR 2013-000258, Paper 29 at 3 (Oct. 16, 2013) (reviewing the legislative history of § 315).

Any accused infringer could skirt the prohibition of section 315(a) by filing a declaratory judgment of non-infringement against the patentee, waiting a mere twenty-one days for the patentee to file its compulsory counterclaim for infringement, then filing a counterclaim in reply seeking a declaratory judgment of invalidity, and thereafter filing an IPR. *See Fed. R. Civ. P. 12(a)* (setting twenty-one day period to respond to complaint); *Capo, Inc. v. Dioptics Med. Prods., Inc.*, 387 F.3d 1352, 1356 (Fed. Cir. 2004) (“In an action for declaration of noninfringement, a counterclaim for patent infringement is compulsory and if not made is deemed waived”). Congress did not intend to allow the statutory bar to

turn on manipulative pleading, such as *Dead Air*'s, or to allow such absurd results. *In re Ybarra*, 259 B.R. 706, 708 (S.D. Ill. 2007).

C. The Board Should Deny Institution Under 35 U.S.C. § 325 (d).

Section 325(d) gives the Board express discretion to deny a petition when “the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d). *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 17-18 (PTAB Dec. 15, 2017).

Applying the applicable factors demonstrates that Petitioner bases its unpatentability arguments on prior art considered by the Patent Office which is cumulative of prior art applied to the challenged claims. Additionally, Petitioner has not identified any material error by the Examiner, and the Board.

Should the Board determine that denial of institution is discretionary instead of mandatory under 35 U.S.C. § 315(a), the *Fintiv* factors favor denial.

1. *Fintiv Factors 1 and 2: Stay of the Proceedings and Trial Date.*

The Petitioner/Plaintiff in the present action commenced the Parallel Litigation for declaratory judgment of non-infringement on August 29, 2025, and then stipulated to stay on October 31, 2025, which was entered by the Court on November 6, 2025. Ex. 2003. Only after stipulating to the stay, did the Petitioner/Plaintiff then interpose an affirmative defense for patent invalidity. Ex.

2002. Petitioner waited until after stipulating to the stay to interpose a claim/defense which would have weighed against institution of the IPR and against Defendant’s decision to seek a stay in view of the absence of invalidity claims.

The Director has found that a Patent Owner’s strong settled expectations alone favor discretionary denial even where, as here, the underlying district court litigation has been stayed pending the PTAB’s decision on institution. *See, e.g., Kahoot! AS v. Interstellar Inc.*, IPR2025-00696, Paper 26, 2 (July 31, 2025) (denying institution despite “the parallel district court proceeding ... stayed.”).

2. Fintiv Factor 3: Investment in the Parallel Proceeding.

Fintiv Factor 3 “consider[s] the amount and type of work already completed in the parallel litigation.” *Fintiv* at 9. This includes investment by both “the court and the parties” and is measured “at the time of the institution decision.” A “countervailing consideration,” however, is whether “Petitioner acted diligently” in filing its petition (which, in this case, was filed after the Civil Action). *Fintiv* at 11.

3. Fintiv Factor 4: There is Overlap Between the Cases.

Fintiv Factor 4 concerns the extent to which arguments and evidence before the district court and the PTAB will overlap. The *Fintiv* panel observed that where a “petition includes the same or substantially the same claims, grounds, arguments, and evidence” as presented in the district court litigation, “concerns of inefficiency and the possibility of conflicting decisions [are] particularly strong.” *Fintiv* at 12.

Plaintiff has asserted in the Parallel Litigation that, “[t]he claims of the Asserted Patent are invalid for failure to comply with the requirements of Title 35 of the United States Code, including, without limitation, 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.” *See Ex. 2002, 6 - 7.* Plaintiff is making § 103 invalidity assertions in the Parallel Litigation just as it is in the IPR Petition, creating overlap between the Petition and Parallel Litigation. Additionally, no stipulations, such as a *Sotera* stipulation, have been reached.

4. *Fintiv* Factor 5: The Petitioner and Plaintiff in the Parallel Litigation Are the Same Party.

The Petitioner is the same party which commenced the Parallel Litigation now involving invalidity claims asserted in the Parallel Litigation. *See Ex. 1012.*

5. *Fintiv* Factor 6: The Merits of the Petition Favor Denial.

As provided above, the merits favor denial of institution.

XVII. CONCLUSION

For all the reasons set forth above, the Board should deny institution of Inter Partes Review of U.S. Patent No. 12,018,906. Petitioner has failed to demonstrate a reasonable likelihood that it will prevail with respect to any challenged claim.

Across all eight asserted grounds:

- None of the references disclose or suggest a continuous, circumferential, longitudinal pressure-equalizing channel,

- None disclose outer-surface core apertures feeding such a channel,
- None disclose a uniform inner compartment capable of supporting such a channel,
- None disclose a removable core compatible with the claimed geometry,
- None disclose or suggest the functional requirement of pressure equalization from the first end to the second end,
- And none of Petitioner's combinations remedy these deficiencies.

Each ground collapses at its foundation because the central inventive element — the continuous circumferential channel performing longitudinal pressure equalization — is absent from all asserted art.

Furthermore, the Petition relies on:

- incorrect constructions,
- unsupported expert assertions,
- hindsight-driven reconstructions,
- internally inconsistent combinations,
- mechanically incompatible geometries,
- and a fundamental misunderstanding of gas-dynamic behavior in suppressor systems.

For these reasons, the Petition fails on the merits. Even if the Petition had provided a prima facie showing, the Board should decline to institute under 35 U.S.C. § 314(a). The parallel district court action presents identical invalidity issues, between the same parties, and is already progressing.

Accordingly, Patent Owner respectfully requests that the Board DENY institution of inter partes review in Case No. IPR2026-00013.

Respectfully Submitted this the 30th day of January, 2026.

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CERTIFICATION OF WORD COUNT AND PAGE COUNT

Under provisions of 37 CFR § 42.24, the undersigned hereby certifies that the word count for the foregoing Preliminary Response totals less than 14,000 words.

Dated this the 30th day of January, 2026.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that, pursuant to 37 C.F.R. §§ 42.8, copies of the foregoing PRELIMINARY RESPONSE OF PATENT OWNER and exhibits including this certificate are being caused to be served in their entirety via electronic mail on Petitioner's counsel through the electronic filing system of the PTAB.

Dated: January 30, 2026,

/steven rinehart/

Steven Rinehart