

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

JUNIPER NETWORKS, INC.,
Petitioner

v.

PORTSMOUTH NETWORK CORP.,
Patent Owner

Case No. IPR2024-00913¹

U.S. Patent No. 8,014,394

PATENT OWNER'S SUR-REPLY

¹ IPR2024-00989 has been consolidated with IPR2024-00913. See Institution Decision (Paper 5) at p. 54.

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Patent Owner Portsmouth Network Corp. ("PO") respectfully submits this Sur-Reply to Petitioner's Reply (Paper 26, "Reply") regarding U.S. Patent No. 8,014,394 (Ex. 1001, "'394 patent").

I. Introduction

Patent Owner's Response ("POR") exposed Petitioner's fundamental misunderstanding of Blease—a flaw that undermines its entire invalidity theory. Rather than addressing this directly with admissible evidence or a substantive technical rebuttal, the Reply deflects. It mischaracterizes the POR, shifts focus away from its own misreading of Blease, and relies on strawman arguments. Notably, instead of citing Blease itself, Petitioner cherry-picks misleading quotes from an irrelevant declaration submitted in reexamination of the '394 Patent and filings from unrelated IPRs. This failure to engage with the actual arguments or provide relevant evidence in this proceeding underscores that Petitioner is not responding on the merits, but attempting to distract from them.

II. Blease Discloses A Centralized Control Architecture

Petitioner's Reply fails to rebut Patent Owner's core argument: Blease teaches a centralized control unit, not a distributed one. Petitioner's contrary assertion relies on a hindsight reconstruction using the '394 patent as a template and a selective reading of just eleven words from Blease's specification. When properly understood, Blease's architecture clearly reflects centralized control, and Petitioner's arguments

do not withstand scrutiny. Accordingly, the Board should find that Blease discloses a centralized control unit and not a distributed control unit.

A. Petitioner's "Distributed" Argument is Legally and Factually Flawed

Petitioner's Reply is based on an incorrect definition of "distributed" and a misinterpretation of Blease's disclosures.

First, Petitioner improperly relies on the '394 Patent, and excerpts of Dr. Olivier's declaration² discussing the '394 Patent in a reexamination proceeding,³ to define the term "distributed," as used in Blease. Reply at 5, 6. But Blease should be interpreted based on its own disclosures, not based on the '394 Patent's disclosures.

² Petitioner faults Dr. Olivier for not recalling a declaration from a separate reexamination. Paper 24. Petitioner failed to properly notice that declaration in this proceeding under 37 C.F.R. § 42.53. Ex. 1026, 9:21-11:22. Instead, Petitioner ambushed Dr. Olivier with the declaration, attempting to create a misleading inference about his memory. Ex. 1026, 9:21-11:22. This gamesmanship should not be rewarded.

³ The Reply attempts to deflect from its failure to substantively address the POR by asserting that "PO withheld its reexamination declaration from the Board." Reply at n.2. However, Petitioner cites no authority requiring PO to disclose an irrelevant, or at best duplicative, declaration.

Microsource, LLC v. Eco World Grp, 587 F. Supp. 3d 770, 798 (N.D. Iowa 2022) (internal citation omitted). Indeed, Petitioner's interpretation of Blease based on the '394 Patent is classic hindsight that the Board should reject. *Mintz v. Deitz & Watson, Inc.*, 679 F.3d 1372, 1379 (Fed. Cir. 2012) (“[T]he proper analysis requires a form of amnesia that ‘forgets’ the invention and analyzes the prior art and understanding of the problem at the date of the invention.”).

Second, Petitioner's assertion that Blease discloses a “distributed” control unit is vague and unsupported. Petitioner relies on a single sentence: “control unit 44 and its functionality may be distributed within IFCs 54” to support Petitioner's definition. Reply at 7. But this sentence does not explain what Blease means by “distributed.” Ex. 2005 at ¶ 51 (“nowhere in Blease is it described how this functionality may be distributed or what is meant by ‘distributed’”). Using support from Blease, technical reasoning from PO's expert, and objective extrinsic evidence, however, PO showed that Blease describes a single control unit, and that “distributed” refers to dividing, not replicating, functionality. POR, 15-22; Ex. 2005 ¶¶ 47–54 (“It is clear that Blease only describes centralized control for the router, stating a single control unit 44”) (citing Ex. 1005 Col. 2:61-64 (“**a control unit**”)); Ex. 2003, 2004, and 2006 (dictionary definitions).⁴

⁴ Petitioner incorrectly asserts that PO relied on a single dictionary definition. See

Blease's control unit (44) manages routing (46), multicast forwarding (48), and OIF mapping (50), all centralized functions. *See* POR, 11-12; Ex. 1005, Fig. 4; 8:39–11:17. Specifically, Blease's core principles include:

1. Mapping membership requests to a dedicated OIF via a centralized map (Ex. 1005, 2:23–35),
2. Sending one copy of the multicast stream to the switch (*Id.*),
3. Relying on the switch—not the router—for replication (*Id.*).

Replicating Blease's centralized control unit across IFCs contradicts Blease's design, which emphasizes efficiency, reduced overhead, and centralized routing decisions. POR, 11-12; Ex. 1005, 9:1–24; 9:43–61. Petitioner does not explain how replication would preserve these benefits, nor does Blease support such replication. Reply at 7-13.

Simply put, Blease's features are incompatible with Petitioner's distributed architecture theory and PO's argument that Blease's centralized control is incompatible with Weyman's local control remains unrebutted.

Reply at 5. In fact, PO submitted three distinct definitions. *See* Exs. 2003, 2004, and 2006. Petitioner's attempt to downplay this evidence is unpersuasive, especially given its failure to offer any competing definitions. The lack of rebuttal strengthens PO's argument that Blease discloses a centralized control architecture.

III. It Would Not Have Been Obvious to Combine Blease, Weyman, and Hu

The POR explained that it would not have been obvious to implement Weyman's router distribution in Blease's control unit 44. Petitioner repeats the argument that a POSITA would combine Blease and Weyman due to Blease's lack of implementation details and introduces a new argument concerning port identifiers being used to identify ports across a distributed fabric. These arguments lack merit.

1. PO Does Not Attack Weyman In Isolation

Petitioner wrongly asserts that PO "attacks Weyman in isolation" and raises improper bodily incorporation arguments. Reply at 8. These arguments miss the point and are wrong. The POR repeatedly explained how there is no motivation to combine Blease with Weyman and Hu and how Petitioner failed to satisfy its burden of proving that the Blease-Weyman-Hu combination meets the challenged claim limitations. POR, 14-25. In doing so, the POR did not just attack Weyman; it explained how the proposed combination would not have been obvious to a POSITA. For example, the POR explained that Petitioner's combination improperly relies on its misinterpretation of Blease's centralized control unit as replicable across IFCs and then combines this flawed reading of Blease with Weyman's local port distribution architecture. POR at 15-16. Thus, it is the proposed combination of Blease, Weyman, and Hu when viewed together, not just Weyman alone, that fails to render the challenged claims of the '394 patent obvious under §103.

Moreover, PO's argument against combinability is not based on improper

bodily incorporation. Petitioner argued that because Blease lacks implementation details for its “distributed control,” a POSITA would look to Weyman for guidance. Petition at 25. The POR explained that Blease and Weyman use fundamentally different multicast techniques, making such a combination implausible. POR at 22-24; *Id.* at 21 (“because Blease and Weyman are directed to different multicast techniques, a POSITA would not have looked to Weyman and would not have had success in modifying Blease in view of Weyman.”); Ex. 2005 ¶ 66. For example, PO explained that Blease transmits multicast streams through a different interface than the one receiving the request, while Weyman uses the same interface for both. POR at 21. Additionally, Blease describes a centralized control unit, while Weyman relies on distributed control with distinct forwarding databases. POR at 15-19. These fundamental architectural differences support PO’s conclusion that a POSITA would view the techniques as incompatible. They are thus not bodily incorporation arguments, they are arguments that a POSITA would not even be motivated to look to Weyman. POR, 21 (“because Blease and Weyman are directed to different multicast techniques, a POSITA would not have looked to Weyman.”). Petitioner ignores, and fails to refute, these distinctions. Reply at 9, 13.

Further, in arguing against combinability, PO does not take an unreasonably narrow view of Weyman’s forwarding databases, as Petitioner asserts. While Petitioner points to a passage from Weyman, referencing Donoghue, not only is this

a new argument, but this passage also does not support Petitioner's point. Petitioner's Reply asserts for the first time that forwarding databases need not reference fabric ports because port identifiers may be used instead. Reply at 8–9. This argument is flawed. The cited passage describes an alternative system where a special header uniquely identifies ingress and egress ports across a distributed fabric. Reply at 8–9 (citing Ex. 1006 ¶29). While this allows for unique port identification, it does not imply centralized control.

Even with port identifiers, each port remains tied to a specific unit, and routing decisions are still made locally. Nothing in Weyman suggests a unified forwarding database spanning the entire fabric or centralized port management. As explained in the POR, Weyman's architecture continues to reflect local control. POR at 16–18.

2. Petitioner's Alleged Incompatibilities are Not Manufactured

Petitioner incorrectly dismisses PO's incompatibility argument as "manufactured." Reply at 9, 13. For example, Petitioner asserts that the alleged incompatibilities between Blease and Weyman are manufactured because distributed architecture and synchronization go hand in hand, Blease allegedly keeps track of all streams, and because PO purportedly attacks Blease in isolation. Petitioner's arguments are incorrect.

First, Petitioner incorrectly presupposes that Blease discloses a distributed architecture that goes "hand-in-hand with synchronization" based on the vague

statement in Blease: “may be distributed within the IFC.” Reply at 10 (citing Ex. 1005, 11:55-57). Petitioner’s assertion is based on Dr. Olivier’s declaration during the ’394 Patent reexamination. Reply at 10. But Dr. Olivier’s statements were about the ’394 Patent’s distributed architecture—not about Blease’s disclosures. Ex. 1027, ¶ 14 (“I have been asked to review the ’394 Patent”). This argument is thus irrelevant as to whether Blease or Weyman disclose the claimed synchronization functionality. Moreover, as previously explained, Blease describes only a centralized control unit. *See infra* § II. Without any supporting evidence, Petitioner’s conclusory assertion that Blease’s architecture inherently involves synchronization should be given no weight.

Second, Petitioner ignores PO’s actual argument (Reply, 10), which is that “neither Blease nor Weyman teach synchronizing multicast distribution information in response to requests.” PO at 20 (citing Ex. 2005 ¶ 69).⁵ Petitioner does not address this argument head on, instead choosing to ignore that the POR attacks both Blease

⁵ Petitioner also makes a technically flawed argument concerning synchronization: “even if Blease is not concerned with synchronizing,” Weyman teaches that synchronization provides benefits. Reply at 10. But even if Weyman teaches synchronization benefits, a POSITA would not have been motivated to implement them in Blease due to architectural differences. POR at 21; Ex. 2005 ¶ 54.

and Weyman, not just Blease in isolation. As explained above, a POSITA would not have looked to Weyman for implementation details based on Blease's disclosure of a distributed architecture. *Infra* § III.

Third, Petitioner criticizes PO's well-reasoned argument that "Blease does not keep track of all streams" as "unsupported" and "nonsensical." Reply at 11.⁶ As previously explained, Blease discloses "[i]f the multicast stream is already forwarded to the network switch, the entry in multicast forwarding information 48⁷ remains unchanged." POR, 20; Ex. 2005 at ¶ 22; Ex. 1005, 10:67-11:2. In other words, Blease keeps track of the first unique instance of a stream in the multicast

⁶ If Petitioner is arguing that only tracking or updating the multicast forwarding list for the first unique instance of a stream satisfies the "each list indicating **all of one or more multicast packet streams**" and the "**updating the respective list**" claim limitations, Petitioner never raised this argument in the Petition nor explained how a POSITA would understand the claim limitations to only require keeping track of the first unique instance of a stream to satisfy the claim limitations. *See* Ex. 1001, claim 1[b] ("each list indicating all of one or more multicast packet streams"), claim 1[d] ("updating the respective list").

⁷ Petitioner has taken the position that multicast forwarding information meets the "list" limitation. *See, e.g.*, Petition, 37.

forwarding information, and for all subsequent streams the “multicast forwarding information does not change.” *Id.* Even Petitioner concedes that “if the multicast stream is already currently forwarded at the time of the request, no change is needed.” Reply at 12. This concession directly supports PO’s position that Blease’s multicast forwarding information only tracks the first unique instance of a stream and does not track **all multicast packet streams**. POR at 20 (citing Ex. 2005 at ¶ 54) (emphasis added). Lastly, Petitioner argues that “even if PO is correct in saying that forwarding information is not changed [when the multicast stream is already currently forwarded], that argument is irrelevant to the ’394 claims, which do not require that every request . . . must result in a change to the claimed ‘list.’” Reply at 12. But this misses the point. As explained in the POR, Blease and Weyman do not teach that each processing unit stores a complete list of multicast pairings. POR at 28; *see also* Ex. 2005 ¶ 67 (“each processing unit must contain all of the multicast pairings in the network element”).

Moreover, Petitioner concedes that some requests are not tracked. For example, when a requested multicast stream is already forwarded, forwarding information remains unchanged. Reply at 12. This admission confirms that Petitioner has not shown that each processing unit maintains a complete list of multicast pairings, as required by the claims. *See, e.g.*, Ex. 1001, claim 1[b] (“each list indicating all of one or more multicast packet streams”), claim 1[d] (“updating

the respective list”). Thus, if in some instances the “list” (e.g., multicast forwarding information) is not changed, Petitioner fails to meet its burden.

IV. Petitioner's Deficient Response to Aggregation and Motivation to Combine Blease and Hu⁸

Petitioner's arguments against combining Blease and Hu rely on broad, unsupported assertions about aggregation and fail to meaningfully engage with the POR's technical and legal arguments. As outlined below, Petitioner's Reply attempts to shift focus through unsupported conclusory statements that undermine its positions. These deficiencies are evident in Petitioner's failure to rebut key arguments concerning technical incompatibility, lack of motivation to combine prior art references, and misapplication of governing legal standards.

1. Petitioner Fails to Rebut PO's Argument That a POSITA Would Not Be Motivated to Combine Blease and Hu Due to Technical Incompatibility

As PO explained, “Hu's request-by-request approach uses a complex system which analyzes in real time the load on ports to determine if each join request's

⁸ Petitioner misrepresents PO's position by citing a statement from a different IPR to support its motivation to combine. Ex. 1028 (“Weyman discloses that aggregated links do not go to users but instead to Ethernet switches”). This conflates two distinct concepts: aggregated links connected to Ethernet switches (a connection topology) and aggregation of Ethernet switches themselves (a structural combination). These are not interchangeable, and Petitioner's argument is misleading and unsupported.

traffic load can be accommodated . . . which is different and incompatible with Blease's stream-by-stream approach." POR, 23. In support, PO identified three independent reasons why a POSITA would not be motivated to combine Blease and Hu, each grounded in technical incompatibility:

- 1) Fundamental differences in network control functionality: Blease and Hu implement significantly different control mechanisms. POR at 22.
- 2) Petitioner's flawed assumption regarding aggregated links: Petitioner's motivation to combine is premised on the incorrect assertion that Blease discloses an aggregated link. It does not, making the proposed combination technically infeasible. POR at 23 (citing Ex. 2005 ¶¶ 56–57).
- 3) Physical connection constraints: Blease's network switch connects to a network device via a single physical link, making it incompatible with Hu's teachings on limiting the use of link aggregation groups. POR at 23–24 (citing Ex. 2005 ¶ 71).

As will be explained below, Petitioner's Reply is silent on each of these points. Petitioner is also silent on the technical distinction between aggregation outputs and aggregation links. POR, 23-24; Reply, 14-16; Ex. 2005 ¶ 56.⁹ Further, Petitioner's

⁹ "Dr. Lavian ignores the express teachings of Blease that network switch is connected to the network device such as a DSLAM over a single physical

Reply does not rebut PO's position that a POSITA would not be motivated to combine Blease's aggregated DSLAM outputs with Hu's link aggregation teachings to form a high-speed link. POR at 23; Ex. 2005 ¶¶ 56–57.

Instead, Petitioner falls back on its argument that PO is individually attacking Blease and Hu. Reply at 13. This mischaracterizes PO's position. The core of PO's argument is that the fundamental differences between Blease and Hu would dissuade a POSITA from combining them. *See Adidas AG v. Nike, Inc.*, 963 F.3d 1355, 1360 (Fed. Cir. 2020) (affirming that substantial evidence supported the finding that a POSITA would not have been motivated to combine two references, in part due to unresolved fundamental differences between them). Petitioner's failure to reconcile the differences identified in the POR alone supports a finding that Petitioner has not met its burden to establish a motivation to combine.

Further, Petitioner argues that PO “fixate[s] on Blease's disclosure of DSLAM” and that PO's expert replies too heavily on DSLAMs. Reply at 14, 15. This misses the point. Petitioner itself highlighted DSLAMs when it pointed to Blease's DSLAM outputs to establish a purported motivation to combine. Petition at 27 (“a POSA would have been motivated to aggregate Blease's ports into LAG”).

connection, which cannot be a high-speed port as described in the '394 Patent.” Ex. 2005 at ¶ 58.

Petitioner cannot now deflect and argue that PO should focus more on Blease's Ethernet switch disclosures. Reply 15. As Dr. Olivier testified, "DSLAMs can't be replaced by Ethernet switches." Ex. 1026 at 13:22–14:4. Thus, a POSITA would not be motivated to combine Blease and Hu due to their technical incompatibility.

2. Petitioner Misapplies the Law on Motivation to Combine And Mischaracterizes The Record

Petitioner argued in its Petition that a POSITA would be motivated to combine Blease's ports into a LAG "to transfer more data." Petition at 27; POR at 24. PO responded that a POSITA would be motivated to instead increase the speed of the single physical link in Blease, avoiding the added complexity of a LAG. POR at 24. Rather than address this point, Petitioner cites *Honeywell* to suggest that PO is arguing for a preferred combination. Reply, 16-17. That is incorrect. PO does not argue for a preferred combination, it simply asserts that a POSITA would choose a less complex alternative, which, as the Federal Circuit affirmed in *Provisur*, supports a conclusion that a POSITA would lack motivation to combine. *Provisur Tech., Inc. v. Weber, Inc.*, 2022 WL 17688071, at *5 (Fed. Cir. Dec. 15, 2022); *see also Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1332 (Fed. Cir. 2019) (affirming Board's finding that a POSITA would not be motivated to combine a reference that would "introduce additional plumbing and complexity and lead to decreased efficiency").

Petitioner further argues that the POR ignores potential benefits of using

LAGs. Reply at 17. This argument is flawed because, as described above, a POSITA would not be able to apply the teachings of Hu's LAGs to Blease's disclosure of a network switch connected to a network device over a single physical connection. *Infra* § IV. Moreover, assuming Blease and Hu were not technically incompatible, Petitioner failed to meet its burden of showing how a POSITA would combine Blease and Hu to achieve the alleged potential benefits (e.g., increased quality of service and accommodation for variable bit rates). Reply at 17. Indeed, simply stating that there are potential benefits of using a LAG, without more, has been consistently rejected as insufficient articulated reasoning to support the legal conclusion of obviousness. *See KSR Int' Co. v. Teleflex Inc. et al.*, 550 U.S. 398, 418 (U.S. 2007); *see also Microsoft Corp. v. Enfish, LLC*, 662 F. App'x 981, 990 (Fed. Cir. 2016).^{10, 11}

¹⁰ Petitioner's reliance on *Intel* is misplaced. Unlike in *Intel*, there's no evidence here that LAG was a known solution to address issues arising from using a single physical connection between a network device and a network switch, as disclosed in Blease. Reply at 17.

¹¹ Petitioner fails to provide any rebuttal to the POR's argument that a POSITA would not have had a reasonable expectation of success modifying Blease's system in view of Weyman and Hu. POR, 25. For that reason alone, Petitioner failed to establish a

V. Petitioner Fails To Explain How The Proposed Combinations Satisfy The Challenged Claims

Petitioner bears the burden of showing, with specificity, how the combination of Blease, Weyman, and Hu meets each challenged claim. Yet, the Reply largely offers conclusory assertions and fails to address key limitations with any meaningful detail. Aside from a single sentence in Blease, the record lacks any explanation of how a POSITA would implement Petitioner's proposed combination to meet the challenged claims.

A. Petitioner Fails To Establish “Multiple Interconnected Processing Units And Multiple Ports” [1[a.i], 8[a.i], 11[b.i], and 18[b.1]

In its Reply, Petitioner simply argues these claim limitations are disclosed. But contrary to Petitioner's assertions, PO's arguments are not based on a flawed interpretation of “distributed,” Petitioner, not PO, misinterprets Blease, and PO does not rely on improper bodily incorporation arguments. Reply at 18.

Petitioner's argument requires “a POSA [to] have implemented Blease's control unit and functionality in each of the IFCs, connected the IFCs (e.g., through a fabric), and synchronized their multicast distribution information.” Petition, 25. But the POR explained that Blease does not disclose copying or replicating the control unit and its functionality in each of the IFCs, and thus, does not disclose these limitations. POR, 25–26. Moreover, PO explained that the proposed

motivation to combine.

combination fails because it lacks a clear explanation of how a POSITA would interconnect Blease's IFCs with Weyman's fabric link, or replicate Blease's centralized control across IFCs. POR, 26. Instead of engaging with these technical deficiencies, Petitioner baselessly asserts that PO improperly analyzes the references individually and does not substantively respond to these arguments. Reply, 18.

For the reasons stated in the POR, and in light of Petitioner's failure to provide any rebuttal evidence or explanation, Petitioner has not met its burden to show that the combination of Blease and Weyman satisfies the claim limitations at issue.

B. Petitioner Fails To Establish “Storing Lists In Each Processing Unit” and “list indicating all of one or more multicast packet streams” 1[b], 11[b.v], 8[b], and 18[b.v]

The Reply argues that PO improperly attacks the references individually and makes a conclusory bodily incorporation argument in support of its assertion that these limitations are disclosed.¹²

But PO does not attack references individually, it attacks the entire combination. POR, 28-31. PO argued that Blease does not disclose copying the control unit (e.g., processor and memory) into each IFC and that the “in each processing unit” is not satisfied. POR at 27–28. Additionally, PO argued that even assuming it were obvious to modify Blease in view of Weyman and Hu (which it is

¹² Petitioner cites to section II.B.2 in the Reply which is a conclusory bodily incorporation.

not), the combination fails to disclose storing lists in each processing unit that **indicate all of one or more multicast packet streams**. POR at 28; *Infra* § III.2 (discussion re the “list” limitations). In doing so, PO attacked the entire combination.

Identifying deficiencies in each reference, however, does not amount to impermissibly attacking the references in isolation. Rather, it highlights the absence of any disclosure, either individually or in combination, that supports the claimed functionality. Petitioner's reliance on bodily incorporation, without any explanation or evidence of how the combination would result in a processing unit storing the required list, is insufficient. Accordingly, Petitioner has failed to meet its burden.

C. Petitioner Fails To Establish “List” 1[b], 1[d] 1[e], 1[g.iii], 8[b], 8[d], 8[e], 8[f.ii], 11[b.v.], 11[b.vi.α], 11[v.vi.β], 18[b.v], 18[c.i], 18[c.ii], 18[d.i]

The Reply incorrectly asserts that lists are the only data structure disclosed in Blease, makes a conclusory statement that data related to multicast forwarding information would have used a list, but then concedes that Blease itself does not explain list formats. Reply at 19.

Simply put, there is no evidence that the claimed “lists” is satisfied. The POR explained that Blease **depicts a mapping table, not a list**. POR, 18-19; Ex. 1005, 12:4–5, Fig. 5. Likewise, data related to multicast forwarding information in a centralized architecture like in Blease, requires the use of a multi-field mapping

table, not a list.¹³ Finally, Petitioner's concession that **"Blease need not explain list formats"** reinforces PO's arguments that the Board **cannot support a finding of unpatentability** with respect to the "lists" limitations. Reply, 19-20.

For the reasons stated in the POR, and considering Petitioner's failure to provide any rebuttal evidence or explanation, Petitioner has not met its burden to show that the combination of Blease and Weyman satisfies the lists limitations.

D. The Limitation "Each List Indicating All Of One Or More Multicast Packet Streams That Are Permitted For Forwarding By The Network Element" Is Directly Relevant To The '394 Patent Claims. 1[b], 8[b], 11[b.v], and 18[b.v]

The Reply states that "if the multicast stream is already currently forwarded at the time of the request, no change is needed" and "even if PO was correct in saying that forwarding information is not changed . . . that argument is irrelevant to the '394 claims." Reply at 12.

This assertion is incorrect. Whether the multicast forwarding information is updated in response to a new stream request is directly relevant to whether the claimed "list" indicates all multicast packet streams permitted for forwarding by the network element. See POR at 31.

¹³ Blease's centralized control architecture requires complex multi-field mapping tables, unlike the '394 Patent's distributed architecture, which uses simple lists for routing and traffic management. See Ex. 1001, 6:35–38.

Petitioner's admission confirms that Blease with Weyman does not maintain a list reflecting "all of one or more packet streams that are permitted for forwarding by the network element." As such, Petitioner failed to meet its burden.

E. Petitioner Failed to Establish "Selectively Forwarding Multicast Packets Associated with the Given Multicast Packet Stream by the Processing Units in Accordance with the Respective Updated Lists" 1[e], 8[e], 11[b.vii.b], and 18[c.ii]

The Reply argues that the "OIF mapper updates multicast forwarding information" and cites to case law holding that prior art teachings that sometimes embody a claimed method teach that aspect of an invention. Reply, 21-22.

But PO is not arguing that the prior art combinations "sometimes" meet the claim limitations, rather the prior art combinations never meet "list indicating all of one or more multicast packet streams" limitation and therefore cannot meet the "selectively forward[] . . . in accordance with the respective updated lists" limitation. POR at 35. As explained in the POR, none of Petitioner's citations demonstrate the existence of the claimed "list" and thus fail to satisfy the entirety of this limitation. POR, 34-36; *see also Infra* §§ III.B, V.B (argument concerning "list indicating all of one or more multicast packet streams").

F. Petitioner Failed to Establish "Distributing the Request Among the Multiple Processing Units" 1[d], 8[d], 11[b.vii.a], and 18[c.i]

The Reply repeats its flawed argument that Blease is a distributed architecture and argues that the results of processing a request (rather than the request itself) can satisfy this claim limitation. Reply, 20-21.

As explained, Blease does not describe any mechanism by which a request is distributed across multiple processing units. POR, 31–34. Instead, the control unit (44) centrally receives and processes requests, accesses the OIF maps (52), and updates multicast forwarding information (48). POR, 33; see Ex. 1005, Fig. 4; 8:39-11-17.

Therefore, without any disclosure or explanation of how the request (not just the outcome of the request) is distributed among multiple processing units, as opposed to being centrally processed, Petitioner has failed to meet its burden to show that this limitation is met or would have been obvious.

VI. Petitioner Mischaracterizes PO's Argument And Fails To Apply The Proper Legal Standard Regarding Ground 1.2 (Dependent Claim 16)

Rather than substantively address PO's argument, Petitioner cites *Honeywell* to suggest that PO is merely advocating for a preferred combination. Reply at 23.

Claim 16 requires, in part, “tracking a use of a permission to forward a certain multicast packet” and “removing the permission from the respective lists responsively to determining the permission is aged.” See Reply at 23. As explained, Hu already discloses a more efficient method for dropping streams when video traffic falls below a threshold than Deng's timer tracking technique. See POR at 39. The issue isn't preference, but whether a POSITA would have been motivated to combine the references. Given Hu's duplicative and more efficient functionality, Petitioner's proposed modification offers no discernible benefits and introduces

drawbacks like duplicative functionality, wasted processing resources, added system complexity, and degraded user experience. *See* Ex. 2005, ¶ 103 (“Deng’s teachings . . . will dramatically affect user’s experience for long running videos.”); *see also*, e.g., *Arctic Cat Inc. v. Polaris Industries, Inc.*, 795 F. App’x 827, 833 (Fed. Cir. 2019) (“The Board must weigh the benefits and drawbacks of the modification against each other, to determine whether there would be a motivation to combine.”); *Provisur Techs.*, 2022 WL 17688071, at *5; *Henny Penny Corp.*, 938 F.3d at 1331.¹⁴

Not only has Petitioner failed to show that the prior art meets this claim limitation, it also failed to identify any benefits of the proposed combination. Without that factual foundation, the Board lacks a basis to assess whether a motivation to combine exists.

VII. Petitioner’s Attorney Argument Concerning Ground 2.1 Should Be Afforded No Weight¹⁵

¹⁴ PO also argued, without rebuttal in the Reply, that Blease does not track individual multicast streams, whereas both Hu and Deng apply to individual multicast streams. *See* POR at 39. For this independent reason, Petitioner fails to meet its burden with respect to dependent claim 16.

¹⁵ Footnote 13 is a classic “gotcha” argument that should be given no weight. The POR’s headings (e.g., “Blease in view of Weyman”) establish that the conclusion sentence was a typographical error.

The Reply uses attorney argument to support its position that the term “non-default” in paragraph [0069] of Weyman is not a typo. Reply, 24-26. But this lacks evidentiary support. As the Federal Circuit has held, “arguments of counsel cannot take the place of evidence lacking in the record.” *Estee Lauder Inc. v. L’Oreal, S.A.*, 129 F.3d 588, 595 (Fed. Cir. 1997) (internal citations omitted); *NexStep, Inc. v. Comcast Cable Comm’cns*, 119 F.4th 1355, 1376 n.6 (Fed. Cir. 2024) (“statements of counsel . . . are not evidence”). Even if Petitioner’s attorney argument is considered, the argument is illogical.¹⁶ As PO explained, Weyman expressly describes updating a unit with a default configuration to match the distributed router. See Ex. 1006, [0069]; Ex. 2005, ¶¶ 59–62; Ex. 1026, 25:11–18. Weyman emphasizes uniformity across the fabric: “every defined router configuration should be identical” and “changes should be made to all the units.” See Ex. 1006, [0069]–[0070]. The idea that a unit with a customized “non-default” configuration could override the distributed default configurations contradicts this and introduces complexity not supported by Weyman.

Dr. Olivier testified that the paragraph “doesn’t make sense unless that’s a typo,” and a POSITA would understand “non-default” to mean “default.” Ex. 2005,

¹⁶ Petitioner’s “even if Weyman included a typo” argument fails for the same reasons. Reply, 26.

¶¶ 59–62; Ex. 1026, 25:11–18. This reading aligns with Weyman's goal of consistency and avoids the implausible scenario of a new unit overriding the existing configuration. Therefore, PO's argument concerning Ground 2.1 remains un rebutted.

VIII. PO's Arguments Concerning Ground 2.4 Are Clear

Petitioner mischaracterizes PO's argument under the guise of being confused. Reply at 27 ("PO's arguments . . . suppose that a POSITA would not have considered Rao because Blease, Weyman, and Rao are not in the same field as the '394 Patent . . . PO's arguments are confusing at best."). In reality, a review of the POR and Dr. Olivier's declaration establishes that Petitioner failed to set forth a motivation to combine and failed to meet its burden to show that the proposed combination with Rao satisfies claims 8 and 18.

The POR explains there would be no motivation to combine Rao with Weyman because Weyman already describes how to initialize a newly added unit by synchronizing its configuration with an existing unit. POR at 45. A POSITA would not look to Rao for additional details when Weyman already provides a complete solution. Petitioner does not rebut this point in the Reply.

Moreover, Petitioner fails to identify any disclosure in Rao of deactivating ports, sending multicast status requests, or constructing multicast forwarding lists as required by the '394 Patent. POR at 44–46. Dr. Olivier confirms that these steps are

absent from Rao and that a POSITA would not expect them to be present. See Ex. 2005, ¶¶ 112–115. This expert-supported argument is also left un rebutted.

Dr. Olivier further explains that Rao's standby route processor module (RPM) is never initialized; it is kept synchronized with the master RPM to avoid losing state. See Ex. 2005, ¶¶ 113–114. Initializing the standby RPM would defeat its purpose and contradict Rao's architecture. *Id.* This directly undermines Petitioner's reliance on Rao to satisfy the initialization requirements of claims 8[f] and 18[d].

Accordingly, Petitioner has not shown that Rao discloses or renders obvious the limitations of claims 8 and 18, and has failed to provide a legally sufficient motivation to combine Rao with Weyman.

IX. Conclusion

For the reasons stated in POR and above, Petitioner has failed to carry its burden to establish that any of the claims of the '394 Patent are invalid over the prior art. The claims should be upheld as patentable.

Date: September 12, 2025

Respectfully submitted,

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CERTIFICATION UNDER 37 C.F.R. § 42.24(d)

This Response complies with 37 C.F.R. § 42.24(b)(2). As calculated by the “Word Count” feature of Microsoft Word 2010, it contains 5,588 words, excluding the words contained in the following: Table of Contents, Table of Authorities, List of Exhibits, Certification Under 37 C.F.R. § 42.24(d), and Certificate of Service.

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies service of PATENT OWNER'S SUR-REPLY on the counsel of record for the Petitioner by filing this document through the P-TACTS platform on September 12, 2025 and served a true and correct copy of the foregoing by electronic mail on the following counsel:

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