

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMERICAN AIRLINES, INC. AND SOUTHWEST AIRLINES CO.,

Petitioners,

v.

INTELLECTUAL VENTURES I LLC,

Patent Owner.

Case No. IPR2025-00786

U.S. Patent No. 7,949,785

**PETITIONERS' BRIEF IN OPPOSITION TO PATENT OWNER'S
REQUEST FOR DISCRETIONARY DENIAL**

Mail Stop Patent Board
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
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PETITIONERS' LIST OF EXHIBITS

| Exhibit No. | Description of Document |
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| 1001 | U.S. Patent No. 7,949,785 (“’785 Patent”) |
| 1002 | File History for U.S. Patent No. 7,949,785 (Appl. No. 10/403,818) |
| 1003 | U.S. Patent No. 6,970,941 (“Caronni-I”) |
| 1004 | U.S. Patent No. 7,814,228 (“Caronni-II”) |
| 1005 | U.S. Patent No. 6,766,371 (“Hipp”) |
| 1006 | Huitema, C., Network Working Group Request for Comment (RFC): 1383, entitled An Experiment in DNS Based IP Routing (“RFC-1383”) |
| 1007 | <i>Intellectual Ventures I LLC et al. v. American Airlines, Inc.</i> , No. 4:24-cv-980 (E.D. Tex.) – Complaint |
| 1008 | <i>Intellectual Ventures I LLC et al. v. Southwest Airlines Co.</i> , No. 7:24-cv-277 (W.D. Tex.) – Complaint |
| 1009 | <i>Intellectual Ventures v. Liberty Mutual</i> , No. 23-cv-525 (E.D. Tex.) – Complaint |
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| 1011 | Declaration of Dr. Erez Zadok (“Zadok Decl.”) |
| 1012 | Curriculum Vitae of Dr. Erez Zadok |
| 1013 | <i>Interim Process for PTAB Workload Management</i> , Acting Director Coke Morgan Stewart, March 26, 2025 (the “Stewart Memo”) |
| 1014 | Microsoft Computer Dictionary, 3rd ed., 1997, excerpts (Microsoft Computer Dictionary) |
| 1015 | Re-Exam 90/0019,519 filed on May 22, 2024 (’785 re-exam) |
| 1017 | Andrew S. Tanenbaum, <i>Computer Networks</i> , 2nd ed., 1988, excerpts (Tanenbaum) |
| 1018 | W. Richard Stevens, <i>TCP/IP Illustrated Volume 1, The Protocols</i> , 1994, excerpts (Stevens) |
| 1019 | William R. Cheswick & Steven M. Bellovin, <i>Firewalls and Internet Security, Repelling the Wily Hacker</i> , 1994, excerpts (Cheswick) |
| 1020 | RFC 1034, “Domain Names - Concepts and Facilities,” P. Mockapetris, November 1987 (RFC-1034) |
| 1021 | RFC 1035, “Domain Names - Implementation and Specification,” P. Mockapetris, November 1987 (RFC-1035) |
| 1022 | RFC 2406, “IP Encapsulating Security Payload (ESP)”, S. Kent and R. Atkinson, November 1988 (RFC-2406) |

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| 1023 | RFC 2131, “Dynamic Host Configuration Protocol,” R. Droms, March 1997 (RFC-2131) |
| 1024 | Linux DNS Server Administration, Craig Hunt, 2000, excerpts (Hunt) |
| 1025 | Claim Chart for ’785 Patent, <i>Intellectual Ventures I LLC et al. v. American Airlines, Inc.</i> , No. 4:24-cv-980-ALM (E.D. Tex. Nov. 2, 2024) (Exhibit 10 to Complaint, Dkt. 1-11) (’785 claim chart) |
| 1026 | Claim Chart for ’785 Patent, <i>Intellectual Ventures I LLC et al. v. Southwest Airlines Co.</i> , No. 7:24-cv-277 (W.D. Tex. Nov. 2, 2024) (Exhibit 3 to Intellectual Ventures I LLC’s and Intellectual Ventures II LLC’s Preliminary Infringement Contentions) (’785 claim chart) |
| 1027 | Network Working Group Request for Comment (RFC): 2401, entitled <i>Security Architecture for the Internet Protocol</i> , by S. Kent <i>et al.</i> , 1998 (RFC-2401) |
| 1028 | Andrew S. Tanenbaum, <i>Computer Networks</i> , 4th ed., 2003, excerpts (Tanenbaum2) |
| 1029 | Correspondence to Brandon R. Theiss dated May 27, 2025 regarding <i>Sotera</i> Stipulation from American Airlines |
| 1030 | Correspondence to Brandon R. Theiss dated May 27, 2025 regarding <i>Sotera</i> Stipulation from Southwest Airlines |
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| 1032 | American’s Opposition to IV’s Motion for Leave to File an Amended Complaint, <i>Intellectual Ventures I LLC et al. v. American Airline, Inc.</i> , No. 4:24-cv-980-ALM (E.D. Tex. Nov. 2, 2024) (Dkt. 56) |
| 1033 | IV’s Reply in Support of its Motion for Leave to File an Amended Complaint, <i>Intellectual Ventures I LLC et al. v. American Airline, Inc.</i> , No. 4:24-cv-980-ALM (E.D. Tex. Nov. 2, 2024) (Dkt. 60) |
| 1034 | IV’s Disclosure of Preliminary Infringement Contentions, <i>Intellectual Ventures I LLC et al. v. American Airline, Inc.</i> , No. 4:24-cv-980-ALM (E.D. Tex. Nov. 2, 2024) (cover pleading only) (redacted) |
| 1035 | <i>Intentionally Blank</i> |
| 1036 | Defendant American Airlines, Inc.’s P.R. 3-3 Invalidity Contentions, <i>Intellectual Ventures I LLC et al. v. American Airline, Inc.</i> , No. 4:24-cv-980-ALM (E.D. Tex. Nov. 2, 2024) (cover pleading and Exhibits C-28 and C-29 only) |
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| | <i>Co.</i> , No. 7:24-cv-277 (W.D. Tex. Nov. 2, 2024) (cover pleading and Exhibits 785-28 and 785-29 only) |
| 1038 | Defendant American Airlines, Inc.’s Rule 4-2 Disclosures, <i>Intellectual Ventures I LLC et al. v. American Airline, Inc.</i> , No. 4:24-cv-980-ALM (E.D. Tex. Nov. 2, 2024) |
| 1039 | Joint Motion to Amend Scheduling Order dated May 24, 2025, <i>Intellectual Ventures I LLC et al. v. Southwest Airlines Co.</i> , No. 7:24-cv-277 (W.D. Tex. Nov. 2, 2024) (Dkt. 38) |
| 1040 | Brief in Support of Patent Owner’s Request for Discretionary Denial, <i>American Airlines, Inc. and Southwest Airlines Co.</i> , IPR2025-00782 (July 29, 2025) |

I. INTRODUCTION

Three weeks after filing its request for Discretionary Denial, Patent Owner sent an email to the Director informing her that Patent Owner based its brief on incorrect dates for the Markman Hearing and Trial Dates in the Southwest District Court Litigation. Doc. No. 3101. But instead of requesting authorization to file an amended brief to correct this error and offer argument based on the correct dates, Patent Owner simply requested authorization to add the correct scheduling order as an exhibit. *Id.*

Patent Owner's misrepresentation of facts underlying its Discretionary Denial request creates a problem for Director review. Specifically, adding exhibits without making any changes to the Brief accomplishes nothing as Patent Owner's Brief argues for discretionary denial *based on the erroneous dates*. The Director should not be required to consider arguments based on incorrect information caused by Patent Owner's error and its subsequent failure to correct that error in the Brief. Under these circumstances, which are of Patent Owner's own making, Patent Owner's request for discretionary denial should be denied.

There are at least six other reasons why the Director should deny Patent Owner's Request.

First, each of the *Fintiv* factors either weigh against discretionary denial or are neutral. To avoid any potential overlap between the district court and PTAB

proceedings, Petitioners have provided a *Sotera* stipulation. Second, discretionary denial under § 325(d) is likewise not appropriate in this case because neither prong of the *Advanced Bionics* framework is satisfied. Neither of the combinations of prior art in the asserted grounds nor the arguments raised in the Petition were previously presented to the Office.

Third, the Petition is not “facially deficient.” Patent Owner misleads the Board by focusing exclusively on four paragraphs regarding “motivation to combine.” Patent Owner overlooks the fact that Petition also contends that each reference discloses (or renders obvious) the claims of the ’785 Patent.

Fourth, Petitioners’ expert testimony contains supporting evidence and technical reasoning and therefore, contrary to the case relied on by Patent Owner, Petitioners’ expert testimony is entirely proper and not a reason for the Board to discretionarily deny the Petition.

Fifth, consistent with the Director’s recent guidance in *Intel Corp. v. Proxense, LLC*, IPR-2025-00434, Paper 12, although the ’785 Patent has been in force for years, it has not been “commercialized, asserted, marked, licensed, or otherwise applied” in Petitioners’ technology space—airlines. This weighs against Patent Owner’s claim of settled expectations.

Sixth, Petitioners' claim construction positions in its Petition and in the respective district court litigations are not inconsistent and therefore do not warrant discretionary dismissal.

Accordingly, the Director should deny Patent Owner's Request and allow the Petition to proceed on the merits to preserve the resources of two different district courts.

II. THE DIRECTOR SHOULD ALLOW THE PETITION TO PROCEED ON THE MERITS

A. The *Fintiv* Factors Do Not Favor Discretionary Denial

Patent Owner's arguments regarding the *Fintiv* factors are based primarily on Patent Owner's representation that, in the Southwest District Court Litigation, "Judge Albright has set the Markman Hearing for 7/29/2025 and has scheduled Trial for 7/27/2026. Ex. 2006, 7 (Dkt. #24)." Request at 41. Patent Owner's representation regarding the Markman Hearing and Trial Dates in the Southwest District Court Litigation is false, rising to the level of breach—IV's counsel breached its duty of candor and good faith to the Board. *See* 37 C.F.R. § 42.11(a); *see also* 37 C.F.R. § 11.303(a)(1)-(3); 37 C.F.R. § 11.103. Three weeks after filing its Discretionary Denial request, Patent Owner, in an email to the Director (Doc. No. 3101), acknowledged providing false information but provided no explanation for how Patent Owner failed to fulfill its duties to the Patent Office on such facts. Moreover, there are several problems with Patent Owner's email.

First, Patent Owner’s representation that “*a few days before the Discretionary Denial Briefs were filed* (and unknown to me at the time), *the parties had agreed to a revised schedule* changing the Markman Hearing and Trial Date” is incorrect. Ex. 3101 (emphasis added). Patent Owner filed its Discretionary Denial Briefs on July 9, 2025. Patent Owner agreed to the revised schedule at least *46 days before* Patent Owner filed the Discretionary Denial Brief (not a “few days before,” as Patent Owner states in his email), when, on May 24, 2025, the parties filed a Joint Motion to Amend Scheduling Order setting forth their agreed upon amended schedule. Ex. 1039. As stated in the Joint Motion, the reason for the agreed-upon revision to the schedule was that “[o]n May 20, 2025, counsel for Plaintiffs informed counsel for Southwest of Intellectual Ventures’ intention to seek leave to amend their complaint to assert five (5) additional patents against Southwest.” *Id.* at 1. The court in the Southwest District Court Litigation entered the parties’ agreed-upon schedule as an Agreed Scheduling Order on July 2, 2025, one week before Patent Owner filed its Discretionary Denial Brief. Ex. 2006.

Second, Patent Owner’s counsel’s representation in the email that “the parties had agreed to a revised schedule changing the Markman Hearing and Trial Date to December 8, 2025 and July 11, 2027” is also incorrect. Doc. No. 3101 (emphasis added). The correct Trial Date, as stated in both the Joint Motion and the Agreed Scheduling Order is January 11, 2027. Ex. 2006 at 9; Ex. 1039 at 9.

Third, Patent Owner's counsel provides no statement as to when he discovered his error regarding the erroneous Markman Hearing and Trial Dates. *Id.* But on July 29, 2025, Patent Owner filed a Brief in Support of Patent Owner's Request for Discretionary Denial in IPR2025-00782 (signed by the same counsel who signed the Request in this case), which involves the validity of another patent asserted by Patent Owner in both the American and the Southwest District Court Litigations. Ex. 1040. In that Brief, Patent Owner included the Agreed Scheduling Order (Ex. 2006 in this case; Ex. 2009 in IPR2025-00782) and referred to the correct trial date in the Southwest District Court Litigation. Ex. 1040 at 11.

Thus, although Patent Owner's counsel was plainly aware of the correct Markman Hearing and Trial Dates in the Southwest District Court Litigation before July 29, 2025, the evidence shows that he waited at least a few days (likely more given that a Discretionary Denial brief is not written overnight) to even notify the Director of this error. Patent Owner's counsel further fails to explain how he could have lacked the correct information when Patent Owner and Patent Owner's litigation counsel plainly knew the correct dates at least 46 days earlier on May 24, 2025, when Patent Owner filed the Joint Motion setting forth the revised dates agreed to by Patent Owner. Ex. 1039. As an excuse, Patent Owner's counsel indicated that it was "unknown to me at the time" that "the parties had agreed to a revised schedule changing the Markman Hearing and Trial Date to December 8,

2025 and July 11, 2027, respectively.” *Id.* (emphasis in original). As counsel to the Patent Owner, counsel has the responsibility to “act with reasonable diligence and promptness in representing a client.” 37 C.F.R. § 11.103.

Instead, Patent Owner’s counsel inexcusably abdicated the professional duty of diligence owed to both the client and the Board. Before filing the request for discretionary denial, counsel was obligated to investigate and confirm the operative facts, yet chose instead to proceed in willful ignorance even though the surrounding circumstances clearly put counsel on notice of the newly issued scheduling order. This lapse was compounded by a second, equally serious breach: rather than immediately appraising the Board of the misrepresentation once it became apparent, counsel remained silent for more than three weeks, thereby permitting the falsehood to stand uncorrected and undermining the integrity of these proceedings. If Patent Owner mistakenly referred to the superseded dates, it could have *promptly* amended its Request to set forth the correct dates; Patent Owner did not do so, which is a clear violation of both 37 C.F.R. § 11.103 and 37 C.F.R. § 11.303(a)(1)-(3).

Fourth, although Patent Owner’s counsel’s email informs the Director of the errors in the Discretionary Denial Briefs, Patent Owner does not request authorization to file a *corrected brief* with any argument for Discretionary Denial based on the correct dates. Instead, Patent Owner merely requests “authorization to file as exhibits the updated scheduling order in the parallel litigation (reflecting the

correct dates) and the order denying the stay request.” Doc. No. 3101. Adding two exhibits changes nothing—all of Patent Owner’s contentions based on the incorrect dates, remain. Even though Patent Owner is aware of the misstatements in the Brief, Petitioner and the Director are still faced with a Brief that argues that the Director should exercise her discretion *based on the incorrect dates*. Request at 40-48.

Further, Patent Owner states that the court in the American District Court Litigation set the Markman Hearing for 10/14/2025 and has scheduled the Final Pretrial Conference for 10/19/2026. Request at 42. Omitted by Patent Owner is the fact that, on May 23, 2025 (over one month before filing its Request), Patent Owner filed a Motion for Leave to File an Amended Complaint, seeking to add claims for infringement of an additional 6 patents against Petitioner American (which, if granted, would cause the total number of patents asserted against American to increase to 12). Exs. 1032-1033. In its Opposition to Patent Owner’s Motion for Leave to Amend, Petitioner American contended that, if granted, the Court should extend all deadlines by 34 weeks:

In the alternative, if this Court determines that IV’s amendment should be allowed, American respectfully requests the Court suspend all current deadlines and enter the schedule attached as Ex. B, which extends all pending deadlines by 34 weeks (the approximate amount of time between the filing of the original complaint and expected filing date of the amended complaint).

Ex. 1032 (Dkt. #56) at 12-13 and Exhibit B. Indeed, Patent Owner agreed to a significant extension of the schedule in the Southwest District Court Litigation after

amending its complaint to add multiple patents. And in its American District Court Litigation, Patent Owner did not oppose Petitioner American's request for an extension of all dates by 34 weeks should the court permit Patent Owner to add the 6 additional patents to the action. Ex.1033.

Patent Owner's Motion for Leave to Amend is currently pending in the American District Court Litigation. If the court grants the motion, it is expected that the court will extend all pre-trial and trial dates, as per American's unopposed request and consistent with how a court would likely manage its docket when a party adds claims for infringement of 6 additional patents to a case that already involves 6 other patents. Like its omission in its Request of the operative dates in the Southwest District Court Litigation, Patent Owner's omission in its Request of its Motion for Leave to Amend and Petitioner American's request to modify the schedule was no mistake.

These issues with erroneous dates, failure to correct the Brief, and omission of a pending Motion to Amend, demonstrate that Patent Owner has failed to comply with the simple maxim that, when asking the Director to grant equitable relief, *i.e.*, exercise her discretion to deny the Petition without addressing its merits, Patent Owner should similarly do equity itself by coming to the Director with clean hands. *Telefonaktiebolaget LM Ericsson v. Lenovo (United States), Inc.*, 120 F.4th 864, 877 n 15 (Fed. Cir. 2024) (quoting *Primerica Life Ins. Co. v. Woodall*, 975 F.3d 697, 699

(8th Cir. 2020) and citing 11A Wright & Miller § 2946, p. 106 (“A principle closely related to the clean-hands maxim is that before plaintiff will be permitted to invoke the aid of a court of equity, plaintiff must do equity.”)).

Accordingly, pursuant to the actual, operative dates set in the Southwest District Court Litigation and likely to be set in the American District Court Litigation, the *Fintiv* factors weigh against discretionary denial.

1. Factor 1 – There is no Stay in the District Court Litigations

Patent Owner contends that, if the Board institutes the Petition, it is unlikely that Judge Albright, in the Southwest District Court Litigation would grant a stay. Request at 43. Patent Owner fails to address whether Judge Mazzant would grant a stay in the American District Court Litigation.

As Judge Mazzant could grant a stay if the Board grants the Petition, the first factor weighs against institution.

2. Factor 2 Weighs Against Discretionary Denial When Considering the Correct Pre-Trial and Trial Dates in the District Court Litigations

Patent Owner’s representations that the Markman Hearing and Trial Dates in the pending litigations are such that these events will occur before the Final Written Decision is due are erroneous. Request at 43-45.

As discussed, the current schedule in the Southwest District Court Litigation sets the Markman Hearing for December 8, 2025, and the Trial Date for January 11,

2027. Ex. 2006. In the American District Court Litigation, no trial date is set. Moreover, there is a pending Motion for Leave to Amend to add 6 patents and Petitioner American's pending request to re-set the schedule to accommodate the additional 6 patents that added to the case. Ex. 1032-1033.

When considering Factor 2 using the actual, operative dates in the Southwest District Court Litigation and the pending request for new dates in the American District Court Litigation, as discussed above, the Final Written Decision in this case will occur *before* the Trial Dates in both district court litigations.

Factor 2 thus weighs against discretionary denial.

3. Factor 3 Weighs Against Discretionary Denial, Particularly Given the Multiple Different District Courts Currently Considering these Validity Challenges

This IPR is uniquely situated to efficiently resolve the validity of the '785 Patent and save the need for multiple district courts to address these invalidity issues. If the IPR is not instituted, then at least two different district courts will need to resolve these invalidity arguments. However, if the IPR is instituted, the same invalidity arguments need only be addressed once by the Board, as this IPR is being brought by two Petitioners, American and Southwest. This fact strongly favors institution, not discretionary denial.

Further, Patent Owner's contentions that "[b]y the time the Board's institution decision is due (on 11/9/25), all of the Markman briefing and the Markman Hearings

in both the Southwest and American District Court Litigations (scheduled for 7/29/25 and 10/14/25, respectively) will have been completed, and in all likelihood one or both of Judges Albright and Mazzant will have issued their claim construction rulings” are, as discussed, erroneous. Request at 45.

The correct date for the Markman hearing in the Southwest District Court Litigation is December 8, 2025, which is *after* the November 9, 2025, institution date. Ex. 2006.

The current date in the American District Court Litigation for the claim construction hearing is October 14, 2025; however, if the court grants Patent Owner’s Motion for Leave to Amend its Complaint to add 6 patents, that date will certainly be extended, similar to the extension of dates when Patent Owner asserted additional patents against Southwest in its litigation. Exs. 2006 and 1032.

Thus, pursuant to these dates, the district court will not have made a substantial investment in either case by the institution date of November 9, 2025.

Therefore, the third factor weighs strongly against discretionary denial.

4. Factor 4 Weighs Against Discretionary Denial as There is Not Significant Overlap Between the Petition and the District Court Litigations

In this IPR, Petitioners challenge the validity of claims 1, 30, 35, 37, 38, 48, 62, 75, and 77-78 of the ’785 Patent. In the American District Court Litigation and in the Southwest District Court Litigation, Patent Owner asserts only claims 30, 35,

and 37 of the '785 Patent (*see* Exs. 1026 and 1034), and therefore, in the Litigations, Petitioners only challenge the validity of claims 30, 35, and 37 of the '785 Patent.

Patent Owner contends that there is “substantial overlap” in the claims challenged in the District Court Litigations and the IPR Petition, and further contend that the “lack of complete overlap” of the claims was “of Petitioners’ own making,” i.e., according to Patent Owner, Petitioners engaged in “gamesmanship” by “engineering a lack of complete overlap in challenged claims by finding that such a situation weights against discretionary denial.” Request at 47. Patent Owner justifies these serious, but false, accusations against Petitioners by contending that “there was *nothing* prohibiting Petitioners from challenging the validity of *all* of the claims of the '785 Patent in either or both of the Southwest and American District Court Litigations.” *Id.* (emphasis in original).

Patent Owner is simply *wrong*. The Federal Circuit has held that there is no case or controversy with respect to *unasserted* patent claims and therefore a court has no jurisdiction to adjudicate the validity of unasserted patent claims. *Fox Group, Inc. v. Cree, Inc.*, 700 F.3d 1300, 1308-09 (Fed. Cir. 2012) (“There was no case or controversy with respect to the unasserted claims at the time of the summary judgment motions; therefore the district court did not have jurisdiction over the unasserted claims. *Id.* Accordingly, we vacate the district court’s declaration that the

entire '130 patent is invalid, but uphold the district court's finding of invalidity of claims 1 and 19 under § 102(g).")

Here, there is no "gamesmanship" by Petitioners or any attempt to "engineer" a lack of complete overlap in challenged claims. Instead, as Patent Owner asserted only claims 30, 35, and 37 in the American and Southwest District Court Litigations (Exs. 1026 and 1034), neither court has jurisdiction over unasserted claims 1, 38, 48, 62, 75, and 77-78 of the '785 Patent. Thus, because Patent Owner chose to assert only claims 30, 35, and 37, the District Courts have jurisdiction over only claims 30, 35, and 37. Petitioners are therefore prohibited from challenging the validity of unasserted claims 1, 38, 48, 62, 75, and 77-78.

Patent Owner further speculates that, because Petitioners include the "Cisco VPN Routers and Software" or "VM Ware" (which Patent Owner speculates Petitioners are relying on "solely for information cumulative of what is already shown in Caronni-I, Caronni-I, Hipp and RFC-1383") in their Preliminary Invalidation Contentions, "Petitioners will argue invalidity in the District Courts based on Caronni-I, Caronni-II, Hipp and RFC-1383 in combination with 'Cisco VPN Routers and Software' and/or 'VM Ware'" and therefore "will argue that these combinations are not covered by the *Sotera* stipulation because one of the references in each of the combinations -- 'Cisco VPN Routers and Software' or 'VM Ware' -- is not a patent or printed publication." Request at 47-48 (emphasis in original). Patent Owner's

contentions, being based on Petitioners' *Preliminary* Invalidity Contentions, are both premature and speculative. Patent Owner further ignores that Petitioners assert in their Preliminary Invalidity Contentions that claims 30, 35, and 37 of the '785 Patent are invalid over the Cisco VPN Routers and Software or VM Ware (as the primary reference) in view of Caronni-I, Caronni-II, Hipp and RFC-1383. Exs. 1036 and 1037.

Thus, as there is no "significant overlap" between the Petition and the District Court Litigations, the fourth factor weighs against discretionary denial.

5. Factor 5 Does Not Support Discretionary Denial

When the Petitioners are the same as the named defendants in the district court litigations, the Board has found that this factor adds "little if anything to the discretionary denial analysis." See *Aylo Freesites Ltd. f/k/a MG Freesites Ltd. v. WellcomeMat, LLC*, IPR2024-00710, Paper 13, at *17-18 (P.T.A.B. Sept. 5, 2024) ("We make the unremarkable observation that an IPR petitioner and patent owner are very often named parties in parallel district court litigation regarding the same patent. In our view, this factor adds little if anything to the discretionary denial analysis unless the petitioner is not named as a defendant (or declaratory judgment plaintiff) in parallel district court patent litigation."). As in *Aylo*, the fact that there is overlap between the Petitioner parties and the defendants in the litigations adds little to the discretionary denial analysis here.

Therefore, the fifth factor is neutral.

6. Factor 6 Weighs Against Discretionary Denial Because the Merits are Strong

Patent Owner contends that “the merits of the Petition are weak because, inter alia, the Petition fails to articulate motivations for combining the references[.]” Request at 49. As discussed, *infra*, Section II.C., Petitioners not only “articulated” a motivation to combine Caronni-I, Caronni-II, Hipp, and RFC-1383 in its Petition, but Petitioners also demonstrate how Caronni-I, Caronni-II, Hipp, and RFC-1383 meet each element of each claim.

Patent Owner thus fails to demonstrate how the Petition is “weak” and therefore factor 6 weighs against discretionary denial.

B. Discretionary Denial is Not Appropriate Under *Advanced Bionics*

Patent Owner bears the burden of proof with respect to the request for exercising discretionary denial. *Geotab USA, Inc. v. Omega Patents, LLC*, IPR2023-00504, Paper 11, at *16 (P.T.A.B. July 25, 2023) (citing 37 C.F.R. § 42.20(c)). The Board uses the *Advanced Bionics* two-part framework to determine whether discretionary denial is merited under 35 U.S.C. § 325(d):

- (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and
- (2) if either condition of first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.

Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6, at *8 (P.T.A.B. Feb. 13, 2020) (precedential). To determine whether a previously presented reference is “substantially the same” as a reference applied in a Petition under part one of *Advanced Bionics*, the Board weighs *Becton, Dickinson* factors (a), (b), and (d), which include:

- (a) the similarities and material differences between the asserted art and the prior art involved during examination;
- (b) the cumulative nature of the asserted art and the prior art evaluated during examination;
- ...
- (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;

Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper 8, at *17-18 (P.T.A.B. Dec. 15, 2017) (precedential); *Advanced Bionics*, Paper 6, at *10.

1. *Becton, Dickinson* Factors (a), (b), and (d)

Discretionary denial of institution is inappropriate as Patent Owner incorrectly analyzes the *Becton, Dickinson* factors (a), (b), and (d). Patent Owner’s argument centers around the fact that “Caronni-I and Caronni-II were both cited in the list of references considered by the Examiner during prosecution of the ’785 Patent and, with respect to the DNS request feature of the independent Claims of the ’785 Patent, Hipp and RFC-1383.” Request at 23. This interpretation of the law is wrong for various reasons. First, citation of a reference in an Information Disclosure Statement (IDS) does not automatically satisfy part 1 of the *Advanced Bionics* framework and

failure to meet part 1 of the *Advanced Bionics* framework eliminates any need to consider part 2. *JUUL Labs, Inc. v. NJOY, LLC*, IPR2024-00160, Paper 10, at *11-13 (P.T.A.B. May 24, 2024).

Second, Patent Owner not only fails to explain *Becton, Dickinson* factors (a), (b), and (d) in regards to the relationship between Caronni-I/II and the prior art examined during prosecution but also then applies *Becton, Dickinson* factors (a), (b), and (d) to the relationship between Hipp/RFC-1383 and Caronni-I/I. Patent Owner faces a two-fold problem here. The whole premise of *Becton, Dickinson* factors (a), (b), and (d) is to discuss the overlap between the art used in the Petition and the art considered during prosecution. Patent Owner includes no such argument in its Request. Patent Owner then compares Hipp and RFC-1383 to Caronni-I/II. This is irrelevant. Patent Owner failed to hit its mark again by not comparing Hipp and RFC-1383 to the art considered during prosecution. Therefore, Patent Owner provides no argument to satisfy part 1 of the *Advanced Bionics* framework.

Moreover, Petitioners did not provide the same art or arguments, in view of combinations of prior art references, as those previously presented to the Office, even when one of the references in the combination was previously presented to the office. *See Verizon Connect Inc. v. Omega Patents, LLC*, IPR2023-01162, Paper 12, at *14 (P.T.A.B. Feb. 21, 2024). Patent Owner neither explains how the Office relied on the same disclosures of the art considered during prosecution in the same manner

as the Petition relies on Caronni-I/II, Hipp, and RFC-1383 nor presents any analysis of the of the similarities between the art considered in the Office Actions during prosecution and Caronni-I/II, Hipp, and RFC-1383 sufficient to demonstrate that the art considered in the Office Actions during prosecution discloses the same relevant information as Caronni-I/II, Hipp, and RFC-1383.

2. *Becton, Dickinson* Factors (c), (e), and (f)

Since part 1 of the *Advanced Bionics* framework is not satisfied, the Director need not consider part 2. Nonetheless, if the Director were to consider part 2, the *Becton, Dickinson* factors (c), (e), and (f) are used to analyze whether the Office erred in a manner material to the patentability of challenged claims. *Advanced Bionics*, Paper 6, at *10. Those factors include:

- (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;
- (e) whether petitioner has pointed out sufficiently how the examiner erred in its evaluation of the asserted prior art; and
- (f) the extent to which additional evidence and facts presented in the petition warrant reconsideration of the prior art or arguments.

Id. at *9; *Becton, Dickinson*, Paper 8, at *17-18. These factors favor institution because the Office erred in a manner material to the patentability of the challenged claims by failing to appreciate the persuasive teachings of Caronni-I/II, Hipp, and RFC-1383. *Advanced Bionics*, Paper 6, at *10 (“[I]f the record of the Office’s previous consideration of the art is not well developed or silent, then a petitioner

may show the Office erred by overlooking something persuasive under factors (e) and (f).”).

Although Caronni-I and Caronni-II are cited on the face of the ’785 patent, the Examiner did not issue a rejection in view of Caronni-I/II even though Caronni-I/II expressly teach the subject matter of the challenged claims, as demonstrated in the Petition. *Becton, Dickinson* Factor (c) supports institution. *Mylan Pharm. Inc. v. Merck Sharp & Dohme Corp.*, IPR2020-00040, Paper 21, at *18 (P.T.A.B May 12, 2020) (“The Examiner never discussed WO ’498 or made a rejection based on it. Indeed, the Examiner entered no prior art rejection against the claims of the ’708 patent. *See supra* Section I(E). Because the Examiner gave no reasons for allowance, we are left to guess at why the Examiner regarded the ’708 patent’s claims as novel and nonobvious.”); *Medacta USA, Inc., et al. v. RSB Spine, LLC*, IPR2020-00264, Paper 24, at *17 (P.T.A.B. May 22, 2020) (“[B]ecause the examiner did not apply Fraser ’106’s Figure 8 during examination, Becton’s factor (c) weighs against exercising our discretion to deny institution under 35 U.S.C. § 325(d).”); *Ecto World Director Review*, IPR2024-01280, Paper 16, at *13, *15 (P.T.A.B. June 25, 2025) (“Other than initials on a lengthy IDS, nothing in the record indicates that the Examiner substantively considered [the prior art in question]. . . . Accordingly, . . . the Office erred by not substantively considering [the prior art] during prosecution . . .”).

As to Factor (e), Petitioner has sufficiently demonstrated that the Examiner erred by failing to reject the challenged claims over Caronni-I/II, Hipp, and RFC-1383. In particular, the Petition shows, through detailed analysis, how Caronni-I/II, Hipp, and RFC-1383 disclose each and every limitation of the challenged claims. Accordingly, the Petition explains in detail how prior art that was not considered during prosecution invalidates the challenged claims—confirming that the Examiner committed a material error by allowing the claims. *Hamilton Techs. LLC v. Fleur Tehrani*, IPR2020-01199, Paper 6, 21 (P.T.A.B. Jan. 6, 2021).

As to Factor (f), for the reasons discussed above, the disclosures of Caronni-I/II, Hipp, and RFC-1383 warrant reconsideration. Further, Dr. Zadok’s expert declaration in support of Grounds 1 and 2—that were not available to the Examiner during prosecution—additionally warrants reconsideration of the prior art. *See Therabody, Inc. v. Hyperice IP Subco, LLC*, PGR2024-00053, Paper 8, at *10-11 (P.T.A.B. Apr. 21, 2025) (existence of a probative expert declaration resulted in “factor (f) weigh[ing] against exercising discretion to deny institution under § 325(d)”); *Safran Cabin Inc. v. B/E Aerospace, Inc.*, IPR2020-00749, Paper 10, at *12 (P.T.A.B. Oct. 21, 2022).

On this record, Becton, Dickinson factors (c), (e), and (f) all weigh against denying institution under §325(d).

C. The Petition is Not “Facially Deficient,” as Patent Owner Wrongly Contends

Patent Owner further contends that the Director should exercise her discretion and deny institution because the Petition is “facially deficient.” Request at 29. Patent Owner argues that both grounds of the Petition “rely on combining Caronni-I with Caronni-II[.]” but the Petition “makes only limited and conclusory allegations with respect to any motivation to combine these references.” *Id.*

Patent Owner misrepresents the Petition; the Petition contends that each Ground meets each limitation of each claim and therefore the claims are obvious over each of the combinations, as shown in the Table below. Patent Owner ignores these contentions, instead focusing only on the Petition’s “*motivation for combining Caronni-I with Caronni-III[.]*” *Id.* (emphasis in original); *see also id.* at 29-39.

| Claim of the '785 Patent | Petitioner’s Contention |
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| Virtual Network system/manager: 1[pre] / 30[pre] / 38[pre] / 48[pre] / 62[pre] / 75[pre] | <p>“Caronni-I discloses a Supernet, which is a virtual network system designed to manage communications between ‘a public network having a network infrastructure that is used by a private network over which a plurality of nodes communicate[.]’ Ex-1003, cl. 1; Ex-1011, ¶ 210.” Petition at 32.</p> <p>“Caronni-I further discloses a virtual network manager as an admin node to ‘to administer to the needs of the Supernet.’ Ex-1003, 5:11–13; Ex-1011, ¶ 212.” Petition at 32-33.</p> |
| A virtual network defined by a domain name having an associated | <p>“Caronni-I discloses a virtual network/community as a Supernet with channels.” Petition at 34.</p> <p>“Caronni-I discloses an ‘administrative node 306 to administer to the needs of the Supernet.’ <i>Id.</i>, 5:11–13.” Petition at 34.</p> |

| Claim of the '785 Patent | Petitioner's Contention |
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| <p>public network address: 1[a] / 30[a] / 38[a] / 48[a] / 62[a] / 75[a]-[b]</p> | <p>“Caronni-I discloses protocol stacks as a component in the administrative node, where the protocol stack is ‘acting as the conduit for all Supernet communications.’ Ex-1003, 8:59.” Petition at 35.</p> <p>“Caronni-I discloses ‘the nodes of a Supernet may communicate over different transports, such as IP, IPX, X.25, or ATM, as well as different physical layers, such as RF communication, cellular communication, satellite links, or land-based links.’ Ex-1003, 5:21–25.” Petition at 36.</p> <p>“Caronni-I discloses a Supernet defined by a Supernet name and Supernet IDs (channels). Ex-1011, ¶¶ 232–234.” Petition at 36.</p> <p>Caronni-I also discloses that nodes in the Supernet community are defined by ‘all real IP addresses,’ which are maintained on the VARPDB (<i>id.</i>, 11:59–61), having an associated ‘node ID’ including ‘a Supernet ID (e.g., 0x123), reflecting a unique identifier of the Supernet, and a virtual address, comprising an IP address (e.g., 10.0.0.1).’ <i>Id.</i>, 7:10–13.” Petition at 36.</p> <p>“Caronni-I further teaches a user may enter a Supernet name when joining a Supernet.” Petition at 37.</p> <p>“Therefore, Caronni-I discloses a virtual network defined by a domain name having an associated public network address. Ex-1011, ¶¶ 232–235.” Petition at 37.</p> <p>“For example, Caronni-I discloses a system administrator and a user both enter the Supernet name, where the Supernet name would be a human compatible name for ease of entry. Ex-1011, ¶ 238.” Petition at 37.</p> <p>“Additionally, Hipp discloses a domain name (hostname) having an associated public network address. Ex-1005, 6:1–4.” Petition at 38.</p> |

| Claim of the '785 Patent | Petitioner's Contention |
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| | <p>“A POSITA would understand the assignment of hostnames and IP addresses to Hipp processes may be applied to the processes of Caronni-I (SASD, VARPD, and KMD) to disclose this limitation. Ex-1011, ¶¶ 243–244.” Petition at 38.</p> |
| <p>Registration / distribution of a virtual network address to each device which uniquely identifies the device 1[a] / 30[b] / 38[a]-[c] / 48[a]-[b] / 62[a]-[b] / 75[b]-[d]</p> | <p>“Caronni-I discloses an agent of each Supernet device (SNlogin) that communicates with the SASD on behalf of the device when the device requests to register with the virtual network. Ex-1003, 10:13–18.” Petition at 39.</p> <p>“Caronni-I also discloses a system for registering and distributing virtual network addresses in a Supernet operating over a public network infrastructure. Caronni-I outlines a process for adding new nodes, from devices 302, 304, and 312 (i.e., a user set), to the Supernet and assigning them unique virtual addresses. Ex1003, 9:66–67 (‘FIGS. 7A and 7B depict a flow chart of the steps performed when a node joins a Supernet.’); <i>see also id.</i>, 4:66–5:7, Figures 7A, 7B; Ex-1011, ¶ 249.” Petition at 40.</p> <p>“Caronni-I discloses that after a device is registered to the Supernet, a virtual network address associated with the device is distributed to the device. As described in the registration process above, ‘SASD concatenates the Supernet ID with the virtual address to create the node ID, obtains the real address of the SNlogin script by querying network services[,]’ and then ‘registers this information with the VARPD[.]’ Ex-1003, 10:11–18; Ex-1011, ¶ 258.” Petition at 41.</p> <p>“Additionally, Caronni-I explains that the first time a node sends a packet to another node, it must be supplied with its virtual network address from the administrative node’s VARPD.” Petition at 41.</p> <p>“Caronni-I also discloses a virtual network being accessible by devices outside of the user set. For example, Node C below is a file system manager that ‘stores the data in an encrypted form</p> |

| Claim of the '785 Patent | Petitioner's Contention |
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| | <p>so that it is unreadable by others.' Ex-1003, 5:44–49.” Petition at 42.</p> <p>“Furthermore, Hipp discloses a virtual network being accessible by devices outside of the user set if permitted. Ex-1005, 2:11–13 (‘However, an application in one VNE cannot communicate with an application in another VNE (unless expressly permitted).’); <i>see also</i> Ex-1003, 5:27–30, 5:36–38, 5:44–49, Figure 4 (disclosing Node C); Ex-1011, ¶¶ 293–299.” Petition at 42-43.</p> <p>“Caronni-I discloses that a Supernet is a private network with an addressing scheme separate from the underlying public network such as the Internet. Ex-1003, 6:7–18.” Petition at 44.</p> <p>“Caronni-I discloses that Supernet nodes/devices have an associated private network address.” Petition at 45.</p> <p>“Caronni-II discloses a message is sent using a real IP address destination, where the destination may be behind an edge device (firewall, NAT box, proxy server, packet filtering device, and gateway). Ex-1004, 9:20–24; <i>see also id.</i>, 9:31–32, 1:60–2:6.” Petition at 45.</p> <p>“Likewise, Hipp discloses virtual addresses in the context of a virtual network environment (VNE), including reserved or private IP addresses. Ex1005, 3:19–27; <i>see also id.</i>, Figures 1, 3–7; Ex-1011, ¶ 276.” Petition at 45.</p> <p>“Thus, a POSITA would understand that the combination of Caronni-I/II and Hipp discloses an associated private network address. Ex-1011, ¶¶ 279–289.” Petition at 45.</p> |
| Route director / routing: 1[b] / 30[c] / 38[d] / 48[c] / 62[c] / 75[e] | “Caronni-II discloses a reflecting agent 200 that allows communication to a member in a private network. Ex-1001, 25:31–36 (‘Route directors allow communication to a member that is in a private network.’).” Petition at 46. |

| Claim of the '785 Patent | Petitioner's Contention |
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| | <p>“Caronni-II’s reflecting agent and the '785 Patent’s route director both act as intermediaries to enable communication between nodes behind different NAT boxes. Ex-1004, 8:22–25. Petition at 47.</p> <p>“Caronni-I discloses encapsulated packets that include a first virtual network address corresponding to the source device and a second virtual address that corresponds to the destination device. Ex-1003, 12:8–16; see also <i>id.</i>, 2:29–31 (explaining tunneling ‘refers to encapsulating one packet inside another when packets are transferred between two end points.’). Ex-1011, ¶¶ 305–306.” Petition at 48.</p> <p>“Additionally, Caronni-I explains that ‘[t]he packet and Supernet ID are then transmitted to the SNSL layer.’ <i>Id.</i>, 11:47–48.” Petition at 50.</p> <p>“Caronni-II also discloses the claimed encapsulation.” Petition at 51.</p> |
| <p>DNS server, request, and responses: 1[c] / 30[c] / 38[e] / 48[d] / 62[d] / 75[e]</p> | <p>“The Caronni-I/II and Hipp combination discloses a DNS server that responds to DNS queries by returning the addresses claimed in the '785 Patent, including (1) a public network address of a route director/network manager, (2) a network address of the destination device, and (3) virtual network address for a destination device.” Petition at 52.</p> <p>“The Caronni-I/II and RFC-1383 combination discloses a DNS server that responds to DNS queries by returning the addresses claimed in the '785 Patent, including (1) a public network address of a route director/network manager, (2) a network address of the destination device, and (3) virtual network address for a destination device.” Petition at 61.</p> <p>“Hipp discloses a DNS server for use in a virtual network environment, where a unique virtual hostname is resolved or translated into a unique virtual IP address. Ex-1005, 6:1–4; see also <i>id.</i>, 6:16–18 (‘The virtual hostname resolves to the virtual IP address for both the applications registered with the VNI</p> |

| Claim of the '785 Patent | Petitioner's Contention |
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| | <p>framework as well as those that are not registered.’).” Petition at 52-53.</p> <p>“A POSITA would understand that higher layer processes in Caronni-I would use DNS services, such as those disclosed by Hipp or those generally known to a POSITA, to initially determine a virtual destination node address. Ex-1011, ¶¶ 319–322.” Petition at 53.</p> <p>“Hipp discloses DNS requests or queries. Ex-1005, 6:16–26 (‘preconfigured to resolve a query of host1055 to IP address 10.10.0.1’) (emphasis added).” Petition at 54.</p> <p>“RFC-1383 discloses a DNS request[.]” Petition at 62.</p> <p>“Likewise, Caronni-I and II disclose DNS type requests through the operation of the VARP address translation process. Ex-1003, 9:47–54, 7:22–28; Ex-1004, 3:20–23 (‘A resolution request is received ...’), 5:10–22 (‘Each entry in the VARP lookup table 26 will list the registering virtual IP address 90 and associated information including a real IP address 91, ...’).” Petition at 54; <i>see also</i> Petition at 62.</p> <p>“A POSITA would understand both Caronni-I (address translation) and Caronni-II (VARP lookup table) are similar to DNS operations. Ex-1011, ¶¶ 328–330. Thus, a POSITA would understand that the combination of Caronni-I/II and Hipp discloses a DNS request. Ex-1011, ¶¶ 326–330.” Petition at 54.</p> <p>“As discussed further below, Caronni-II discloses the address of the reflecting agent is added to the VARP table. Ex-1004, 8:19–21 (‘[T]he present invention adds an entry to the VARP table for a third-party reflecting agent located at an address outside the NAT box.’).” Petition at 54.</p> <p>“A POSITA would recognize the Caronni-I/II and Hipp combination would disclose a way to store and return multiple IP address in response to a single query.” Petition at 54.</p> |

| Claim of the '785 Patent | Petitioner's Contention |
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| | <p>“Caronni-II discloses the address of the reflecting agent is added to the VARP table. Ex-1004, 8:19–21 (“[T]he present invention adds an entry to the VARP table for a third-party reflecting agent located at an address outside the NAT box.”) Petition at 55.</p> <p>“Also, Caronni-II discloses “[t]he virtual address resolution facility 24 is used to determine the associations registered with the destination address.” Ex-1004, 6:39-41. Petition at 55.</p> <p>“Therefore, a POSITA would’ve been motivated to combine Caronni-II and Hipp to add this step of returning the public IP address. Further, a POSITA would’ve been motivated to combine the systems and methods in Caronni-I/II and Hipp for the reasons discussed above. <i>See supra</i> § VI.E; Ex-1011, ¶¶ 336–337.” Petition at 55.</p> <p>“Caronni-I discloses returning a network address of a destination device as a destination real address.” Petition at 56.</p> <p>“Furthermore, Caronni-I discloses that the real addresses may be public or private network addresses.” Petition at 56.</p> <p>“Also, Caronni-II discloses “[e]ach entry in the VARP lookup table 26 will list the registering virtual IP address 90 and associated information including a real IP address 91, a transport protocol designation 92, a port number identification 93 and an Application layer protocol designation 94.” Ex-1004, 5:18–22; Ex-1011, ¶¶ 340– 342.” Petition at 56-57.</p> <p>“Caronni-I discloses returning a virtual network address that corresponds to the destination device.” Petition at 57.</p> <p>“As explained above, Hipp also discloses returning a virtual network address that corresponds to the destination device. <i>See supra</i> Section VII.5.a–b; <i>see also</i> Ex-1005, 4:58–64, 6:16–26; Ex-1011, ¶¶ 343–344.” Petition at 57.</p> |

| Claim of the '785 Patent | Petitioner's Contention |
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| | <p>“A POSITA would understand that the combination of Caronni-I/II and Hipp discloses a DNS response. Ex-1011, ¶ 345.” Petition at 57.</p> <p>“RFC-1383 discloses a generalized scheme for packet routing using a standard DNS with a defined DNS record. Ex-1006, 2; <i>see also id.</i>, 5, 11 (‘In the scheme that we propose, the DNS is only accessed once’ and ‘will use the general purpose “TXT” record.’); <i>supra</i> § VI.D; Ex-1011, ¶ 391.” Petition at 62.</p> <p>“Accordingly, a POSITA would understand the Caronni-I/II and RFC-1383 combination discloses a DNS server. See <i>supra</i> § VI.F; Ex-1011, ¶ 392.” Petition at 62.</p> <p>“As discussed above in § VI.D, RFC-1383 discloses a way to store and return multiple IP addresses in response to a single query using TXT fields or records. <i>See also supra</i> § VI.F.” Petition at 62.</p> <p>“A POSITA would recognize that the Caronni-I/II and RFC-1383 combination would disclose a way to store and return multiple IP address in response to a single query. <i>See supra</i> Section VI.F.” Petition at 63.</p> |
| 35, 37 | <p>“Further, Caronni-I discloses an administrative node including a join module that is responsive to SNlogin and SNlogout scripts, where these scripts are agents associated with a device. Caronni-I discloses the first time a node accesses or is accessed over a Supernet, the local VARPDB (part of the device agent) sends a message to the administrative node to obtain its address mappings. Ex-1003, 11:53– 59.” Petition at 57-58.</p> <p>“Further, Caronni-I discloses devices logging out of a Supernet. Ex-1003, 12:62–65. (‘[T]he SNlogout script requests a log out from SASD[.]’).” Petition at 58.</p> |
| 37 | <p>“Additionally, Caronni-I’s admin node contains a server VARPDB (join module and part of administrative node) that stores and maintains device information, including addresses in</p> |

| Claim of the '785 Patent | Petitioner's Contention |
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| | mapping tables. Ex-1003, 7:5–9 (‘VARPD 548 has an associated component, VARPDB 551, into which it stores mappings of the internal Supernet addresses, known as a node IDs, to the network addresses recognized by the public-network infrastructure, known as real addresses.’). Ex1011, ¶¶ 378–379.’ Petition at 59. |

Regardless, Patent Owner’s arguments regarding the Petition’s discussion of the “motivation to combine” do not demonstrate that the Petition is “facially deficient.” Patent Owner improperly focuses its arguments in its Request on four paragraphs from the 69-page Petition. Request at 29, 35, 38. In doing so, however, Patent Owner ignores Petitioner’s reliance on specific aspects of Caronni-I, Caronni-II, Hipp, and RFC-1383 with respect to each element and each claim of the '785 Patent throughout the rest of the Petition. When Petitioners’ contentions in its Petition are considered in full (as they would be when the Board considers the merits of the Petition), Patent Owner’s “motivation to combine” arguments are not “facially deficient,” as Patent Owner contends.

D. The Expert Testimony Provides Supporting Evidence and Technical Reasoning and Therefore is Not a Reason to Discretionarily Deny the Petition

Patent Owner further contends that the Director should exercise her discretion to deny the Petition, because “[t]he [t]estimony of Petitioners’ Declarant [p]arrots [t]he [w]ords [o]f [t]he Petition [a]nd [p]rovides [n]o [a]dditional [e]xplanation [o]r

[c]itations [s]upporting [t]he [a]lleged [m]otivation [t]o [c]ombine Caronni-I and Caronni-II[.]” Request at 34.

The Stewart Memo regarding “Interim Processes for PTAB Workload Management” identifies “[t]he extent of the petition’s reliance on expert testimony” as one of the considerations that a party may address when seeking discretionary denial of an IPR petition. Ex. 1013 at 2. The Stewart Memo, however, does not state how the extent of the reliance on expert testimony affects discretionary denial, e.g., whether extensive reliance on expert testimony weighs in favor of, or against, discretionary denial. Moreover, the Stewart Memo does not state, as Patent Owner contends, that a factor that favors discretionary denial is extensive reliance on expert testimony that “largely repeats (word-for-word) the petition’s conclusory assertions for combining Caronni-I and Caronni-II.” Request at 34.

Patent Owner relies on one case (*Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, at *15-17 (P.T.A.B. Aug. 24, 2022)) as support. However, this case fails to support Petitioner’s contentions. As described below, in *Xerox*, unlike the present case, the problem with the expert testimony was not that it repeated statements in the Petition, but instead that the expert’s testimony was conclusory and lacked supporting evidence or technical reasoning. Further, *Xerox* did not involve a request that the Director discretionarily deny an IPR petition; instead, *Xerox* involved an IPR petition that the Board addressed on its merits. In other words,

despite the deficiencies with the expert declaration in *Xerox*, the Director did not discretionarily deny the *Xerox* Petition.

In *Xerox*, the Board, when addressing the merits of the Petition, gave little weight to the expert's (Dr. Jones') statement that "[a] POSITA would understand that such a blocking would require recording the blocking in a data record associated with that user's account," because "Dr. Jones does not cite to any additional supporting evidence or provide any technical reasoning to support his statement." IPR2022-00624, Paper 9 at *15 (citing 37 C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight."))).

Here, Patent Owner does not contend that the expert's testimony is conclusory and without supporting evidence or technical reasoning. Request at 34. Instead, Patent Owner merely shows which arguments in the Petition are supported by which paragraphs in the expert declaration. *Id.* Patent Owner does not even attempt to demonstrate that the expert declaration lacks supporting evidence or technical reasoning. Further, Patent Owner does not identify or describe any of the additional paragraphs in expert declaration's motivation to combine sections that are not contained in the Petition.

Thus, there is no basis for giving “little weight” to the expert declaration (Ex. 1011) that supports the Petition. Therefore the “extent of the petition’s reliance on expert testimony” factor does not support discretionary denial of the Petition.

E. A “Persuasive Reason” for the Board to Review is that the ’785 Patent Has Not Previously Been Asserted In Petitioners’ “Technology Space”—Airlines

Patent Owner further contends that the fact that the ’785 Patent has been in force for almost 14 years demonstrates that the parties’ “settled expectations” weigh in favor of discretionary denial. Request at 39-40.

Although Patent Owner cites *Intel Corp. v. Proxense, LLC*, IPR2025-00327, Paper 12, at *2 (P.T.A.B. June 26, 2025), Patent Owner ignores the portion of that opinion that provides “persuasive reasons” why the Board should review challenged claims several years after their issuance, one reason occurring when the patent has not been asserted in the petitioner’s particular technology space:

There may be persuasive reasons why the Board should review challenged claims several years after their issuance date As another example, a patent may have been in force for years but may not have been commercialized, asserted, marked, licensed, or otherwise applied in a petitioner’s particular technology space, if at all. These non-exclusive examples provide considerations that weigh against a patent owner’s claim of settled expectations and bears on the Director’s discretion.

Id. at 2-3.

Here, the Petitioners are American Airlines, Inc. and Southwest Airlines Co. Both Petitioners are airlines. As airlines, Petitioners are not in the business of parallel

processing systems and therefore Petitioners are not in the technology space of the '785 Patent.

As best understood by Petitioners, the '785 Patent, despite having been issued nearly 14 years ago, has *never* been “commercialized, asserted, marked, licensed, or otherwise applied” in the “airline” technology space until Patent Owner sued Petitioners in November 2024 in district courts in Texas. *See* Ex. 1007; *see also* Ex-1008. Indeed, Patent Owner offers no facts that would show that the '785 Patent has been “commercialized, asserted, marked, licensed, or otherwise applied” in the “airline” technology space prior to Patent Owner’s district court actions against Petitioners on the '785 patent. This evidence weighs against Patent Owner’s claim of settled expectations. *See Shenzhen Tuozhu Technology Co., Ltd.*, IPR2-25-00438; IPR2025-00531; IPR2025-00532; IPR2025-00585; and IPR2025-00611, Paper 10 at 3 (Director July 17, 2025) (Petitioner’s evidence that the challenged patents have never been “commercialized, asserted, marked, licensed, or otherwise applied” in Petitioner’s ‘particular technology space’ is evidence that ‘weighs against Patent Owner’s claim of strong settled expectations.’)

Setting aside the fact that Petitioners are airlines, the '785 Patent was purchased by Patent Owner for assertion. If there were any settled expectations regarding the '785 Patent, those expectations were that this patent did not read on

open-source software as the current Patent Owner, but not the original patent owner, asserts.

Further, at present, the parallel American and Southwest District Court Litigations involve the same 6 different patents spanning 6 families that involve a diverse range of subject matter, *i.e.*, in addition to the virtual communication networks and routing messages in such networks of the '785 patent, other asserted patents, each of which is currently the subject of IPRs brought by Petitioners, involve different subject matter: (1) U.S. Patent No. 7,257,582 (IPR2025-00785) is directed to parallel processing; (2) U.S. Patent No. 8,332,844 (IPR2025-00931) is directed to technology for caching and indexing for block-level distributed application management; (3) U.S. Patent No. 8,407,722 (IPR2025-00987) is directed to routing/transferring information for remotely updating content through a digital network; (4) U.S. Patent No. 7,324,469 (IPR2025-00782) is directed to providing rural hotspots, such as for Wi-fi access; and (5) 8,027,326 (IPR2025-01055). Exs. 1007 and 1008¹.

The large number and vast scope of the patents asserted in the district court litigation weighs against discretionary denial, as the Board is better suited to review a large number of patents involving diverse subject matter. *Shenzen*, Paper 10 at 3

¹ Patent Owner has asserted 5 additional patents against Southwest and is seeking to assert the same 5 patents and one additional patent against American.

(citing *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 9 at 2-3 (Director June 13, 2025)).

The fact that the '582 patent has not been “commercialized, asserted, marked, licensed, or otherwise applied” in the “airline” technology space coupled with the large number and vast scope of the patents asserted in the district court litigation bears on the Director’s discretion, weighing decidedly against discretionary denial.

F. Petitioners’ Positions on Claim Construction Before the District Courts Are Irrelevant

Patent Owner contends that Petitioners are engaging in alleged “gamesmanship” because, on the one hand, Petitioners, in the present Petition, contend that “Petitioners have abandoned [their 35 U.S.C. § 112, ¶ 2] positions in this IPR in favor of interpretations intended to support invalidity arguments” (Request at 49-50), whereas, on the other hand, Petitioners in their Preliminary Invalidity Contentions in the District Court Litigations, contend that certain terms of the '785 Patent claims are indefinite. *Id.* (citing Ex. 2004 at 36-37 and Ex. 2005 at 191-192).

Patent Owner relies on Petitioners’ ***Preliminary Invalidity*** Contentions, not final invalidity contentions or claim construction contentions. Currently, neither the Board nor either of the district courts has addressed the construction of any of the terms of the claims of the '785 Patent. Unstated by Patent Owner is the fact that, in the American District Court Litigation, American has served its Preliminary Claim

Constructions in which American did not claim any terms to be indefinite. Ex. 1038.
There is no inconsistency between Petitioners' IPR Petition and Petitioner American's Preliminary Claim Constructions.

Accordingly, Petitioner's claim construction contentions demonstrate no "gamesmanship" that would favor discretionary denial.

III. CONCLUSION

For the foregoing reasons, the Director should deny Patent Owner's Request for Discretionary Denial and thus allow the Petition to proceed on the merits.

Dated: August 11, 2025

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Response complies with the type-volume limits of 37 C.F.R. § 42.24(a)(1)(i) because it contains 8,623 words, according to the word-processing system used to prepare this petition, excluding parts of this petition that are exempted by 37 C.F.R. § 42.24(a) (including the table of contents, a table of authorities, mandatory notices, a certificate of service or this certificate word count, appendix of exhibits, and claim listings).

Dated: August 11, 2025

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CERTIFICATE OF SERVICE

I hereby certify, pursuant to 37 C.F.R. Sections 42.6 and 42.106, that a complete copy of the attached **RESPONSE TO REQUEST FOR DISCRETIONARY DENIAL**, including all exhibits (**Nos. 1013, 1032-1040**) and related documents, are being served, upon Patent Owner by serving the correspondence address of record with the USPTO as follows:

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