

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMERICAN AIRLINES, INC. AND SOUTHWEST AIRLINES CO.,

Petitioners

v.

INTELLECTUAL VENTURES II LLC,

Patent Owner.

Inter Partes Review No. IPR2025-01509

U.S. Patent No. 11,032,000

Issue Date: June 8, 2021

Title: COMMUNICATIONS IN A WIRELESS NETWORK

**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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<i>Tesla, Inc. v. Intellectual Ventures II LLC</i> IPR2025-00217, Paper 9 (Director Jun. 13, 2025)	6

EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 11,032,000 (the “’000 Patent”)
1002	File History for U.S. Patent No. 11,032,000 (U.S. Patent Appl. No. 16/682,854)
1003	Declaration of Dr. van der Weide
1004	Curriculum Vitae of Dr. van der Weide
1005	U.S. Patent No. 8,417,248 (“Papaskellariou”)
1006	US Patent Application Publication No. 2007/0058595 (“Classon”)
1007	US Patent No. 7,817,605 (“Liu”)
1008	US Patent Application Publication No. 2008/0045260 (“Muharemovic”)
1009	Claim Chart for ’000 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 13) (’000 claim chart)
1010	<i>Toyota Motor Corp. et al. v. Intellectual Ventures II LLC</i> , IPR2022-01130, Paper 1 (P.T.A.B. Jun. 13, 2022) (the “’356 Petition”)
1011	<i>Toyota Motor Corp. et al. v. Intellectual Ventures II LLC</i> , IPR2022-01130, Paper 10 (P.T.A.B. Oct. 5, 2022) (the “’356 POPR”)
1012	<i>Toyota Motor Corp. et al. v. Intellectual Ventures II LLC</i> , IPR2022-01130, Paper 26 (P.T.A.B. Apr. 7, 2023) (the “’356 POR”)
1013	<i>Toyota Motor Corp. et al. v. Intellectual Ventures II LLC</i> , IPR2022-01130, Paper 13 (P.T.A.B. Dec. 12, 2022) (the “’356 Institution”)
1014	<i>Toyota Motor Corp. et al. v. Intellectual Ventures II LLC</i> , IPR2022-01130, Paper 41 (P.T.A.B. Dec. 4, 2023) (the “’356 FWD”)
1015	“LTE – The UMTS Long Term Evolution: From Theory to Practice” by Sesia, Toufik, and Baker, published by Wiley in 2009.
1016	US Patent No. 7,668,564 (“Onggosanusi”)
1017	<i>Intellectual Ventures I LLC et al. v. American Airlines, Inc.</i> , No. 4:24-cv-980 (E.D. Tex.) [Dkt. 76] – Amended Complaint
1018	<i>Intellectual Ventures I LLC et al. v. Southwest Airlines Co.</i> , No. 7:24-cv-277 (W.D. Tex.) [Dkt. 1] – Complaint
1019	<i>Intellectual Ventures I LLC et al. v. American Airlines, Inc.</i> , No. 25-cv-576 (E.D. Tex.) [Dkt.1] – Complaint
1020	Intentionally not used
1021	Approved report of 3GPP TSG RAN WG1 #46
1022	Approved report of 3GPP TSG RAN WG1 #45
1023	Approved report of 3GPP TSG RAN WG1 #44

Exhibit No.	Description
1024	Approved report of 3GPP TSG RAN WG1 #43
1025	Approved report of 3GPP TSG RAN WG1 #42bis
1026	Intentionally not used
1027	Intentionally not used
1028	Intentionally not used
1029	Declaration of Paul Howard dated March 29, 2014
1030	Declaration of Kenneth Scott
1031	Claim Chart for '000 Patent from Intellectual Ventures' Infringement Contentions against American Airlines
1032	Defendant American Airlines' Supplemental Disclosure of Proposed Terms and Claim Elements for Construction
1033	American Litigation Scheduling Order

I. INTRODUCTION

The '000 Patent's validity should be resolved by the PTAB ("the Board"), not in court. The '000 Patent has clear validity issues that are explained by the Petition—the merits of which Patent Owner does not contend with. Moreover, Patent Owner asserts the '000 Patent as part of a multi-district litigation campaign involving twelve patents from ten different families (collectively the "Parallel Litigations"). This proceeding, if instituted, will save significant resources and resolve validity without the need for multiple trials by multiple district courts (the Northern and Eastern Districts of Texas, collectively the "District Courts").

The two arguments in Patent Owner's brief fail to justify discretionary denial. Patent Owner first attempts to argue that due to previous institution decisions concerning six other patents asserted in the District Court litigations, the District Courts "are better suited to review the validity of the remaining patents." Opp. at 3. This argument is not persuasive. There are still six patents in the Parallel Litigations whose validity has not been considered by the Board, with four pending petitions and two yet to be filed. The solution for the already-overburdened courts in the Parallel Litigations is not to heap another six patents on top of the six for which institution has been denied—that outcome would only exacerbate the challenge of resolving both invalidity and infringement in the District Courts on twelve patents.

Patent Owner also argues that Petitioner Southwest pursues inconsistent claim

construction positions before the District Court and this proceeding. But this argument is unavailing, as Petitioner Southwest stipulates it will not pursue in the District Court the indefiniteness arguments identified by Patent Owner. Accordingly, there is no risk of inconsistent claim construction positions between the Parallel Litigations and this proceeding, and Patent Owner identifies no basis for discretionary denial.

Finally, though Patent Owner's request for discretionary denial is silent with respect to *Fintiv*, that analysis counsels in favor of institution. Trial is not yet set in either of the Parallel Litigations, and an institution decision will predate any significant expenditure in adjudicating the validity and infringement of the '000 Patent.

Thus, the number and range of the patents asserted in the Parallel Litigations, the lack of inconsistent arguments between the Parallel Litigations and this proceeding, and *Fintiv* all counsel that discretionary denial is inappropriate here. The Petition should be instituted because its arguments against the '000 Patent are strong, and the Board is best positioned to efficiently resolve validity given the existing strain on the District Courts. Petitioners respectfully request that the Board review the merits of the Petition and institute trial.

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

A. The Board is best suited to review this patent because of the breadth of the twelve patents asserted in the Parallel Litigations.

“The large number and vast scope of the patents asserted” in the Parallel Litigations weighs against discretionary denial. *Shenzen Tuozhu Tech. Co., Ltd. v. Stratasys, Inc.*, IPR2025-00438, Paper 10 at 3 (Director July 17, 2025) (“*Stratasys*”). Contrary to Patent Owner’s arguments, the Board’s declining to institute the earlier petitions does not alter this rationale, it strengthens it—there are still twelve patents at issue in the Parallel Litigations, and this proceeding, if instituted, *will* lighten the District Courts’ loads in the Parallel Litigations.

The ’000 Patent is one of twelve different patents (from ten different families) asserted in the Parallel Litigations. This fact led the Director to decline Patent Owner’s earlier requests for discretionary denial. *E.g.*, Exs. 2001, 2002, and 2003. It should do so here as well. Patent Owner is wrong that the Board’s denial of institution in the earlier proceedings now strengthens its case for discretionary denial. If anything, those earlier denials only reinforce the need for the Board to review the ’000 Patent’s validity, as it is now clear that the District Courts will adjudicate the validity and infringement of a large number of unrelated patents, *i.e.*, the six patents for which discretionary denial was denied but for which the Board denied institution. The Board can prevent that burden from growing even larger by

instituting the Petition and resolving the '000 Patent's validity outside of the Parallel Litigations.

Patent Owner's argument that "no results by the Board in the four remaining IPRs will avoid the need for the District Courts to address the validity of patents spanning a 'diverse range of subject matter'" defies common sense. Opp. at 6. It would only exacerbate the judicial-economy problem faced by the District Courts if additional patents in the Parallel Litigations were left for their adjudication. Further waste and inefficiency can be avoided by having a specialized tribunal—the Board— review the '000 patent's validity. Doing so would undeniably lessen the load on the already-overburdened District Courts in the Parallel Litigations.

This point is especially salient given the '000 Patent's subject matter. The '000 Patent is the only patent in the Parallel Litigations to concern cellular communications technology. Ex. 1001, Cover. Patent Owner's own infringement contentions confirm that the '000 Patent's adjudication would introduce an entirely new technology to the Parallel Litigations; the device accused of infringement by Patent Owner is not accused under any other patent and it is not related to any other device accused in the Parallel Litigations. Ex. 1031 ('000 Patent Claim Chart concerning Collins Aerospace's cellular aircraft interface device). Because the '000 Patent involves an entirely different technology than the other patents in the Parallel Litigations, Board review of its validity would promote efficiency.

This '000 Patent's unique stature in the Parallel Litigations is obscured in Patent Owner's discretionary denial brief, which contains an inaccurate table that omits two of the patents in the Parallel Litigations and describes the subject matter of the remaining patents at such a high level of generality that the comparison between patents is meaningless. Opp. at 5. For example, Patent Owner contends that U.S. Patent No. 8,027,326, which concerns and is asserted against 802.11-based Wi-Fi technology, is so similar to the '000 Patent that there will be no legitimate efficiency concerns raised by the District Courts adjudicating both patents. Opp. at 6. Wi-Fi and cellular communications are distinct technologies. The argument that the subject matter areas of the other patents in the Parallel Litigations "fully encompass" that of the '000 Patent is just not true.

The table below recites the complete list of patents asserted in the Parallel Litigations, along with the title of each patent and the technology Patent Owner accuses of infringement. As can be seen, the '000 Patent is the only ***cellular technology*** (*i.e.*, LTE-based wireless systems) patent asserted in the Parallel Litigations; it bears no relation to any of the other asserted patents.

U.S. Patent No.	Description	Notes
7,257,582	"Load Balancing With Shared Data"	Accusing Spark/Hadoop software
7,324,469	"Satellite Distributed High Speed Internet Access"	Accusing onboard satellite internet systems

U.S. Patent No.	Description	Notes
7,712,080	“Systems and Methods for Parallel Distributed Programming”	Accusing Spark software
7,721,282	“Block-Level I/O Subsystem for Distributed Application Environment Management”	CIP of '844 Patent; Accusing Docker software
7,822,841	“Method and System for Hosting Multiple, Customized Computing Clusters”	Accusing Kubernetes software
7,949,785	“Secure Virtual Community Network System”	Accusing Kubernetes software
8,027,326	“Method and System for High Data Rate Mult-Channel Wlan Architecture”	Accusing 802.11-based wi-fi access points
8,332,844	“Root Image Caching and Indexing for Block-Level Distributed Application Management”	Accusing Docker software
8,352,584	“System for Hosting Customized Computing Clusters”	Continuation of '841 Patent; Accusing Kubernetes software
8,407,722	“Asynchronous Messaging Using a Node Specialization Architecture in the Dynamic Routing Network”	Accusing Kafka software
10,103,845	“Dual Mode Communication Systems and Methods”	Asserted against Petitioner American, but not asserted against Petitioner Southwest; Accusing 802.11-based wi-fi access points
11,032,000	“Communications In a Wireless Network”	Accusing LTE-based wireless systems

Moreover, the '000 Patent is one of six patents asserted in the Parallel Litigations that has not yet reached an institution decision before the Board. This

scenario reflects others in which the Board has declined to exercise its discretion to deny institution. *Tesla, Inc. v. Intellectual Ventures II LLC* IPR2025-00217, Paper 9 at 2-3 (Director Jun. 13, 2025) (declining to discretionarily deny institution where six patents from a single litigation were before the Board). Thus, even setting aside the six previously decided institution decisions and the unique subject matter of the '000 Patent, the breadth and complexity that would be added to the Parallel Litigations from the patents where institution has not been denied would be reason enough for the Board not to discretionarily deny this Petition.

Last, it should be borne in mind that there are two Parallel Litigations: any resolution of the validity of the '000 Patent's validity by the Board will save effort and expense in *two* district court proceedings. The cost-savings and efficiency of the Board's reviewing this patent further confirms that discretionary denial is inappropriate here. *Harbor Freight Tools USA Inc. v. Champion Power Equipment, Inc.*, IPR2025-00805, Paper 20 at 2 (Director September 19, 2025) (declining to discretionarily deny review of a patent asserted in a thirteen-patent multi-district parallel litigation).

In sum, the fact that IPR petitions concerning previous patents asserted in the Parallel Litigations were not instituted changes nothing with respect to Petitioners' arguments of efficiency and judicial economy. There is still an unworkably high number of patents for the District Courts to adjudicate, there are still six patents

asserted in the Parallel Litigations that have not reached institution decisions by the Board, and any review of the '000 Patent's validity will save resources in two different venues. On these facts, discretionary denial is not an appropriate outcome for the '000 Petition.

B. There is no risk of inconsistent arguments before the district court proceedings and this proceeding that would disfavor institution.

Patent Owner claims discretionary denial is appropriate based on Petitioner Southwest's arguments regarding indefiniteness in the district court and a supposed failure "to present a consistent and legally sound claim construction" across the Parallel Litigations and this proceeding. As will be explained below, there is no danger of inconsistent claim constructions between this proceeding and the Parallel Litigations, so this is not a valid basis for discretionary denial.

First, Petitioner Southwest agrees not to pursue before the District Court the indefiniteness arguments complained of by Patent Owner in its discretionary denial brief, so regardless of their consistency or inconsistency with Petitioners' claim construction positions in the Petition, these arguments are no longer a basis to decline institution. Stipulations of this type have been accepted previously by the Director as a valid means of overcoming accusations of inconsistency. *Caption Health, Inc. v. Univ. of British Columbia*, IPR2025-01422, Paper 15 (Director Dec. 18, 2025) (denying a Patent Owner's request for discretionary denial where the Petitioner stipulated to pursue the same claim construction positions before a district

court and the Board). Patent Owner alleges no other inconsistencies between Petitioners' claim construction positions in the Parallel Litigations and the Petition, so this stipulation alone dispenses with Patent Owner's argument.

Second, although Patent Owner does not argue that Petitioner American's positions in the District Court are inconsistent with positions taken in this Petition, it should be noted that Petitioner American will not pursue indefiniteness arguments that are inconsistent with the Petition's contents. The only indefiniteness arguments forwarded by Petitioner American in its Supplemental Disclosure of Proposed Terms and Claim Elements for Construction (Ex. 1032) are those made under the Federal Circuit's *IPXL* case, which holds that a claim is invalid as indefinite when it "recites both a system and the method for using that system." *IPXL Holdings, LLC v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005). Such arguments are not inconsistent with the Petition's arguments that the prior art discloses and invalidates the claimed invention of the '000 Patent, so these arguments too are not a basis for discretionary denial.

In light of these considerations, there is no risk of inconsistent claim construction positions between the Parallel Litigations and this proceeding, so the Board should not decline to institute the Petition on this basis.

C. *Fintiv* favors institution.

1. Factor 1 (likelihood of a stay) is neutral.

The relevant inquiry into *Fintiv* Factor 1 is “whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted.” *Apple, Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (P.T.A.B. May 13, 2020) (informative) (“*Fintiv*”). Here, there is no indication from either court in the Parallel Litigations as to how it would rule on such a stay if a proceeding were instituted. Therefore, this factor does not weigh for or against denial. *Fintiv* at 12; *Sand Revolution II, LLC v. Continental Intermodal Grp.-Trucking LLC*, IPR2019-01393, Paper 24 at 7 (P.T.A.B. June 16, 2020) (informative) (“*Sand Revolution*”).

2. Factor 2 (proximity of the trial date) weighs against discretionary denial because a Final Written Decision will likely predate any trial.

The Board is set to issue its Final Written Decision on the ’000 Patent by March 23, 2027. Further, trial is not yet set in either of the Parallel Litigations. Factor 2 accordingly weighs against discretionary denial. *Murata Mfg. Co., Ltd. v. Georgia Tech Research Corp.*, IPR2025-00384, Paper 13 at 2 (Director July 29, 2025).

3. Factor 3 (investment in the parallel proceeding) weighs against discretionary denial because institution would predate substantial investment in the Parallel Litigations.

Fintiv Factor 3 weighs strongly against discretionary denial because, on the likely date of the Board’s institution decision, neither court in the Parallel Litigations is likely to have issued substantive orders related to the ’000 Patent, and there will

undoubtedly be substantial remaining investment in the merits of the parties' invalidity positions. *Sand Revolution* at 10.

The likely date of the institution decision (March 23, 2026) predates the date set for the opening *Markman* brief in the American Litigation (set for March 30, 2026). Ex. 1033 at 2. The institution decision is also certain to predate any adjudication in the Parallel Litigations of the '000 Patent's validity or infringement, as trial is not yet set in either of the Parallel Litigations. This IPR is by far the most efficient way to resolve the '000 Patent's validity going forward, so Factor 3 weighs strongly against discretionary denial.

4. Factor 4 (overlap between issues in the petition and parallel proceedings) weighs against discretionary denial because overlap between the proceedings is minimal.

Factor 4 weighs against discretionary denial because the Petition includes materially different arguments and evidence than what will be presented in the Parallel Litigations. *Sand Revolution* at 11-12. Specifically, the Petition addresses substantially more claims than are at issue in the Parallel Litigations, and, pursuant to *Sotera*, Petitioners stipulated not to pursue any grounds in the Parallel Litigations that could have been raised in this proceeding. Petition at 2.

This proceeding would address materially different issues than the Parallel Litigations. In the Parallel Litigations, Patent Owner asserts twelve claims of the '000 Patent (1-6 and 13-18), so Petitioners may only seek review of those twelve

claims in that forum. Conversely, Petitioners seek review of all 24 claims of the '000 Patent in this proceeding, including the claims asserted in the Parallel Litigations. Petition at 1. This weighs against discretionary denial because this proceeding can resolve substantial validity issues that the Parallel Litigations cannot.

Moreover, Petitioners have stipulated to “not pursue in the District Court Litigation any ground raised or that could have been reasonably raised in an IPR,” thereby eliminating any potential overlap between this proceeding and the Parallel Litigations. Petition at 2 (citing *Sotera*). Factor 4 weighs against denial. *Stratasys* at 3.

5. Factor 5 (identity of the parties) is neutral.

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.” *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). As in *Aylo*, the fact that there is overlap between Petitioners and defendants in the Parallel Litigations adds little to the discretionary denial analysis here, so Factor 5 is neutral. *Id.* at 18.

* * *

Of the five *Fintiv* factors to be considered, Factors 2, 3, and 4 weigh against denial, and Factors 1 and 5 are neutral. The *Fintiv* analysis thus favors institution.

III. CONCLUSION

For the reasons above, Petitioners respectfully ask the Director to institute the Petition.

Dated: December 23, 2025

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CERTIFICATE OF SERVICE

I hereby certify, pursuant to 37 C.F.R. Sections 42.6, that a complete copy of the attached **PETITIONERS' BRIEF IN OPPOSITION TO PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL**, including all exhibits (**Nos. 2030-2032**), are being served upon Patent Owner by servicing Patent Owner's counsel listed below:

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