

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DJI EUROPE B.V.,
Petitioner,

v.

TEXTRON INNOVATIONS INC.,
Patent Owner.

Case IPR2023-01106
Patent No. 10,275,950

**PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 37 C.F.R. § 42.107**

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1011	U.S. Patent 6,278,913 to Jiang ("Jiang")
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1013	Peters, et al, "ISR-Eagle: Unmanned Aerial Systems Competition Report", Student Unmanned Aerial Systems (SUAS) Competition

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1014	Koh, "Digital Memory Card Market and Technology", 2005 Conference on High Density Microsystem Design and Packaging and Component Failure Analysis (June 27-29, 2005)
1015	U.S. Department of Transportation, Federal Aviation Administration, AC No: 120-76B, "Guidelines for the Certification, Airworthiness, and Operational Use of Electronic Flight Bags"
1016	GE Intelligent Platforms, "ARINC Protocol Tutorial" (2010)
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1024	U.S. Patent Publication 2007/0219831 to Ne'meth
1025	U.S. Patent 8,626,568 to Warkentin, et al.
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2001	Defendant's Motion to Stay in <i>Textron Innovations Inc. v. SZ DJI Technology Co., Ltd.</i> , 2-22-cv-00351 (EDTX)
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I. INTRODUCTION

The Board should deny institution of *inter partes* review for discretionary and merits-based reasons.

Each *Fintiv* factor favors denial. Trial is scheduled to take place well before any final written decision will issue in this proceeding, the parties and district court will have invested significant resources in the related litigation by the time an institution decision issues, and this petition raises the same issues as in related litigation because Petitioner has not provided any stipulation as to which grounds it will raise in litigation should the Board grant institution. Moreover, the petition does not present a compelling challenge that overcomes a *Fintiv* denial as it suffers from fatal deficiencies.

Indeed, regarding the merits, the petition fails at least because it is inconsistent in its analysis of claim terms and conclusory in its assertions. The petition also proffers motivations to combine that are inadequate as they fail to articulate why or how one of ordinary skill in the art would have combined the asserted prior art.

As such, the Board should deny institution of this *inter partes* review.

II. THE BOARD SHOULD DENY INSTITUTION UNDER *FINTIV*

Under § 314(a), the Board has discretion to deny institution when there is a parallel district court proceeding. In considering whether to exercise discretion,

the Board balances six factors:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board's exercise of discretion, including the merits.

Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 11 at 5-6 (PTAB Mar. 20, 2020).

“These factors relate to whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding.” *Id.* In evaluating, the Board takes “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.*

Patent Owner asserted the '950 Patent, as well as three other patents, against Petitioner in *Textron Innovations Inc., v. SZ DJI Tech. Co., Ltd. et al.*, Case No. 2:22-CV-00351-RWS-RSP (E.D. Tex.) (Complaint filed September 9, 2022) (“the district court litigation”). In view of the advanced nature of this parallel litigation,

discretionary denial under *Fintiv* is warranted.¹

A. Factor 1 Favors Denial or is Neutral (Likelihood of a Stay)

Factor 1 weighs in favor of exercising discretion to deny institution, or at a minimum is neutral. Petitioner has requested a stay in the parallel district court litigation, but there is no evidence indicating that the stay will be granted as the court has a “universal” practice to deny pre-institution stays. EX2001; EX2002, 7-8. Indeed, neither Judge Schroeder nor Judge Payne, who are assigned to the district court litigation, appear to have granted any contested pre-institution stays. EX2003; EX2004. And the likelihood of any post-institution stay is similarly slim.

¹ Petitioner did not address *Fintiv* other than providing a cursory argument that its petition “presents a compelling unpatentability challenge” and “[s]hould PO raise discretionary denial under *Fintiv* in its preliminary response, Petitioner reserves the right to offer a stipulation at that time to mitigate or foreclose *Fintiv* discretionary denial.” Petition (Paper 3), 80-81. To the extent Petitioner requests authorization to address *Fintiv* with a more complete analysis, such a request should be denied. Petitioner had good reason to expect a *Fintiv* argument by Patent Owner, at least because it filed the Petition close to the one-year statutory bar, knew of the advanced stage of litigation, and has not yet extended any offer of stipulation that would obviate the *Fintiv* issues.

EX2005; EX2006. Absent evidence indicating a stay, this factor weighs in favor of discretionary denial or, at a minimum, is neutral. *See Mylan Labs. Ltd. v. Janssen Pharmaceutica NV*, IPR2020-00440, Paper 17 at 13-14 (P.T.A.B. Sept. 16, 2020) (finding this factor “leans towards denial of institution” where the facts in the parallel district court proceeding “indicate that no stay is likely to be entered”); *see also Sand Revolution II, LLC v. Cont’l Intermodal Grp.-Trucking LLC*, IPR2019-01393, Paper 24 at 7 (P.T.A.B. June 16, 2020) (noting that without “specific evidence” of whether or not a stay would be granted, this factor is neutral).

B. Factor 2 Strongly Favors Denial (Timing of Trial)

Fintiv factor 2 weighs heavily in favor of exercising discretion to deny institution. Trial in the district court litigation is scheduled to take place in July 2024—just a few months after the deadline for an institution decision to issue, and approximately seven months before the statutory deadline for a final written decision of February 15, 2025. Paper 6; EX2007, 1. This factor therefore “weighs heavily” in favor of denial. *See Roku, Inc. v. Ioengine, LLC*, IPR2022-01553, Paper 11 at 10-11 (PTAB May 5, 2023) (trial date “about six months prior to the due date for [] final written decision” found to “weigh[] heavily in favor of discretionary denial of institution”); *Samsung Electronics Co., Ltd. v. California Institute of Technology*, IPR2023-00130, Paper 10 at 16 (PTAB May 4, 2023) (trial date

“several months before the expected date of [] final written decision” weighing in favor of denial); *Zhuhai Cosmx Battery Co. Ltd. v. Ningde Ampere Tech. Ltd.*, IPR2023-00585, Paper 12 at 11-13 (PTAB Oct. 24, 2023) (trial scheduled “about eight or nine months before the statutory deadline” to issue a final written decision, and median time-to-trial statistics indicating “trial would occur about three to four months before the statutory deadline,” weighing in favor of denial)

Moreover, there are no indications that the litigation is departing from the scheduled July 2024 trial date. The most recent trial statistics for the twelve-month period ending June 30, 2023 indicate that the Eastern District of Texas's median time-to-trial for civil cases is 16.7 months. EX2010, 35. The time-to-trial for the district court litigation is approximately four months longer than the median, which indicates that the scheduled date is conservative and will likely be maintained. The statistics therefore further support that trial will take place well before issuance of a final written decision.

C. Factor 3 Strongly Favors Denial (Investment in Parallel Proceeding)

Factor 3 weighs strongly in favor of denial because both Petitioner and Patent Owner will have invested significantly and expended considerable resources in the parallel district court litigation by the time the Board issues a decision on institution. For this factor, the Board considers “the amount and type of work already completed in the parallel litigation by the court and the parties at the time

of the institution decision.” *Fintiv*, Paper 11 at 9. “Specifically, if, at the time of the institution decision, the district court has issued substantive orders related to the patent at issue in the petition, this factor favors denial.” *Id.*, 9-10. For example, “district court claim construction orders may indicate that the court and parties have invested sufficient time in the parallel proceeding to favor denial.” *Id.*, 10. “This investment factor is related to the trial date factor, in that more work completed by the parties and court in the parallel proceeding tends to support the arguments that the parallel proceeding is more advanced, a stay may be less likely, and instituting would lead to duplicative costs.” *Id.*

Here, the Board is projected to issue a decision on institution by February 15, 2024. By that time, the parties will have fully briefed and argued claim construction, and likely will have obtained a final *Markman* order. EX2007, 3-4. Completion of fact discovery will be days away with a fact discovery cut-off of February 26, 2024. *Id.* Completion of expert discovery will be approximately a month away. *Id.* Document production will be substantially completed. *Id.* Petitioner has already served invalidity contentions including the same combinations presented in this proceeding (and IPR2023-01107). EX2012.

Accordingly, the parties will have already expended significant time and resources in the parallel district court litigation, including work relevant to validity, claim construction, and fact and expert discovery, before an institution decision.

See, e.g., Fintiv, IPR2020-00019, Paper 15 at 13-14 (finding this factor weighed in favor of discretionary denial where the parties had fully briefed claim construction, conducted the *Markman* hearing, and exchanged both initial and final infringement and invalidity contentions—“including detailed invalidity claim charts addressing the prior art cited in th[e] Petition”—despite fact discovery being in its early stages); *Zhuhai Cosmx Battery Co. Ltd.*, IPR2023-00585, Paper 12 at 14-15 (finding advanced nature of district court litigation heavily favoring denial). For at least these reasons, the parties' significant investment in the parallel district court litigation before the Board issues a decision on institution weighs in favor of discretionary denial.

D. Factor 4 Strongly Favors Denial (Overlap of Issues)

Factor 4 strongly favors discretionary denial. Petitioner has challenged claims 9-14 and 16 in this IPR proceeding, and in the parallel IPR proceeding challenged claims 1-5, 7, and 8. Petition (Paper 3) at 2; IPR2023-01107, Petition (Paper 3) at 2. Claims 1-5, 8, 9, 12-14, and 16 are currently asserted in the district court litigation, meaning all asserted claims have been challenged across the two petitions. EX1012, 1.²

² Petitioner has not argued that the unasserted challenged claims differ significantly in some way or that Petitioner would be harmed if institution of the unasserted

In the district court litigation, Petitioner is challenging ***all of the asserted claims*** using the ***same references***³ and ***same grounds*** raised in this petition and the petition of IPR2023-01107. EX2012, 1, 9, 32; IPR2023-01107, Paper 3. Institution of both petitions would result in a high likelihood of inconsistent results and be inefficient, with the parties, Board, and district court all analyzing the same issues. Thus, institution should be denied in this proceeding and IPR2023-01107. This

claims is denied. *See Fintiv*, Paper 11 at 13, n.25 (citing *Next Caller, Inc. v. TRUSTID, Inc.*, IPR2019-00961, Paper 10 at 14 (PTAB Oct. 16, 2019) (denying institution even though the IPR petitions jointly challenged all claims of a patent and the district court proceeding involved only a subset of the claims because the claims all were directed to the same subject matter and the petitioner did not argue that the non-overlapping claims differed significantly in some way or that it would be harmed if institution of the non-overlapping claims was denied).

³ Petitioner's invalidity contentions of EX2012 erroneously refer to Wakutsu as "US2012/105083 (sutsu)" rather than its WIPO publication number of WO 2012/105083. EX2012 at 9; EX1007. The invalidity contentions also rely on Greubel's patent application publication (2014/0328248) listed on the face of the Greubel patent (EX1009) used in this proceeding. EX2012 at 9; EX1009. There do not appear to be substantive differences between these versions of Greubel.

factor therefore weighs strongly in favor of discretionary denial. *See, e.g., Fintiv*, Paper 11 at 12 (“[I]f the petition includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel proceeding, this fact has favored denial,” because “concerns of inefficiency and the possibility of conflicting decisions [are] particularly strong.”); *Resmed Corp v. Cleveland Medical Devices, Inc.*, IPR2023-00565, Paper 13 at 13-15 (PTAB Sept. 25, 2023) (“Given the overlap in claims, prior art, and arguments between this IPR and the district court, we have concerns regarding duplicative efforts and potentially conflicting positions”); *Intel Corp. v. VLSI Tech. LLC*, IPR2020-00158, Paper 16 at 12 (PTAB May 20, 2020) (denying institution when there was “substantial overlap between the issues raised in the Petition and in the [district court] litigation.”); *Google LLC v. AGIS Software Dev., LLC*, IPR2020-00873, Paper 16 at 15 (PTAB Nov. 25, 2020) (denying institution where there was “substantial overlap between the grounds asserted in the underlying litigation and those asserted in the Petition, so that institution of an *inter partes* review likely will result in duplicative efforts by the Board and the trial court as to how the references teach limitations of the challenged claims.”); *U.S. Venture, Inc. v. Sunoco Partners Marketing & Terminals L.P.*, IPR2020-00728, Paper 10 at 12-14 (PTAB Oct. 1, 2020) (denying institution where the petitioner relied on the same primary references in IPR and the parallel district court proceeding, as “instituting

an inter partes review would likely duplicate the district court's efforts, as well as create the potential for inconsistent results, both of which undercut the efficiency and integrity of the Patent system.”).

Additionally, Petitioner has not provided any stipulation that it will forego using the prior art included in the Petition in the district court litigation, let alone that it will not pursue any ground that could have been reasonably raised under 35 U.S.C. §§ 102 or 103 based on prior art patents and/or printed publications. Nor has Petitioner taken any other actions to mitigate the duplicative challenges. For at least these additional reasons, this factor weighs strongly in favor of discretionary denial. *See, e.g., Resmed*, IPR2023-00565, Paper 13 at 14-15 (“Petitioner could have expressly waived in district court any overlapping patentability or invalidity defenses but chose not to. Given the facts here this factor weighs in favor of exercising discretion to deny institution”); *Apcon, Inc. v. Gigamon Inc.*, IPR2020-01579, Paper 9 at 26 (PTAB Mar. 16, 2021) (finding this factor favored denial where the art was substantially the same and no stipulation had been filed by the petitioner agreeing not to assert the same art in the parallel proceeding); *Code200, Uab v. Luminati Networks Ltd.*, IPR2020-01506, Paper 10 at 11-12 (PTAB Feb. 16, 2021) (determining that this factor favored exercising discretion to deny institution where the petitioner had not filed any stipulations or taken any actions to reduce the overlap between the IPR and district court proceedings); *see also*

Vizio, Inc. v. Maxell, Ltd., IPR2022-01458, Paper 8 at 51-52 (PTAB April 11, 2023) (lack of stipulation weighing in favor of denial, but instituting due to “compelling merits”); *Samsung Electronics Co., Ltd. et al. v. Ancora Technologies, Inc.*, IPR2020-01184, Paper 11 at 19-21 (PTAB Jan. 5, 2021) (finding that a narrow stipulation agreeing only that the art used in the grounds in the petition would not be raised during trial in the parallel litigation does not “mitigate the ‘concerns of inefficiency and the possibility of conflicting decisions,’ nor does it ensure that an *inter partes* review is a ‘true alternative’ to the parallel District Court proceeding.”) (quoting *Fintiv*, Paper 11 at 12).

E. Factor 5 Strongly Favors Denial (Overlapping Parties)

Factor 5 weighs strongly in favor of discretionary denial. It is undisputed that Petitioner and Patent Owner are the same parties in the district court litigation. *See, e.g., Fintiv*, Paper 15 at 15 (“Because the petitioner and the defendant in the parallel proceeding are the same party, this factor weighs in favor of discretionary denial.”); *Samsung Electronics Co., Ltd. et al. v. Ancora Technologies, Inc.*, IPR2020-01184, Paper 11 at 22-23 (PTAB Jan. 5, 2021).

F. Factor 6 Strongly Favors Denial (Other Circumstances)

This factor is “a catch-all that takes into account any other relevant circumstances,” including “strengths or weaknesses” of the parties’ arguments. *Samsung Electronics Co., Ltd. v. Clear Imaging Research, LLC*, IPR2020-01401,

Paper 12 at 23 (PTAB Feb. 17, 2021).

As noted above, Petitioner did not address *Fintiv* other than stating the petition presented a “compelling unpatentability challenge” and reserving the right to offer a stipulation if Patent Owner raised *Fintiv* in the POPR. Petition, 80. Petitioner’s chosen strategy is problematic for multiple reasons and favors denial.

Petitioner’s bare statement that its petition “presents a compelling unpatentability challenge” is undercut not only by the fatal deficiencies identified below (see Section V), but also the Director’s precedential opinion in *Commscope Tech. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 (PTAB Feb. 27, 2023) (Director Review Decision) (Precedential). Under *Commscope*, the Board “should first assess *Fintiv* factors 1-5” and “if that analysis supports discretionary denial, the Board should engage the compelling merits question.” *Commscope*, Paper 23 at 6. Petitioner did not address *Fintiv* factors 1-5. Thus, not only does the petition fail in providing a compelling challenge—its bare argument is improper and carries no weight.

And as a broader issue, Petitioner’s chosen strategy is an example of the “inefficiency and gamesmanship” the Director intended to eliminate in the *Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation Memorandum* (June 21, 2022) at 1. Petitioner had good reason to expect the POPR would address discretionary denial under *Fintiv* in view

of the July 2024 trial date and advanced stage of litigation, and because Petitioner waited until approximately the last possible month to file its petition. And Petitioner apparently recognized this by expressly “reserv[ing] the right to offer a stipulation” to “mitigate or foreclose *Fintiv* discretionary denial” should “PO raise discretionary denial under *Fintiv* in its preliminary response.” Petition, 81. But within the current context, premising an offer of stipulation on whether “PO raise[s] discretionary denial under *Fintiv* in its preliminary response” feigns ignorance on the issue. As such, this inefficient, gamesmanship strategy—forcing Patent Owner to expend a significant portion of its word count to address *Fintiv* even though Petitioner apparently intends to offer a stipulation to mitigate or foreclose the issue after the POPR is filed—weighs in favor of discretionary denial at least for fairness and efficiency reasons.

* * * * *

In sum, the *Fintiv* factors weigh in favor of discretionary denial here and in IPR2023-01107. The Board should therefore exercise its discretion to deny institution here and in IPR2023-01107 to avoid an inefficient duplication of efforts and resources for the Board, the parties, and the district court.

III. LEVEL OF SKILL IN THE ART

For the limited purpose of this Preliminary Response, Patent Owner does not contest Petitioner's definition of a person of ordinary skill in the art ("POSITA") but reserves the right to do so in the event that trial is instituted.

IV. CLAIM CONSTRUCTION

The Board applies the *Phillips* claim construction standard used by the district courts. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*). Patent Owner submits that it is not necessary for the Board to construe claim terms to deny institution and the claims should take their plain and ordinary meaning.

V. THE PETITION DOES NOT ESTABLISH A REASONABLE LIKELIHOOD OF PREVAILING

The Board should deny institution because Petitioner fails to show that there is a reasonable likelihood it would prevail with respect to at least one of the challenged claims. 35 U.S.C. § 314(a).

For brevity, Patent Owner addresses only those arguments that are necessary for the Board to determine whether to institute trial at this stage and makes no admission or waiver with respect to arguments not addressed herein. Further, to avoid confusion and facilitate the Board's review, Patent Owner adopts the Petition's labeling of claim elements of the '950 Patent for this Response without accepting the substance of the Petition's arguments or any substantive implications of such labeling.

A. Ground 1: The combination of Warner, Wakutsu, and Shavit does not render obvious claims 1-5 and 7-8

1. Petitioner has not shown that a POSITA would have been motivated to combine Warner and Wakutsu

Warner describes a “Quick Access Recorder” (QAR) having a “means of transmission including wireless transmission,” where such wireless transmission is “preferably accomplished through a Wifi router with the IEEE 802.11ac standard” and can be implemented by a “wifi chip set” that “should be 802.11n or better with a throughput rate of at least 22 Mbit/s.” EX1005, 4:26-43, 12:9-24, Fig. 1. Wakutsu describes a “memory device 11 such as an SD card” that includes a “wireless LAN signal processing section 19a [that] controls a wireless communication function based on, for example, Wi-Fi.” EX1007, 9:20-23, 10:21-27, Fig. 1. The Petitioner attempts to modify the wireless transmission capability of Warner’s Quick Access Recorder (QAR) with Wakutsu’s wireless transmission techniques that use a WiFi SD card. Petition, 12-13. Specifically, Petitioner alleges that a POSITA would have been “motivated to combine Wakutsu’s WiFi SD card teachings with Warner’s QAR,” where “a POSITA would have been motivated to use Wakutsu’s WiFi SD card as the means for wireless transmission for the QAR and to incorporate Wakutsu’s host controller and other electronic components necessary to support the SD card in Warner’s QAR.” *Id.*, 12-13. But, for at least the reasons discussed below, Petitioner does not adequately explain *how* or *why* a

POSITA would have been motivated to combine these teachings, and no such motivation exists. *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1366-69 (Fed. Cir. 2012).

a) The alleged basis for combining Warner and Wakutsu is wrong

To provide a basis for its combination, the Petition states, “Warner does not provide any detail regarding the wireless transmission means in its QAR other than it is accomplished using IEEE WiFi standards,” and a “POSITA would have therefore been motivated to search for techniques to implement wireless transmission and would have been led to Wakutsu which explicitly discloses a memory system for controlling wireless communications.” Petition, 13.

But these conclusions mischaracterize Warner by creating a deficiency that does not exist; as discussed below, Warner does indeed provide “detail regarding its wireless transmission means in its QAR.” Board decisions have repeatedly rejected motivations to combine based on alleged deficiencies in a prior art reference that do not exist. *See Runway Safe LLC v. Engineered Arresting Systems*, IPR2015-01921, Paper 9 at 6-8, 10 (PTAB Feb. 29, 2016) (no motivation to combine because a POSITA would have had no reason to solve a problem that does not exist: “[b]ecause we are not persuaded that water intrusion is a problem in Gwynne’s arrester system, we are not persuaded by Petitioner’s proffered rationale[.]”); *id.* at 10-11 (rejecting another combination because “Petitioner’s

stated rationale for combining Brubaker '917 and Angley '025 is predicated on solving a problem already addressed by Angley '025"); *Life Spine, Inc. v. Globus Medical, Inc.*, IPR2022-01603, Paper 8 at 48-49 (PTAB June 12, 2023) ("Given that Olmos already teaches a mechanism for accommodating lordosis, the bare reasoning Petitioner offers, i.e., 'to accommodate lordosis,' does not sufficiently explain why a POSITA would further modify Olmos's device;" "Petitioner's vague and conclusory reference to 'benefits,' in the absence of any identification of an actual purported benefit—other than the lordosis-accommodating benefit already provided by Olmos's device—is not sufficient reasoning to support the asserted combination of references."); *TRW Automotive U.S. LLC v. Magna Electronics, Inc.*, IPR2015-00972, Paper 9 at 11-12 (PTAB Sept. 16, 2015) (no motivation to combine as petition "does not explain why it would have been obvious to use the fastening device and housing in Klappenbach to mount the camera rather than the bracket already disclosed in Schofield," finding unpersuasive an argument that "the housing in Klappenbach would advantageously seal the components of the camera to prevent intrusion of elements from the environment" when "Schofield teaches that the camera disclosed therein already is protected from such intrusions."); *Stryker Corp. v. Karl Storz Endoscopy America, Inc.*, IPR2015-00764, Paper 13 at 13 (PTAB September 2, 2015) ("[W]e fail to see, and Petitioner does not adequately explain, why it would be obvious to add a translator to redundantly

perform the function that Petitioner maintains is performed by the interconnect devices and network computer located within the surgical network.”).

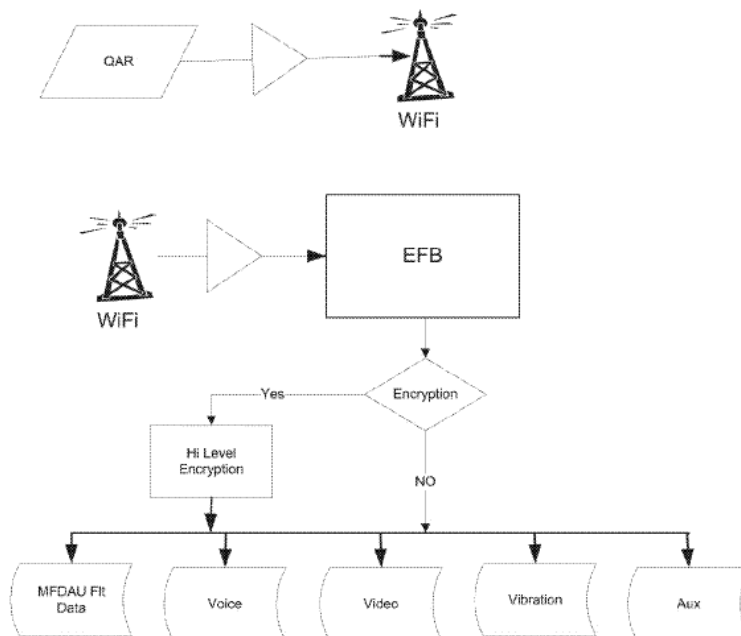
As an initial matter, the Petition's statements on Warner's alleged deficiencies are not properly supported. The Petition cites to five lines of Warner, one line of the Warner provisional, and a single paragraph of the Expert Declaration as evidence of Warner's alleged deficiencies. *See* Petition, 13 (citing to “DJI-1005, 4:38-43; DJI-1006, 4:10-11”); EX1003, ¶57. But the Petition ignores numerous other portions of Warner that do indeed provide “detail regarding its wireless transmission means in its QAR,” rendering Petitioner's cited evidence inadequate. *See Meridian Wildlife Servs., LLC v. Safe Haven Wildlife Removal & Prop. Mgmt. Experts, LLC*, IPR2022-01340, Paper 9 at 44 (PTAB Jan. 10, 2023) (“[Petitioner's expert]'s reasoning that a skilled artisan would have placed the net ‘in response to observing flight patterns’ presumes that birds fly along the perimeter of a building's interior, yet the evidence does not adequately support such a finding.”). And Petitioner's citation to the expert declaration should be afforded little weight as it simply parrots the conclusory statements of the petition, without any further corroborating evidence, support, or reasoning. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 12 at 5 (PTAB Feb. 10, 2023) (Director Review decision, designating as precedential the Board's underlying institution decision denying review) (“the Board was correct in giving little weight to

Petitioner's expert because the expert declaration merely offered conclusory assertions without underlying factual support and repeated, verbatim, Petitioner's conclusory arguments").

As noted above, Warner provides "detail regarding its wireless transmission means in its QAR" throughout its disclosure. For example, Warner explains that the QAR "includes a wireless data router, wireless access point, solid state memory, and logic" used to "transmit data in the present invention," and that its wireless transmission is accomplished using the "IEEE 802.11ac standard." EX1005, 4:41-43, 5:30-35, 6:49-50; *see id.*, 8:63-9:7 (explaining that data collected by the QAR is sent to a "QAR WiFi router...for transmission to the EFB (electronic flight bag) device" (parenthetical added) and that the "QAR-3W will...continue to transmit that composite data stream over the wifi router"), 8:3-7 and 8:14-21 (explaining use of a "wireless router (such as 802.11n or 802.11AC)" to transmit a "composite data stream" to a "portable or quasi portable device that contains logic"). Warner even provides specific "Technical Specifications" of a QAR device (the "NORTH QAR-3W") and its wireless transmission means, explaining how the QAR has a "wifi chip set" that "should be 802.11n or better with a throughout rate of at least 22 Mbit/s" and "employ a WPA security routing," and that WiFi capability of the QAR device should be "capable of being updated to 802.11ac without a change to firmware" and "able to connect to numerous external

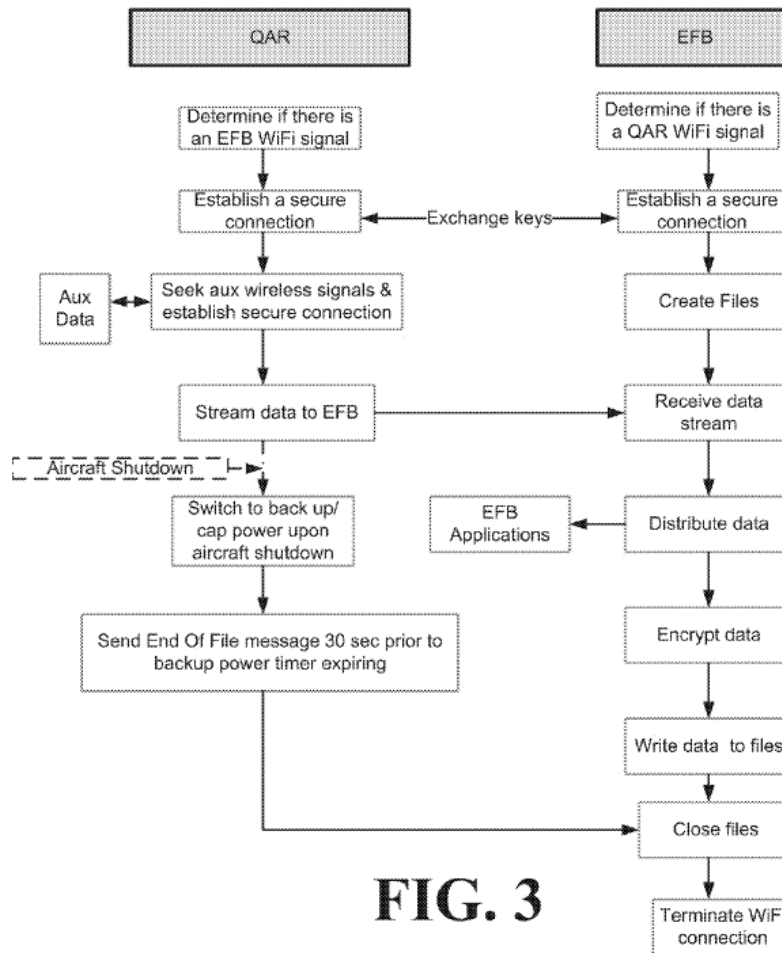
devices (e.g., a maximum of 5) with differing passwords.” *Id.*, 12:9-24. Warner also explains how the QAR can “sense brief wifi interruptions, identify where the break was in the consolidated data stream and be able to reestablish connectivity with the EFB and resume data transmission at the point of interruption.” *Id.*, 11:55-61. Indeed, if the “WiFi router must be disabled (possibly during takeoff or approach/landing) the QAR...will preferably store/buffer the collected data and upon reactivation of the WiFi router and/or connection the stored data will be sent to the EFB by the QAR.” *Id.*, 9:64-10:3.

Warner further provides an express “schematic view of the QAR transfer of data through a wireless network to an EFB,” which provides additional details regarding the QAR’s means of transmission. EX1005, 5:36-43, Fig. 2.

**FIG. 2**

EX1005, Fig. 2

Here, Warner explains that the “QAR transmits data wirelessly to the EFB” and that “[i]n this transfer of data, an option is given as to whether the data should be encrypted.” *Id.* Warner also provides details on the “process for transferring data from the QAR to the EFB” in Figure 3, explaining that the QAR “attempts to and establishes a secure connection with the EFB wirelessly” and “streams the data to the EFB,” where “[w]hen the aircraft has shut down, the QAR may switch to a backup/cap power and may send an end-of-file message prior to a backup power timer expiring.” *Id.*, 5:44-61.

**FIG. 3**

EX1005, Fig. 3

Finally, Warner elaborates, in detail, on the specific ways in which wireless transmission functionality is performed by the QAR. For instance, Warner explains that “[w]hen the system initially boots up the QAR-3W wifi...preferably looks for a receiving device,” where “[e]ach receiving device preferably has been programmed with the appropriate router address and WPA password.” EX1005, 8:22-29. The QAR “preferably goes through a system check and the WiFi router preferably broadcasts a Service Set Identifier (SSID) for an EFB receiving device

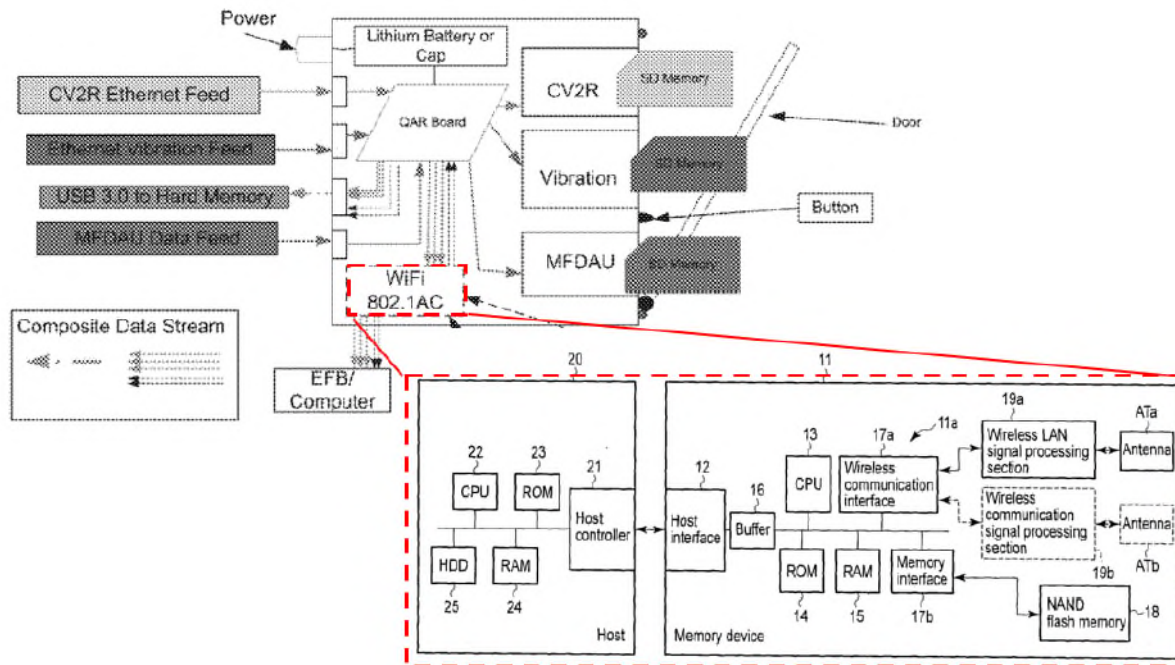
to 'see'." *Id.*, 9:54-57. When an EFB is identified by the "QAR router," the "EFB and QAR router [] preferably conduct a security check via a shared security key encryption." *Id.*, 10:4-7. If necessary, the QAR will store accumulated data and buffer the data "until the WiFi router is activated and make a positive connection with the EFB," and after a "positive connection to the EFB," the QAR "preferably transmits all stored/buffered data and initiates the continuous flow of received data." *Id.*, 9:58-64.

Thus, the entire premise of the Petition's combination of Warner and Wakutsu—that Warner "does not provide any detail regarding the wireless transmission means in its QAR other than it is accomplished using IEEE WiFi standards"—is wrong. Petition, 12. Petitioner cannot selectively ignore the explicit portions of Warner that cut against its position. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1550 (Fed. Cir. 1983) (it is error to consider references in "less than their entirety" and "disregard[] disclosures in the references that diverge from and teach away from the invention at hand"); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 296 (Fed. Cir. 1985) (reference must be "considered for all it taught, disclosures that diverged and taught away from the invention at hand as well as disclosures that pointed towards and taught the invention at hand"). Warner already disclosed "techniques to

implement wireless transmission,” and a POSITA would not have needed to, or been motivated to, look to Wakutsu for this reason.

b) The teachings of Wakutsu are not compatible with Warner

The Petition states that the combination of Warner and Wakutsu amounts to using “Wakutsu’s WiFi SD card as the means for wireless transmission for the QAR and to incorporate Wakutsu’s host controller and other electronic components necessary to support the SD card in Warner’s QAR.” Petition, 12-13. The Petition includes a figure, reproduced below, showing how Petitioner envisages the combination in view of Warner’s Figure 1 and Wakutsu’s Figure 1, indicating Wakutsu’s host 20, which presumably includes the “host controller and other electronic components necessary to support the SD card” as stated by the Petition, would be implemented as part of Warner’s QAR. *Id.*, 13.



Warner, Figure 1 Excerpt; Wakutsu, Figure 1

But this proposed combination is deficient. Wakutsu discloses that host 20 is “for example, a digital camera, cellular phone, personal computer, and the like.” EX1007, 12:15-19. The Petition does not explain how or why a POSITA would have been motivated to incorporate a device such as a “digital camera, cellular phone, personal computer, and the like” into Warner’s QAR solely to implement wireless transmission via an SD card placed in the device’s SD card slot (e.g., host controller 21), and does not address how such a device would even function when used as the wireless transmission means of Warner’s QAR. *Id.*; *Kinetic Concepts*, 688 F.3d at 1366-69.

Moreover, Wakutsu states that its host controller 21 “issues various commands [] in accordance with instructions from the CPU 22” and that “CPU 22

controls the entire host.” EX1007, 12:21-13:5. The Petition fails to provide any explanation as to how, as combined, Wakutsu's CPU 22 would have been ***controlled itself*** by Warner's QAR logic board (which directs wireless data transmission) or how CPU 22 would no longer have had independent control functionality over host 20, as disclosed by Wakutsu. *Id.*; see, e.g., EX1005, 5:37-41, 5:45-52. Due to this lack of explanation, the Petition's proposed combination would result in transmission commands originating from host device's CPU 22 and being contained to the host device 20 rather than the QAR as a whole, which ignores how Warner's QAR logic board already directs wireless transmission. *Id.* As such, the combination fails.

c) The petition engages in hindsight reasoning to combine Warner and Wakutsu

The Petition states that “Wakutsu is reasonably pertinent to a particular problem faced by the '950 patent, wireless transmission of data” and that “[i]n the '950 patent, ‘transmitter 303 is a Secure Digital (SD) or a non-volatile memory card that is configured to receive, store, and/or transmit data to and from avionics system 309.” Petition, 13-14. As such, the Petition alleges, “Wakutsu's WiFi memory card would have ‘logically commend[ed] itself’ to an inventor's attention in considering the problem addressed by the '950 patent.” Petition, 13-14. But this explanation falls well short of a reasoned motivation to combine; instead, it engages in hindsight bias that yet again does nothing to explain *why* or *how* a

POSITA would have been motivated to combine Warner and Wakutsu. *Kinetic Concepts*, 688 F.3d at 1366-69. Indeed, simply asserting references are broadly related to the “wireless transmission of data” as the Petition does is not enough to show a motivation to combine, and instead amounts only to “mere conclusory statements.” *KSR Int’l Co. v. Teleflex inc.*, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)); *Securus Tech., Inc. v. Global Tel*Link Corp.*, 701 Fed.Appx 971, 976-77 (Fed. Cir. 2017) (“broad characterization” that references fall within the same alleged field “without more, is not enough” to meet the burden of providing a sufficient rationale for an obviousness conclusion); *Salem Fabrication Techs. Grp., Inc., v. Uniglass Eng’g Oy*, IPR2022-01517, Paper 9 at 25 (PTAB Mar. 22, 2023); *Dropworks, Inc. v. Bio-Rad Laboratories, Inc.*, IPR2021-00212, Paper 7 at 12-13 (PTAB Jun. 1, 2021) (arguments relevant to showing that “references *could* have been combined, i.e., that they may be analogous art, nevertheless falls short of establishing *what would have prompted* the ordinarily skilled artisan to make the proffered combination”) (emphasis in original). The Petition does not explain what, in the absence of the ’950 patent’s disclosure, would have led a POSITA to include the very specific SD card-based transmitter teachings of Wakutsu in Warner’s system; this is a critical flaw. *Dropworks*, IPR2021-00212, Paper 7 at 14-15 (“Critically lacking from Petitioner’s analysis is what would have led a skilled artisan, in the absence of the

[challenged patent's disclosure], to include" teachings of the secondary reference with the primary reference; "[o]nly after review of the [challenged patent's disclosure] does a reason to combine become clear and the use of hindsight becomes apparent").

d) The petition's motivation based on "QAR operation and maintenance" is erroneous

The Petition states "[a] POSITA would have been further motivated to combine Warner and Wakutsu to simplify QAR operation and maintenance" and that "[a]lthough Warner describes transmission of data to a portable device during a flight, Warner stores flight data on one or more SD cards in the QAR for other uses;" as such, the Petitioner alleges "[a] POSITA would have understood using a wireless SD card for both the storage medium and wireless interface of Warner's QAR would alleviate the need for an individual to retrieve the flight data from the QAR SD card after every flight for these other uses" and "a POSITA would have been motivated to use the wireless capabilities of the SD card to transfer the data during flight to the pilot tablet/EFB and to other devices as needed post flight." Petition, 14. These statements, however, amount to nothing more than attorney argument and are wrong.

First, the only evidence cited by Petitioner to support its conclusions are Dr. Reinholtz's declaration (EX1003) at paragraph 58. Petition, 14. But this paragraph simply parrots the statements in the petition and adds no further corroborating

evidence or reasoning. It should therefore be afforded little weight. *Xerox Corp.*, IPR2022-00624, Paper 12 at 5.

And what's worse, the Petition's conclusions are wrong and again attempt to create a deficiency in Warner that does not exist. The Petition characterizes Warner's system as having flight data stored in "one or more SD cards in the QAR for other uses" and requiring "an individual to retrieve the flight data from the QAR SD card after every flight for these other uses," apparently implying that a user must manually eject the SD card from the QAR and download data that is stored on it for such "other uses." Petition, 14. But this situation is contradicted by Warner's disclosure. For example, Warner explains that the QAR writes CV2R, vibration, and MFDAU data to an appropriate SD card (*see, e.g.*, EX1005, 5:7-12, 8:3-17, 8:62-9:2, 11:3-21), **and** that the QAR can wirelessly transmit the data stored in its SD cards to an EFB: "the **QAR preferably stores accumulated data from the MFDAU, CV2R and Vibration acquisition units and 'buffers' that data** until the WiFi router is activated and can make a positive connection with the EFB. **Upon establishing a positive connection to the EFB, the QAR (or MFDAU) preferably transmits all stored/buffered data** and initiates the continuous flow of received data." EX1005, 9:57-64; *id.*, 9:64-10:3 ("If for some other reason (regulatory or otherwise) the WiFi router must be disabled (**possibly during takeoff or approach/landing**)...the **QAR and/or MFDAU will**

preferably store/buffer the collected data and upon **reactivation of the WiFi router and/or connection the stored data will be sent to the EFB by the QAR**”), 12:29-34 (“[t]he present invention contemplates **moving more data than just what has been heretofore stored on an SD card**”) (emphasis added). Thus, a POSITA would not have been motivated to effectuate the combination of Warner and Wakutsu to “use the wireless capabilities of the SD card to transfer the data during flight to the pilot tablet/EFB and to other devices as needed post flight,” as the Petition states, because Warner’s QAR already provides for the wireless transfer of data stored on an SD card, and even explicitly notes that such stored data can be transmitted post flight (i.e., upon reactivation of WiFi after landing). Petition, 13; EX1005, 9:64-10:3. *See Runway Safe LLC*, IPR2015-01921, Paper 9 at 6-8, 10-11; *Life Spine, Inc.*, IPR2022-01603, Paper 8 at 48-49; *TRW*, IPR2015-00972, Paper 9 at 11-12; *Stryker Corp.*, IPR2015-00764, Paper 13 at 13.

The Petition further concludes, relying only on repetitive expert testimony, that “a POSITA would have been motivated to use a wireless SD card instead of embedded WiFi hardware in the QAR to simplify maintenance and upgrades to the QAR wireless capabilities” and that “a POSITA would have understood that updates or fixes to a removable wireless card are made by replacing the SD card rather than replacing the entire QAR or taking the QAR out of service for an update.” Petition, 14-15.

But yet again, these statements only amount to conclusory attorney argument and the repetitive expert support for them, which adds no further corroborating evidence or reasoning, should be afforded little weight. *See* EX1003, ¶59; *Xerox Corp.*, IPR2022-00624, Paper 12 at 5. And the Petition does not address how Warner in fact does describe that its WiFi hardware can be updated without “replacing the entire QAR.” Petition, 14-15. For example, Warner explains that its QAR’s WiFi chipset has “wifi capability [that] should be capable of being upgraded to 802.11ac without a change to firmware.” EX1005, 12:9-14. The Petition’s conclusory allegations, which selectively ignore Warner’s full disclosure, fail to establish a motivation to combine.

The Petition continues, stating (again, without any support but for repetitive expert testimony) that “using a separate SD card to provide wireless capabilities allows a QAR manufacturer to implement a simpler more cost-effective device, increasing the market for the QAR product,” where “the QAR merely needs to include an SD card interface and not an antenna and wireless communications hardware.” Petition, 15. But the Petition provides no reasoning or explanation as to how the combination would provide a “simpler more cost-effective device” that increases market by replacing Warner’s “antenna and wireless communications hardware”—widely known, standardized components that are routine for manufacturers to implement—in favor of the “SD card interface” and associated

SD card transmitter of Wakutsu. And Wakutsu describes that such an SD card interface is part of host 20, which is “for example, a digital camera, cellular phone, personal computer, and the like” (EX1007, 12:15-19); the Petition does not address how using such a device (e.g., a “a digital camera, cellular phone, personal computer, and the like”) with Warner’s QAR to implement wireless transmission via an SD card placed in the device’s SD card slot (e.g., host controller 21) would have resulted in a simpler or more cost-effective system. Such a system would not have been simpler and more cost-effective, and would have instead been overly complex and less cost-effective.

e) The petition’s “simple substitution” rationale is erroneous

The Petition states that “the combination of Wakutsu’s WiFi memory card with Warner is merely the substitution of one known element (Wakutsu’s WiFi memory card) for another (Warner’s WiFi module),” that the “results of the combination would have been predictable,” and that “a POSITA would have had a reasonable expectation of success in the combination because wireless SD cards were known (even to undergraduate engineering students) and in use before the ’950 patent.” Petition, 15. But this reasoning is erroneous. The alleged motivation only addresses substituting “Wakutsu’s WiFi memory card” into Warner’s system, and does not account for the full combination which, according to Petitioner, is “use [of] Wakutsu’s WiFi SD card as the means for wireless transmission for the

QAR” and “Wakutsu’s host controller and other electronic components necessary to support the SD card in Warner’s QAR.” Petition, 12-13. Indeed, the resulting system as presented by the Petition in its “simple substitution” argument, with “Wakutsu’s WiFi memory card” substituted for “Warner’s WiFi module,” would have left Warner’s QAR with no transmission-specific slot to receive Wakutsu’s WiFi memory card and with no way of effectuating wireless transmission. *Id.*, 14-15. The combination therefore would have failed.

If the Petition intended to mean the combination is “use [of] Wakutsu’s WiFi SD card as the means for wireless transmission for the QAR” and “Wakutsu’s host controller and other electronic components necessary to support the SD card in Warner’s QAR” (Petition, 12-13) as a “simple substitution”, the motivation still fails. As discussed, the entire motivation to combine Warner and Wakutsu section presented by the Petitioner does not actually explain why or how a POSITA would have effectuated the combination and here, the motivation fails to even identify what “predictable result” would be achieved. Petition, 15. Moreover, the analysis alleges a reasonable expectation of success only because “wireless SD cards were known” and “in use before the ’950 patent,” but this is deficient; simply pointing to elements of different references allegedly being known in the prior art does not establish a motivation to combine. *Id.*; see *Metalcraft of Mayville, Inc. v. The Toro Company*, 848 F.3d 1358, 1367 (Fed. Cir.

2017) (to show a motivation to combine, “it is not enough [] to merely demonstrate that elements of the claimed invention were independently known in the prior art”).

2. Petitioner has not shown that a POSITA would have been motivated to combine Warner, Wakutsu, and Shavit

The Petition fails to show that a POSITA would have been motivated to combine Warner, Wakutsu, and Shavit at least for the same reasons discussed above with respect to the combination of Warner and Wakutsu. The motivation to combine Warner, Wakutsu, and Shavit is also deficient for at least the following reasons.

Warner describes that its pilot tablet/electronic flight bag (EFB) receives flight data that is “automatically wirelessly transmitted” to it, and that the tablet/EFB “may create files to incorporate the transmitted data within.” EX1005, 3:20-22, 4:46-5:9, 5:48-57. Shavit describes a “data logger” that “may obtain and store timed location data and other flight parameter data, and transmit them to a ground-based server.” EX1008, ¶0039. The Petitioner attempts to modify Warner and Wakutsu’s combined system, which already provides data logging via Warner’s pilot tablet/EFB, with Shavit’s data logging techniques and teachings regarding server storage for data. Petition, 15-16. Specifically, Petitioner alleges a “POSITA would have been motivated to combine Shavit’s data logger teachings with the combined data collection system of Warner and Wakutsu” and that “as illustrated below, a POSITA would have been motivated to (1) implement Shavit’s

data logger as an application on Warner's pilot tablet/EFB and (2) use Shavit's ground-based network (server, SQL database and web client) and associated applications as Warner's 'corporate data infrastructure for long time processing and preservation.'" Petition, 15-16.

But yet again, for at least the reasons discussed below, Petitioner does not adequately explain *how* or *why* a POSITA would have been motivated to combine these teachings, and no such motivation exists. *Kinetic Concepts*, 688 F.3d at 1366-69.

a) The alleged basis for combining Warner, Wakutsu, and Shavit is wrong

As support for its alleged motivation to combine, the Petition points to Warner's disclosure that data can be "accessed by other applications running on the same EFB" and one application is "analyzing flight performance and flight crew performance," and Shavit's disclosure that its data logger application is used for "pilot's self-improvement"—a use that is allegedly "consistent with Warner's suggested use cases in flight and flight crew performance analysis." Petition, 17.

But these stated reasons to combine Warner, Wakutsu, and Shavit are deficient and fail to appreciate Warner's teachings related to data logging. Indeed, Warner already discloses "data logger" capabilities for its pilot tablet/EFB, and the alleged combination says nothing as to why a POSITA would have used the specific details of Shavit's data logger application instead. Warner explains that

“data is automatically wirelessly transmitted to the EFB” and that during such transmission “the EFB may create files to incorporate the transmitted data within” and “the EFB may include means of distributing the data, encrypting the data, or writing the data to previous created files. EX1005, 3:20-22, 5:48-57; *id.*, 5:7-9. Once data is written to the files of an EFB, the “EFB may close the files and terminate the wireless connection with the QAR.” *Id.*, 5:57-59. At bottom, Warner’s entire disclosure is directed to the same generalized “data logger” teachings that the Petition alleges are necessary from Shavit, and the Petition has not articulated why a POSITA would have combined Shavit with Warner. *See, e.g., id.*, 6:12-36 (explaining “pilot tablet” as “having access to data collection data and vibration data” and “access[ing] a flight data stream”), 8:22-29 (“live stream of data” written to “EFB memory”), 9:38-10:45 (“[u]pon establishing a positive connection to the EFB, the QAR...preferably transmits all stored/buffered data and initiates the continuous flow of received data); 4:46-49 (“[t]he means of transmission can be transferring multiple external component data to other storage means such as an EFB”); 5:5-9 (“QAR board preferably directs a composite data stream to the EFB...composite data stream is preferably transmitted from the...QAR to the EFB wirelessly”). And none of the Petition’s analysis regarding the data logging explains why a POSITA would have used Shavit’s “ground-based network (server, SQL database and web client) and associated applications as

Warner's 'corporate data infrastructure for long time processing and preservation,'" as proposed by the Petition. Petition, 16. Board decisions have repeatedly rejected motivations to combine based on alleged deficiencies in a prior art reference that do not exist. *See Runway Safe LLC*, IPR2015-01921, Paper 9 at 6-8, 10-11; *Life Spine, Inc.*, IPR2022-01603, Paper 8 at 48-49; *TRW*, IPR2015-00972, Paper 9 at 11-12; *Stryker Corp.*, IPR2015-00764, Paper 13 at 13.

b) The FAA EFB guidelines do not provide a motivation to combine Warner, Wakutsu, and Shavit

The Petition argues that a "POSITA would have further been motivated to combine Warner, Wakutsu, and Shavit based on the FAA's EFB guidelines." Petition, 17. Here, the Petition argues that an EFB "must be able to host Type A and/or Type B software applications," where "Type A applications include 'aircraft flight log and servicing records', 'pilot flight and duty-time logs', 'flight crew qualification logs', and 'aircraft captain's logs'" and "Type B applications include 'master flight plan/updating,'" and "[a] POSITA would have therefore been motivated to incorporate Shavit's data logger application to provide at least the log applications set forth in the FAA EFB guidelines." *Id.*, 17-18. But Shavit does not refer to such "Type A" or "Type B" applications and doesn't even refer to a "flight bag" or "EFB." The Petition therefore does not show that Shavit's data logging teachings should be combined with Warner to provide such Type A or Type B logging. And again, nothing in the Petition's explanation here relates to why a

POSITA would have used Shavit's "ground-based network" portion in the proposed combination.

The Petition further states that a "POSITA would have further been motivated to incorporate Shavit's data logger application and ground-based network teachings, including pilot performance monitoring, with Warner and Wakutsu to improve flight safety." Petition, 18. Here, the Petition alleges, "Shavit suggests the combination describing an FAA study that 'demonstrated that most airplane accidents are the result of human errors'" and that Flight Operational Quality Assurance (FOQA) is supported by Warner's disclosure. *Id.* Thus, according to the Petition, a "POSITA would have therefore understood and been motivated to incorporate Shavit's data logger application and ground-based performance analysis capabilities with Warner to track pilot performance, identify errors and areas for improvement, and to improve flight safety." *Id.*

But again, this explanation is deficient and does not provide an adequate motivation to combine. Warner already discusses that its system is compatible with FOQA, and already details how data of an EFB is wirelessly downloaded to another device for FOQA analysis. EX1005, 7:43-67 (explaining that aircraft data may be sent "to FOQA app"), 7:23-32 ("[a]nalysis of such data may include analysis of aircraft sensor data in a virtual live basis in flight with Flight Operational Quality Assurance (FOQA)"). The Petition does not explain why or

how the aspects of Shavit's data logger would have improved the FOQA analysis already contemplated by Warner, or why a POSITA would have used Shavit to implement FOQA when Warner already teaches analysis of its data under such a program.

c) The petition's "known technique" rationale is erroneous

Finally, the Petition proposes a canned motivation to combine rationale, broadly stating, "the combination is merely the use of a known technique (Shavit's data logger application and performance monitoring system) to improve similar devices (Warner's pilot tablet/EFB and corporate infrastructure) in the same way (provide pilot performance analysis) and applying a known technique (Shavit's data logger application and performance monitoring system) to a known device (Warner's pilot tablet/EFB and corporate infrastructure) ready for improvement." Petition, 19. But as noted above, the Petition has not articulated a reason to combine Warner, Wakutsu, and Shavit, and the explanation here is deficient. The Petition has not identified any improvement that would have resulted from the combination, or that Warner's system was "ready for improvement." Indeed, as discussed above, Warner's system was not ready for improvement because it already utilized the same techniques upon which the Petition relies on Shavit for.

The Petition's explanation as to predictable results and reasonable expectation of success is similarly deficient. For example, the Petition does not

provide any explanation or evidence regarding how “Shavit’s performance monitoring system uses standard database technology and web applications,” as it suggests. Petition, 19. Nor does the Petition explain how or why a POSITA would have understood “how to implement and integrate such applications on Warner’s pilot table[sic]/EFB.” *Id.*

3. The combination of Warner, Wakutsu, and Shavit does not render obvious the “transceiver” limitations [1E.1] and [1E.2] of claim 1

a) “transceiver having a transceiver identity associated with pilot identification information” [1E.1]

The Petition states, “[a] POSITA would have understood that a WiFi networking device, such as Warner’s pilot tablet/EFB, includes a MAC address assigned by the manufacturer” and that “because the pilot tablet/EFB of Warner, Wakutsu, and Shavit wirelessly receives and transmits data using the standardized IEEE 802.11 protocol, the MAC address of the device is its ‘*transceiver identity*.’” Petition, 33-34. The Petition then alleges that “[b]y storing the ‘*pilot identification information*,’” which the Petition alleges is “[t]he name of the pilot entered into the pilot tablet/EFB” (Petition, 32), in the “pilot tablet/EFB having a ‘*transceiver identity*’ (MAC address), the ‘*transceiver identity* [is] *associated with pilot identification information*.’” *Id.*, 34. The Petition further alleges that “[b]y transmitting the ‘*pilot identification information*’ in a wireless message that

includes the MAC address of the pilot tablet/EFB in the MAC sublayer, the combination of Warner, Wakutsu, and Shavit discloses the ‘*transceiver identity associated with pilot identification information.*’” *Id.*, 35.

But the Petition does not explain how such storage or transmission forms an association between the MAC address and pilot identification information. Indeed, the Petition contains no detail as to how any association is present in either of these circumstances. Such a high-level analysis is insufficient to establish that this limitation is met. As such, the Petition has not shown how Warner, Wakutsu, and Shavit teach limitation [1E.1].

b) “transceiver being configured... for associating...” [1E.2]

Claim 1 recites *the transceiver being configured...for associating the thus received information with the pilot identification information associated with the transceiver identity*. EX1001, claim 1.

To address the element, the Petition states “[a]s discussed above, the pilot tablet/EFB associates received flight performance data with the ‘*pilot identification information*’ which is associated with the transceiver identity.” Petition, 36. But fatally, the Petition contains no analysis “above” in the Petition (and the Petition does not even attempt to identify where “above” this analysis is intended to be), and does not explain how “the pilot tablet/EFB associates received flight performance data with the ‘*pilot identification information*’ which is associated

with the transceiver identity.” Such a conclusory assertion is insufficient, and the Petition therefore has not shown how Warner, Wakutsu, and Shavit render obvious claim 1.

To the extent the Petition is attempting to refer to its discussion alleging “‘*pilot identification information*’ is stored in the ‘*database*’ of the pilot tablet/EFB,” “‘*pilot identification information*’ is subsequently transmitted with the flight performance data to the ground-based server using the 802.11 protocol,” “a POSITA would have understood that Shavit discloses transmitting ‘*pilot identification information*’ with the flight data,” and “a POSITA would have been motivated to communicate flight performance data with pilot identification information” (Petition, 34-35), the Petition is still deficient. The Petition also relies on these teachings to meet the limitation *the transceiver being configured...for transmitting the received information with the thus associated pilot identification information to the database*. Petition, 36-37 (e.g., citing to Section V.B.6.c and Section V.B.4 of the Petition). The Petition would be “double mapping” the same prior art disclosure and arguments to separate elements of claim 1, which is improper. *Engel Indus., Inc. v. Lockformer Co.*, 96 F.3d 1398, 1404-05 (Fed. Cir. 1996) (where a claim provides for two separate elements, these two elements “logically cannot be one and the same”); *Becton, Dickinson and co. v. Tyco Healthcare Group, LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (“Where a claim lists

elements separately, the clear implication of the claim language is that those elements are distinct component[s] of the patented invention”) (internal quotation marks omitted); *Chemco Systems, L.P. v. RDP Tech., Inc.*, IPR2019-01563, Paper 38 at 23-24 (PTAB March 1, 2021) (Petitioner's identification of the same structure for two separate claim elements insufficient to demonstrate unpatentability).

4. The combination of Warner, Wakutsu, and Shavit does not render obvious the “only accessible” limitation [1H] of claim 1

Claim 1 recites that *the stored sensed flight performance is only accessible with the associated pilot identification information*. EX1001, claim 1. The Petition provides two different mappings for this element: (1) when the claimed *database* is considered internal to the aircraft, and (2) when the claimed *database* is considered external to the aircraft. Petition, 37-39. Under either interpretation, however, the Petition is deficient.

Under the “database internal to the aircraft” interpretation, the Petition argues that Warner describes its pilot tablet/EFB as having a “governing application which drives...security” and that the application has a “set up function that will store security settings and customer driven options.” Petition, 38. The Petition acknowledges that “Warner does not explicitly disclose the security settings used in the pilot tablet/EFB” but alleges that “a POSITA would have

understood that the pilot tablet/EFB is protected using a common access security technique such as the pilot's log-in and password,” and that “Shavit teaches the use of a user's credentials to control access to stored data.” *Id.* The Petition therefore concludes that the “combination of Warner, Wajutsu, and Shavit therefore teaches or at least suggests ‘*the stored sensed flight performance* [in the database of the pilot tablet/EFB] *is only accessible with the associated pilot identification information.*’” *Id.* (brackets in original).

Under the “database external to the aircraft” interpretation, the Petition argues that Shavit's (EX1008) “log-in for the user ‘allow[s] the user to access information based on the user's credentials, as determined by the web client 206 software running on the workstation” and that “[t]he user credential for a pilot includes ‘*pilot identification information.*’” Petition, 39. The Petition therefore concludes that “in the combination of Warner, Wajutsu, and Shavit, ‘*the stored sensed flight performance* [in the ground-based database] *is only accessible with the associated pilot identification information.*’” *Id.*, 38-39 (brackets in original).

The Petition's analysis is deficient under both interpretations. This element requires *the associated pilot identification information*. EX1001, claim 1. The Petition previously maps “the name of the pilot entered into the pilot tablet/EFB” as the *pilot identification information*. Petition, 32. But now, the Petition states that *pilot identification information* is met by (1) a POSITA's understanding of “a

common access security technique such as the pilot's log-in and password" and Shavit's "use of a user's credentials to control access to stored data," and (2) "the user credential for a pilot [that] includes '*pilot identification information.*'" Petition, 38-39. The Petition is therefore inconsistent in its mapping to the claimed *pilot identification information*. And to the extent the Petition intended to argue that the "name of the pilot" is necessarily the same as a pilot's "log-in" and "user credentials," the Petition is wrong. It was well known by POSITAs to **not** use one's name as a log-in or user credential for security reasons, meaning that they are not necessarily the same. EX2013, 1 ("An enhancement to account security is to have a username, which is not based on the user's proper name."). As such, the Petition's ambiguous and inconsistent analysis is improper because it does not identify how Warner, Wakutsu, and Shavit meet the *pilot identification information* element.

Moreover, the inconsistent analysis violates the particularity requirement for petitions set forth in 35 U.S.C. § 312(a)(3) (petition "may be considered only if...the petition identif[ies], in writing and with particularity,... the grounds on which the challenge to each claim is based, and the evidence that supports the grounds"), as well as the requirements of 37 C.F.R. §§ 42.104(b)(4), 42.104(b)(5), and 42.22(a)(2) that a petition "specify where each element of the claim is found in the prior art," "identify[] specific portions of the evidence that support the

challenge,” and provide a “full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence.” See *Facebook, Inc. v. Uniloc USA, Inc.*, IPR2017-01523, Paper 7 at 9-19 (PTAB December 4, 2017) (the Board “will not, and cannot, piece together Petitioner’s inconsistent and contradictory arguments into a cogent and coherent explanation that supports and obviousness showing” and instead must “evaluate the Petition’s arguments as presented,” and denying institution due to petition’s inconsistent mapping, explaining that such inconsistent mapping violates 35 U.S.C. § 312(a)(3) and 37 C.F.R. §§ 42.104(b)(4), 42.104(b)(5), and 42.22(a)(2)); *Smith & Nephew, Inc. v. Conformis, Inc.*, IPR2017-00545, Paper 8 at 13-14 (PTAB July 13, 2017) (inconsistent citations to separate references “create ambiguity” as to what Petitioner is relying on to show obviousness, and “[m]erely identifying where limitations may be found in several prior art references is not sufficient to demonstrate a reasonable likelihood of prevailing in showing obviousness”). The Petition therefore fails to show that Warner, Wakutsu, and Shavit teach claim 1.

5. Claims 2-5 and 7-8

Claims 2-5 and 7-8 depend on claim 1. The same arguments regarding claim 1 therefore apply.

B. Ground 2: The combination of Warner, Wakutsu, Shavit, and Greubel does not render obvious claims 1-5 and 7-8

The Petition presents Ground 2 to address the element *transceiver having a transceiver identity associated with pilot identification information* of claim 1. Petition, 43. However, the deficiencies noted above regarding Ground 1 are not cured by Ground 2. As such, Ground 2 is deficient for the same reasons explained above with respect to Ground 1.

C. Ground 3: The combination of Uczekaj and Jiang does not render obvious claims 1-5 and 8

1. Petitioner has not shown that a POSITA would have been motivated to combine Uczekaj and Jiang

Uczekaj describes a “pilot logbook application” that is a “software application on a non-certified device,” such as an iPhone or iPad, and “records pilot hours and aircraft performance data” and obtains “aircraft and/or engine status (or other information to be logged)” EX1010, 1:42-57, 10:55-11:6. Jiang describes a system where “each pilot has their own Pilot Log Card which is a portable, self-protected secure memory device” that stores “flight parameter data” during a flight. EX1011, 4:36-38, 4:49-53. At a flight’s conclusion, a pilot passes the Pilot Log Card “to Ground Station personnel” and “[d]ata recorded in the memory device is then downloaded by an authorized person to a Ground Station processing station.” *Id.*, 5:53-59. The Petition alleges a POSITA would have been “motivated to combine Jiang’s pilot logbook and flight performance monitoring

teachings with Uczekaj” and that “[s]pecifically, a POSITA would have been motivated to implement functionality of Jiang’s pilot logbook, including the file structure for storing pilot and flight performance data, in the pilot logbook application executing on Uczekaj’s non-certified device.” Petition, 53. The Petition also states that “a POSITA would further be motivated to use Jiang’s ground-based system for analysis and storage of recorded pilot logbook data to provide continued pilot and aircraft performance monitoring.” *Id.* But, for at least the reasons discussed below, Petitioner does not adequately explain *how* or *why* a POSITA would have been motivated to combine these teachings, and thus its motivation fails. *Kinetic Concepts*, 688 F.3d at 1366-69.

a) The alleged basis for combining Uczekaj and Jiang is wrong

To provide a basis for its combination, the Petition states, “Uczekaj explicitly suggests the combination, teaching a flight logbook application,” but “Uczekaj does not provide detail regarding the information required by a pilot logbook application or a means for storing such information on its non-certified device” and “[b]ased on Uczekaj’s suggestion, a POSITA would have been motivated to search for logbook applications and would have been led to Jiang which discloses both an electronic logbook and pilot and aircraft performance analysis applications.” Petition, 53. But this conclusion mischaracterizes Uczekaj, and the cited evidence is not adequate to support it. *See Meridian Wildlife Servs.*,

LLC, IPR2022-01340, Paper 9 at 44 (PTAB Jan. 10, 2023). Indeed, the Petition cites to only a small portion of Uczekaj, as well as a single paragraph of its Expert Declaration, for evidence of Uczekaj's alleged deficiencies. Petition, 53 (citing to "DJI-1010, 10:56-11:6; DJI-1003, ¶200"); EX1003, ¶200. But the Petition fails to consider other parts of Uczekaj that do indeed provide "detail regarding the information required by a pilot logbook application or a means for storing such information on its non-certified device." Petition, 53. And the citation to the expert declaration should be afforded little weight as it simply parrots the conclusory statement of the petition, without any further corroborating evidence, support, or reasoning. *Id.*; *Xerox Corp.*, IPR2022-00624, Paper 12 at 5. As with the other grounds, the Petition attempts to form a deficiency in Uczekaj that does not exist; Board decisions have repeatedly rejected motivations to combine on this basis. *See Runway Safe LLC*, IPR2015-01921, Paper 9 at 6-8, 10-11; *Life Spine, Inc.*, IPR2022-01603, Paper 8 at 48-49; *TRW*, IPR2015-00972, Paper 9 at 11-12; *Stryker Corp.*, IPR2015-00764, Paper 13 at 13.

Uczekaj discloses that the "pilot logbook application" is a "software application on a non-certified device" that "records pilot hours and aircraft performance data," and that it obtains "aircraft and/or engine status (or other information to be logged)" that is stored in "storage" of the non-certified device. EX1010, 10:55-11:6. Uczekaj also explains that its non-certified device is a device

such as an iPhone, iPad, etc. *Id.*, 1:42-57. Such devices are well-known to have storage that stores logged data. EX2014 (“As you run, your...iPhone 3GS, or iPhone 4 tells you your time, distance, pace, and calories burned”; “When your run is finished, your...iPhone 3GS, or iPhone 4 wirelessly sends your workout data to nikeplus.com from wherever you are on the road.”).

Moreover, Uczekaj describes how its non-certified devices perform data analysis for flight performance, explaining that “between flights, a pilot uses non-certified devices and information gathered from avionics devices to accomplish tasks such as review flight trends, share experience, analyze data, maintain aircraft, maintain and enhance skills, maintain pilot status, and critique instructor.” EX1010, 5:43-48; *id.*, 13:40-47 (“The data stored in the predetermined memory storage is available for bulk load by applications for later analysis as well as being available to application on a non-real time basis”).

Thus, the entire premise of the Petition’s combination of Uczekaj and Jiang—that Uczekaj “does not provide detail regarding the information required by a pilot logbook application or a means for storing such information on its non-certified device”—is wrong. Petition, 53-54. Uczekaj already describes such details, so a POSITA would not have had any need to look to Jiang, and the Petition’s use of Jiang is thus a result of improper hindsight. *Id.*

b) The Petition shows a POSITA would not have combined Jiang with Uczekaj

The Petition argues that a “POSITA would have been motivated to use Uczekaj’s logbook application to implement Jiang’s pilot log card to simplify the process of acquiring data and transferring the data to the ground station” (Petition, 54) because Jiang’s system “requires a pilot to carry a separate smart card onto the plane, insert the card into the log box, retrieve the card, and then carry the card to a ground station employee,” requires that the “ground station employee must then insert the smart card into a reader to download the data,” and specifies that “[i]n addition to requiring manual handling of a small memory device by multiple individuals, this process delays transmission of the flight data until the pilot provides the smart card to ground personnel.” Petition, 54. The Petition concludes by stating “[i]n the combined system of Uczekaj and Jiang, data is wirelessly downloaded from the non-certified device without requiring manual intervention of a ground employee to remove the card, improving security and ensuring proper data transfer.” *Id.*

But the Petition’s analysis is backwards; none of its explanation about Jiang’s deficiencies provides any reason why a POSITA would then turn around and combine Jiang’s teachings with Uczekaj. Rather than explaining how Uczekaj’s system would have been improved by Jiang’s teachings, the Petition alleges that Jiang’s deficiencies would have made it attractive to combine with

Uczekaj. Petition, 54. This improper, convoluted analysis does not explain why or how a POSITA would have combined Jiang with Uczekaj. If anything, it discourages the combination by enumerating how inefficient and overly complicated Jiang's system is, and why a POSITA would not have looked to Jiang for combination with Uczekaj. Indeed, as the Petition notes, Jiang's teachings introduce numerous issues, such as having to use a separate smart card to track flight data, having to insert the card into an aircraft, having to retrieve the card manually and manually carry the card to a ground employee, who in turn must insert the smart card into a reader to download data. *Id.* The Petition shows why a POSITA would **not** have combined Uczekaj with Jiang.

c) A POSITA would not have combined Uczekaj and Jiang to improve flight safety

The Petition also argues that a "POSITA would have been motivated to combine Jiang's pilot performance and aircraft performance monitoring teachings, including integrating Jiang's ground-based flight management center database and access computers, with Uczekaj to improve flight safety" and that a "POSITA would have been further motivated to integrate operation safety measures into the system of Uczekaj based on the FAA's FOQA" which is "designed to make commercial aviation safer by allowing airlines and pilots to share de-identified aggregate information with the FAA." Petition, 54-55. But none of this provides any explanation as to *how* flight safety would be improved. Moreover, Uczekaj

already describes how its flight data is analyzed to provide flight safety, for example, explaining that “a pilot uses non-certified devices and information gathered from avionics devices to accomplish tasks such as review flight trends, share experience, analyze data, maintain aircraft, maintain and enhance skills, maintain pilot status, and critique instructor.” EX1010, 5:43-48.

Finally, the Petition argues that “the combination of Jiang with the Uczekaj is simply the combination of prior art elements according to known methods to yield predictable results,” “[a] POSITA would have combined the elements as claimed by known methods because the combination uses Jiang’s file storage structure with Uczekaj’s software application executing on well-known commercial off-the-shelf devices and uses Jiang’s ground-based analysis application and database,” and “[a] POSITA would have therefore had a reasonable expectation of success in the combination because the combination involves integration of software logic and database file storage structures which would have been well-known and within the capability of a POSITA” (Petition, 55-56). This explanation, however, is conclusory and unsupported. And the expert declaration at paragraph 204, relied on as support, provides no additional reasoning or explanation beyond what is in the Petition, and should therefore be afforded little weight. *Id.*; EX1003, ¶204; *Xerox Corp.*, IPR2022-00624, Paper 12 at 5. The alleged motivation is therefore deficient.

2. The combination of Uczekaj and Jiang does not render obvious the “transceiver having a transceiver identity associated with pilot identification information” limitation [1E.1] of claim 1

The Petition states that “[a] POSITA would have understood that a WiFi (802.11) networking device, such as a non-certified device, includes a MAC address assigned by the manufacturer” and that “because the non-certified device of Uczekaj wirelessly receives and transmits data using the standardized IEEE 802.11 protocol, the device has a MAC address which is its ‘*transceiver identity*.’” Petition, 67-68. The Petition then alleges that “[b]y storing the ‘*pilot identification information*,’” which the Petition alleges is Jiang’s personal identification data (Petition, 66-67), “in the non-certified device having a ‘*transceiver identity*’ (MAC address), the ‘*transceiver identity* [is] *associated with pilot identification information*.’” *Id.*, 68. The Petition further alleges that “[b]y transmitting the ‘*pilot identification information*’ in a wireless message with the MAC address of the non-certified device in the MAC sublayer, the ‘*transceiver identity associated with pilot identification information*.’ [sic]” *Id.*

This analysis is deficient because it does not explain how such storage or transmission forms an association between the MAC address and pilot identification information. Indeed, the Petition provides no detail as to how any association is present in either of these circumstances. Such a high-level analysis is

insufficient to meet this limitation. As such, the Petition has not shown how Uczekaj and Jiang teach limitation [1E.1].

3. The combination of Uczekaj and Jiang does not render obvious the “transceiver being configured...for associating...” limitation [1E.2] of claim 1

Claim 1 recites *the transceiver being configured...for associating the thus received information with the pilot identification information associated with the transceiver identity*. EX1001, claim 1.

In addressing the element, the Petition states, “[t]hrough the process of transmitting the flight data to the database for storage in the pilot’s record, the transceiver associates the received flight data with the pilot identification information” and, “[f]or example, the transceiver must identify the pilot record (by identification information) in the database write (transmission) of the associated flight data.” Petition, 69.

But the Petition does not provide any explanation or detail about how such transmission of flight data would result in the claimed *associating [of] the thus received information with the pilot identification information*. Moreover, the Petition only relies on Dr. Reinholtz’s declaration at paragraph 234 to support its assertions, but the declaration simply repeats the conclusory statements of the Petition and should not be accorded any weight. Petition, 69; EX1003, ¶234; *Xerox Corp.*, IPR2022-00624, Paper 12 at 5.

The Petition further argues that “should an argument be made that the preamble is not limiting, the combination and Uczekaj and Jiang discloses these limitations” because “[i]n Jiang, after termination of the flight, the data ‘recorded in the memory device is then downloaded by an authorized person to a Ground Station processing station.’” Petition, 70. The Petition concludes that “in the combination of Uczekaj and Jiang, the non-certified device downloads the data stored in the file structure to the ground-based system including the ‘*pilot identification information*’ and flight data” and the combination therefore “discloses that, for the external database, ‘*the transceiver*’ is configured ‘*for associating the thus received information with the pilot identification information associated with the transceiver identity, and for transmitting the received information with the thus associated pilot identification information to the database*’” and “‘*the wireless transceiver is configured to wirelessly receive and transmit aircraft flight performance data to the database.*’” *Id.*

But none of these conclusory statements address how the prior art meets *associating the thus received information with the pilot identification information* as claimed. And again, the Petition’s only support for meeting any of the listed claim limitations is Dr. Reinholtz’s declaration at 235-236, but these paragraphs yet again simply repeat the conclusory statements of the Petition and should not be

accorded any weight. Petition, 65-66; EX1003, ¶¶233-236, 255; *Xerox Corp.*, IPR2022-00624, Paper 12 at 5.

The Petition therefore has not shown how Uczekaj and Jiang render obvious limitation [1E.2].

4. The combination of Uczekaj and Jiang does not render obvious the “only accessible” limitation [1H] of claim 1

Claim 1 recites *the stored sensed flight performance is only accessible with the associated pilot identification information*. EX1001, claim 1. The Petition provides two different mappings for this element: (1) when the claimed *database* is considered internal to the aircraft, and (2) when the claimed *database* is considered external to the aircraft. Petition, 70-73. Under either interpretation, however, the Petition is deficient.

Under the “database internal to the aircraft” interpretation, the Petition argues that Jiang “‘provides controls on the personnel authorized to access’ the data recorded in the pilot log” and that “data access ‘is protected by different access keys or codes’ and ‘[o]nly when the correct keys or codes are presented, will the corresponding rights be authorized.’” Petition, 71. The Petition thus concludes that “[t]he pilot’s secret codes and keys are pilot identification information” and that Uczekaj and Jiang therefore “discloses ‘*the stored sensed flight performance* [in the local ‘*database*’] *is only accessible with the associated pilot identification information.*’” *Id.* (brackets in original). The Petition also

appears to rely on Uczekaj as teaching this limitation based on its disclosure of “a security key feature,” arguing that “Uczekaj suggests limiting user access to functionality unless the proper user credentials are presented” and “[b]ased on Uczekaj’s suggestion and the general knowledge in the art, a POSITA would have been motivated to implement similar security on the non-certified device to limit access to the non-certified device and the logbook application to only an individual with the proper user credentials (e.g., username and password).” *Id.*, 71-72.

Under the “database external to the aircraft” interpretation, the Petition argues that “a POSITA would have understood that data records in the database are protected by an access security technique or alternatively would have been motivated to protect the data records stored in the database using an access security mechanism such as the pilot’s log-in and password,” concluding that the combination of Uczekaj and Jiang “teaches or at least suggests ‘*the stored sensed flight performance [in the ground-based database] is only accessible with the associated pilot identification information.*’” Petition, 72-73 (brackets in original).

The Petition’s analysis is deficient under both interpretations. This element requires *the associated pilot identification information*. EX1001, claim 1. When attempting to meet the claimed *pilot identification information*, the Petition first refers to Jiang’s “pilot **personal identification data**” (bolding in original) and asserts that a “POSITA would have been motivated to provide the pilot with the

ability to enter and modify the personal identification data stored in the log via the user interface of the device.” Petition, 66-67. But now, the Petition states that *pilot identification information* is met by (1) Jiang’s teachings of “[t]he pilot’s secret codes and keys [that] are pilot identification information” (Petition, 71), (2) “Uczekaj’s suggestion and the general knowledge in the art” that “a POSITA would have been motivated to implement [] security on the non-certified device to limit access to the non-certified device and the logbook application to only an individual with the proper user credential (e.g., username and password)” (Petition, 71-72), and (3) a POSITA’s understanding “that data records in the database are protected by an access security technique” or motivation “to protect the data records stored in the database using an access security mechanism such as the pilot’s log-in and password” (Petition, 72-73). The Petition is therefore inconsistent in its mapping of the claimed *pilot identification information*.

As such, the Petition’s ambiguous and inconsistent analysis is improper because it does not identify how Uczekaj and Jiang render obvious the *pilot identification information* element. And as explained in Section V.A.4, this type of ambiguous and inconsistent analysis is also improper as it renders the Petition deficient under at least 35 U.S.C. § 312(a)(3) and 37 C.F.R. §§ 42.104(b)(4), 42.104(b)(5), and 42.22(a)(2)).

5. Claims 2-5 and 8

Claims 2-5 and 8 depend on claim 1. The same arguments regarding claim 1 therefore apply.

D. Ground 4: The combination of Uczekaj, Jiang, and Greubel does not render obvious claims 1-5 and 8

The Petition presents Ground 4 to address the element *transceiver having a transceiver identity associated with pilot identification information* of claim 1. Petition, 75-78. However, Patent Owner submits that the deficiencies noted above regarding Ground 3 are not cured by Ground 4. As such, Ground 4 is deficient for the same reasons explained above with respect to Ground 3.

E. Ground 5: The combination of Warner, Wakutsu, Shavit, and Uczekaj does not render obvious claims 4 and 5

The Petition presents Ground 5 to address claims 4 and 5. Petition, 78-79. Claims 4 and 5 depend on claim 1. Patent Owner submits that the deficiencies noted above regarding Warner, Wakutsu, and Shavit in Ground 1, in relation to claim 1, are not cured by Ground 5. As such, Ground 5 is deficient for the same reasons explained above with respect to Ground 1.

VI. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Board decline to institute *inter partes* review of the '950 Patent.

Respectfully submitted,

/s/ Brian W. Oaks
Brian W. Oaks
Reg. No. 44,981
Lead Attorney for Patent Owner

Date: November 15, 2023

CERTIFICATE OF WORD COUNT

The undersigned certifies that the foregoing Preliminary Response has a word count of 13,112, as defined by 37 C.F.R. § 42.24 using the word count feature of Microsoft Word.

CERTIFICATE OF SERVICE

In accordance with 37 C.F.R. §§ 42.6(e), the undersigned certifies that on November 15, 2023, a complete and entire copy of PATENT OWNER'S PRELIMINARY RESPONSE UNDER 37 C.F.R. § 42.107 and related documents were served on Petitioner via electronic mail at the below addresses:

gordon-ptab@perkinscoie.com

bi-ptab@perkinscoie.com

November 15, 2023
Date

/s/ Brian W. Oaks
Brian W. Oaks
Reg. No. 44,981
Lead Attorney for Patent Owner