

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.

Petitioner

v.

iSCAN2D TECHNOLOGIES, LLC

Patent Owner

Case IPR2026-00317

U.S. Patent No. 12,230,394

**PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 35 U.S.C. § 313 AND 37 C.F.R. § 42.107**

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PATENT OWNER'S EXHIBIT LIST

Exhibit No.	Description
2001	U.S. Patent Application Publication No. US 2007/0033068 to Rao et al.
2002	File History of U.S. Patent No. 11,664,123
2003	U.S. Patent Application Publication No. US 2008/0300109 to Karkanias et al.
2004	U.S. Patent Application Publication No. US 2009/0176451 to Yang et al.

I. INTRODUCTION

Pursuant to 35 U.S.C. § 313 and 37 C.F.R. § 42.107, Patent Owner iScan2D Technologies, LLC submits this Preliminary Response to the Petition for inter partes review of U.S. Patent No. 12,230,394 (the “’394 patent”) filed by Apple Inc. This Response is timely filed within three months of the Notice of Filing Date Accorded entered May 26, 2026. For the reasons below, the Petition fails to establish a reasonable likelihood that Petitioner would prevail as to any challenged claim and institution should be denied.

The ’394 patent claims the same family invention from the mobile device’s perspective: a mobile device that generates an “optical scanning user interface,” detects, via its camera sensor and that interface, a “color coded digital scannable media” displayed by an external wearable activity tracking device, optically obtains and processes the wireless pairing information, establishes the wireless communications link, and then receives and displays the wearable’s activity and biometric information. The Petition’s combinations supply fragments of that sequence from references directed to other problems. None teaches a mobile device performing the complete scanning-pairing-receiving-displaying sequence the claims require and the Examiner found missing from the art.

Three defects run through every ground. *First*, no asserted reference, and no asserted combination, teaches the claimed invention as an integrated whole: a wearable activity device that generates and displays a color coded digital scannable media responsive to its wireless pairing information, a mobile device that scans and decodes that media to establish the wireless link, and the communication of the wearable's activity/biometric data over the so-established link, together with the mobile device's generation of an optical scanning user interface and its receipt and display of the wearable's data. That integration was the express basis for allowance. *Second*, the Petition's mappings rest on Petitioner's own concessions and hedges ("to the extent" qualifiers, "at the very least" fallbacks, and conceded gaps) that confirm the missing limitations are supplied by attorney argument rather than prior-art teaching. *Third*, the asserted motivations to combine are hindsight constructs that no rational person of ordinary skill would have pursued. Specifically, the wearable references already used conventional Bluetooth, with simple, standardized pairing, and the Petition offers no evidence-based reason to burden a miniaturized wearable with a camera-scannable color-coded pairing media display to solve a problem that was already solved.

Separately, Patent Owner has requested discretionary denial under 35 U.S.C. § 325(d) in its Brief Requesting Discretionary Denial filed July 21, 2026, which is incorporated herein by reference. The present Response addresses the merits and

does not repeat that discretionary briefing, although the prosecution history discussed below independently confirms that the Office has already considered, and found insufficient, prior art containing the same principal building blocks on which Petitioner now relies.

II. BACKGROUND

A. The '394 Patent and the Claimed Invention

The '394 patent issued from Application No. 18/320,937, filed May 19, 2023, as a direct continuation of the application that became the '123 patent. It shares that specification and was examined by the same Examiner. Independent claim 1 recites a mobile device comprising at least one camera sensor, a processor, a display, communication circuitry, and memory storing instructions that cause the processor to: “[g]enerate ... an optical scanning user interface on the mobile device display”; “[d]etect, via the at least one mobile device camera sensor and the optical scanning user interface, a color coded digital scannable media from a display included within the external wearable activity tracking device,” the media containing wireless pairing information; “[o]ptically obtain” and “[p]rocess” that pairing information; “[e]stablish ... a wireless communications link with the external wearable activity tracking device responsive to the processing of the wireless pairing information”; and “[r]eceive” and “[d]isplay” the “activity related information and bio-metric

information generated by the ... wearable.” Independent claim 11 recites a system comprising both the wearable side (which generates and displays the color-coded media and communicates its data) and the mobile side.

The '394 claims therefore stand or fall on an end-to-end sequence performed by a single mobile device: scan (via a generated optical scanning interface), obtain, process, pair, receive, display. No asserted reference teaches that sequence.

B. The Prosecution History Confirms the Point of Novelty

The '394 patent was allowed without any rejection. In the Statement of Reasons for Allowance (Notice of Allowability dated September 5, 2024), the Examiner identified prior art “made of record and not relied upon,” including Brown, which she described as teaching “Bluetooth pairing between two devices where a first device generates a barcode that encodes the Bluetooth pairing data that is scanned using a camera as a barcode scanner”; Yang, which “teaches encoding pairing information as color information ... to establish wireless communication”; and Rao, which teaches barcode/RFID-based identification of fitness members. The Examiner concluded that this art “fails to teach” the claimed mobile device and system. EX1002, 177-189, 185-88. Brown and Rao were also on the considered IDS. EX1002, 6. Karkanias, too, was on that Information Disclosure Statement, which lists “US 11/754,565 ... 12-04-2008 ... Karkanias et al.” — the application that

published as US 2008/0300109 A1, the Karkanias reference discussed below. EX1002, 5-6. The Examiner considered that Statement. EX1002, 181 (Notice of Allowability, box 2, citing the Information Disclosure Statement of 5/19/23). Rao further discloses a wearable “wireless enabled wrist sensor 314” that measures heart rate and wirelessly communicates physiological data. EX2001, FIG. 3, ¶¶ 0061-0062.

In the parent '123 application (same specification, same Examiner) the Office rejected the then-pending claims over Karkanias, which is a single reference that compresses “activity information into an identifying indicia (e.g., two dimensional barcode) that can be processed (e.g., [s]canned) by a wide array of devices (e.g., mobile phone, personal data assistant),” EX2003, Abstract; generates and “render[s]” that indicia “(e.g., printed, displayed, transmitted),” *id.*, ¶ 56; has “a mobile device (e.g., cell phone) ... employed to scan a barcode,” *id.*, ¶ 51; “automatically transfer[s]” the barcoded “activity (and physiological) information” “into the individual’s mobile device,” *id.*, ¶ 65, “using most any wired or wireless protocol (e.g., Bluetooth, infrared, Wi-Fi),” *id.*, ¶ 77; and discloses wearable monitoring via “haptic braces and/or sensory technologies ... applied to an individual,” *id.*, ¶ 53, and “physiological sensors,” *id.*, ¶ 64. The Examiner allowed the claims only after the color-coded/pairing-information/integrated-communication limitations were added. Non-Final Rejection (Sept. 10, 2021) at 2-7 (rejection under

§ 102 over Karkanias) and 8-9 (rejection of claims 6 and 16 under § 103 over Karkanias in view of Arguello) (EX2002, 251-258); Notice of Allowability (June 6, 2022), Statement of Reasons for Allowance at 2-3 (EX2002, 218-219). (Citations to the '123 file history are to each document's own internal pagination, with the corresponding page of EX2002 given parenthetically.) The Examiner relied on Karkanias ¶¶ 31, 40, 56, 64-66, and 77 and Figs. 3-5.

Patent Owner does not concede that Karkanias teaches any limitation. As in the '123 proceeding, the significance is comparative. Specifically, the Office has already examined art (Karkanias) embodying more of the asserted combination than any single reference Apple advances, and confirmed the claims' patentability over it. The '394 claims add mobile-side limitations that were not even at issue in the rejection for the '123 patent, while the '394 prosecution separately placed before the same Examiner had Karkanias itself (EX1002, 5-6), Brown's camera-scanned Bluetooth pairing, Yang's color-encoded pairing information (EX2004), and Rao's fitness/wearable context and wireless physiological-data communication. The Examiner nevertheless concluded that the prior art failed to teach the claimed mobile device and system. The relevant issue, therefore, was not whether barcode pairing, color encoding, wearable sensing, or wireless data transfer were individually known; it was whether those teachings produced the claimed mobile-side architecture as a whole.

C. The Petition

The Petition asserts the following grounds, all under 35 U.S.C. § 103:

- **Ground 1** — Bishop in view of LeBoeuf (claims 1-3, 5-8, 11-14, 16-18);
- **Ground 2** — Bishop-LeBoeuf in view of Williams (claims 4, 9, 10, 15, 19, 20);
- **Ground 3A** — Brown in view of Weiss (claims 1-8, 11-18);
- **Ground 3B** — Brown-Weiss in view of Ort (claims 1-8, 11-18);
- **Grounds 4A/4B** — Brown-Weiss and Brown-Weiss-Ort in view of Williams (claims 9-10, 19-20).

All grounds rest on the same building blocks asserted against the parent '123 patent in IPR2026-00316 (barcode pairing between general-purpose devices (Bishop or Brown) and wearable monitors communicating over conventional Bluetooth (LeBoeuf or Weiss)) supplemented by Ort (color barcode) and Williams (dependent-claim features). The Petition relies throughout on the declaration of Dr. Prashant Shenoy (EX1003).

III. CLAIM CONSTRUCTION

Claim terms are given their plain and ordinary meaning in light of the specification and prosecution history. Petitioner proposes that “color coded” means “having color other than ‘black-white’ that encodes data.” Pet. 4. For purposes of

this Response, Patent Owner applies Petitioner's construction, under which color itself must encode data (a colored rendering of an otherwise black-and-white symbology does not suffice). As shown below, the Brown-based grounds fail even under Petitioner's own construction. No other term requires express construction to resolve this Response, and no genuine construction dispute is presented.

IV. LEVEL OF ORDINARY SKILL

For purposes of this Response only, Patent Owner does not contest Petitioner's articulation of the level of ordinary skill in the art. The Petition fails under its own definition.

V. LEGAL STANDARDS

Institution requires "a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged." 35 U.S.C. § 314(a). The burden is on the petitioner, and the petition must identify with particularity where each limitation is taught and articulate a reasoned motivation to combine. *Harmonic*, 815 F.3d at 1363; 37 C.F.R. § 42.104(b). Obviousness requires more than showing that each element existed somewhere in the prior art: the petitioner must show a reason a person of ordinary skill would have combined the references as claimed, with a reasonable expectation of success, without using the claims as a roadmap. *KSR*, 550 U.S. at 418, 421; *Personal Web*, 848 F.3d at 993-94; *In re NuVasive*, 842 F.3d at

1381-85. Conclusory expert testimony that merely repeats the petition's attorney argument is entitled to little or no weight. 37 C.F.R. § 42.65(a); *Xerox v. Bytemark*, IPR2022-00624, Paper 9 at 15-16 (precedential); *TQ Delta*, 942 F.3d at 1358-59; *ActiveVideo*, 694 F.3d at 1327-28.

VI. ARGUMENT

A. No Ground Supplies the Integrated Invention the Examiner Found Missing — and the Office Has Already Found Richer Art Insufficient

The '394 claims are directed to the mobile side of the integrated invention, and the asserted art does not teach it. Bishop's and Brown's scanning devices "capture" a displayed image from devices that are not wearable activity devices, EX1004, ¶¶ 16, 33-39; EX1006, ¶¶ 79, 83-84, but neither Bishop or Brown's scanning devices generate a dedicated "optical scanning user interface" for detecting a color-coded media displayed by a wearable activity tracking device. Neither reference's scanning device thereafter receives and displays a wearable's activity or biometric data (Bishop and Brown have no wearable and no biometric data at all). LeBoeuf's portable telecommunication device receives data from the wearable, but over conventional Bluetooth. It scans nothing, and LeBoeuf concededly "does not teach how to establish" the link. Pet. 9.

Petitioner likewise concedes Weiss "does not teach how to establish this Bluetooth link." Pet. 57. No combination places the complete sequence (generate the

scanning interface, detect the wearable's color-coded media, optically obtain and process the pairing information, establish the link responsive to that processing, then receive and display the wearable's data) in a single mobile device, because no reference performs it.

As in the parent proceeding, the prosecution history confirms that art of this character does not reach the claims. The same Examiner rejected the parent '123 claims over Karkanias, which is a single reference combining the displayed, mobile-scanned barcode encoding activity information, the wireless communication of that information to the user's mobile device, and wearable activity and physiological monitoring, EX2003, Abstract, ¶¶ 40, 51, 53, 56, 64-66, 77; Figs. 3-5; Non-Final Rejection (Sept. 10, 2021) at 2-10 (EX2002, 251-259). The Examiner allowed the family's claims only after the distinguishing limitations were added. The '394 claims add the mobile-side limitations (the generated optical scanning user interface and the receive-and-display steps) on top of that distinguishing subject matter, and the Examiner allowed the '394 claims expressly because the prior art "fails to teach" that mobile device and system. EX1002, 185-88. Further, Karkanias appears on the Information Disclosure Statement filed in this application and considered by the same Examiner. EX1002, 5-6, 181. The Office therefore allowed these very claims with Karkanias before it.

Patent Owner does not concede that Karkanias teaches any limitation of any claim. Rather, the point is comparative. Petitioner's multi-reference combinations are no closer to the '394 claims than art the Office has already examined and found insufficient, and the Petition, although it acknowledges the Notice of Allowance, nowhere engages the Examiner's stated reasons for allowance. Nor does the Petition assert that the Examiner made a material error. *See Magnum Oil*, 829 F.3d at 1380-81.

The Petition also repeats a pattern that matters to the merits analysis. Where an asserted reference stops short of the claimed architecture, Petitioner shifts from saying the reference "teaches" the feature to saying a POSA would have "understood," "adapted," "implemented," or "substituted" additional functionality. Bishop's network-addressing procedure becomes a Bluetooth wearable-link bootstrap; LeBoeuf's and Weiss's wearables are somehow adapted to generate and display pairing barcodes; Brown's generic "color barcode" somehow becomes a color-as-data encoding scheme through "expert" interpretation and, alternatively, Ort. These shifts identify the modifications for which Petitioner has failed to provide a reasoned, non-hindsight explanation tied to the prior art rather than to the challenged claims.

B. Ground 1 (Bishop + LeBoeuf) Fails as to Every Challenged Claim

1. No reference teaches the mobile device's "optical scanning user interface" detecting the wearable's color-coded media.

Claim 1 requires the mobile device to "[g]enerate ... an optical scanning user interface on the mobile device display" and to "[d]etect, via the ... camera sensor and the optical scanning user interface," the color-coded media displayed by the external wearable activity tracking device. Bishop's device 104 "captures" an image with an image capture component, EX1004, ¶¶ 33-39. nothing in Bishop teaches generating a dedicated optical scanning user interface for detecting media displayed by a wearable activity tracking device, which is a device category absent from Bishop entirely. The Petition's mapping, Pet. 21-22, equates the bare capability of capturing an image with the claimed generated interface, conflating a camera with a claimed user-interface element. That mapping fails on its face, and it is dispositive of every challenged claim.

2. The "process" step and the "responsive to the processing" sequence are not taught.

Claim 1 separately requires the mobile device to "[p]rocess ... the wireless pairing information" and then establish the wireless link "responsive to the processing." Bishop's native architecture does not disclose the claimed wearable-link bootstrap. Device 102 already has an address on Communication Network 108, and that address enables other devices on Network 108 to send messages to device 102. EX1004, ¶¶ 17-18, 23-24. After device 104 decodes the address and secret, it

generates a communication-initiation request targeted to that already network-addressable device. *Id.*, ¶¶37-44. Thus, Bishop presupposes an operative network path capable of routing the initiation request before Bishop's pairing process completes. The optical scan step of Bishop supplies addressing/authentication information for use over that network substrate; it does not itself create the underlying connectivity as the claims of the '394 patent describe. Petitioner then changes architectures: in the proposed combination, Bishop's network-mediated initiation procedure "would be" used to establish LeBoeuf's Bluetooth link. Pet. 29-30; EX1003, ¶¶88-90, 127-30. That transition is a proposed modification, not Bishop's disclosure, and Petitioner must provide a reasoned basis for converting Bishop's Communication Network-108 procedure into the mechanism for establishing the previously unestablished wearable-to-mobile device link responsive to the mobile device's processing of the scanned pairing information.

Petitioner's reliance on Bishop's statement that its techniques can operate on "low-resource device[s]" does not answer this architectural problem. Bishop's own examples of low-resource devices include traditional set-top boxes and hand-held game consoles, not wrist-worn biometric monitors or physiological sensor modules. EX1004, ¶15. More importantly, the low-resource embodiments remain participants in Bishop's Communication Network 108 architecture. The "low-resource" statement concerns memory and processing resources; it does not eliminate the

operative network path on which Bishop's address and communication-initiation request depend. Dr. Shenoy nevertheless uses that generic resource statement to conclude that Bishop's pairing process was "intended for devices like LeBoeuf's." EX1003, ¶¶87-91. That inference does not establish that Bishop's complete source-device architecture was suited for LeBoeuf's wearable or that Bishop teaches a scan-responsive bootstrap of a previously unestablished wearable-to-mobile Bluetooth link.

3. No reference teaches the mobile device receiving and displaying the wearable's activity/biometric data over the scan-established link.

Claim 1 concludes with the mobile device "[r]eceiv[ing] ... activity related information and bio-metric information generated by the ... wearable" and "[d]isplay[ing]" it. Bishop and Brown contain no wearable and no biometric data. LeBoeuf's portable telecommunication device receives and displays health data, but over a conventional Bluetooth connection that concededly is not established by any scan (LeBoeuf's wearable displays no barcode). The end-to-end sequence exists in no reference and is assembled only from the claims. The same failure defeats Petitioner's challenge to system claim 11, which additionally requires the wearable side (generation and display of the color-coded media by the wearable and communication of its data) that Ground 1 does not teach for the reasons given in IPR2026-00316.

4. The motivation and expectation-of-success showings fail.

Petitioner identifies generic goals of easier and more secure pairing, but those goals do not themselves explain the specific coordinated reconstruction proposed here. Dr. Shenoy states that LeBoeuf's monitoring device would be "adapted as necessary" to generate and display Bishop's graphically encoded pairing information, while the mobile device would separately be "adapted as necessary" to capture and decode that information and generate Bishop's communication-initiation request. EX1003, ¶86. Dr. Shenoy further identifies Bishop's device-pairing module, screen, image-capture component, processors, and memory/storage as components to be implemented as necessary, yet characterizes the result as a "simple substitution" producing predictable results. *Id.*, ¶¶86-96. The issue is not whether those individual components were known, but whether the Petition provides a reasoned, evidence-based explanation for why a POSA would have selected and coordinated those particular modifications to LeBoeuf's wearable and mobile device in the claimed configuration. Generic ease and security goals, coupled with labels such as "straightforward" and "predictable," do not by themselves supply that claim-specific reasoning. Indeed, the Petition's motivation rationale (user-friendly, secure pairing) fails for the reasons detailed in Patent Owner's Preliminary Response in IPR2026-00316, which apply with equal force here. *See* KSR, 550 U.S. at 418, 421; 37 C.F.R. § 42.65(a); *Xerox v. Bytemark*, Paper 9 at 15-16.

C. Ground 3A (Brown + Weiss) Fails as to Every Challenged Claim**1. The “color coded” limitation is not taught under Petitioner’s own construction.**

Brown’s disclosure is a conventional black-and-white symbology. Its lone reference to a “color barcode” employing “different color combinations,” EX1006, ¶ 76, does not describe color itself encoding data, and the Petition reaches that meaning only through the declarant’s hypothetical color-to-bit assignment, Pet. 72; EX1003, ¶ 233, and the assertion that Brown “encompasses” HCCB, which is a symbology Brown never mentions. EX1003, ¶¶ 233-34. The Petition’s “at the very least” fallback, Pet. 73, concedes the doubt, and its two positions are irreconcilable: if Brown teaches color coding, no substitution is needed; if not, replacing Brown’s barcode with an HCCB is a redesign of the encoding mechanism, not the “simple substitution” the Petition labels it. This failure alone defeats Ground 3A for every claim, since each requires detecting a “color coded digital scannable media.”

2. Petitioner’s display concession defeats the wearable-side requirements.

Claim 1 requires detecting the media “from a display included within the external wearable activity tracking device,” and claim 11 expressly recites the wearable’s display device. The Petition concedes that “to the extent Weiss’s monitoring device’s user interface does not include a display device, it would be adapted to implement such display device.” Pet. 82; EX1003, ¶ 253. The wearable-

side display on which the mobile device's claimed detection depends is thus conceded to be potentially absent from the reference relied upon for the wearable and supplied only by unexplained adaptation. That concession defeats the mapping. Thus, Weiss itself does not unambiguously supply the wearable display in the configuration Petitioner needs. Petitioner instead relies on an additional adaptation so that Weiss's monitoring device can assume Brown device 401's role and generate and display Brown's pairing barcode. That is a modification for which Petitioner has failed to provide a reasoned motivation and reasonable expectation of success; the reference itself does not disclose the claimed wearable-side color coded scannable media-display configuration.

3. The mobile-side sequence is missing here too.

Brown, a reference considered by the Examiner before allowance for both the parent '123 patent and the '394 patent, supplies barcode-pairing functionality on its scanning device, including a pairing application with a user-interface option to scan a barcode. EX1006, ¶¶81-96. Brown does not, however, disclose the claimed wearable/data architecture. Weiss supplies a display-less, wearable physiological-monitoring device and a processing device that receives and displays physiological data, but Weiss does not teach establishing that link through Brown's optical pairing sequence (Weiss's wearable has no screen to display any color-coded digital scannable media). Pet. 57. Petitioner therefore assigns Weiss's monitoring device

the role of Brown device 401, modifies that wearable to generate and display Brown's pairing barcode, assigns the mobile/processing device the role of Brown device 100a, and then routes Weiss's subsequently generated physiological data over the newly constructed Brown pairing link. EX1003, ¶¶212-14, 221. The issue is not whether the separate functions were individually known; it is whether the Petition supplies a reasoned, non-hindsight basis for that particular coordinated integration in which the same mobile device performs the claimed scan-process-pair-receive-display sequence with the modified wearable. The integrated mobile-side sequence is absent, and the motivation and expectation-of-success failures track those addressed above and in IPR2026-00316.

D. Ground 3B (Brown + Weiss + Ort) Fails as to Every Challenged Claim

Ground 3B confirms that Petitioner itself recognizes a deficiency in Brown's ability to satisfy the claimed color coding under Petitioner's proposed construction: Ort is added "to the extent that Brown's color barcode is not color coded as claimed." Pet. 94; EX1003, ¶297. Ort discloses an HCCB visual tag for joining devices to a shared communication session, not a wearable biometric-monitoring system. EX1008, Abstract, ¶¶6, 20-23. Petitioner's stated rationale is that Ort's HCCB provides greater data density and may reduce physical barcode size. EX1003, ¶¶298-301. But the Petition does not identify a data-density problem in Brown's MAC-

address/PIN pairing payload that would have prompted a POSA to transplant Ort's multi-color HCCB into the reconstructed Brown-Weiss wearable system. Nor does Ort cure the more fundamental integration issue: it changes the machine-readable code technology, and requires Petitioner to construct the wearable-displayed pairing endpoint and the same mobile device's subsequent scan-process-pair-receive-display sequence.

E. The Dependent-Claim Grounds (2, 4A/4B) Fall With the Base Combinations and Add Nothing

Grounds 2 and 4A/4B depend on the Bishop-LeBoeuf and Brown-Weiss(-Ort) combinations addressed above and fail with them. Williams is invoked only for narrow dependent features, including that the pairing information be encrypted (claims 19-20), and the Petition concedes encryption "was a well-known technique" a person of ordinary skill "would have readily understood how to implement." Pet. 54; *see also* Pet. 96-98. Williams is itself just another barcode-based Bluetooth-pairing reference. It does not touch the optical-scanning-interface, receive, or display limitations on which the independent claims stand.

F. The Shenoy Declaration Cannot Fill the Gaps

The Petition's gap-filling rests on the declaration of Dr. Shenoy (EX1003), which in the critical passages restates the Petition's attorney argument and appends the labels "routine," "simple substitution," and "predictable results" without

underlying technical analysis. The Board gives such testimony little or no weight. 37 C.F.R. § 42.65(a); *Xerox v. Bytemark*, Paper 9 at 15-16; *TQ Delta*, 942 F.3d at 1358-59. The deficiency is most evident on the modifications on which every ground depends: adapting a miniaturized, battery-powered wearable to generate and display a color-coded scannable media that a phone camera can reliably detect and decode. The Petition and declaration offer no dimensions, no display specifications, no power analysis, no scanning-distance or lighting analysis. Indeed, it offers nothing beyond the assertion that it could be done. A petition may not fill claim gaps with an expert's say-so, *Magnum Oil*, 829 F.3d at 1380, and an unsupported assertion cannot carry Petitioner's burden at institution. The deficiency is further exposed by the absence, at critical points, of a reasoned explanation tied to the asserted art for why a POSA would have selected and coordinated the particular modifications necessary to produce the claims: converting Bishop's Communication Network-108 initiation procedure into a Bluetooth wearable-link bootstrap; treating Bishop's generic low-resource disclosure as a reason to implement the complete pre-existing communication network source-device architecture in LeBoeuf's wearable; supplying Brown's color-as-data relationship; modifying Weiss's wearable to assume Brown device 401's barcode-display role; and combining Brown's pairing workflow with Weiss's later physiological-data receipt and display. EX1003, ¶¶86-96, 212-14, 221, 233-34, 253, 297-301. Conclusory expert testimony cannot

substitute for the required reasoned connection between the evidence and the proposed combination. 37 C.F.R. § 42.65(a); *Xerox v. Bytemark*, Paper 9 at 15-16; *TQ Delta*, 942 F.3d at 1358-59; *Magnum Oil*, 829 F.3d at 1380.

G. Discretionary Denial Under § 325(d) Independently Warrants Denial

Patent Owner's Brief Requesting Discretionary Denial under 35 U.S.C. § 325(d), filed July 21, 2026, is incorporated by reference. As set forth there, the same or substantially the same prior art and arguments were previously presented to the Office, and Petitioner has not shown material error. *Advanced Bionics*, Paper 6 at 8-9; *Becton, Dickinson*, Paper 8 at 17-18. Whether or not the Director exercises discretion, the merits deficiencies addressed above independently require denial under § 314(a).

VII. CONCLUSION

For the foregoing reasons, the Petition does not establish a reasonable likelihood that Petitioner would prevail as to any challenged claim of the '394 patent, and Patent Owner respectfully requests that the Board deny institution of IPR2026-00317 in its entirety.

Date: August 26, 2026

Respectfully submitted,

By: /René A. Vazquez/

René A. Vazquez (Lead Counsel)

Reg. No. 38,647

Counsel for Patent Owner

CERTIFICATION OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(b)(1) and (d), the undersigned certifies that the foregoing Patent Owner's Preliminary Response contains 4,356 words, exclusive of the table of contents, table of authorities, listing of exhibits, certificates, and this certification, as counted by the word-processing system used to prepare it, and therefore complies with the 14,000-word limit of 37 C.F.R. § 42.24(b)(2).

Dated: August 26, 2026

/René A. Vazquez/
René A. Vazquez (Lead Counsel)
Reg. No. 38,647
Counsel for Patent Owner

CERTIFICATION OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e) and 42.105(b), the undersigned certifies that on August 26, 2026, a copy of the foregoing **Patent Owner's Preliminary Response** was served by electronic mail on the following:

Lead Counsel

Richard M. Bemben, Reg. No. 68,658
rbemben-PTAB@sternekessler.com
Telephone: (202) 772-8549

Back-Up Counsel

David W. Haars, Reg. No. 73,112
dhaars-PTAB@sternekessler.com
Telephone: (202) 772-8680

Robert E. Sokohl, Reg. No. 36,013
rsokohl-PTAB@sternekessler.com
Telephone: (202) 772-8677

Justin Wang, Reg. No. 81,975
jwang-PTAB@sternekessler.com
Telephone: (202) 772-8677

Dated: August 26, 2026

BY: /René A. Vazquez/
René A. Vazquez (Lead Counsel)
Reg. No. 38,647
Counsel for Patent Owner