

Filed on behalf of IngenioSpec, LLC
By: Douglas R. Wilson
Michelle E. Armond
Joseph Li
Monica Arnold
ARMOND WILSON LLP
100 Bayview Circle, Suite 300
Newport Beach, CA 92660
Telephone: (949) 932-0778
Email: ipr@armondwilson.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

INGENIOSPEC, LLC,
Patent Owner.

Case No. IPR2026-00143
U.S. Patent No. 12,001,599

PATENT OWNER'S RESPONSE

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	BACKGROUND.....	2
A.	Overview Of The '599 Patent	2
B.	Jannard (EX1016)	2
C.	Griffin (EX1017)	3
D.	Zadesky (EX1018).....	3
E.	Abreu (EX1019).....	4
F.	Burson (EX1020).....	4
III.	LEVEL OF ORDINARY SKILL IN THE ART	5
IV.	CLAIM CONSTRUCTION IS NOT NECESSARY TO FIND THAT APPLE’S INVALIDITY GROUNDS FAIL	5
V.	THE PETITION FAILS TO MEET ITS BURDEN ON AT LEAST ONE LIMITATION IN EVERY CLAIM IN ALL GROUNDS.....	6
A.	Ground 1 Cannot Prevail (Claims 1-7, 10-11, And 24)	7
B.	Ground 2 Cannot Prevail (Claim 8)	9
C.	Ground 3 Cannot Prevail (Claims 9, 12-18, 20, And 25)	9
D.	Ground 4 Cannot Prevail (Claims 19 And 21-23)	10
E.	Ground 5 Cannot Prevail (Claims 1-7, 14-15, 20, And 24)	11
F.	Ground 6 Cannot Prevail (Claims 8 And 11).....	13
G.	Ground 7 Cannot Prevail (Claims 9-10, 12-18, 20, And 25)	13
H.	Ground 8 Cannot Prevail (Claims 19 And 21-23)	14

VI.	THE JANNARD GROUNDS 1-4 CANNOT PREVAIL.....	15
A.	Jannard Is Not Prior Art (All Grounds 1-4)	15
1.	Apple’s Priority Date Challenge Is Easily Dispatched.....	16
2.	The ’045 Application Was Entitled To Rely On The ’169 Application Disclosures.....	17
3.	The ’169 Application Provides Written Description Support For All Limitations Of The ’599 Patent Claims.....	18
4.	The ’599 Patent’s Priority Date Predates Jannard	29
B.	There Is No Motivation To Combine Jannard And Burson Or Reasonable Expectation Of Success (Grounds 1-4)	30
C.	Jannard Did Not Disclose Claim 5[A] And The Same Or Comparable Limitations In Independent Claims 20, 22, And 24.....	38
D.	There Is No Motivation To Combine Jannard And Zadesky Or A Reasonable Expectation Of Success (Claims 8 And 21).....	40
VII.	THE GRIFFIN GROUNDS 5-8 CANNOT PREVAIL.....	44
A.	Apple Cannot Show Griffin Disclosed “Corresponding Conductive Contacts... External To And Separate From The Wireless Wearable Device” Under The Petition’s Theory (Grounds 5-8).....	45
B.	Griffin Did Not Disclose “At Least Two Conductive Areas Are Configured To Removably Couple... At Least Via Spring-Force, To At Least Enable... Electrical[] Connect[ion]” Required By All Claims (Grounds 5-8)	47
C.	There Is No Motivation To Combine Griffin And Zadesky Or Reasonable Expectation of Success (Grounds 6 And 8).....	50
D.	The Grounds 7-8 Challenges To Claims 9-10, 16-19, And 21-23 Cannot Prevail.....	56

1.	There Is No Motivation To Combine Griffin And Abreu Or A Reasonable Expectation of Success	56
2.	The Petition’s Cross-Referencing In Ground 8 Does Not Meet Apple’s Burden (Claims 19 And 21-23)	62
E.	The Petition Did Not Meet Its Burden To Show Unpatentability Of Claim 7 (Ground 5).....	63
VIII.	CONCLUSION	64

TABLE OF AUTHORITIES

<i>Apple v. UUSI</i> , IPR2019-00356, Paper 14 (P.T.A.B. July 22, 2019)	43
<i>Ariosa Diagnostics v. Verinata Health</i> , 805 F.3d 1359 (Fed. Cir. 2015)	7
<i>Bio-Rad Labs. v. GE Healthcare Bio-Scis.</i> , IPR2015-01826, Paper 11 (P.T.A.B. Feb. 29, 2016)	37, 44, 61
<i>BlackBerry v. Facebook</i> , IPR2019-01596, Paper 7 (P.T.A.B. Mar. 5, 2020)	43, 53
<i>Guangzho EKO Trading Dev. v. Nine Stars Grp.</i> , IPR2025-01191, Paper 8 (P.T.A.B. Jan. 14, 2026)	33
<i>Hesai Tech. v. Ouster</i> , IPR2023-01458, Paper 18 (P.T.A.B. Jan. 21, 2025)	39
<i>Liberty Mutual Ins. v. Progressive Casualty Ins.</i> , CBM2012-00003, Paper 78 (P.T.A.B. Feb. 11, 2014)	7
<i>In re Magnum Oil Tools Int’l</i> , 829 F.3d 1364 (Fed. Cir. 2016)	7, 62
<i>Microsoft v. InterDigital Patent Holdings</i> , IPR2024-00537, Paper 27 (P.T.A.B. June 23, 2025).....	30
<i>In re Nuvasive</i> , 842 F.3d 1376 (Fed. Cir. 2016)	41
<i>Realtime Data v. Iancu</i> , 912 F.3d 1368 (Fed. Cir. 2019)	5
<i>Samsung Elecs. v. Elm 3DS Innovations</i> , 925 F.3d 1373 (Fed. Cir. 2019)	37, 44, 61
<i>Samsung Elecs. v. Ouraring</i> , IPR2024-01078, Paper 62 (P.T.A.B. Jan. 27, 2026).....	52

Apple Inc. v. IngenioSpec, LLC
U.S. Patent No. 12,001,599 – IPR2026-00143

Samsung Elecs. v. Red Rock Analytics,
IPR2018-00555, Paper 16 (P.T.A.B. Aug. 30, 2018) 47

Triller v. TikTok,
IPR2022-00181, Paper 9 (P.T.A.B. May 16, 2022) 47

Ubiquiti v. Intellectual Ventures,
IPR2024-01290, Paper 9 (P.T.A.B. Mar. 7, 2025) 9, 10, 13, 14

Unigene Labs. v. Apotex,
655 F.3d 1352 (Fed. Cir. 2011) 55

Uniloc 2017 v. Google,
No. 2:18-CV-00493-JRG-RSP, 2020 WL 339802
(E.D. Tex. Jan. 20, 2020) 64

Verizon v. Huawei,
IPR2020-01080, Paper 39 (P.T.A.B. Jan. 12, 2022) 6, 8, 12

Volkswagen v. Spero,
IPR2023-00315, Paper 35 (P.T.A.B. June 18, 2024) 6

In re Wesslau,
353 F.2d 238 (C.C.P.A. 1965) 61

Winner Int’l Royalty Corp. v. Wang,
202 F.3d 1340 (Fed. Cir. 2000).....41

Xerox v. Bytemark,
IPR2022-00624, Paper 9 (P.T.A.B. Aug. 24, 2022) 63

OTHER AUTHORITIES

37 C.F.R. § 42.23 7

37 C.F.R. § 42.100.....5

37 C.F.R. § 42.104.....6, 7

TABLE OF EXHIBITS

Exhibit No.	Description
2001	Complaint, <i>IngenioSpec, LLC v. Apple Inc.</i> , Case No. 1:25-cv-00867, Dkt. No. 1 (W.D. Tex. June 5, 2025)
2002	Complaint, <i>IngenioSpec, LLC v. Apple Inc.</i> , Case No. 1:25-cv-00877, Dkt. No. 1 (W.D. Tex. June 6, 2025)
2003	Order Granting Joint Motion to Consolidate, <i>IngenioSpec, LLC v. Apple Inc.</i> , Case No. 1:25-cv-00867, Dkt. No. 25 (W.D. Tex. Oct. 14, 2025)
2004	Scheduling Order, <i>IngenioSpec, LLC v. Apple Inc.</i> , Case No. 1:25-cv-00867, Dkt. No. 36 (W.D. Tex. Nov. 17, 2025)
2005	Scheduling Order, <i>IngenioSpec, LLC v. Apple Inc.</i> , Case No. 1:25-cv-00867, Dkt. No. 39 (W.D. Tex. Dec. 5, 2025)
2006	Defendant Apple Inc.’s Preliminary Invalidity Contentions, <i>IngenioSpec, LLC v. Apple Inc.</i> , Case No. 1:25-cv-00867 (W.D. Tex. Nov. 21, 2025) (cover pleading)
2007	RESERVED
2008	RESERVED
2009	RESERVED
2010	Exhibit E-3 to Defendant Apple Inc.’s Preliminary Invalidity Contentions, <i>IngenioSpec, LLC v. Apple Inc.</i> , Case No. 1:25-cv-00867 (W.D. Tex. Nov. 21, 2025)
2011	Defendant’s Proposed Claim Constructions, <i>IngenioSpec, LLC v. Apple Inc.</i> , Case No. 1:25-cv-00867 (W.D. Tex. Dec. 22, 2025)
2012	DocketNavigator Case List for U.S. Patent No. 11,829,518
2013	Office Action in Apple Patent Application Citing U.S. Patent No. 7,890,128
2014	Information Disclosure Statement in Apple Patent Application Listing U.S. Patent Application Publication No. 2004/0208324
2015	Declaration of Peter Tong
2016-2019	RESERVED
2020	Claim Construction Order, <i>IngenioSpec, LLC v. Apple Inc.</i> , Case No. 1:25-cv-00867, Dkt. No. 69 (W.D. Tex. Apr. 6, 2026)
2021-2029	RESERVED
2030	U.S. Provisional Application No. 60/583,169
2031	U.S. Patent No. 7,500,747
2032	U.S. Patent No. 7,806,525

Apple Inc. v. IngenioSpec, LLC
U.S. Patent No. 12,001,599 – IPR2026-00143

Exhibit No.	Description
2033	U.S. Patent No. 8,434,863
2034	U.S. Patent No. 8,430,507
2035	U.S. Patent No. 10,345,625
2036	U.S. Patent No. 11,630,331
2037	U.S. Patent No. 11,803,069
2038	U.S. Patent No. 11,829,518
2039	Transcript of Deposition of Dr. Joshua R. Smith (August 4, 2026)
2040	Declaration of Dr. Joseph J. LaViola Jr. in Support of Patent Owner's Response
2041	CV of Dr. Joseph J. LaViola Jr.

I. INTRODUCTION

IngenioSpec is a California company with a branch in Texas that has led innovation in wearable electronic devices for more than a decade. EX2002 ¶¶3-4. Its cutting-edge wearable technology seamlessly integrates electronics into the wearable devices to deliver practical solutions that positively transform consumers' daily lives. *Id.* ¶4. Through its patented wearable device technologies, these solutions include health monitoring, hands-free communication, enhanced hearing, and integrated audio and video playback. *Id.* ¶¶5, 7-8.

In attacking IngenioSpec's '599 Patent, Apple's Petition falls short on every ground, failing to address the requirement of "at least partially in the wireless wearable device" or comparable claim limitations present in every challenged claim. The Petition's Grounds 1-4 also cannot prevail because Jannard, their primary reference, is not prior art. Grounds 1-4 fail for other reasons as well including the lack of any motivation to combine Jannard with Burson or Jannard and Burson with Zadesky. The Petition's Grounds 5-8 based primarily on Griffin also entirely collapse because Apple relied on a set of "corresponding conductive contacts" in its identified "wireless wearable communication device 10" even though all challenged claims require those "corresponding conductive contacts" to be "external to and separate from the wireless wearable device." Grounds 5-8 also suffer from other deficiencies including Griffin's failure to disclose "at least two conductive areas are

configured to removably couple to corresponding conductive contacts... at least via spring force,” the lack of any motivation to add Zadesky’s touchpad and gestures to Griffin’s earpiece, the lack of any motivation to combine Griffin and Abreu or any likelihood of success in doing so, and the failure to show Griffin disclosed Bluetooth.

Given the voluminous and overwhelming deficiencies in Apple’s Petition, the Board should confirm patentability of all challenged claims.

II. BACKGROUND

A. Overview Of The ’599 Patent

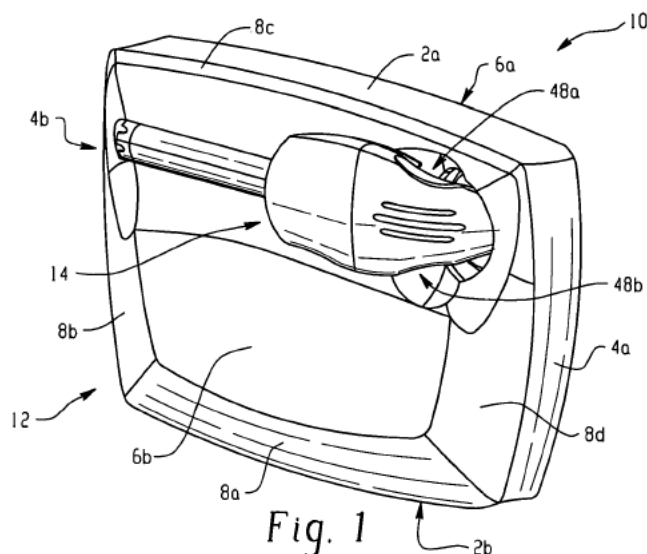
The ’599 Patent is titled “Head-Worn Device with Connection Region.” EX1001, 1. The ’599 Patent describes a wireless wearable device with one or more embedded or partially embedded electrical components which make the device easier to operate and improve wireless communication techniques for users of mobile communication devices. *Id.*, 3:60-4:3. Among other electronic components in the wearable wireless device, the ’599 Patent describes, for example, speakers, an electrical connector, a rechargeable battery, a microphone, and wireless communication circuitry. *E.g., id.*, 4:31-39; EX2040 ¶¶35-37.

B. Jannard (EX1016)

Jannard is a U.S. patent that issued on March 5, 2019. EX1016, 1. Jannard is not prior art to the ’599 Patent. *Infra* §VI.A; EX2040 ¶¶38-39.

C. Griffin (EX1017)

Griffin is a U.S. patent that issued on December 25, 2007. EX1017, 1. Griffin described a “communication device 10 having a first communication module 12 and a second detachable communication module 14 for insertion into the communication device user’s ear,” as illustrated in Figure 1. *Id.*, 2:53-57; EX2040 ¶¶40-41.



EX1017, Fig. 1.

D. Zadesky (EX1018)

Zadesky is a U.S. patent that issued on May 16, 2006. EX1018, 1. Titled “Touch Pad Handheld Device,” Zadesky “relates generally to a media player having a touch pad.” *Id.*, 1:22-23. Zadesky specifically disclosed a “media player [that] is a handheld device” having both a touchpad and a display. *Id.*, 4:40; *see also id.*, 3:64-65 (“a user input system having a touch pad, a display and a controller”), 5:46-

6:1 (describing “media player 100” including a “display screen 104” and a “touch pad 110”), Figs. 2-3; EX2040 ¶¶42-44.

E. Abreu (EX1019)

Abreu is a U.S. patent that issued on August 4, 2020. EX1019, 1. Abreu was focused on measurements at a “Brain Temperature Tunnel” located at the medial canthal region “adjacent to the medial corner of the eye above the medial canthal tendon and in the medial third of the upper eyelid.” *Id.*, 3:20-23, 4:16-19; *see also id.*, 3:25-29, 3:66-67; EX2040 ¶45. Abreu described measuring pulse and blood pressure using a motion or pressure sensor mounted on a medial canthal pad, which is placed at the medial canthal region. EX1019, 13:26-28 (“Pressure can be applied to a blood vessel through a micro cuff mounted in the medial canthal pads, or alternatively by the temples of eyeglasses.”), 13:38-40 (“Motion sensors and/or pressure sensors can be mounted in the medial canthal pad to measure pulse.”); EX2040 ¶46.

F. Burson (EX1020)

Burson is a U.S. patent that issued on August 2, 2005. EX1020, 1. Burson described that its “dual system charging interface 100 includes two charging interfaces. The first charging interface utilizes stationary charging contacts comprising negative contact arc 106 and positive contact arc 108 disposed on front surface 116.... The second charging interface comprises a negative contact 104 and

positive contact 102 disposed within well 134 behind aperture 114....” *Id.*, 4:26-55; EX2040 ¶¶47-52.

III. LEVEL OF ORDINARY SKILL IN THE ART

The parties agree that a person of ordinary skill in the art at the time of the invention would have had a Bachelor of Science degree and a Masters degree in Electrical Engineering, Computer Engineering, Physics, or an equivalent field, as well as one to two years of academic or industry experience in mobile devices, wireless communications, or audio electronics, or comparable industry experience. Paper 2 (“Pet.”) at 5 (citing EX1003 ¶19); EX2040 ¶31. However, IngenioSpec would clarify that “equivalent field” includes Computer Science. EX2040 ¶32.

IV. CLAIM CONSTRUCTION IS NOT NECESSARY TO FIND THAT APPLE’S INVALIDITY GROUNDS FAIL

Claims in an IPR are “construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. §42.100(b). The district court in the co-pending litigation issued a claim construction order. *See* EX2020.

IngenioSpec maintains that claim construction is unnecessary to confirm patentability of the claims. *See* Paper 8 at 3; *Realtime Data v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms... that are in controversy, and only to the extent necessary to resolve the controversy.’”

(quoting *Vivid Techs. v. Am. Sci. & Eng’g*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

Apple agrees that “no claim construction is necessary to resolve any issue” in this proceeding. *See* Pet. at 6.

V. THE PETITION FAILS TO MEET ITS BURDEN ON AT LEAST ONE LIMITATION IN EVERY CLAIM IN ALL GROUNDS

The Petition does not address at least one limitation in every challenged claim in each ground and thus on its face fails to “specify where each element of the claim is found in the prior art patents or printed publications relied upon,” as required by 37 C.F.R. §42.104(b)(4). As explained below, the Petition does not address the requirement of “at least partially in the wireless wearable device” or comparable limitations in each of independent Claims 1, 20, 22, and 24 and several dependent claims and thus cannot prevail. *See, e.g., Volkswagen v. Spero*, IPR2023-00315, Paper 35 at 30-31 (P.T.A.B. June 18, 2024) (“Petitioner has failed to prove the unpatentability of claim 48” where “the Petition fails to address claim 48’s ‘classifying’ requirement.”); *Verizon v. Huawei*, IPR2020-01080, Paper 39 at 35-36 (P.T.A.B. Jan. 12, 2022) (where “Patent Owner argue[d] that Petitioner fails to address the ‘selected-signal feature’ limitation,” the Board found that “[a]lthough Petitioner’s Reply brief presents supporting argument interpreting the teachings of Saleh as necessarily disclosing the selection feature, these arguments are not persuasively presented in the Petition”).

Moreover, “if the patent owner response simply states that the petition is lacking because it fails to address a certain claim limitation, then it would be too late to address that limitation, for the first time, in the reply.” *Liberty Mutual Ins. v. Progressive Casualty Ins.*, CBM2012-00003, Paper 78 at 67 (P.T.A.B. Feb. 11, 2014); *see also* 37 C.F.R. §§42.23(b), 42.104(b)(4); *Ariosia Diagnostics v. Verinata Health*, 805 F.3d 1359, 1367-68 (Fed. Cir. 2015) (“The Board must make judgments about whether a Petition identified the specific evidence relied on in a Reply and when a Reply contention crosses the line from the responsive to the new.”). Additionally, the Board may not “adopt arguments on behalf of petitioners....” *In re Magnum Oil Tools Int’l*, 829 F.3d 1364, 1381 (Fed. Cir. 2016).

A. Ground 1 Cannot Prevail (Claims 1-7, 10-11, And 24)

Ground 1 cannot prevail because the Petition does not address the limitation “at least partially in the wireless wearable device” required by challenged Claims 1-7, 10-11, and 24, much less show that it is satisfied. Because the Petition fails to address this limitation and Apple cannot remedy that failure in reply, Apple cannot carry its burden to show invalidity of any challenged claim.

As to Claim 1, the Petition never addresses the Claim 1[B] requirement of an electrical connector “at least partially in the wireless wearable device,” *see* Pet. at 18-21, or the Claim 1[E] requirement of a microphone “at least partially in the wireless wearable device,” *see id.* at 30. Similarly, as to independent Claim 24, the

Petition never addresses the Claims 24[A], 24[D], 24[E], and 24[F] requirements of electrical connector, speaker, first microphone, and second microphone, respectively, that are “at least partially in the wireless wearable device.” *See id.* at 39-42.

The Petition also never addresses the “at least partially in the wireless wearable device” requirement in several dependent claims, including in Claims 3[A], 6[A], 7[A], and 10[A]. *See id.* at 32, 34-37.

In its opposition to IngenioSpec’s discretionary denial request, Apple asserted, for Claim 1[B]’s requirement of an electrical connector “at least partially in the wireless wearable device,” that “the Petition shows clearly, for all applicable claims, and with specific citation to the prior art and to expert support, and how this limitation (and all other limitations) are met by the prior art.” Paper 9 at 18. Apple’s only cited support in Ground 1 was a citation to “Pet., 15-19” accompanied by the parenthetical: “showing how the claimed electrical connector is met by Jannard’s power contacts 164 included in the audio device.” Paper 9 at 18-19. But nothing in the Petition at pages 15-19, which spans other limitations, addresses an electrical connector “at least partially in the wireless wearable device.” *See Pet.* at 15-19. And it is too late to address it now. *Verizon*, IPR2020-01080, Paper 39 at 36 (“Although Petitioner’s Reply brief presents supporting argument interpreting the teachings of

Saleh as necessarily disclosing the selection feature, these arguments are not persuasively presented in the Petition.”).

Because the Petition does not address at least one limitation in every claim challenged, Apple cannot prevail on Ground 1.

B. Ground 2 Cannot Prevail (Claim 8)

The Ground 2 challenge to Claim 8 falls with the Ground 1 challenges to Claims 1 and 2 from which Claim 8 depends. As explained, Ground 1 fails. *Supra* §V.A. Thus, Ground 2 also fails. *Ubiquiti v. Intellectual Ventures*, IPR2024-01290, Paper 9 at 32 (P.T.A.B. Mar. 7, 2025) (petitioner necessarily fails to show unpatentability of dependent claims by failing to show unpatentability of independent claim from which they depend).

Ground 2 also independently fails because the Petition fails to address the Claim 8[B] requirement of a storage medium “at least partially in the wireless wearable device.” *See* Pet. at 45-47.

Apple cannot prevail on Ground 2.

C. Ground 3 Cannot Prevail (Claims 9, 12-18, 20, And 25)

The Ground 3 challenges to dependent Claims 9, 12-18, and 25 fall with the Ground 1 challenges to claims from which they depend. As explained, Ground 1 fails. *Supra* §V.A. Thus, the Ground 3 challenges to Claims 9, 12-18, and 25 also fail. *Ubiquiti*, IPR2024-01290, Paper 9 at 32 (petitioner necessarily fails to show

unpatentability of dependent claims by failing to show unpatentability of independent claim from which they depend).

The Ground 3 challenges to Claims 9, 14-18, and 20 also independently fail because the Petition fails to address the Claims 9[A], 14[A], 15[A], 16[A]¹, 17[A], 18[A], 20[B], 20[E], 20[G], and 20[H] requirements of “at least partially in the wireless wearable device.” *See* Pet. at 51-52, 58-63. For example, as to independent Claim 20, the Petition never addresses the 20[B], 20[E], 20[G], and 20[H] requirements of electrical connector, microphone, storage medium, and wireless communication circuitry, respectively, that are “at least partially in the wireless wearable device.” *See id.* at 61-63.

Apple cannot prevail on Ground 3.

D. Ground 4 Cannot Prevail (Claims 19 And 21-23)

The Ground 4 challenges to dependent Claims 19 and 21 fall with the Grounds 1 and 3 challenges to claims from which they depend. As explained, Grounds 1 and 3 fail. *Supra* §§V.A., V.C. Thus, the Ground 4 challenges to Claims 19 and 21 also fail. *Ubiquiti*, IPR2024-01290, Paper 9 at 32.

¹ Claim 16[A] refers to “claim 9[B]” for its entire argument, but claim 9[B] does not exist. *See* Pet. at 51-55, 60.

The Ground 4 challenges to Claims 22 and 23 independently fail because the Petition fails to address the Claims 22[B], 22[E], 22[G], 23[A], and 23[B] requirements of “at least partially in the wireless wearable device.” *See* Pet. at 65-67. For example, as to independent Claim 22, the Petition never addresses the Claims 22[B], 22[E], and 22[G] requirements of electrical connector, microphone, and wireless communication circuitry, respectively, that are “at least partially in the wireless wearable device.” *See id.* at 65-66.

Apple cannot prevail on Ground 4.

E. Ground 5 Cannot Prevail (Claims 1-7, 14-15, 20, And 24)

Ground 5 cannot prevail because the Petition does not address the limitation “at least partially in the wireless wearable device” required by challenged Claims 1-7, 14-15, 20, and 24, much less show that it is satisfied.

For example, as to Claim 1, the Petition never addresses the Claims 1[B], 1[D], and 1[E] requirements of electrical connector, rechargeable battery, and microphone, respectively, that are “at least partially in the wireless wearable device.” *See* Pet. at 72-73, 75-76. Similarly, as to independent Claim 24, the Petition never addresses the Claims 24[A], 24[D], 24[E], and 24[F] requirements of electrical connector, speaker, first microphone, and second microphone, respectively, that are “at least partially in the wireless wearable device,” *see id.* at 82-84, or the Claim

24[C] requirement of a rechargeable battery “in the wireless wearable device,” *see id.* at 82.

The Petition also never addresses the “at least partially in the wireless wearable device” requirement in several dependent claims, including in Claims 2[A], 3[A], 6[A], and 7[A]. *See id.* at 76-78, 80-82.

Finally, Claims 14-15 and 20 are not addressed in the Petition’s Ground 5 even though the Petition’s heading says it challenges them. *See id.* at 68, 81-82. To the extent the Petition had intended to challenge Claims 14-15 and 20 in Ground 5, those challenges fail.

In its opposition to IngenioSpec’s discretionary denial request, Apple asserted, for Claim 1[B]’s requirement of an electrical connector “at least partially in the wireless wearable device,” that “the Petition shows clearly, for all applicable claims, and with specific citation to the prior art and to expert support, and how this limitation (and all other limitations) are met by the prior art.” Paper 9 at 18. In support of its assertion regarding Ground 5, Apple cited pages 70-73 of the Petition accompanied by the parenthetical: “showing same for Griffin’s charging terminals.” Paper 9 at 18-19. Nothing in the cited passage, which spans other limitations, addresses an electrical connector “at least partially in the wireless wearable device.” *See Pet.* at 70-73. It is too late to address it now. *Verizon*, IPR2020-01080, Paper 39 at 36 (“Although Petitioner’s Reply brief presents supporting argument interpreting

the teachings of Saleh as necessarily disclosing the selection feature, these arguments are not persuasively presented in the Petition.”).

Because the Petition does not address at least one limitation in every claim challenged, Apple cannot prevail on Ground 5.

F. Ground 6 Cannot Prevail (Claims 8 And 11)

The Ground 6 challenges to dependent Claims 8 and 11 fall with the Ground 5 challenges to Claims 1 and 2 from which Claims 8 and 11 depend. As explained, Ground 5 fails. *Supra* §V.E. Thus, Ground 6 also fails. *Ubiquiti*, IPR2024-01290, Paper 9 at 32.

The Ground 6 challenge to Claim 8 also independently fails because the Petition fails to address the Claim 8[B] requirement of a storage medium “at least partially in the wireless wearable device.” *See* Pet. at 87-88.

Apple cannot prevail on Ground 6.

G. Ground 7 Cannot Prevail (Claims 9-10, 12-18, 20, And 25)

The Ground 7 challenges to dependent Claims 9-10, 12-18, and 25 fall with the Ground 5 challenges to claims from which they depend. As explained, Ground 5 fails. *Supra* §V.E. Thus, the Ground 7 challenges to Claims 9-10, 12-18, and 25 also fail. *Ubiquiti*, IPR2024-01290, Paper 9 at 32.

The Ground 7 challenges to Claims 9-10, 14-18, and 20 also independently fail because the Petition fails to address the Claims 9[A], 10[A], 14[A], 15[A],

16[A]², 17[A], 18[A], 20[B], 20[D], 20[E], 20[F], 20[G], and 20[H] requirements of “at least partially in the wireless wearable device.” *See* Pet. at 90-96. For example, as to independent Claim 20, the Petition never addresses the 20[B], 20[D], 20[E], 20[F], 20[G], and 20[H] requirements of electrical connector, rechargeable battery, microphone, another microphone, storage medium, and wireless communication circuitry, respectively, that are “at least partially in the wireless wearable device.” *See id.* at 95-96.

Apple cannot prevail on Ground 7.

H. Ground 8 Cannot Prevail (Claims 19 And 21-23)

The Ground 8 challenges to dependent Claims 19 and 21 fall with the Grounds 5 and 7 challenges to claims from which they depend. As explained, Grounds 5 and 7 fail. *Supra* §§V.E, V.G. Thus, the Ground 8 challenges to Claims 19 and 21 also fail. *Ubiquiti*, IPR2024-01290, Paper 9 at 32.

The Ground 8 challenges to Claims 22 and 23 independently fail because the Petition fails to address the Claims 22[B], 22[D], 22[E], 22[F], 22[G], 23[A], and 23[B] requirements of “at least partially in the wireless wearable device.” *See* Pet. at 97-98. For example, as to independent Claim 22, the Petition never addresses the

² Claim 16[A] refers to “claim 9[B]” for its entire argument, but claim 9[B] does not exist. *See* Pet. at 90-92, 94.

Claims 22[B], 22[D], 22[E], 22[F], and 22[G] requirements of electrical connector, rechargeable battery, microphone, another microphone, and wireless communication circuitry, respectively, that are “at least partially in the wireless wearable device.”
See id. at 97-98.

Apple cannot prevail on Ground 8.

VI. THE JANNARD GROUNDS 1-4 CANNOT PREVAIL

Even if Grounds 1-4 are considered despite the Petition failing to address at least one limitation in every claim in all grounds, *supra* §V, none of Grounds 1-4, based on Jannard and one or more other references, can prevail because Jannard is not prior art. That alone forecloses any further consideration of Grounds 1-4. Even if considered, the Grounds 1-4 challenges fail for multiple additional reasons, including: (1) no motivation or reasonable expectation of success for combining Jannard and Burson in all Grounds 1-4, (2) Jannard’s failure to disclose “the microphone is configured to be positioned closer to mouth of the user than the another microphone” or similar limitations required by Claims 5 and 20-25, and (3) no motivation or reasonable expectation of success for combining Jannard and Zadesky for Claims 8 and 21.

A. Jannard Is Not Prior Art (All Grounds 1-4)

The Petition cannot prevail on Grounds 1-4 because Jannard, which is the primary reference asserted in each of those grounds, does not qualify as prior art.

The '599 Patent is entitled to a priority date of no later than July 28, 2004, the filing date of U.S. Provisional Application No. 60/592,045, from which the '599 Patent claims priority. Because Jannard is not prior art in relation to this priority date, Grounds 1-4 relying on Jannard collapse. EX2040 ¶¶39, 54-60.

1. Apple's Priority Date Challenge Is Easily Dispatched

Despite admitting that the “the '599 patent... claims priority to... ten provisional applications and a continuation-in-part filed between 2004 and 2006,” including “Provisional Appl. No. 60/592,045, filed July 28, 2004,” Apple incorrectly asserts that “the challenged claims are not entitled to a priority date earlier than October 11, 2005.” Pet. at 2-3.

The alleged basis for Apple's incorrect assertion is that “[a]ll challenged claims rely on a claim limitation directed to conductive areas that can removably couple to and separate from counterpart contacts on an external connector via spring-force” but “no subject matter that can support this ‘spring force’ limitation was disclosed in the '599 patent's priority chain until the filing of Provisional Appl. No. 60/725,896 on October 11, 2005.” *Id.* at 3.

As explained in Section VI.A.2 below, Provisional Application No. 60/592,045 (“'045 Application”)—filed July 28, 2004 and from which the '599 Patent claims priority—incorporated by reference Provisional Application No. 60/583,169 (“'169 Application”) (EX2030). The '169 Application disclosures

provide written description support for every limitation of every claim of the '599 Patent, including the same disclosure for the spring-force limitation Apple concedes is sufficient as of October 11, 2005, entitling all challenged claims to a priority date no later than July 28, 2004 and disqualifying Jannard as prior art. *Infra* §§VI.A.3-VI.A.4; EX2040 ¶¶39, 54-60, Appendix A.

2. The '045 Application Was Entitled To Rely On The '169 Application Disclosures

The '045 Application properly incorporated by reference, and was entitled to rely on, the disclosures of the '169 Application. EX1009 ¶[0001] (“U.S. Provisional Patent Application No. 60/583,169, filed June 26, 2004, entitled ‘ELECTRICAL COMPONENTS FOR USE WITH EYEWEAR, AND METHODS THEREFOR,’ and which is hereby incorporated herein by reference”). The Petition does not challenge this fact, nor could it. *See* Pet. at 2-4.

Every patent or application in the priority chain of the '599 Patent, from the '599 Patent itself to the '045 Application, properly incorporated by reference the '169 Application. *E.g.*, EX1001, 2:30-34; EX2038 (U.S. Patent No. 11,829,518), 2:26-30; EX2037 (U.S. Patent No. 11,803,069), 2:22-26; EX2036 (U.S. Patent No. 11,630,331), 1:44-48; EX2035 (U.S. Patent No. 10,345,625), 1:41-45; EX2034 (U.S. Patent No. 8,430,507), 1:35-39; EX2033 (U.S. Patent No. 8,434,863), 1:31-35;

EX2032 (U.S. Patent No. 7,806,525), 1:26-30; EX2031 (U.S. Patent No. 7,500,747), 1:23-27; EX1009 ¶[0001]; *see also* EX2040 ¶¶55-56.

Thus, the '045 Application incorporated by reference the '169 Application, and continuity of the '169 Application disclosure was maintained from the '045 Application through the '599 Patent itself.

3. The '169 Application Provides Written Description Support For All Limitations Of The '599 Patent Claims

The claims of the '599 Patent are fully supported by the disclosures of the '169 Application. *See* EX2040 ¶¶54-60, Appendix A.

Apple challenges only a single limitation, the “‘spring force’ limitation” required by all claims of the '599 Patent. Pet. at 3; *id.* at 21 (Claim 1[C]: “at least two conductive areas are configured to removably couple to corresponding conductive contacts of a counterpart connector... at least via spring-force”), 39 (Claim 24[B]), 61 (Claim 20[C]), 66 (Claim 22[C]). But the '169 Application provided written description support for this limitation, disclosing, for example, that “[w]hen the temple (i.e., male connector 300) is inserted into the female plug, the soft PVC material stretches slightly, providing a *spring-force to keep the contacts connected.*” EX2030 ¶[00061] (emphasis added); *see also id.* ¶[00063] (“Referring to both FIG. 5 and FIG. 6B, when the male connector 300 is inserted into the slot 314 of the female connector 310, the metal pads, 304 and 306, will get in contact, or

mate, with the metal sheets, 364 and 366.”); *id.*, Figs. 5 (showing male connector 300 and female connector 310), 6B (showing a cross-section of female connector 310); EX2040 ¶¶57-60, Appendix A.

The same disclosures in the ’169 Application appear in U.S. Provisional Application No. 60/725,896 (’896 Application). *Compare* EX2030 ¶¶[00061], [00063], Figs. 5, 6B, *with* EX1005 ¶¶[00068], [00070], Figs. 5, 6B; *see also* EX2040 ¶59. Taking at face value their (mistaken) assertion that “no subject matter that can support this ‘spring force’ limitation was disclosed in the ’599 patent’s priority chain until the filing of [the ’896 Application],” Pet. at 3; EX1003 ¶26, both Apple and Dr. Smith thus agree that the ’169 Application’s disclosures are sufficient to support the spring-force limitation. Indeed, Apple’s own expert, Dr. Smith, at his deposition conceded that the disclosures in the ’896 Application and in the ’169 Application are the same in this regard. EX2039, 27:13-28:4.

The chart below shows examples of written description support in the ’169 Application for all claims of the ’599 Patent. EX2040 ¶¶57-60, Appendix A.

Claims	Examples of Supporting Disclosures from the '169 Application (EX2030)
Claim 1	
[Preamble] A wireless wearable device, with at least a portion of the wireless wearable device configured to be worn in at least one ear of a user, to at least help the user hear audio outputs produced by the device, the wireless wearable device comprising:	<i>See</i> page 8 ³ , ¶[00049]; pages 18-19, ¶[00095].
[A] a speaker at least partially in the wireless wearable device; and	<i>See</i> pages 6-7, ¶[00038].
[B] an electrical connector at least partially in the wireless wearable device, wherein the electrical connector includes at least two conductive areas, each area on a surface of the wireless wearable device, and	<i>See</i> page 10, ¶¶[00056]-[00057].
[C] wherein the at least two conductive areas are configured to removably couple to corresponding conductive contacts of a counterpart connector external to and separate from the wireless wearable device, at least via spring-force, to at least enable each of the at least two conductive areas to be electrically connected to its corresponding conductive contact;	<i>See</i> page at 11, ¶¶[00061], [00063]; page 53, Fig. 5; page 54, Fig. 6A; page 55, Fig. 6B; EX2039, 27:13-28:4.
[D] a rechargeable battery at least partially in the wireless wearable device, with the battery configured to be charged via at least the electrical connector; and	<i>See</i> page 16, ¶[00082].
[E] a microphone at least partially in the wireless wearable device.	<i>See</i> page 21, ¶[000108]; <i>see also</i> page 2, ¶[0001]; page 6, ¶[00037]; pages 28-29, ¶[000142]; page 31, ¶[000153]; page 32,

³ Pages refer to the original page numbers at the bottom of the '169 Application, not the page numbers added to EX2030 for purposes of this IPR.

	¶[000154]; pages 32-33, ¶[000155]; page 33, ¶[000159].
Claim 2	
[Preamble] A wireless wearable device as recited in claim 1 comprising	<i>See</i> Claim 1.
[A] another microphone at least partially in the wireless wearable device configured to capture at least sound in vicinity of the wireless wearable device.	<i>See</i> page 21, ¶[000108]; <i>see also</i> page 2, ¶[0001]; page 6, ¶[00037]; pages 28-29, ¶[000142]; page 31, ¶[000153]; page 32, ¶[000154]; pages 32-33, ¶[000155]; page 33, ¶[000159].
Claim 3	
[Preamble] A wireless wearable device as recited in claim 2 comprising	<i>See</i> Claim 2.
[A] electronic circuitry at least partially in the wireless wearable device configured to cancel at least a portion of the sound captured by the another microphone to produce the audio outputs.	<i>See</i> page 21, ¶[000108]; page 33, ¶[000157]; <i>see also</i> page 2, ¶[0001]; page 6, ¶[00037]; pages 28-29, ¶[000142]; page 31, ¶[000153]; page 32, ¶[000154]; pages 32-33, ¶[000155]; page 33, ¶[000159].
Claim 4	
[Preamble] A wireless wearable device as recited in claim 2,	<i>See</i> Claim 2.
[A] wherein at least the microphone and the another microphone are configured to receive audio inputs, with at least some sound in the audio inputs configured to be cancelled based on using at least the microphone and the another microphone.	<i>See</i> page 21, ¶[000108].
Claim 5	
[Preamble] A wireless wearable device as recited in claim 2,	<i>See</i> Claim 2.

[A] wherein the microphone is configured to be positioned closer to mouth of the user than the another microphone, when the wireless wearable device is worn by the user.	See page 21, ¶[000108].
Claim 6	
[Preamble] A wireless wearable device as recited in claim 2 comprising	See Claim 2.
[A] a storage medium at least partially in the wireless wearable device configured to store at least computer program codes for facilitating voice recognition to recognize at least a word received at least by the microphone for an operation of the wireless wearable device.	See page 3, ¶[0006]; page 14, ¶[00076]; page 20, ¶¶[000102], [000105]; page 36, ¶[000168]; see also page 2, ¶[0001]; page 6, ¶[00037]; pages 28-29, ¶[000142]; page 31, ¶[000153]; page 32, ¶[000154]; pages 32-33, ¶[000155]; page 33, ¶[000159].
Claim 7	
[Preamble] A wireless wearable device as recited in claim 2 comprising	See Claim 2.
[A] wireless communication circuitry at least partially in the wireless wearable device configured for coupling to at least a Bluetooth network.	See pages 18-19, ¶[00095]; page 19, ¶¶[00096]-[00097]; see also page 2, ¶[0001]; page 6, ¶[00037]; pages 28-29, ¶[000142]; page 31, ¶[000153]; page 32, ¶[000154]; pages 32-33, ¶[000155]; page 33, ¶¶[000157], [000159].
Claim 8	
[Preamble] A wireless wearable device as recited in claim 2 comprising:	See Claim 2.
[A] a touch-sensitive input surface on a portion of the wireless wearable device; and	See page 1; pages 14-15, ¶[00078]; page 15, ¶[00080]; page 172, ¶[0057]; pages 174-175, ¶[0066].
[B] a storage medium at least partially in the wireless wearable device configured to store at	See Claim 6[A].

least computer program codes for facilitating an operation of the wireless wearable device based on identifying a sliding user-input action across at least a portion of the touch-sensitive input surface.	<i>See</i> page 1; page 15, ¶[00080]; page 172, ¶[0057]; pages 174-175, ¶[0066]; page 194, Fig. 7C.
Claim 9	
[Preamble] A wireless wearable device as recited in claim 2 comprising	<i>See</i> Claim 2.
[A] a controller at least partially in the wireless wearable device configured to determine whether the wireless wearable device is being worn based on outputs from a sensor at least partially in the wireless wearable device.	<i>See</i> page 3, ¶[0006]; page 29, ¶¶[000144]-[000146]; pages 30-31, ¶[000152]; <i>see also</i> page 2, ¶[0001]; page 6, ¶[00037]; pages 28-29, ¶[000142]; page 31, ¶[000153]; page 32, ¶[000154]; pages 32-33, ¶[000155]; page 33, ¶[000159].
Claim 10	
[Preamble] A wireless wearable device as recited in claim 2 comprising	<i>See</i> Claim 2.
[A] a motion sensor at least partially in the wireless wearable device.	<i>See</i> page 29, ¶¶[000144]-[000146]; pages 30-31, ¶[000152]; <i>see also</i> page 2, ¶[0001]; page 6, ¶[00037]; pages 28-29, ¶[000142]; page 31, ¶[000153]; page 32, ¶[000154]; pages 32-33, ¶[000155]; page 33, ¶[000159].
Claim 11	
[Preamble] A wireless wearable device as recited in claim 2 comprising	<i>See</i> Claim 2.
[A] a touch-sensitive input surface on the wireless wearable device, wherein the touch-sensitive input surface is configured to facilitate generating at least an electrical signal for an operation of the wireless wearable device based on receiving at least a touch input.	<i>See</i> page 1; pages 14-15, ¶[00078]; page 15, ¶[00080]; page 172, ¶[0057]; pages 174-175, ¶[0066].

Claim 12	
[Preamble] A wireless wearable device as recited in claim 2 comprising	<i>See Claim 2.</i>
[A] an area configured for attachment via magnetic force.	<i>See page 33, ¶[000158].</i>
Claim 13	
[Preamble] A wireless wearable device as recited in claim 12 comprising	<i>See Claim 12.</i>
[A] a magnet in the area.	<i>See page 33, ¶[000158].</i>
Claim 14	
[Preamble] A wireless wearable device as recited in claim 12 comprising	<i>See Claim 12.</i>
[A] a storage medium at least partially in the wireless wearable device configured to store at least computer program codes for facilitating voice recognition to recognize at least a word received at least by the microphone for an operation of the wireless wearable device.	<i>See Claim 6[A].</i>
Claim 15	
[Preamble] A wireless wearable device as recited in claim 14 comprising	<i>See Claim 14.</i>
[A] wireless communication circuitry at least partially in the wireless wearable device configured for coupling to at least a wireless network.	<i>See Claim 7[A].</i>
Claim 16	
[Preamble] A wireless wearable device as recited in claim 15 comprising	<i>See Claim 15.</i>
[A] a pressure sensor at least partially in the wireless wearable device.	<i>See page 30, ¶[000150]; pages 30-31, ¶[000152]; see also page 2, ¶[0001]; page 6, ¶[00037]; pages 28-29, ¶[000142]; page 31, ¶[000153]; page 32, ¶[000154]; pages 32-33, ¶[000155]; page 33, ¶¶[000157], [000159].</i>

Claim 17	
[Preamble] A wireless wearable device as recited in claim 15 comprising	<i>See Claim 15.</i>
[A] a controller at least partially in the wireless wearable device configured to determine whether the wireless wearable device is being worn based on outputs from a sensor at least partially in the wireless wearable device.	<i>See Claim 9[A].</i>
Claim 18	
[Preamble] A wireless wearable device as recited in claim 17 comprising	<i>See Claim 17.</i>
[A] a motion sensor at least partially in the wireless wearable device.	<i>See Claim 10[A].</i>
Claim 19	
[Preamble] A wireless wearable device as recited in claim 18 comprising	<i>See Claim 18.</i>
[A] a touch-sensitive input surface on the wireless wearable device, wherein the touch-sensitive input surface is configured to facilitate generating at least an electrical signal for an operation of the wireless wearable device based on receiving at least a touch input.	<i>See Claim 11[A].</i>
Claim 20	
[Preamble] A wireless wearable device, to at least help a user hear audio outputs produced by the device, with at least a portion of the wireless wearable device configured to be worn in an ear of the user, and the wireless wearable device comprising:	<i>See Claim 1[Preamble].</i>
[A] a speaker at least partially in the wireless wearable device;	<i>See Claim 1[A].</i>
[B] an electrical connector at least partially in the wireless wearable device, wherein the electrical connector includes at least two conductive areas, each area on a surface of the wireless wearable device,	<i>See Claim 1[B].</i>
[C] wherein the at least two conductive areas are configured to removably couple to corresponding conductive contacts of a counterpart connector	<i>See Claim 1[C].</i>

external to and separate from the wireless wearable device, at least via spring-force, to at least enable each of the at least two conductive areas to be electrically connected to its corresponding conductive contact;	
[D] a rechargeable battery at least partially in the wireless wearable device, with the battery configured to be charged via at least the electrical connector;	See Claim 1[D].
[E] a microphone at least partially in the wireless wearable device;	See Claim 1[E].
[F] another microphone at least partially in the wireless wearable device configured to capture at least sound in vicinity of the wireless wearable device, wherein the microphone is configured to be positioned closer to mouth of the user than the another microphone, when the wireless wearable device is worn by the user;	See Claim 2[A]; Claim 5[A].
[G] a storage medium at least partially in the wireless wearable device configured to store at least computer program codes for facilitating voice recognition to recognize at least a word received at least by the microphone for an operation of the wireless wearable device;	See Claim 6[A].
[H] wireless communication circuitry at least partially in the wireless wearable device; and	See Claim 7[A].
[I] an area configured for attachment via magnetic force.	See Claim 12[A].
Claim 21	
[Preamble] A wireless wearable device as recited in claim 20 comprising	See Claim 20.
[A] a touch-sensitive input surface on a portion of the wireless wearable device; and	See Claim 8[A].
[B] electronic circuitry configured to identify a sliding user-input action across at least a portion of the touch-sensitive input surface.	See Claim 8[B].
Claim 22	
[Preamble] A wireless wearable device to at least help a user hear audio outputs produced by the	See Claim 1[Preamble].

device, with at least a portion of the wireless wearable device to be worn in an ear of the user, and the wireless wearable device comprising:	
[A] a speaker at least partially in the wireless wearable device;	<i>See Claim 1[A].</i>
[B] an electrical connector at least partially in the wireless wearable device, wherein the electrical connector includes at least two conductive areas, each area on a surface of the wireless wearable device, and	<i>See Claim 1[B].</i>
[C] wherein the at least two conductive areas are configured to removably couple to corresponding conductive contacts of a counterpart connector external to and separate from the wireless wearable device, at least via spring-force, to at least enable each of the at least two conductive areas to be electrically connected to its corresponding conductive contact;	<i>See Claim 1[C].</i>
[D] a rechargeable battery at least partially in the wireless wearable device, with the battery configured to be charged via at least the electrical connector;	<i>See Claim 1[D].</i>
[E] a microphone at least partially in the wireless wearable device;	<i>See Claim 1[E].</i>
[F] another microphone at least partially in the wireless wearable device configured to capture at least sound in vicinity of the wireless wearable device, wherein the microphone is configured to be positioned closer to mouth of the user than the another microphone, when the wireless wearable device is worn by the user;	<i>See Claim 2[A]; Claim 5[A].</i>
[G] wireless communication circuitry at least partially in the wireless wearable device;	<i>See Claim 7[A].</i>
[H] a touch-sensitive input surface on the wireless wearable device, wherein the touch-sensitive input surface is configured to facilitate generating at least an electrical signal for an operation of the wireless wearable device based on receiving at least a touch input; and	<i>See Claim 11[A].</i>

[I] an area configured for attachment via magnetic force.	See Claim 12[A].
Claim 23	
[Preamble] A wireless wearable device as recited in claim 22 comprising	See Claim 22.
[A] a pressure sensor at least partially in the wireless wearable device; and	See Claim 16[A].
[B] a controller at least partially in the wireless wearable device configured to determine whether the wireless wearable device is being worn based on outputs from a sensor at least partially in the wireless wearable device.	See Claim 9[A].
Claim 24	
[Preamble] A wireless wearable device to at least help a user hear audio outputs produced by the device, with at least a portion of the wireless wearable device to be worn in an ear of the user, the wireless wearable device comprising:	See Claim 1[Preamble].
[A] an electrical connector at least partially in the wireless wearable device, wherein the electrical connector includes at least two conductive areas, each area on a surface of the wireless wearable device, and	See Claim 1[B].
[B] wherein the at least two conductive areas are configured to removably couple to corresponding conductive contacts of a counterpart connector of an apparatus external to and separate from the wireless wearable device, at least via spring-force, to at least enable each of the at least two conductive areas to be electrically connected to its corresponding conductive contact;	See Claim 1[C].
[C] a rechargeable battery in the wireless wearable device, with the battery configured to be charged via at least the electrical connector;	See Claim 1[D].
[D] a speaker at least partially in the wireless wearable device, with the battery configured to provide power to the speaker;	See Claim 1[A]. See page 9, ¶[00054]; page 10, ¶[00055]; pages

	15-16, ¶[00081]; page 16, ¶[00082].
[E] a first microphone, at least partially in the wireless wearable device, configured to capture at least sound in vicinity of the wireless wearable device, with the battery configured to provide power to the first microphone; and	See Claim 1[E]. See page 9, ¶[00054]; page 10, ¶[00055]; pages 15-16, ¶[00081]; page 16, ¶[00082].
[F] a second microphone, at least partially in the wireless wearable device,	See Claim 2[A].
[G] wherein the battery is configured to provide power to the second microphone, and	See Claim 24[E].
[H] wherein the second microphone is configured to be positioned closer to mouth of the user than the first microphone, when the wireless wearable device is worn by the user.	See Claim 5[A].
Claim 25	
[Preamble] A wireless wearable device as recited in claim 24 comprising	See Claim 24.
[A] an area configured for attachment via magnetic force.	See Claim 12[A].

4. The '599 Patent's Priority Date Predates Jannard

Because the '045 Application provides written description support for the challenged limitations, the '599 Patent claims are entitled to a priority date of no later than “July 28, 2004, which is the filing date of the earliest application to which the '599 patent claims priority.” Pet. at 3-4. This date is earlier than the alleged prior art date of Jannard. See Pet. at 8 (“Jannard is a U.S. patent that was filed on July 5, 2013, as a continuation of Appl. No. 11/022,367, which was filed on December 22, 2004.”).

Because the '045 Application predates Jannard, Jannard is not prior art, and the Board need not consider further Grounds 1-4 relying on Jannard. EX2040 ¶¶39, 54-60; *Microsoft v. InterDigital Patent Holdings*, IPR2024-00537, Paper 27 at 36 (P.T.A.B. June 23, 2025) (“[W]e conclude that the Foruntanpour reference... is not prior art. Consequently, we need not evaluate further any ground of unpatentability” based on that reference.).

B. There Is No Motivation To Combine Jannard And Burson Or Reasonable Expectation Of Success (Grounds 1-4)

Grounds 1-4 rely on at least “Jannard in view of Burson,” Pet. at 21, and independent Claims 1[C], 20[C], 22[C], and 24[B], and thus all claims, require “at least two conductive areas are configured to removably couple to corresponding conductive contacts of a counterpart connector... at least via spring-force,” *id.* at 21, 39, 61, 66. After tacitly admitting that “Jannard alone does not teach the conductive areas coupling to corresponding contacts, at least via spring-force,” the Petition pivots to Burson. *Id.* at 21; *see also id.* at 39 (Claim 24[B] cross-referencing Claim 1[C]), 61 (Claim 20[C] cross-referencing Claim 1[C]), 66 (Claim 22[C] cross-referencing Claim 1[C]). The Petition asserts that “the specific details of the recharging cradle, including how the power contacts engage with the contacts of the charger, are ‘not shown’” in Jannard and that one of skill “would have been

motivated to look to other references to supply these missing details from Jannard.”

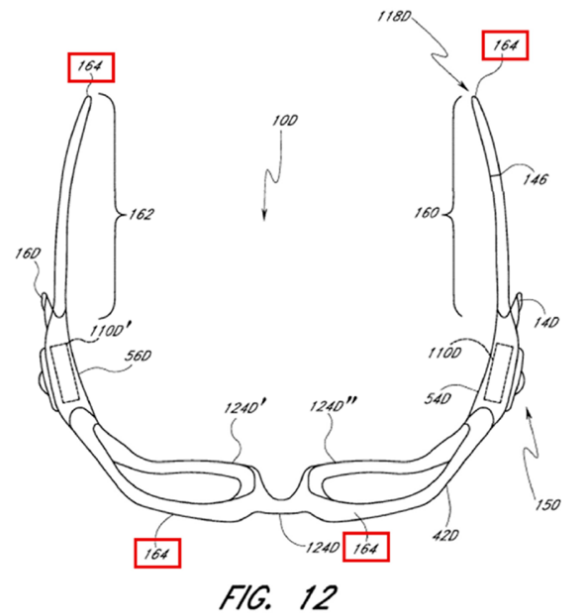
Id. at 25.

The Petition contends that “Burson supplies implementation detail not specified in Jannard.” *Id.* The Petition’s alleged motivation for combining Jannard with Burson is thus premised on Burson providing implementation detail missing from Jannard and that the specific implementation described in Burson would be beneficial for use with Jannard’s device. *See, e.g., id.* at 26 (“The spring-loaded contacts enable that approach because their additional compliance makes the contacts more tolerant of headset-cradle misalignment, by electrically engaging over a wider range of positions.”); *id.* at 26-27 (“For example, the POSITA would understand that without a securing mechanism such as Burson’s spring force, the power contacts of Jannard’s wearable device would be susceptible to dimensional and positional variation in the charger, such that an electrical connection may be lost between the device and the charger’s power contacts.”).

But one of skill in the art would not have been motivated to use Burson’s design with Jannard’s device, much less with a reasonable expectation of success.

EX2040 ¶¶61-74.

For Claim 1[B]’s “at least two conductive areas, each area on a surface of the wireless wearable device,” the Petition relies on Jannard’s “power contacts 164” (shown in annotated Figure 12 reproduced at right), asserting that “Jannard discloses that the power contacts 164 can be disposed at the ends of the ear stems 54D, 56D, and further can be disposed on the upper or lower edges of the orbitals 48D, 58D.” Pet. at 19 (citing EX1016, 33:13-35). Then, for Claim 1[C], the Petition



resorts to “the spring-loaded contacts of the docking cradle” in Burson to assert that Burson’s “docking cradle would utilize spring-force to enable the docking cradle’s contacts to electrically connect to the corresponding power contacts 164 when Jannard’s headset is inserted into the charging cradle.” *Id.* at 24.

First, one of skill reading Burson for all it disclosed would have understood that Burson taught the use of a dual charging interface. EX2040 ¶¶47-48, 66. A problem Burson specifically identified in prior art chargers is that “only one charging interface is included.” EX1020, 1:64-65. Burson taught that “improved charging interfaces for chargers and wireless devices are needed,” such that “charging interfaces offering increased flexibility are needed.” *Id.*, 1:65-67. Thus, Burson

specifically described, and a skilled artisan would have understood Burson to require, two charging interfaces, as shown, for example, in the Figure 1 example cited by the Petition. *See* Pet. at 22 (citing EX1020, 3:31-4:55); EX1020, 4:26-45 (“The dual system charging interface 100 includes two charging interfaces.”); *Guangzho EKO Trading Dev. v. Nine Stars Grp.*, IPR2025-01191, Paper 8 at 35 (P.T.A.B. Jan. 14, 2026) (agreeing that “Wang’s can is meant to be automatic because it improves upon an existing ‘intelligent automatic flip garbage can’”); EX2040 ¶¶47-48, 66; EX2039, 39:5-7 (explaining that Burson Figure 5 uses the dual system charging interface 100 from Figure 1).

As shown in Figure 1 below, Burson’s dual system charging interface includes a surface-type charging interface (106, 108) and a plug-type charging interface in a well (102, 104). *Supra* §II.F; EX1020, 4:26-55; EX2040 ¶66. The surface interface would require a flat surface, and as explained further below, the plug interface would require a surface with enough depth for a well. EX2040 ¶66. The Petition does not explain, nor could it, how Burson’s dual system charging interface could be created at the ends of the ear stems or edges of the orbitals of Jannard’s eyeglasses where Jannard asserts

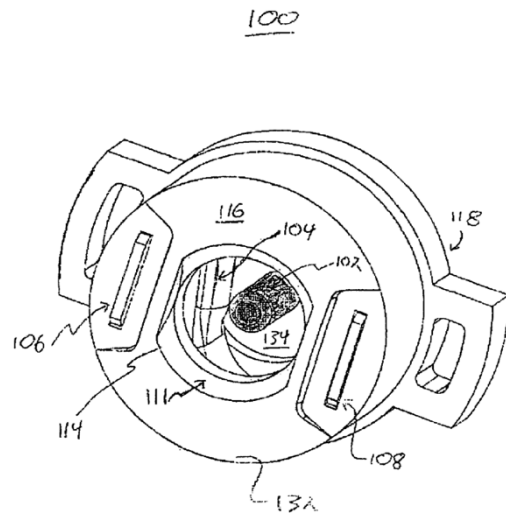
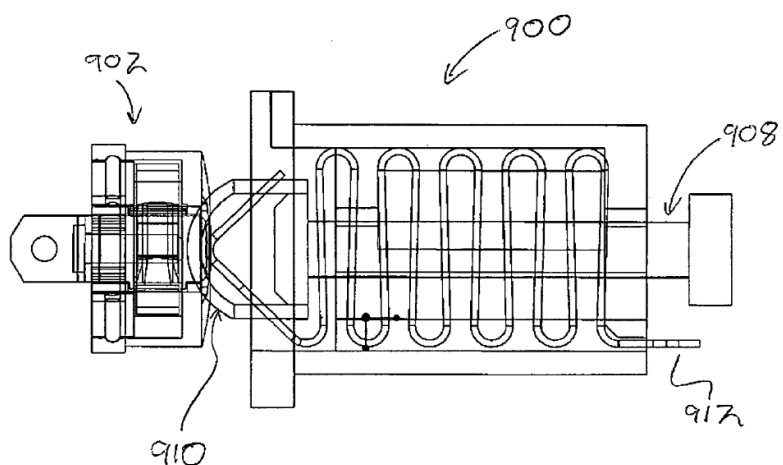


FIGURE 1

and the Petition reiterates that the contacts would be. Pet. at 19 (citing EX1016, 33:13-35); EX2040 ¶¶66-67. Neither of these points, nor any other point on Jannard’s eyeglasses, provides both a flat surface and the depth needed for a well.

Second, even if a skilled artisan would not have understood Burson to require two charging interfaces, using the spring-loaded contacts of Burson’s docking cradle does not make sense in the proposed combination because it still requires a well for a detent position. EX2040 ¶¶68-72. In describing Burson’s specific implementation, the Petition explains that “in a detent position, an actuator of the spring-loaded contact extends into the headset contact apparatus 902, ‘allowing the spring loaded contacts to couple with the corresponding contacts on the headset contact apparatus 902 to complete the charging loop.’” Pet. at 22-23 (citing EX1020, 9:7-26). To create this detent position, Burson’s implementation requires a “well disposed within the headset contact apparatus 902.” EX1020, 9:15-16; EX2040 ¶69.

As shown in Figure 9 reproduced below, Burson explained that an actuator outer member 910 “extends into a well disposed within the headset contact apparatus 902, allowing contacts of the spring contact apparatus 912 to couple in a detent



position with associated contacts of the headset contact apparatus.” EX1020, 9:14-18. “The actuator outer member 910 slips into the well disposed within the headset contact apparatus 902....” *Id.*, 9:18-22. “The pressure of the actuator member against the aperture leading to the well provides a means of detenting the headset in place.” *Id.*, 9:22-26; *see also* EX2039, 67:11-68:4, 69:5-16 (Dr. Smith agreeing); EX2040 ¶¶69.

But it would be impractical to construct a well in Jannard’s device. EX2040 ¶¶70-72. The Petition never explains, nor could it, how Burson’s well could be created at the tip end or under the orbitals of Jannard’s eyeglasses where Jannard asserts and the Petition reiterates that the contacts would be. Jannard’s lack of a well is critical because, in Burson, it is the well or aperture leading to the well that allows the headset to detent in place, *see* EX1020, 9:22-26; EX2040 ¶¶69, 71, which in turn provides the benefits the Petition asserts would apply equally to Jannard, *see, e.g.*, Pet. at 26 (“The spring-loaded contacts enable that approach because their additional compliance makes the contacts more tolerant of headset-cradle misalignment, by electrically engaging over a wider range of positions.”); *id.* at 26-27 (“For example, the POSITA would understand that without a securing mechanism such as Burson’s spring force, the power contacts of Jannard’s wearable device would be susceptible to dimensional and positional variation in the charger, such that an electrical connection may be lost between the device and the charger’s power contacts.”);

EX2040 ¶71. Burson’s detent mechanism is what provides the benefits relied upon by the Petition. *See* EX1020, 9:22-25 (“The pressure of the actuator member against the aperture leading to the well provides a means of detenting the headset in place.”); EX2039, 67:11-17 (Dr. Smith agreeing); EX2040 ¶71.

In sum, the Petition asserts that one of skill would look to Burson for implementation details but then ignores Burson’s actual implementation. Apple’s expert, Dr. Smith, confirmed that he ignored Burson’s disclosure on these points. EX2039, 64:15-65:4 (“I didn’t rely on these particular sentences [describing Burson’s means of detenting] in my analysis.”). Without the inclusion of Burson’s well, the benefits asserted by the Petition as purportedly motivating the combination would be lost. EX2040 ¶¶71-72.

The Petition itself also refutes any motivation to combine Jannard with Burson. EX2040 ¶73. For example, the Petition explains that the “headset in Burson is inserted into the cradle, *e.g.*, via a downward and forward motion,” Pet. at 22, and that, “by the operation of Hooke’s law,” the spring “exerts a restorative spring force on the mass” or headset, *id.* at 23-24. In other words, in the combination, Burson’s implementation would require exerting force on Jannard’s device, which is contrary to Jannard’s teachings, as admitted by both Apple and its expert. *See id.* at 27 (“Jannard... explains that avoiding unnecessary force on the headset is a

consideration for the charging cradle.” (citing EX1016, 33:28-35)); EX1003 ¶58 (Dr. Smith: same); EX2040 ¶73.

Finally, the Petition’s generic statements that “Burson and Jannard utilize analogous hardware components... to achieve analogous goals,” “the combination relates to using straightforward and well-understood technology,” and “Burson emphasizes the broad applicability of its teachings,” Pet. at 27-28, do not establish a motivation to combine or reasonable expectation of success. *See, e.g., Bio-Rad Labs. v. GE Healthcare Bio-Scis.*, IPR2015-01826, Paper 11 at 29 (P.T.A.B. Feb. 29, 2016) (asserting that the prior art disclosed “interchangeable” parts is insufficient to show motivation to combine); *Samsung Elecs. v. Elm 3DS Innovations*, 925 F.3d 1373, 1381 (Fed. Cir. 2019) (asserting prior art “in the same technological field was insufficient to meet Petitioners’ burden” to show reasonable expectation of success). Indeed, when asked to explain how Burson’s allegedly “straightforward and well-understood,” Pet. at 27-28, headset 500 reproduced in his own expert declaration worked, Dr. Smith responded, “I didn’t analyze that issue,” EX2039, 32:6-33:3.

Because the combination of Jannard and Burson lacks any motivation to combine or reasonable expectation of success, Grounds 1-4 cannot prevail.

C. Jannard Did Not Disclose Claim 5[A] And The Same Or Comparable Limitations In Independent Claims 20, 22, And 24

Jannard did not disclose the Claim 5[A] requirement that “the microphone is configured to be positioned closer to mouth of the user than the another microphone.” Pet. at 33; *see also* EX2040 ¶¶75-80. Independent Claims 20[F], 22[F], and 24[H] have the same or similar requirements, and the Petition merely cross-references Claim 5[A] for those limitations. *See* Pet. at 43, 62, 66.

For Claim 5[A], the Petition asserts that “Jannard describes that its speaking microphone and noise-canceling microphone are ‘positioned at any suitable location,’ including at ‘opposing sides of the audio device,’ and are ‘separated by desired distances.’” *Id.* at 33 (quoting EX1016, 34:10-45). Citing Dr. Smith’s verbatim declaration, the Petition asserts that, “[b]ased on this *disclosure*, the POSITA would understand *Jannard to disclose* that the speaking microphone is preferably located close to the user’s mouth (*e.g.*, at a first side of the audio device near the mouth), in order to best detect ‘verbal input’; and the noise-canceling microphone to be located farther from the user’s mouth (*e.g.*, at an opposing side of the audio device) in order to best detect ambient noise.” *Id.* (emphases added).

But in no way did Jannard’s statement that its “microphone banks can be positioned at any suitable location or combination of locations (*e.g.*, on the audio device, within the audio device, opposing sides of the audio device, or the like),” or

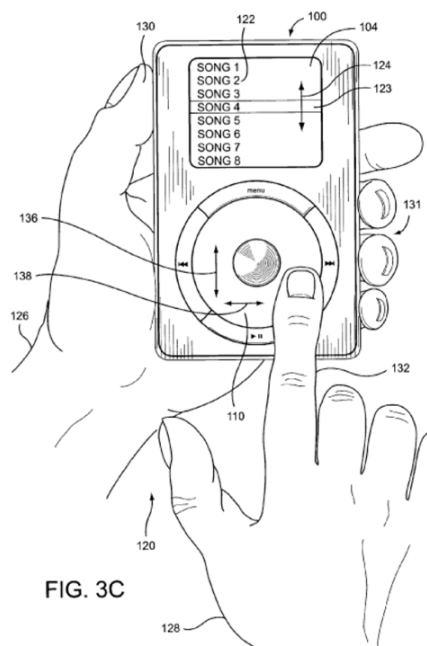
that, in another embodiment, the microphones can be “separated by desired distances,” EX1016, 34:16-19, 34:36-41, disclose the specific Claim 5[A] arrangement that “the microphone is configured to be positioned closer to mouth of the user than the another microphone.” EX2040 ¶¶76-80. Apple points to no such disclosure in Jannard. Indeed, Jannard’s express disclosure contradicts Apple’s embellishment: “In one embodiment, automatic switching of the speaking-microphone and noise-canceling-microphone banks’ function advantageously enhances ease of use.” EX1016, 34:19-22. Neither Apple nor its expert explains why it would make sense to automatically switch the function of two microphones if one were intentionally located closer to the user’s mouth specifically to capture speech. EX2040 ¶79.

And Apple’s reliance on Dr. Smith’s verbatim declaration is no substitute for Jannard’s lack of disclosure of the claimed arrangement. *See, e.g., Hesai Tech. v. Ouster*, IPR2023-01458, Paper 18 at 21 (P.T.A.B. Jan. 21, 2025) (rejecting petitioner’s “attempt[] to substitute the testimony of Dr. Hesselink to teach the claimed arrangement of pixels”); Consol. Trial Practice Guide at 36 (“[E]xpert testimony may explain ‘patents and printed publications,’ but is not a substitute for disclosure in a prior art reference itself.”).

Because the Petition relies solely on Jannard’s disclosure for Claim 5[A] and Jannard did not disclose the claimed arrangement of microphones, the Claims 5 and 20-25 challenges in Grounds 1 and 3-4 should be rejected.

D. There Is No Motivation To Combine Jannard And Zadesky Or A Reasonable Expectation Of Success (Claims 8 And 21)

Claim 8[B] requires “a sliding user-input action across at least a portion of the touch-sensitive input surface.” Pet. at 45. In Ground 2, the Petition asserts that one of skill “would have combined the sliding-input teachings of Zadesky with the touchpad of Jannard to meet the claim limitation.” *Id.* at 47. The Petition relies on Zadesky’s “sliding input (136, 138) controlling the media player (scroll operation 124),” shown in Figure 3C at right. Pet. at 46-47. The Petition leans on this same analysis for Claim 21 in Ground 4. *Id.* at 64-65. But the Petition establishes no motivation or reasonable expectation of success for the proposed combination. EX2040 ¶¶81-88.



The Petition first asserts that one of skill would have looked to Zadesky because “the specific details of how user input is provided to the touchpad to control the audio device are not expressly described in Jannard,” and a skilled artisan “thus

would have been motivated to look to other references to supply these missing details from Jannard.” Pet. at 48. But Jannard already disclosed that “the user controls 322 include a button, dial, switch, lever, sensor, touchpad... and/or any other input device that may be used by a user to control the audio device 304,” including play, fast-forward or rewind, power on or off, adjust volume, set a playlist, or “perform any other function related to an audio data file.” EX1016, 44:4-23; EX2040 ¶¶84. The Petition never identifies what “specific details” are both needed and missing from Jannard and has no answer to the truism: if it ain’t broke, don’t fix it. *See, e.g., In re Nuvasive*, 842 F.3d 1376, 1384-85 (Fed. Cir. 2016) (no motivation to combine established with no articulated reason to depart from primary reference to obtain “additional information”); *Winner Int’l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 (Fed. Cir. 2000) (“no motivation to combine” because “there was no apparent disadvantage to the dead-bolt mechanism of Johnson”). Indeed, as Dr. Smith confirmed, even Zadesky disclosed the use of **buttons** on its media player for making selections or issuing commands. EX2039, 104:15-105:11 (quoting EX1018, 8:8-12); *see also* EX1018, 8:12-15 (“By way of example, in the case of an MP3 music player, the button functions may be associated with opening a menu, playing a song, fast forwarding a song, seeking through a menu and the like.”); EX2040 ¶¶44, 84.

Moreover, Jannard disclosed that the touchpad of its “wearable-glasses,” Pet. at 49, may be “located on an earstem, an orbital or the bridge,” EX1016, 27:13-18. The Petition establishes no reason why a skilled artisan would have looked to Zadesky’s media player for a touchpad to be used on eyeglasses. *See* Pet. at 48-49; EX2040 ¶85. Indeed, Zadesky’s media player is a handheld device with a display. *Supra* §II.D; EX2040 ¶¶42-43, 85. The Petition’s assertion that one of skill “would have looked to Zadesky because Zadesky describes touchpad input techniques that ‘facilitate user interaction’ *with media players such as Jannard’s wearable device*,” Pet. at 48 (emphasis added), is easily dispatched because Zadesky’s media players were handheld devices, unlike “Jannard’s wearable-glasses,” *id.* at 49; EX2040 ¶85.

The Petition next asserts that a skilled artisan “would have combined the sliding input with Jannard in order to realize Zadesky’s advantages, such as faster, intuitive, and ergonomic user control,” Pet. at 48, but it offers no reasoning, explanation, or evidence, other than a citation to Dr. Smith’s declaration, which simply restates the Petition’s assertion verbatim, *see* EX1003 ¶103; EX2040 ¶86. Similarly, the Petition asserts that “Jannard’s wearable-glasses format... may thus benefit from intuitive touch-based control techniques,” but never explains how Zadesky’s handheld device touchpad would be implemented in Jannard’s eyeglasses that are “worn on the user’s head” to accomplish that. Pet. at 48-49; EX2040 ¶86. Mere assertions of generic benefits without more is insufficient to demonstrate a

motivation to combine. *See, e.g., BlackBerry v. Facebook*, IPR2019-01596, Paper 7 at 18 (P.T.A.B. Mar. 5, 2020) (“Petitioner, however, does not explain this assertion vis-à-vis the drawbacks of making such a change to Peinado’s architecture.”).

In addition to failing to prove a motivation to use Zadesky’s handheld device touchpad with Jannard’s eyeglasses, the Petition never establishes a reasonable expectation of success of doing so, particularly where Zadesky described that “a more complex arrangement of zones may be used” in its touchpads, including for example “angular and radial zones 240” shown in Figure 7. EX1018, 11:42-49; *see also id.*, Figs. 5-7; EX2040 ¶87. Indeed, the mere fact that Jannard already disclosed a touchpad does not substitute for an adequate explanation of how the proposed combination would be made. *See, e.g., Apple v. UUSI*, IPR2019-00356, Paper 14 at 16, 20 (P.T.A.B. July 22, 2019) (“Petitioner has not explained adequately how a skilled artisan would have made the proposed combination of Caldwell ’205 and Ingraham ’735” by “replacing control touch pads 14 of Caldwell ’205 with the touch plate 15 of Ingraham ’735.”).

Further, the Petition’s generic statements that “Jannard and Zadesky describe analogous components (*e.g.*, portable devices, computer processors, touchpad input devices), which are ‘common’ and well-understood” and that “applying Zadesky’s teachings could be implemented using the components of Jannard (*e.g.*, user controls 322, processor 312) to perform functions common to both Jannard and Zadesky (*e.g.*,

volume control),” Pet. at 49, fails to establish a motivation to combine or reasonable expectation of success. *See, e.g., Bio-Rad Labs.*, IPR2015-01826, Paper 11 at 29 (asserting that the prior art disclosed “interchangeable” parts is insufficient to show motivation to combine); *Samsung Elecs.*, 925 F.3d at 1381 (asserting prior art “in the same technological field was insufficient to meet Petitioners’ burden” to show reasonable expectation of success).

Without a motivation to combine or reasonable expectation of success, the Grounds 2 and 4 challenges relying on Jannard and Zadesky cannot prevail.

VII. THE GRIFFIN GROUNDS 5-8 CANNOT PREVAIL

Even if Grounds 5-8 are considered despite the Petition failing to address at least one limitation in every claim in all grounds, *supra* §V, Grounds 5-8 collapse for numerous reasons, including: (1) the Petition failed to meet its burden to show Griffin disclosed the “corresponding conductive contacts” limitations for two reasons; (2) the Petition’s asserted motivation and reasonable expectation of success for combining Jannard and Zadesky in Grounds 6 and 8 is meritless; (3) the Grounds 7-8 challenges to Claims 9-10, 16-19, and 21-23 lack a motivation to combine Griffin with Abreu with a reasonable expectation of success and insufficiently cross-reference in Ground 8; and (4) the Petition cannot meet its burden to show a Bluetooth network in its Ground 5 challenge to Claim 7.

A. Apple Cannot Show Griffin Disclosed “Corresponding Conductive Contacts... External To And Separate From The Wireless Wearable Device” Under The Petition’s Theory (Grounds 5-8)

Independent Claims 1[C], 20[C], 22[C], and 24[B], and thus all claims, require “corresponding conductive contacts of a counterpart connector *external to and separate from the wireless wearable device.*” Pet. at 21, 61, 66 (emphasis added); *id.* at 39 (Claim 24[B]: similar). Under the Petition’s theory, Apple cannot prevail in showing Griffin met this requirement of all claims. EX2040 ¶¶90-94.

For the “wireless wearable device,” the Petition identifies Griffin’s “wireless wearable communication device 10,” which has two components: “*a first communication module 12* (e.g., a mobile communications device such as a cell phone); *and a detachable second communication module 14.*” Pet. at 70 (emphases added) (Claim 1[Preamble]); *see also id.* at 82 (Claim 24[Preamble] cross-referencing Claim 1[Preamble]), 95 (Claim 20[Preamble] cross-referencing Claim 1[Preamble]), 97 (Claim 22[Preamble] cross-referencing Claim 1[Preamble]); EX2040 ¶91.

Then, for the requirement of “corresponding conductive contacts of a counterpart connector external to and separate from the wireless wearable device,” the Petition relies on Griffin’s first communication module 12. *See* Pet. at 73-74; EX2040 ¶92. In particular, the Petition asserts that “the second communication

module 14 can be inserted into a cavity 16 of the first communication module, where charging terminals 56 of the second communication module preferably mate with ***‘corresponding charging terminals 46’ of the first communication module.***” Pet. at 73 (emphasis added).

Apple’s expert, Dr. Smith, confirmed that his opinion rests on “the combination of the first communication module 12 and second communication module 14” as the claimed “wireless wearable device.” EX2039, 78:7-79:3. Dr. Smith further confirmed that he identified charging terminals 56 of the second communication module 14 as the claimed “at least two conductive areas” and also identified “corresponding charging terminals 46 of the first communication module as the corresponding conductive contacts.” EX2039, 80:11-81:22.

Apple cannot prevail under its own theory because its Petition relies on Griffin’s first communication module 12 (*i.e.*, a component of the Petition’s alleged wireless wearable device) for the “corresponding conductive contacts of a counterpart connector” that must be “external to and separate from the wireless wearable device.” *See* Pet. at 73-74. As explained above, the Petition identified Griffin’s “wireless wearable communication device 10,” including the first communication module 12, as the claimed “wireless wearable device.” *Id.* at 70 (“Griffin discloses a wireless wearable communication device 10 having a first communication module 12....”); EX1003 ¶169 (same). ***Because Griffin’s first***

communication module 12 is part of the alleged “wireless wearable device,” it cannot be “external to and separate from the wireless wearable device” as required by all claims. EX2040 ¶93; *Samsung Elecs. v. Red Rock Analytics*, IPR2018-00555, Paper 16 at 18-19 (P.T.A.B. Aug. 30, 2018) (agreeing with patent owner “that Yellin discloses that non-linear element 340 obtains signals directly from non-linear element 330, which is *not external to* Yellin’s apparatus 300, and *instead forms part of* the transmitter” (emphases added)).

Further, because the Petition relies on the faulty Claim 1 analysis for independent Claims 20, 22, and 24, none of the Griffin grounds can prevail. *See* Pet. at 82 (Claim 24[B] cross-referencing Claim 1[C]), 95 (Claim 20[C] cross-referencing Claim 1[C]), 97 (Claim 22[C] cross-referencing Claim 1[C]); *see also Triller v. TikTok*, IPR2022-00181, Paper 9 at 27 (P.T.A.B. May 16, 2022) (“Because Petitioner’s challenge to claims 19, 23, 24, and 28 relies on the same faulty analysis,” those challenges also cannot prevail.).

B. Griffin Did Not Disclose “At Least Two Conductive Areas Are Configured To Removably Couple... At Least Via Spring-Force, To At Least Enable... Electrical[] Connect[ion]” Required By All Claims (Grounds 5-8)

Independent Claims 1[C], 20[C], 22[C], and 24[B], and thus all claims, require “at least two conductive areas are configured to removably couple to corresponding conductive contacts... at least via spring-force, to at least enable each

of the at least two conductive areas to be electrically connected to its corresponding conductive contact.” Pet. at 21, 39, 61, 66. Griffin did not disclose this requirement. EX2040 ¶¶95-99.

The Petition relies solely on Griffin to meet this “at least via spring-force” requirement and asserts that Griffin disclosed the requirement. *See* Pet. at 73 (“This element is met by Griffin.”); *see also id.* at 82 (Claim 24[B] cross-referencing Claim 1[C]), 95 (Claim 20[C] cross-referencing Claim 1[C]), 97 (Claim 22[C] cross-referencing Claim 1[C]). The Petition offers no obviousness theory for the spring-force limitation. *See, e.g., id.* at 73-75. For disclosure, the Petition relies exclusively on Griffin’s generic statement that “*springs* or otherwise elastically-biased protrusions or hooks, may be included *on the first or second communication module* that cooperate with appropriate mating retention means on the other of the first or second communication module.” *Id.* at 75 (emphases added) (quoting EX1017, 3:39-43); *see also* EX1003 ¶173 (Dr. Smith: same). But Griffin does not explain how this retention mechanism would work or whether any spring or elastic bias would force opposing charging contacts together. EX2040 ¶¶96-98.

The Petition incorrectly asserts that “Griffin provides mechanical detail for how the charging terminals 46 couple to charging terminals 56,” Pet. at 74-75, but the cited passage at 3:39-43 is not in reference to charging contacts at all. EX2040 ¶97. Instead, Griffin’s cited paragraph describes several embodiments “for retention

of the second communication module 14 within the cavity 16” of the first communication module 12. *E.g.*, EX1017, 3:28-46. The Petition relies on a single one of these retention embodiments, in which Griffin stated, “In yet another embodiment, other retention means, such as springs or otherwise elastically-biased protrusions or hooks, may be included on the first or second communication module that cooperate with appropriate mating retention means on the other of the first or second communication module.” *Id.*, 3:38-43; *see also* EX1003 ¶¶172-173. But Griffin provided no additional detail on how this “yet another embodiment” would work. *E.g.*, EX1017, 3:38-43; EX2039, 92:16-93:2 (agreeing that he cites nothing else for this embodiment); EX2040 ¶¶96-98.

Because Griffin did not explain how “springs” or other “elastically-based protrusions or hooks” would work to retain second communication module 14 within cavity 16 in the first communication module 12, Griffin cannot disclose that any such springs or protrusions or hooks would exert spring force in the direction of mating contacts 56 with 46. EX2040 ¶¶98-99. For example, Griffin’s disclosure is entirely consistent with using spring force in a direction perpendicular to the axis of contact between contacts 56 and 46, which would retain second communication module 14 within cavity 16 but would exert no spring force from contacts 56 onto contacts 46. EX2040 ¶98. Griffin described the purpose of these embodiments as providing “for retention of the second communication module 14 within the

cavity 16.” EX1017, 3:28-30. It did not disclose coupling or connecting the contacts. EX2040 ¶98. The claims expressly recite that the “spring-force... enable[s] each of the at least two conductive areas to be electrically connected to its corresponding conductive contact.” Pet. at 21, 39, 61, 66. Griffin’s silence cannot constitute disclosure.

Because Griffin did not disclose the “spring-force” limitation, Grounds 5-8 cannot prevail.

C. There Is No Motivation To Combine Griffin And Zadesky Or Reasonable Expectation of Success (Grounds 6 And 8)

The Petition contends that one of skill “would have been motivated to combine the teachings of Griffin and Zadesky to meet the claim limitations.” Pet. at 85. The challenges in Grounds 6 and 8 rely on Griffin and Zadesky. *See id.* at 84-90, 96-98. But the Petition fails to establish any motivation or reasonable expectation of success for the proposed combination. EX2040 ¶¶100-112.

First, for Claim 8[A], which requires “a touch-sensitive input surface on a portion of the wireless wearable device,” Pet. at 45, the Petition asserts that “integrating a touchpad onto the second module would enable users to answer calls, go on mute, add a telephone number, or ‘control execution of other functions by the first module,’ without requiring access to the first module, speaking into a microphone, which may be inconvenient for certain situations (e.g., exercising) or

when concerned about privacy, or relying on physical switches, which may be less ergonomic,” *id.* at 85 (citing EX1017, 11:3-14). The Petition’s proposed integration of Zadesky’s touchpad into Griffin’s second communication module earpiece, EX1017, 2:55-57, Figs. 4-5, is baseless. EX2040 ¶¶102-108.

Regarding the assertion that a touchpad would allow controlling functions “without requiring access to the first module” or “speaking into a microphone,” Pet. at 85, Griffin already disclosed that “the second communication module 14 may also include other switched functions, such as a mute function, controlled by one or more additional switches located on the... second module,” EX1017, 4:44-47; *see also* EX2040 ¶103. The Petition asserts that “relying on physical switches... may be less ergonomic,” Pet. at 85, but offers no reasoning, explanation, or evidence other than a citation to Dr. Smith’s declaration, which simply restates the Petition’s assertion verbatim, *see* EX1003 ¶202. On the contrary, adding Zadesky’s *touchpad* to Griffin’s in-ear second module risks making it less ergonomic by, for example, removing the tactile feedback of Griffin’s physical switches, particularly given the earbud form factor. EX2040 ¶¶104-105.

The Petition next selectively quotes Zadesky to assert that “Zadesky describes that switches typically ‘provide limited control’ and can only make ‘specific selections,’ but that touchpads enable advanced user input functionality, like swiping, tapping, gestures, by sensing ‘relative movements of the user’s finger.’”

Pet. at 85-86 (citing EX1018, 1:24-65). But Zadesky actually stated that switches “provide limited control *with regards to the movement of a cursor (or other selector).*” EX1018, 1:36-39 (emphasis added); EX2039, 95:22-96:14 (Dr. Smith agreeing); EX2040 ¶106. Zadesky explained that “[w]ith a touch pad, the movement of an input pointer (i.e., cursor) corresponds to the relative movements of the user’s finger (or stylus) as the finger is moved along a surface of the touch pad” and that “*a selection on the display screen*” can be made “when one or more taps are detected on the surface of the touch pad.” EX1018, 1:48-54 (emphases added); EX2040 ¶106. Indeed, Zadesky’s handheld media player had a display. *Supra* §II.D.

The Petition never explains why one of skill would have added Zadesky’s touchpad supporting scrolling actions on displayed items to Griffin’s second module, which is an ear-piece with no display, much less how a skilled artisan would have accomplished integrating Zadesky’s handheld-device touchpad with Griffin’s earbud form factor. EX2040 ¶¶106-107. The Petition’s failure to do so is fatal to its challenge. *See, e.g., Samsung Elecs. v. Ouraring*, IPR2024-01078, Paper 62 at 24 (P.T.A.B. Jan. 27, 2026) (confirming patentability: “Petitioner’s position that an ordinarily skilled artisan would have been motivated to and would had a reasonable expectation of successfully shrinking Mestas’s device and its large, curved batteries to a finger-ring form factor is not supported by the evidence.”).

Despite criticizing Griffin’s physical switches, the Petition fails to acknowledge that Zadesky itself taught using buttons. *See, e.g.*, EX1018, 8:8-12 (“In addition to above, the media player 100 may also include one or more buttons 112. The buttons 112 are configured to provide one or more dedicated control functions for making selections or issuing commands associated with operating the media player 100.”); EX2039, 104:15-105:11 (Dr. Smith acknowledging that Zadesky taught using buttons in its media player); EX2040 ¶105. Indeed, Zadesky explained that there exist “many styles of input devices” including, for example, “buttons, switches, keyboards, mice, trackballs, touch pads, joy sticks, touch screens and the like,” and that each has “advantages and disadvantages that are taken into account when designing the consumer electronic device.” EX1018, 1:26-34. Here, the Petition never acknowledges the earbud form factor of Griffin’s second module, *see* Pet. at 84-87, much less “consider[s] the disadvantages” of the proposed combination, *BlackBerry*, IPR2019-01596, Paper 7 at 18; EX2040 ¶105.

The Petition further asserts that one of skill “would have combined the sensing techniques of Zadesky with Griffin in order to realize the sensory circuit functionality disclosed by Griffin” to monitor a user’s vitals. Pet. at 86. But it is Griffin, not Zadesky, that disclosed “sensory circuits” for monitoring vitals of a user. Pet. at 86 (citing EX1017, 9:44-57). Zadesky nowhere disclosed or suggested monitoring vitals or using its handheld device touchpad for monitoring vitals. *See*

generally EX1018; *see also* EX2039, 106:3-7 (Dr. Smith agreeing that Zadesky did not disclose measuring vital signs); EX2040 ¶107. Even if monitoring user vitals were desirable, the Petition provides no explanation why a skilled artisan would have looked to Zadesky’s handheld media player to achieve such functionality, particularly when (i) Zadesky offers no teaching useful for vital monitoring, and (ii) Griffin itself has “sensory circuits” for monitoring vitals. *See* Pet. at 86-87; EX1017, 4:41-47; EX2039, 108:15-22 (Dr. Smith when asked what vital signs could be detected using Zadesky’s capacitive touch: “I really haven’t been asked to look at that, so I’m not going to give an opinion on that.”); EX2040 ¶107. The Petition makes no connection between Griffin’s vital monitoring and Zadesky’s sensing touch input for scrolling. EX2040 ¶108. The Petition’s hindsight-ridden proposal should be rejected.

Second, “[o]bviousness requires more than a mere showing that the prior art includes separate references covering each separate limitation in a claim under examination.” *Unigene Labs. v. Apotex*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). Yet, for Claim 8[B], which requires “a sliding user-input action across at least a portion of the touch-sensitive input surface,” Pet. at 45, the Petition again resorts to “Griffin in view of Zadesky,” relying on Zadesky’s “sliding input (136, 138) controlling the media player (scroll operation 124),” shown in Figure 3C at right. Pet. at 87-88. But the Petition again provides no reason why or how one of skill would have added Zadesky’s “touch pad 110 [which] may be actuated forwards and backwards as shown by arrows 136 and side to side by arrows 138,” EX1018, 9:16-21, to Griffin’s in-ear

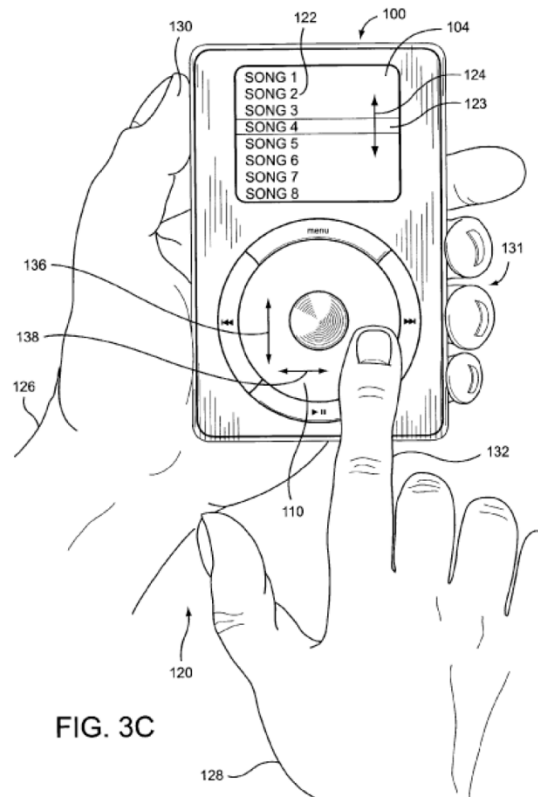


FIG. 3C

device. EX2040 ¶¶109-111. The Petition merely refers to its discussion “for claim 8[A],” Pet. at 88, which fails as discussed above. Neither discussion explains why a forwards or backwards actuation on a touchpad would be combined with Griffin’s in-ear device. Zadesky explicitly disclosed that these are scrolling actions for items on a screen. EX1018, 8:52-57 (“In all of [Figures 3A-3C], the user 120 is linearly

scrolling 104 (as shown by arrow 124) through a list of songs 122 displayed on the display screen via a slider bar 123.”); EX2039, 101:17-102:11 (Dr. Smith agreeing); *see also* EX1018, 6:24-38 (defining “scrolling”); EX2039, 95:3-18 (Dr. Smith rejecting Zadesky’s definition of “scrolling”); EX2040 ¶111.

Without a motivation to combine or reasonable expectation of success, Grounds 6 and 8 relying on Griffin and Zadesky cannot prevail.

D. The Grounds 7-8 Challenges To Claims 9-10, 16-19, And 21-23 Cannot Prevail

The Ground 7 challenges to Claims 9-10 and 16-18 and Ground 8 challenges to Claims 19 and 23 cannot prevail because they fail to establish a motivation or reasonable expectation of success for the Griffin-Abreu combination. The Ground 8 challenges to Claims 19 and 21-23 additionally fail because the Petition’s cross-referencing does not meet Apple’s burden to show obviousness.

1. There Is No Motivation To Combine Griffin And Abreu Or A Reasonable Expectation of Success

The Petition’s deficient challenge to Claims 9-10, 16-19, and 23 in Grounds 7-8 must fail. The Petition relies on “Griffin in view of Abreu” for Claim 9[A], Pet. at 90, and asserts that one of skill “would have been motivated to combine Abreu’s teaching of pressure sensors with Griffin,” *id.* at 91. The Petition relies on this same

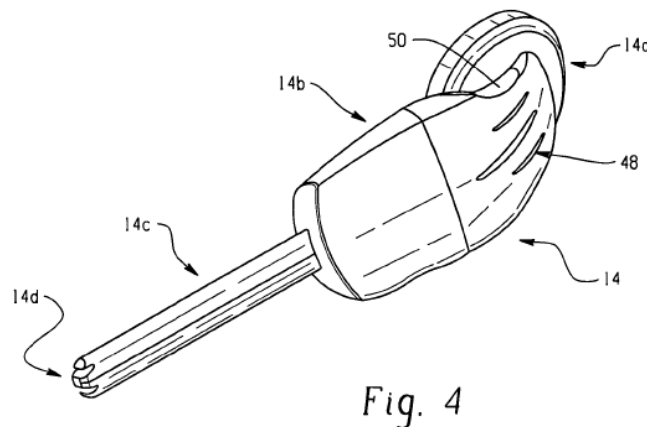
analysis for Claims 10, 16-19, and 23. *Id.* at 92, 94-96, 98.⁴ But the Petition’s assertion that one of skill would have combined Abreu’s eye-adjacent “pressure sensor ‘to measure pulse’ and... ‘monitoring of blood pressure,’” *id.* at 91, with Griffin’s in-ear device is baseless, EX2040 ¶¶113-121.

Abreu was focused on measurements at a Brain Temperature Tunnel adjacent to the middle corner of the eye and on the middle third of the upper eyelid. EX1019, 3:20-23 (“The search for a better way to measure biological parameters has resulted in... the discovery of a Brain Temperature Tunnel (BTT) and other physiologic tunnels in humans and animals.”), 3:25-29, 3:66-67 (“There are six characteristics needed to define a BTT.”), 4:16-19 (“All six characteristics are present on the skin on the medial canthal area adjacent to the medial corner of the eye above the medial canthal tendon and in the medial third of the upper eyelid.”); EX2040 ¶¶45, 115. Abreu described measuring pulse and blood pressure using a motion or pressure sensor mounted on a medial canthal pad, which is placed at the medial canthal region. EX1019, 13:26-28, 13:38-40; EX2040 ¶¶46, 115-116; *supra* §II.E.

⁴ For Claim 16, the Petition cross-references Claim 9[B], *see* Pet. at 94, but Claim 9[B] does not exist. However, even if the Petition had intended to cross-reference Claim 9[A], which is unclear, the challenge still fails.

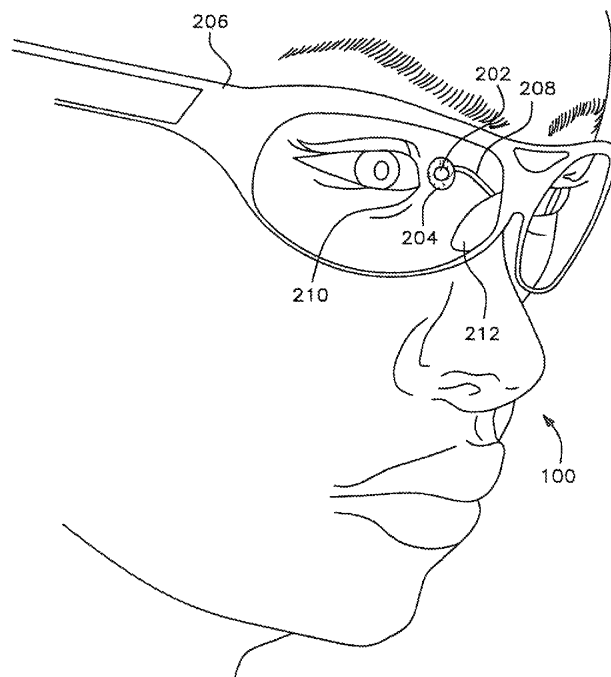
In contrast to Abreu, Griffin’s “second module” relied on for Claim 9, *see* Pet. at 90-91, is “a second detachable communication module 14 for insertion into the... user’s ear,” EX1017, 2:55-57; *id.* at Figs. 4-5; EX2040 ¶¶40, 117.

The Petition never explains why, much less how, one of skill would combine Abreu’s motion or pressure sensor for measuring pulse and blood pressure adjacent to the user’s eye with Griffin’s *in-ear* second module when Abreu instructed mounting a sensor on “medial canthal pads, or alternatively by the temples of eyeglasses.” EX1019, 13:26-28; Pet. at 90-92; EX1003 ¶¶212-13 (Dr. Smith: verbatim testimony); EX2040 ¶118. For example, Griffin’s second communication module 14 is shown below in Figure 4:



EX1017, Fig. 4. Neither the Petition nor Dr. Smith explains how Griffin’s second module would be modified to sense blood pressure or pulse at the medial canthal region as taught by Abreu and as Abreu’s sensor 202 does as depicted in Figure 22A:

FIG. 22A



EX1019, Fig. 22A; *see also id.*, 45:30-32 (“Sensor 202 is positioned on the superior aspect of the medial canthal area adjacent to the medial corner of the eye 210.”); EX2039, 114:17-115:15 (Dr. Smith agreeing that Abreu’s medial canthal pad covers the “medial corner of the eye above the medial canthal tendon and in the medial third of the upper eyelid”); EX2040 ¶118. Abreu emphasized the significance of the medial canthal area for sensing vital signs. EX1019, 3:25-29 (“The present invention was yet the first to recognize the end of the tunnel on the skin surface in which an optimal signal is acquired and measurements can be done without the presence of interfering constituents and background noise that exceeds the signal being measured.”), 3:66-4:19 (“There are six characteristics needed to define a

BTT.... *All six characteristics are present on the skin on the medial canthal area* adjacent to the medial corner of the eye above the medial canthal tendon and in the medial third of the upper eyelid.” (emphasis added)); EX2040 ¶118. Neither Apple nor Dr. Smith offer any way to combine Griffin’s second module with Abreu that would allow sensing at the medial canthal region as taught by Abreu. Similarly, they do not propose adopting the eyeglass temple for such a sensor, which although mentioned in passing by Abreu is never explained and even if adopted would be non-functional. EX2040 ¶¶115, 118 (describing Abreu’s lack of disclosure and the inability to use Griffin’s earpiece for such an arrangement).

When confronted with this deficiency, Dr. Smith explained: “I mean, I wasn’t discussing things at the level of form factor. It was more you take this principle, sensing method, put it in this other device.” EX2039, 116:15-117:4; EX2040 ¶119. When faced with Griffin’s second communication module’s inability to cover the critical medial canthal area as taught by Abreu, Dr. Smith abandoned Abreu’s teaching: “These pieces shown in Figure 4 and 5 of Griffin don’t cover the medial canthal pad but a person skilled in the art would understand you could take a sensor from one part of the body, *move it somewhere else*.” EX2039, 117:5-14 (emphasis added). In other words, Dr. Smith’s opinion rests on abandoning Abreu’s primary teaching about the significance of the medial canthal area for vital sign measurement and simply “mov[ing] it somewhere else” that Dr. Smith has not and did not specify.

EX2040 ¶120. Neither Dr. Smith nor Apple is entitled to pick and choose only so much of a reference as will support their assertion and ignore the rest. *In re Wesslau*, 353 F.2d 238, 241 (C.C.P.A. 1965) (“It is impermissible... to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.”). Thus, the Petition’s proposed Griffin-Abreu combination lacks any evidentiary basis.

Finally, the Petition’s generic assertion that “Griffin and Abreu describe analogous components (e.g., head-worn devices, sensors) and can be used to perform analogous functionality (e.g., monitoring user’s vitals),” Pet. at 91, fails to establish a motivation to combine or reasonable expectation of success, *see, e.g., Bio-Rad Labs.*, IPR2015-01826, Paper 11 at 29 (asserting that the prior art disclosed “interchangeable” parts is insufficient to show motivation to combine); *Samsung Elecs.*, 925 F.3d at 1381 (asserting prior art “in the same technological field was insufficient to meet Petitioners’ burden” to show reasonable expectation of success). Apple and Dr. Smith cannot abandon Abreu’s teaching of *how* to measure vital signs and “move it somewhere else” that is not specified and yet still claim a reasonable likelihood of success.

The absence of a motivation to combine or reasonable expectation of success dooms the challenges to Claims 9-10, 16-19, and 23 in Grounds 7-8.

2. The Petition’s Cross-Referencing In Ground 8 Does Not Meet Apple’s Burden (Claims 19 And 21-23)

The burden of demonstrating obviousness is not met by conclusory argument that “the same analysis” for one combination applies to a different combination of references. *Magnum Oil Tools*, 829 F.3d at 1380. That is precisely what the Petition does for Claims 19 and 21-23 challenged in Ground 8:

- Claim 19: relying on Claim 18 analysis in Ground 7 (Griffin + Abreu) and Claim 11[A] analysis in Ground 6 (Griffin + Zadesky), Pet. at 96-97;
- Claim 21: relying on Claim 20 analysis in Ground 7 (Griffin + Abreu) and Claims 8[A]-8[B] analysis in Ground 6 (Griffin + Zadesky), *id.* at 97;
- Claim 22: relying on Claims 1[Preamble]-1[E] and 2[A] analysis in Ground 5 (Griffin), Claims 20[H] and 12[A] analysis in Ground 7 (Griffin + Abreu), and Claim 11[A] analysis in Ground 6 (Griffin + Zadesky), *id.* at 97-98; and
- Claim 23: relying on Claim 22 analysis in Ground 8 (Griffin + Zadesky + Abreu) and Claim 9[A] analysis in Ground 7 (Griffin + Abreu), *id.* at 98.

The Petition’s cross-reference to other grounds based on other references without explanation or analysis does not meet Apple’s burden to show obviousness of Claims 19 and 21-23 in Ground 8.

E. The Petition Did Not Meet Its Burden To Show Unpatentability Of Claim 7 (Ground 5)

Claim 7 requires “wireless communication circuitry at least partially in the wireless wearable device configured for coupling to at least a Bluetooth network.” EX1001, 46:27-30. The Petition relies solely on Griffin’s disclosure of “short-range communication” to assert that one of skill “would understand ‘short-range communication’ to disclose coupling to a Bluetooth network.” Pet. at 82 (citing EX1017, 9:61-64; EX1003 ¶188). Although Bluetooth is a short-range communication, a short-range communication is not necessarily Bluetooth. EX2040 ¶124. For example, NFC (near field communication) is also a short-range communication that is not Bluetooth. *Id.* Thus, one of skill in the art would not understand “short-range communication” to mean Bluetooth. *Id.* ¶¶122-125. The Petition’s only support for this assertion is Dr. Smith’s “*verbatim* restatement of the assertion being supported, without any supporting evidence or technical reasoning,” which is insufficient to “supply a limitation missing from the prior art.” *Xerox v. Bytemark*, IPR2022-00624, Paper 9 at 16 (P.T.A.B. Aug. 24, 2022) (precedential).

The Petition next cites the ’599 Patent to assert that it “describes that Bluetooth is a type of ‘short-distance wireless transmission standard.’” Pet. at 82 (citing EX1001, 44:4-12). But showing that Bluetooth is a type of “short-distance wireless transmission,” EX1001, 44:6-8, does not prove the converse that all short-

distance wireless transmission is Bluetooth, EX2040 ¶124; *see also Uniloc 2017 v. Google*, No. 2:18-CV-00493-JRG-RSP, 2020 WL 339802, at *27 (E.D. Tex. Jan. 20, 2020) (“This disclosure does not, however, state that Bluetooth and Wi-Fi are interchangeable or that the term ‘short-range wireless technology’ could cover either or both.”).

Griffin’s failure to disclose Bluetooth is fatal to the Petition’s Claim 7 challenge.

VIII. CONCLUSION

For each of the foregoing reasons, IngenioSpec respectfully requests the Board confirm patentability of the challenged claims.

ARMOND WILSON LLP

Dated: August 14, 2026

By: /Douglas R. Wilson/
Douglas R. Wilson (Reg. No. 54,542)
Michelle E. Armond (Reg. No. 53,954)
Joseph Li (Reg. No. 74,998)
Monica Arnold (Reg. 77,262)
Attorneys for IngenioSpec, LLC

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that foregoing **PATENT OWNER'S RESPONSE** exclusive of the parts exempted as provided in 37 C.F.R. § 42.24, contains 13,987 words and therefore complies with the type-volume limitations of 37 C.F.R. § 42.24.

ARMOND WILSON LLP

Dated: August 14, 2026

By: /Douglas R. Wilson/
Douglas R. Wilson (Reg. No. 54,542)
Michelle E. Armond (Reg. No. 53,954)
Joseph Li (Reg. No. 74,998)
Monica Arnold (Reg. 77,262)
Attorneys for IngenioSpec, LLC

CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a true copy of the foregoing **PATENT OWNER’S RESPONSE** and **EXHIBITS 2020 and 2030-2041** is being served electronically on August 14, 2026 to the following lead and backup counsel for Petitioner to the following email addresses:

Alex S. Yap
AYap@mofo.com

Mehran Arjomand
MArjomand@mofo.com

Bryan Blumenkopf
BBlumen@mofo.com

Apple-IngenioSpec-IPR@mofo.com

ARMOND WILSON LLP

Dated: August 14, 2026

By: /Douglas R. Wilson/
Douglas R. Wilson (Reg. No. 54,542)
Michelle E. Armond (Reg. No. 53,954)
Joseph Li (Reg. No. 74,998)
Monica Arnold (Reg. 77,262)
Attorneys for IngenioSpec, LLC