Nos. 20-1921, -1922, -1943, -1944

IN THE

United States Court of Appeals for the Federal Circuit

ZAXCOM, INC.,

Appellant,

v.

LECTROSONICS, INC.,

Cross-Appellant

ANDREW HIRSHFELD, Performing the Functions and Duties of the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office,

Intervenor

Appeals from the United States Patent and Trademark Office,
Patent Trial and Appeal Board in Nos. IPR2018-01129 and IPR2018-01130.

PRINCIPAL AND RESPONSE BRIEF OF LECTROSONICS, INC.

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U.S. Patent No. 8,385,814 (Appx90-91 (original), Appx120-121 (substitute))

1. A system for recording locally generated audio comprising:

at least one master timecode generator for generating a plurality of master timecodes; and

at least one local audio device wearable by a creator of said locally generated audio including:

at least one local audio device receiver for receiving at least one of the group consisting of digital commands, said master timecodes, and non-local audio data;

at least one audio input port for receiving said locally generated audio from an audio input device;

at least one memory;

at least one local timecode generator for generating a plurality of local timecodes; and

at least one control unit electrically coupled to said local audio device receiver, said audio input device, said memory, and said local timecode generator for creating stamped local audio data from said locally generated audio and storing said stamped local audio data in said memory;

wherein said stamped local audio data includes at least one local timestamp to reference at least a portion of said stamped local audio data to at least one of said local timecodes.

50. (substitute) A system for locally recording locally generated audio <u>and remotely recording the locally generated audio</u> comprising:

<u>at least one remote recorder;</u>

at least one master timecode generator for generating a plurality of master timecodes; and

at least one local audio device wearable by a creator of said locally generated audio including:

at least one local audio device receiver for receiving [at least one of the group consisting of] digital commands, a transport status, said master timecodes, and non-local audio data;

at least one audio input port for receiving said locally generated audio from an audio input device;

at least one memory;

a wireless transmitter transmitting said locally generated audio to said at least one remote recorder;

at least one local timecode generator for generating a plurality of local timecodes said local timecode generator is synchronized by said master timecodes; and

at least one control unit electrically coupled to said local audio device receiver, said audio input device, said memory, and said local timecode generator for creating stamped local audio data from said locally generated audio and storing said stamped local audio data in said memory;

wherein said stamped local audio data includes at least one local timestamp to reference at least a portion of said stamped local audio data to at least one of said local timecodes[.];

said at least one remote recorder receiving said locally generated audio and remotely recording said locally generated audio as remote audio data; receiving said stamped local audio data, and replacing a portion of said remote audio data with said stamped local audio data;

U.S. Patent No. 7,929,902 (Appx4-5 (original), Appx42-44 (substitute))

7. A system for recording locally generated audio comprising:

at least one master timecode generator for generating a plurality of master timecodes; and

at least one local audio device wearable by a creator of said locally generated audio including:

at least one local audio device receiver for receiving at least one of the group consisting of digital commands and said master timecodes;

at least one audio input port for receiving locally generated audio from an audio input device;

at least one memory;

at least one local timecode generator for generating a plurality of local timecodes; and

at least one control unit electrically coupled to said local audio device receiver, said audio input device, said memory, and said local timecode generator for creating stamped local audio data and storing said stamped local audio data in said memory;

wherein said stamped local audio data includes at least one local timestamp to reference at least a portion of said stamped local audio data to at least one of said local timecodes; and

wherein said stamped local audio data includes at least one identifier selected from the group consisting of track identifiers, local audio device identifiers, performer identifiers, and combinations thereof.

12. A method of wirelessly recording local audio, said method comprising:

locally receiving said local audio generated by at least one performer during an audio event;

wirelessly transmitting said local audio to at least one of the group

consisting of a recorder, a receiver, and combinations thereof;

locally recording said local audio as local audio data in at least one memory of at least one local audio device; and

remotely recording said transmitted local audio via at least one of the group consisting of a recorder, a receiver, and combinations thereof as remote audio data;

wherein at least a portion of said local audio data is retrieved during or subsequent to said audio event and is combined with said remote audio data;

wherein said local audio data includes at least one identifier selected from the group consisting of track identifiers, local audio device identifiers, performer identifiers, and combinations thereof.

21. (substitute) A system for locally recording locally generated audio and remotely recording the locally generated audio comprising:

at least one remote recorder;

at least one master timecode generator for generating a plurality of master timecodes; and

at least one local audio device wearable by a creator of said locally generated audio including:

at least one local audio device receiver for receiving [at least one of the group consisting of] digital commands and said master timecodes;

at least one audio input port for receiving locally generated audio from an audio input device;

at least one memory;

a wireless transmitter transmitting said locally generated audio to said at least one remote recorder;

at least one local timecode generator for generating a plurality of local timecodes, said local timecode generator is synchronized by said master timecodes; and

at least one control unit electrically coupled to said local audio device receiver, said audio input device, said memory, and said local timecode generator for creating stamped local audio data and storing said stamped local audio data in said memory;

wherein said stamped local audio data includes at least one local timestamp to reference at least a portion of said stamped local audio data to at least one of said local timecodes; [and]

wherein said stamped local audio data includes at least one identifier selected from the group consisting of track identifiers, local audio device identifiers, performer identifiers, and combinations thereof[.]; and

said at least one remote recorder receiving said locally generated audio and remotely recording said locally generated audio as remote audio data; receiving said stamped local audio data, and replacing a portion of said remote audio data with said stamped local audio data.

24. (substitute) A method of wirelessly recording local audio, said method comprising:

locally receiving said local audio generated by at least one performer during an audio event;

wirelessly transmitting said local audio to at least one of the group consisting of a recorder, a receiver, and combinations thereof;

locally recording said local audio as local audio data in at least one memory of at least one wearable local audio device; and

remotely recording said transmitted local audio via at least one of the group consisting of a recorder, a receiver, and combinations thereof as remote audio data;

[wherein] retrieving at least a portion of said local audio data [is retrieved] during or subsequent to said audio event and [is combined with said remote audio data] combining said remote audio data with said local audio data by replacing a portion of said remote audio data with said local audio data;

wherein said local audio data includes at least one identifier selected from the group consisting of track identifiers, local audio device identifiers, performer identifiers, and combinations thereof.

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

CERTIFICATE OF INTEREST

Case Number 2020-1921, -1922, -1943, -1944

Short Case Caption Zaxcom, Inc. v. Lectrosonics, Inc.

Filing Party/Entity Lectrosonics, Inc.

Instructions: Complete each section of the form. In answering items 2 and 3, be specific as to which represented entities the answers apply; lack of specificity may result in non-compliance. **Please enter only one item per box; attach additional pages as needed and check the relevant box**. Counsel must immediately file an amended Certificate of Interest if information changes. Fed. Cir. R. 47.4(b).

I certify the following information and any attached sheets are accurate and complete to the best of my knowledge.

Date: 03/12/2021

Signature: /s/ Cory C. Bell

Name: Cory C. Bell

1. Represented Entities. Fed. Cir. R. 47.4(a)(1).	**2. Real Party in Interest.** Fed. Cir. R. 47.4(a)(2).	**3. Parent Corporations and Stockholders.** Fed. Cir. R. 47.4(a)(3).
Provide the full names of all entities represented by undersigned counsel in this case.	Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities. ☑ None/Not Applicable	Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities. ☑ None/Not Applicable
Lectrosonics, Inc.		

☐ Additional pages attached

4. Legal Representatives. List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

☐ None/Not Applicable ☐ Additional pages attached

C. Brandon Rash	Finnegan, Henderson, Farabow, Garrett & Dunner, LLP	No longer with firm
Deborah Peacock	Peacock Law P.C.	
Justin Muehlmeyer	Peacock Law P.C.	

5. Related Cases. Provide the case titles and numbers of any case known to be pending in this court or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. Do not include the originating case number(s) for this case. Fed. Cir. R. 47.4(a)(5). See also Fed. Cir. R. 47.5(b).

☐ None/Not Applicable ☐ Additional pages attached

Zaxcom, Inc. v. Lectrosonics, Inc.	No. 1:17-cv-03408 (E.D.N.Y.)	
Zaxcom, Inc. v. Lectrosonics, Inc.	No. 2:17-cv-02840 (D.N.J.)	
Zaxcom, Inc. v. Lectrosonics, Inc.	No. 2020-1350 (Fed. Cir.)	

6. Organizational Victims and Bankruptcy Cases. Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6).

☑ None/Not Applicable ☐ Additional pages attached

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STATEMENT OF RELATED CASES

Under Federal Circuit Rule 47.5, the district court case might directly affect or be affected by this Court's decision: *Zaxcom, Inc. v. Lectrosonics, Inc.*, Civil Action No. 1:19-cv-00109-RB-JFR (D.N.M.).

A related patent involving another Patent Trial and Appeal Board ("Board") proceeding was appealed and docketed as *Zaxcom, Inc. v. Lectrosonics, Inc.*, Nos. 2020-1350, -1405 (Fed. Cir.) (appeal of IPR2018-00972) (U.S. Patent No. 9,336,307 ("the '307 patent")).

INTRODUCTION

To avoid the teachings of the primary reference, Patent Owner Zaxcom, Inc. ("Zaxcom") was forced to narrow its claim scope to a specific use case in its Motion to Amend, "replacing" remotely recorded audio with locally recorded audio. But after narrowing the scope, what remained of Zaxcom's substitute claims never actually received industry praise and was admittedly known in the art. Whereas the Board correctly found that the alleged secondary considerations could not overcome the strong case of obviousness defeating the original claims, it incorrectly held the that amended claims were not unpatentable by virtue of the same evidence.

Zaxcom is evidently impressed with its technical EMMY and OSCAR. It declares that "the claimed invention undisputedly received the equivalent of not just one 'Nobel Prize' in its field, but two!" Zaxcom Br. 51. But these Hollywood awards have not been shown to fit this case as "reasonably commensurate" in scope with the original and amended claims so as to be probative in the obviousness analysis. In fact, the claims of the patents Zaxcom touted in its application for such awards have been held unpatentable by the PTAB, underscoring the problematic circularity of using patents to get awards and using those awards to get patents. Appx4383-4384. Even if the industry praise is deemed reasonably commensurate in scope to some aspect of the original and amended

claims, praise of features unclaimed and otherwise known in the art cannot overcome obviousness. Accordingly, the industry praise presented provided nothing probative to the nonobviousness analysis because there is not a sufficient nexus between it and purported novelty in the claims. *See infra* §§ IV.-VI.

Zaxcom, attempting on appeal to resurrect all of its original claims deemed unpatentable, is now arguing for a presumption of nexus it never mentioned below—it contends with several *amici* that *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366 (Fed. Cir. 2019), *cert. denied*, 141 S. Ct. 373 (2020), strays from thirty years of precedent and violates stare decisis. Not so. In *Fox*, this Court properly corrected the Board's misapplication of "presumptive" nexus, and there was no error here. *See infra* §§ IV., V.B.

Without the benefit of such a presumption, Zaxcom was required to carry its burden to show *prima facie* nexus in the ordinary manner, which the Board found it failed to do for its original claims. *Demaco Corp. v. F. von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988). While Zaxcom also failed to perform sufficient analysis of nexus for its amended claims, the Board erroneously ignored all legal shortcomings as to this evidence, made impermissible arguments on behalf of the patentee, and granted the Motion to Amend. This result should be reversed on cross-appeal. *See infra* §§ IV.-VI.

JURISDICTIONAL STATEMENT

This Court has jurisdiction over the appeal from the Board's Final Written Decisions under 35 U.S.C. §§ 141 and 319, and 28 U.S.C. § 1295(a)(4)(A). Lectrosonics timely filed a notice of cross-appeal challenging the Board's grant of the amended claims 21-26 of the '902 patent and claims 50-65 of the '814 patent.

STATEMENT OF THE ISSUES

i. Can claims be limited to embodiments in the specification without any clear requirement in the claims to do so?

ii. Can an attack on a single reference rather than the applied combination show a lack of substantial evidence?

iii. Can secondary considerations weigh against obviousness when all claim features relating to what the patentee alleges to have been praised by industry are taught by the primary reference without modification?

ii. Can the Board make obviousness determinations without addressing all of the evidence before it?

iv. Can the Board in the context of motions to amend set forth arguments that the patent owner never made?

STATEMENT OF THE CASE

A. The Independent Claims on Appeal

Two PTAB proceedings deemed unpatentable original claims 7, 8, and 11, 12, 14, and 15 of U.S. Patent No. 7,929,902 ("the '902 patent") and claims 1-4, 9, 10, 12, 15, 31, 36, 37 and 41-45 of U.S. Patent No. 8,385,814 ("the '814 patent") (collectively "the patents-at-issue").[1]

Claim 12 of the '902 patent (Appx195, 25:66-26:17) is the method claim with highly similar steps to those in independent claim 12 of the '307 patent, which was also found unpatentable in the related matter, *Lectrosonics, Inc. v. Zaxcom, Inc*., IPR2018-00972, Paper 41 (PTAB Nov. 7, 2019) (on appeal at Nos. 2020-1305, -1450).

Claim 1 of the '814 patent (Appx223, 23:18-41) and claim 7 of the '902 patent (Appx194-195, 24:51-25:10)[2] are system claims that omit the concepts of

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[1] Of these, claims 7 and 12 of the '902 patent and claim 1 of the '814 patent are independent. These independent claims correspond to claims 21, 24, and 50 of the amended claims, respectively. Zaxcom has not separately argued any of the dependent claims on appeal.

[2] The Brief of Appellant Zaxcom, Inc. (D.I. 24) does not include parallel joint appendix citations to both the '902 patent (Appx169-196) and the '814 patent (Appx197-226), which share a specification. Nor does Zaxcom parallel cite to both Final Written Decisions in IPR2018-01129 (Appx1-75) and IPR2018-01130 (Appx87-151), which are mostly verbatim except for a few modifications. Following this practice, Lectrosonics will also only cite to the material in the '902 patent and the IPR2018-01129 decision, unless there is a particular contextual need to distinguish one patent or matter over the other.

wireless transmission, remote recording, and combining local audio data with remote audio data as recited in claim 12 of the '902 patent. Thus, these system claims lack the concept of "dropout" repair.

In its Motion to Amend, Zaxcom added the "replacing limitations" to each of the independent claims, which the Board found to be claiming "dropout" repair. In the system claims, it added "said at least one remote recorder receiving said locally generated audio and remotely recording said locally generated audio as remote audio data; receiving said stamped local audio data, and replacing a portion of said remote audio data with said stamped local audio data." Appx43. And in the method claim it limited the claimed "combining" to "replacing a portion of said remote audio data with said local audio data." Appx44.

B. Patents-at-Issue Generally

The patents-at-issue generally relate to the recording and wireless transmission of audio, although Zaxcom removed the requirement of wireless transmission from the system claims at issue. Appx169, Abstract.

A known problem in the art was that wireless transmissions of audio could become corrupted, such as experiencing unintended gaps in the recording—i.e., "dropouts." Appx183, 1:59-66. It had long been understood that using a second version of the recording (i.e., a backup) can "repair" a recording with dropout errors. *Id.*; *see also* Appx189, 13:4-8. For example, creating a backup version using

two or more redundant receivers that each *received* the transmitted audio was known for decades. Appx1991-1992, 26:9-27:23. The patents-at-issue, however, noted that such backups could not correct audio *transmission* errors, and discloses a transmitter with a local memory for transmitting and recording audio from a source, such as a microphone. Appx173, Fig. 3A; Appx183, 1:66-2:6; Appx186, 8:65-67; Appx187, 9:11-13, 9:61-64.

The patents-at-issue disclose two uses for the local recording of the audio: (1) it can be combined with other tracks of audio to create *a multitrack recording* (Appx184, 3:3-14, 4:12-14); or (2) it can be used to repair a *dropout* error in a recording of wirelessly transmitted audio (Appx184, 4:15-25). Whether combining or repairing, the patents-at-issue use then-commercially available remote recorders or software, including Zaxcom's own prior art products. Appx184, 4:50-61 (Zaxcom's Deva multitrack recorder); Appx187, 10:48-52 (referring to mixing using commercially available Pro Tools).

C. The Proceedings and Related Matters

In this consolidated appeal of two *inter partes* reviews, four sets of challenged claims are at issue: six original claims of the '902 patent (claims 7, 8, and 11, 12, 14, and 15); six proposed substitute claims of the '902 patent (amended claims 21-26); fifteen original claims of the '814 patent (claims 1-4, 9, 10, 12, 15,

31, 36, 37, and 41-45); and fifteen proposed substitute claims of the '814 patent (amended claims 50-65). Appx2-3; Appx88-89.

The Board found every element of the original claims and every element of the amended claims taught by the prior art of record. Indeed, the Board even found claim 12 of the '902 patent was anticipated by Strub.[3] Appx73-74; Appx149-150.

D. The Board's Findings for the System Claims

For the original system claims, Zaxcom has only appealed the Board's findings with respect to two claim elements: "wearable" and "master timecode generator." The Board found both elements in the prior art.

For the wearable elements, Zaxcom's arguments hinged on a claim construction for wearable that the Board rejected. For this element, the Board adopted the plain meaning of the term (i.e., "suitable and in a condition to be worn") based on a dictionary definition provided by Zaxcom. Appx11-12. The Board considered the other evidence cited by Zaxcom (i.e., cites to the specification, prosecution history, and deposition testimony) but found "no credible evidence on the record that requires a narrower definition." *Id.*

For the master timecode generator elements, the Board found that Woo[4] discloses it and that there was express motivation to combine this feature with

[3] U.S. Patent No. 6,825,875 B1, issued November 30, 2004. Appx1299-1357.
[4] U.S. Patent No. 5,479,351, published December 26, 1995. Appx1549-1558.

Strub. Woo is directed to a "time-keeping system for synchronizing sound and picture recordings from a plurality of independent recording devices at a shared performance." Appx1554, 4:62–66. The time-keeping system includes a master clock comprised of a GPS navigation satellite receiver 122, and a digital signal processor 124, where the master clock output 128 is an SMPTE-formatted timecode preferably compatible with equipment that has master clock input ports. Appx1556-1557, 8:60–65; Appx1557, 9:1-4; Appx1552, Fig. 5; Appx17.

Zaxcom argued that Woo fails to teach "at least one master timecode generator for generating a plurality of master timecodes," as recited in claim 7 of the '814 patent and claim 1 of the '902 patent. Appx27; Appx110. The Board found, however, that "the purpose of Woo's device is to provide master timecodes in SMPTE format to synchronize recording data in independent sound, film, and video recorders." Appx28 (quotation omitted) (citing Appx1549, title, abstract; Appx1554, 3:20-24; Appx1556, 8:26-59; Appx1551-1552, Figs. 4, 5)). The Board concluded:

> Thus, we find that Woo discloses a master timecode generator . . . using the same SMPTE format used in the '902 patent, and Woo discloses jam synchronizing to control other timecode generators. Therefore, we are persuaded that Woo teaches the "master timecode generator" as properly construed.

Appx28-29. The Board also rejected Zaxcom's additional arguments presented on rehearing. Appx78-81; Appx155-157.

The Board agreed with Lectrosonics on the express motivation to use the Woo master timecode generator in the system of Strub. Appx29 ("Woo itself provides an express motivation to combine"). The Board found: (1) that "audio recorders with timecode input ports were known for more than a decade and were a conventional way to synchronize two devices recording the same event," (Appx29 (citation omitted) (citing Appx1553, 2:2-48; Appx1554, 3:37-57, 4:3-5; Appx1555, 5:16-19; Appx1468-1469, ¶ 58)); and (2) that a skilled artisan "would have understood that modifying Strub to include 'a conventional SMPTE timecode input port for receiving conventional SMPTE-formatted master timecodes from Woo's master clock would have been simply combining prior-art elements according to known methods to improve the system and yield predictable results'" (Appx29-30 (citation omitted)). Further, the Board rejected Zaxcom's argument that motivation to combine would have been lacking because Strub already discloses a solution to post-production editing—"Petitioner relies on Woo for its disclosure of a master timecode generator, not for a solution to post-production editing." Appx31.

The Board also found that Strub discloses the other related elements of the system claims. For example, the Board found that Strub discloses "at least one local audio device receiver for receiving . . . said master timecodes" because Strub disclosed a "SMPTE timecode input port." Appx19-20. The Board similarly found that Strub's internal clock used to timestamp recordings for later synchronization

discloses the claimed "at least one local timecode generator for generating a plurality of local time codes," Appx22. Zaxcom does not dispute either of those findings on appeal.

E. The Board's Findings on Secondary Considerations

The Board found no nexus between Zaxcom's secondary considerations evidence and any original claims. For the system claims, the Board found the claims "directed to locally recording and timestamping audio data" but "the evidence [wa]s directed to features that are not required by the claims" (i.e., dropout repair of a wireless transmission). Appx34. For the method claim, the Board found the original claim broad enough to cover both potential uses—multitrack creation *and* dropout repair—refusing to restrict the scope to one embodiment only. Appx7-10; Appx16-24. As broad as the original claims were deemed to be, the prior art of record created a strong obviousness case and even anticipated the method claims. Appx15-35; Appx36-41; Appx98-119. Zaxcom's evidence of secondary considerations, namely industry praise, was considered in the analysis but insufficient to change the ultimate unpatentability conclusion for all original claims challenged. Appx31-35.

Nevertheless, the Board went on to grant Zaxcom's amended claims for both patents-at-issue, insofar as they were expressly delimited to dropout repair alone. Appx41-73. Yet the only potentially relevant "industry praise" relied on was

directed solely to claimed subject matter in the prior art, a fact ignored by the Board in relying on it to overcome obviousness in all amended claims. Appx60-65; Appx68-70. The Board ought to have recognized this issue regarding nexus because the patents-at-issue both expressly recognize that dropout repair had been employed for many years in the industry, and Zaxcom never claims to have invented it.

F. What Zaxcom Claims It Invented and What Was Known

According to Zaxcom's brief, "the invention of the '902 Patent incorporated local recording in the local audio devices 102 to create individual backups for use in repair of the remotely recorded multi-track data . . . ." Zaxcom Br. 10.

Zaxcom also candidly concedes that the '902 patent teaches both multitrack *and* dropout embodiments. Zaxcom Br. 31 ("[T]he Board is correct that the '902 Patent Specification teaches a Dropout Embodiment and a Multitrack Embodiment . . . ."). This is a critical admission, determinative of the case:

- In the "Multitrack Embodiment," the '902 patent discloses that recordings can be "combined" into a single, multitrack recording. Appx184, 3:3-14, 4:12-14.
- In the "Dropout Embodiment," the '902 patent discloses that an error in a recording can be corrected using a different recording of the audio. For example, "audio may be *inserted* in the proper time

sequence with respect to the other recorded audio samples based upon the synchronized timestamp data." Appx184, 4:15-25; Appx185, 5:7-10.

Zaxcom never purports to have invented dropout repair in what it styles "a Dropout Embodiment" above. Indeed, the fact that dropout repair was known and practiced in the industry is confirmed by (1) the background sections of the patents-at-issue, (2) Zaxcom's own witness testimony, and (3) the Board's findings that Zaxcom does not dispute on appeal.

1. The '902 patent acknowledges that dropout repair was known, and Zaxcom does not dispute that dropout repair by replacing a damaged portion with a backup recording was known.

The background of the '902 patent describes a state of the art where dropouts are known to occur, can be repaired by a redundant recording, and that redundant recordings are readily made. Appx183, 1:59-66.

However, the '902 patent asserts that the redundant recordings already known in the art occurred only downstream from audio transmission, so *transmission errors* could not be corrected because such errors would be present in both recordings. Appx183, 1:64-2:3. Thus, according to the '902 patent, the purported invention as it pertains to dropouts was not a new technique for making the correction but rather provided a recording of the audio outside of the wireless transmission path (e.g., at the transmitting device) that avoids *transmission* errors.

2. Zaxcom's witness confirmed that dropout repair by replacing audio was known.

During cross-examination, Zaxcom's witnesses were specifically questioned on the known extent of dropout repair to those of ordinary skill in the art before the '902 patent application filing in 2005. Appx1772-1776, 17:11-21:12. Zaxcom's expert, Mr. DeFilippis, was directly asked if before 2005, there "was a known way to fix the dropout problem by replacing the lost portion of the audio with a backup copy." Appx1774, 19:18-21. He responded affirmatively, with the qualification "if there was a backup copy." Appx1775, 20:1-6. He also noted that while it was known to have backup copies before filing in 2005, "it wasn't always practical or wasn't always available." *Id*., 20:7-12. The Board did *not* address these admissions regarding dropout repair when assessing the amended claims for obviousness. Appx55-72.

3. The Board found that Wood discloses dropout repair, which Zaxcom does not dispute.

Secondary reference Wood[5] "is directed to a method for repairing a broadcast signal to improve the quality of the signal that is available to the end user." Appx55 (citing Appx1420, 2:28-30). In its Final Written Decision, the Board expressly found: "Wood teaches a method for repairing dropouts." Appx59-

[5] World Intellectual Property Organization Publication No. WO 2004/ 091219 A1, published October 21, 2004 ("Wood"). Appx1417-1431.

60. Indeed, the Board considered and rejected Zaxcom's contrary arguments with respect to Wood (in combination with primary reference Strub). Appx55-60. Specifically, the Board found that Wood's

> [p]rocessor 16 monitors the broadcast signal to ascertain when the signal has been corrupted. Transceiver 20 may request a replacement undamaged copy of the lost video and audio segments upon the detection of a lost portion of data in order to replace the lost data.

Appx55 (citations omitted).

Zaxcom has never challenged the Board's factual determinations regarding Wood. In fact, in its briefing here, Zaxcom fully endorses the Board's conclusion that "Wood focuses on repairing dropouts in a received TV broadcast signal," proving its teachings were known by 2004. Zaxcom Br. 45 (quoting Appx59-60) (discussing prior art Wood and noting approvingly: "In this regard, the Board was correct.").

G. Other Evidence Confirmed that Making a Local Backup of Wirelessly Transmitted Audio Was Known.

Other evidence confirms that the general concept of capturing transmitted audio locally was known before 2005. The Board failed to consider any of this additional evidence in its secondary considerations analysis, despite it being timely presented by Lectrosonics. Appx60-72.

The first confirmation that making a local copy of transmitted audio was known comes from Zaxcom's own witness, Mr. Wexler. He confirmed that

redundancy (i.e., having a backup) was not limited to having multiple receivers, and acknowledged that *as far back as 1975* it was known to both wirelessly transmit and locally record microphone audio using a mini or pocket recorder hooked up to the microphone and wireless transmitter. Appx1991-1992, 26:9-27:23.

This type of configuration, in fact, is what Zaxcom accuses of infringement. In the district court, Zaxcom asserts that the claims are infringed by a mini or pocket recorder hooked up to the microphone and wireless transmitter via a cable. The accused product is a personal data recorder that does not have an integrated transmitter. Appx1524-1527; Appx1530. But Zaxcom asserts that the claims are infringed by the personal data recorder hooked up to the microphone and the wireless transmitter using a cable. Appx1529-1530.

H. To the Extent there Is Any Relationship Between the Claims and the Industry Praise, the Praise Highlighted by Zaxcom Itself Is Limited to Features of the Local Audio Device Found Entirely in the Prior Art.

The statements highlighted by Zaxcom in its opening brief (Zaxcom Br. 20-25) refer to a single device that wirelessly transmits and locally records a microphone signal—which Zaxcom does not dispute Strub also fully discloses:

Emmy Quotes

- "[A] production tool that *married wireless transmission with a recording device located within the actor's body pack*." Zaxcom Br. 22 (emphasis original) (quoting Appx4382).
- "[D]igital recording of microphone signal *in the wireless transmitter* to provide backup recording of the original microphone signal." *Id.* (quoting Appx4370).

Academy Award Quotes

- "[L]ocal recording capability *within the belt pack* . . . ." Zaxcom Br. 23 (quoting Appx4345).

Declaration of Customer of Mr. Wexler

- "Zaxcom developed *a transmitter that had recording capability* . . . . I soon realized that *this* was truly a 'game changer' for my work." *Id*. (quoting Appx4357, ¶ 5).
- "Each Zaxcom *transmitter can digitally record* the output of the microphone along with transmitting the signal to the receiver. If there is a drop out of the RF

signal, the identical recording in the transmitter can be used by post-production." *Id.* (quoting Appx4357, ¶ 6).

Declaration of Customer Mr. Sarokin

- "I purchased 12 TRX 900 *transmitters* and these *included a mini SD card slot for recording . . . . This capability* solved the major limitation of radio mics. . . ." Zaxcom Br. 25 (quoting Appx4350-4351, ¶ 6).
- "I can't emphasize enough the revolution these *recording radios* brought on." *Id*. (quoting Appx4350-4351, ¶ 6).

I. The Praise of Zaxcom's Product Was Expressly Qualified as Not for Any Specific Feature and Included Many Unclaimed Features.

The movie awards Zaxcom highlights focus on its *digital technology*—mentioning the ability to record audio as one feature. Appx4345; Appx4370. Indeed, the EMMY that Zaxcom received was expressly "[n]ot for a single component but for the system as a whole," including numerous *unclaimed* features (Appx4370), such as:

- "audio file format (MARF) that includes time code stamps to facilitate synchronization of the recorded audio with video as well as the conversion to Broadcast Wave Format (BWAV)";
- "audio file protection in case of power failure or media removal using a unique file directory structure";
- "digital, low latency IFB (interrupted fold back) audio return signal";

- "Full-range microphone audio capture (126dB) using dual precision A/D converters";
- "Low latency digital compression and transmission (3.5mS)";
- "Efficient, high quality digital compression to increase the number of wireless microphone channels available"; and
- "Wireless digital remote control of the wireless microphone transmitter including pre-amp gains."

J. Wood Disclosed that the Type of Wireless Transmission Used by Strub Could Experience Dropouts, How to Correct Them, and Why a Person of Skill Would Have Done So.

Primary reference Strub discloses a local audio device with wireless transmission of audio using "conventional television signal transmitters and receivers," Appx1329, 37:53-38:4; Appx1328, 35:54-57, and, as the Board found, local recording of the audio with timestamps, Appx22-Appx23; Appx35. Like Strub, Wood discloses processing video and audio content sent over television broadcast communication channels and also recognized the problem of dropouts in such signals. Appx1419, 1:19-26. Wood discloses sending a request when dropout is detected so that, like in the '902 patent, the content can be re-sent and combined with the previously received audio to repair the dropout. Appx1419-1420, 1:31-2:13. Wood describes the motivation to improve signal quality (Appx1419, 1:28-30) and produce a "program free of dropouts" (Appx1421, 3:4-6).

SUMMARY OF ARGUMENT

The Board correctly determined that all original claims were unpatentable based on § 102 and/or § 103 grounds. Appx73.

Zaxcom's claim construction arguments are thinly veiled attempts to improperly limit the claims to particular embodiments in the specification. And Zaxcom's attack on Woo in isolation ignores that it was the combination of Woo and Strub that resulted in the claims being held unpatentable. *See infra* § III.

Significantly, the Board gave no weight to the EMMY or OSCAR for any original claim because they were deemed not in praise of matter sufficiently commensurate with Zaxcom's claimed scope. Appx34. The Board understood that to credit secondary considerations in the analysis, there must be a demonstrated "nexus between the merits of the claimed invention and the evidence of secondary considerations." *Simmons Fastener Corp. v. Ill. Tool Works, Inc.*, 739 F.2d 1573, 1575 (Fed. Cir. 1984).

Zaxcom argues on appeal that its secondary considerations arguments should have overcome the strong case of obviousness based on Strub, and even suggests for the first time that it merited a presumption of nexus. But Zaxcom never made the necessary showings for the nexus requirement to go forward with such contentions and its view of the *Fox* decision should be rejected. This decision on

the original claims should be upheld over Zaxcom's challenge here. *See infra* §§ IV.-V.

For the *amended* claims with narrowed scope, however, the Board erred in not finding them unpatentable. Appx55-73. This decision should be reversed, in part because the Board made Zaxcom's nexus argument. Further, the "replacing" limitation of the substitute claims was already known in the art, and Zaxcom did not show that its secondary considerations evidence was commensurate in scope with the amended claims and does not create a legally sufficient nexus. The objective evidence of nonobviousness should have little weight as against the strong case of obviousness combining Strub and Wood. *See infra* §§ VI.A.-B.

ARGUMENT

I. STANDARDS OF REVIEW

Obviousness is a legal question based on underlying factfinding. *In re DBC*, 545 F.3d 1373, 1377 (Fed. Cir. 2008). This Court "review[s] the [Board]'s factual findings for substantial evidence and its legal conclusions de novo." *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 449 (Fed. Cir. 2015). "Substantial evidence is something less than the weight of the evidence but more than a mere scintilla," meaning "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *In re NuVasive, Inc.*, 842 F.3d

1376, 1379-80 (Fed. Cir. 2016) (citations omitted); *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938).

"For secondary considerations to have probative value, the decision maker must determine whether there is a nexus between the merits of the claimed invention and the secondary considerations." *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 305 n.42 (Fed. Cir. 1985). The presence *vel non* of nexus is a factual question reviewed for substantial evidence. *Merck & Cie v. Gnosis S.P.A.*, 808 F.3d 829, 837 (Fed. Cir. 2015). Patentee must demonstrate a nexus between the claimed features and the secondary considerations relied on. *Fox*, 944 F.3d at 1378 (patentee has "burden of proving that the evidence of secondary considerations is attributable to the claimed [features], as opposed to . . . unclaimed features").

The Court "review[s] de novo the Board's ultimate claim constructions and any supporting determinations based on intrinsic evidence." *Personalized Media Commc'ns, LLC v. Apple Inc.*, 952 F.3d 1336, 1339 (Fed. Cir. 2020).

II. THE CLAIM CONSTRUCTIONS SHOULD BE AFFIRMED

The Board's decisions on claim construction should be sustained. Specifically, the Board did not err in its construction of "wearable" and "said local audio . . . combined with said remote audio data." Appx6-14.

The Board properly applied the broadest reasonable interpretation standard. Appx6-7 (citing 37 C.F.R. § 42.100(b)). Under this standard, the claim terms are given their ordinary meaning, as would have been understood by one of ordinary skill in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13, 1315 (Fed. Cir. 2005) (en banc)).

A. Wearable

The limitation "wearable" appears in claim 7 of the '902 patent and claim 1 of the '814 patent. Appx194-195, 24:51-25:10 ("local audio device wearable by a creator"); Appx223, 23:18-41. By the time of Final Written Decisions, Zaxcom was proposing that "wearable" mean "small, lightweight, unobtrusive, easily hidden, not visible, and designed to be worn on the body of a creator of audio (i.e., performer)." Appx10-11 (citations omitted).

Nothing in the specification supports such a narrow and limitation-laden construction, however, and the Board interpreted the term simply as "suitable and in a condition to be worn." Appx11 (quoting dictionary at Appx4537). Tellingly, it was *Zaxcom* that first raised the dictionary definition adopted. Appx10 (citing Appx493). There is no reason to stray from it, as the Board held: "This definition is consistent with the plain meaning of 'wearable,' and we find no credible evidence on the record that requires a narrower definition." Appx11-12.

The Board is correct—nothing narrows this plain meaning where the specification states only that the devices may be "worn." Appx183, 1:51-53; Appx186, 8:65-67; Appx187, 10:7-11. Zaxcom is not entitled to such an idiosyncratic definition of "wearable," beyond anything clearly defined in the specification. *See Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1329 (Fed. Cir. 2009) ("[W]e will adopt a definition that is different from the ordinary meaning when the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in . . . the specification.") (quotation omitted).

Zaxcom attempted to confound the clear "suitable and in a condition to be worn" articulation it initially proposed by seeking to include additional adjectives from a deposition exchange. Appx10-12; Zaxcom Br. 11-12, 29-30. The Lectrosonics expert agreed only that the original dictionary definition sufficed, however, and never testified that "wearable" requires all of Zaxcom's additional restrictions. The Board, assessing the witness statements, did not support Zaxcom's characterization of the testimony. Appx12 (finding that Mr. Tinsman did not agree with Patent Owner's narrowed definition).

The unwieldy proposal that Zaxcom advanced for such a simple term was properly rejected in favor of the broader dictionary definition agreed on by all at first—"suitable and in a condition to be worn." Appx10-11. This reasonable interpretation should be affirmed. Appx10-12.

Zaxcom complains that "[t]he Board acknowledged that Zaxcom pointed to [the parent application] prosecution history (Appx11) but fell strangely silent when its Decision did not address it at all." Zaxcom Br. 12-13. There was nothing "strange" about the Board's handling of this argument for three reasons:

First, the fact that the Board signaled the existence of the prosecution-based argument, then concluded several lines later that "no credible evidence on the record . . . requires a narrower definition" (Appx11), indicates it was likely considered, just deemed unpersuasive.

Second, the Board's opinion noted that this argument originated in Zaxcom's surreply (Appx11)—it was thus untimely presented in a paper to which there could be no response.

Third, the best Zaxcom can do is suggest that the "prior art rejection based on a portable device that was *arguably* 'suitable and in a condition to be worn' . . . was overcome via Zaxcom's amendment of the claims to include the term 'wearable.'" Zaxcom Br. 29. "[A]rguably" is not enough. Even assuming one reads the record as Zaxcom wants, an off-hand comment by an Examiner is not a formal applicant "disclaimer" and not evidence to overrule the plain meaning recognized by the Board. Appx10-11; *Avid Tech., Inc. v. Harmonic, Inc.*, 812 F.3d 1040, 1045 (Fed. Cir. 2016) ("Where the alleged disavowal is ambiguous, or even amenable to multiple reasonable interpretations, we have declined to find prosecution

disclaimer." (quotation omitted)). The fact that Zaxcom never advocated for a clear disclaimer demonstrates the weakness of this position. *Trivascular Inc. v. Samuels*, 812 F.3d 1056, 1063-64 (Fed. Cir. 2016) ("The party seeking to invoke prosecution history disclaimer bears the burden of proving the existence of a 'clear and unmistakable' disclaimer . . . ."). The Board was correct to reject such strained interpretations of the record as not credible. Appx11-12.

In any event, Zaxcom should be estopped from challenging the "wearable" construction now. Zaxcom did not appeal the Board's identical interpretation decision back in May 2020, when it filed its brief in the related matter. *Zaxcom, Inc. v. Lectrosonics*, Nos. 2020-1350, -1405, Dkt. 26 (Brief of Appellant, Zaxcom, Inc.) (Fed. Cir. May 26, 2020) (listing IPR2018-01129 and IPR2018-01130 as related cases to IPR2018-00972, yet not appealing the "wearable" interpretation). Despite forfeiting review of the same "wearable" construction—the Board's opinion in the related case is the same in all relevant respects as the decisions here—Zaxcom raises the issue in this appeal (Zaxcom Br. 10-14, 29-30). *Compare, e.g.*, *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-00972, Paper 41 ("Final Written Decision") at 10-12 (PTAB Nov. 7, 2019) *with* Appx10-12. The statute ordains that estoppel attach as of the Final Written Decision. 35 U.S.C. § 315(e); *Shaw Indus. Grp. v Automated Creel Sys.*, 817 F.3d 1293, 1299-1300 (Fed. Cir. 2016). Having made the litigation decision to not timely appeal the "wearable" in the

related case last year, Zaxcom should not get to do so more than six months later. 35 U.S.C. §§ 141(c), 142 (establishing time to appeal). It is settled. Moreover, the presumption that like terms across a family of patents carry the same meaning, *Omega Eng'g Inc., v. Raytek Corp.*, 334 F.3d 1314, 1333 (Fed. Cir. 2003), concomitantly suggests there should not emerge a different construction by the backdoor. Even if the Court chooses to consider it, the Board's ordinary meaning of "wearable" as "suitable and in a condition to be worn," is the broadest reasonable interpretation—a dictionary definition Zaxcom proposed and with which Lectrosonics agreed. *See supra* § D.

B. Local Audio Data . . . Is Combined

Regarding "the 'combining' limitation" in claim 12 of the '902 patent, i.e., "local audio data . . . is combined with said remotely recorded audio data," the Board noted the evolution of Zaxcom's proposed claim construction:

> Patent Owner now asserts a different construction of this limitation, requiring
>
> > that (i) local audio generated by a performer is stored in a wearable local audio device as local audio data, (ii) *the same* local audio is transmitted to a remote recorder or receiver, (iii) *the same local audio* is remotely recorded at the recorder or receiver as remotely recorded audio data, and (iv) that the local audio data is combined with the remotely recorded audio data.

Appx8 (quoting Appx491).

Zaxcom's interpretation was rejected. Appx10. In proposing such a complex construction for the "combined" element, Zaxcom improperly attempts to rewrite and eliminate the Multitrack Embodiment from the scope of the claim. *See supra* §§ B., F. The Board was not led into error: "[W]e construe the 'combining' limitation to encompass the disclosed multitrack embodiment in the '902 patent specification, where separate audio tracks are combined to form a multitrack audio file." *Id*. The Board properly rejected the "same source" construction for the reasons below.

1. The original claims do not specify dropout repair only, as the Board correctly determined.

Zaxcom's brief admits, as it must, that "the Board is correct that the '902 Patent Specification teaches a Dropout Embodiment and a Multitrack Embodiment," Zaxcom Br. 31. But it fails to recognize that no language in claim 12 of the '902 patent delimits it to dropout repair alone. The drafters of the original claims did not include any express limitations to prohibit Zaxcom's claim language from encompassing disclosed multitrack embodiment applications also.

The Board determined, therefore, that claim 12's "'is combined with said remote audio data' does not require that the local and remote audio data originate from the same source." Appx10. Zaxcom's expert, Mr. DeFilippis, could not point to anything to alter this understanding, and the Board relied expressly on his

admission in the related '972 proceedings that the "combining" limitation need not exclude the Multitrack Embodiment. Appx9.

Absent any limiting language in the claim, the "combined" element was deemed broad enough by the Board to cover *both* disclosed embodiments. Appx9-10. The Board concluded that

> we are not persuaded that the recited "combined" limitation is limited to that embodiment, but rather also encompasses the multi-track embodiment . . . .
>
> [T]he '902 patent specification contemplates a broader definition—one that includes the combination of local audio data and remotely recorded audio data to create a multi-track audio file.

Appx9-10 (citing Appx184, 4:23-25; Appx185, 5:18-19; Appx190, 16:51-55; Appx192, 19:13-15). The Board refused under the broadest reasonable interpretation to restrict the scope to a dropout embodiment exclusively. *Id*. Because the express claim language predominates in the analysis, and since nothing in the specification indicated otherwise, the Board did not err in this construction. Appx7-10; *see supra* §§ B., F.

2. On appeal, Zaxcom improperly attempts to limit the claims to a single embodiment.

On appeal, Zaxcom seeks a construction that would improperly import a limitation into the claim based on a single embodiment. Zaxcom Br. 2 ("The Board erroneously construed that claim to cover two embodiments (*i.e.*, a Dropout

Embodiment and a Multitrack Embodiment), when in fact the claim covers solely a Dropout Embodiment."). Zaxcom concedes that multiple embodiments are included in the specification, however, admitting "the Board is correct that the '902 Patent Specification teaches a Dropout Embodiment and a Multitrack Embodiment . . . ." Zaxcom Br. 31; *see also supra* §§ B., F.

Zaxcom fails to recognize that "a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment." *Resonate Inc. v. Alteon Websys., Inc.*, 338 F.3d 1360, 1364-65 (Fed. Cir. 2003). Here, at least two nonlimiting embodiments are described. Zaxcom Br. 31. Indeed, "even where a patent describes only a single embodiment, claims will not be 'read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope,'" *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) (citation omitted).

No such "clear intention" is present. *Id*. Zaxcom's suggestion that "nothing in the intrinsic evidence (or otherwise) signaled the inventors' intention that these claims cover both [embodiments]" gets it backwards (Zaxcom Br. 31)—the onus was on the drafter to be "clear" in the claim language if a specific disclosed embodiment is to be excluded. *Innova/Pure*, 381 F.3d at 1117.

Zaxcom's strategy now relies on recasting each specification use of the word "combine" as somehow depicting dropout repair by another name. Zaxcom Br. 33 ("all specification references to the combination . . . are in fact references to the repair of a remote multitrack file, i.e., a Dropout Embodiment"). These arguments are ineffectual given the concession that "the '902 Patent Specification teaches a Dropout Embodiment and a Multitrack Embodiment" (Zaxcom Br. 31), and Zaxcom's further admission that "combine" can refer to multi-track and dropout repair (*id.*).[6] Nothing in this specification's language requires limiting all claims to dropout repair alone. Appx9-10.

The Board held: "[W]e construe the 'combining' limitation to encompass the disclosed multitrack embodiment in the '902 patent specification, where separate audio tracks are combined to form a multitrack audio file." Appx10 (citing Appx184, 4:23-25; Appx185, 5:18-19; Appx190, 16:51-55; Appx192, 19:13-15). This was correct and Zaxcom's arguments do not meet the standard necessary to read out an embodiment entirely. *Innova/Pure*, 381 F.3d at 1117. In *Sprint Spectrum L.P. v. Gen. Access Sols., Ltd.*, 812 F. App'x 999, 1004 (Fed. Cir. 2020),

[6] Even the first of these citations confirms the Board was correct in its nonlimiting interpretation of "combine" based on admitted embodiments in the specification. Appx9-10; Zaxcom Br. 35-36. Without qualification of tracks being from any particular device, the passage explains that "multiple individually recorded audio tracks to be combined into one or more multi-track audio files electronically post-recording." Appx184, 4:23-25.

for example, this Court reversed a final written decision for improperly construing claims in the manner Zaxcom now proposes. The Board interpreted the disputed term to be limited to just one of the embodiments. *Id*. at 1003-04 (citation omitted). The Court held that the Board's construction was not the broadest reasonable interpretation and rejected the unwarranted narrowing:

> As we have explained, the scope of an invention may only be properly limited to the preferred embodiment "if the patentee uses words that manifest a clear intention to restrict the scope of the claims to that embodiment."

Id. (quoting *Info-Hold, Inc. v. Applied Media Techs. Corp.*, 783 F.3d 1262, 1267 (Fed. Cir. 2015)). "The Board identified no manifestation of a clear intention to restrict the scope of the claims to the embodiment illustrated by Figure 14," according to the Court. *Id*. at 1004; *id*. at 1005 ("[W]here claims can reasonably [be] interpreted to include a specific embodiment, it is incorrect to construe the claims to exclude that embodiment, absent probative evidence on the contrary." (alterations in original)).

The case Zaxcom raises is *Pacing Technologies*, stating that "[when] the patent describes multiple embodiments, every claim does not need to cover every embodiment." Zaxcom Br. 39 (quoting *Pacing Techs., LLC v. Garmin Int'l, Inc.*, 778 F.3d 1021, 1026 (Fed. Cir. 2015)). This is not controversial. Far from supporting Zaxcom, however, *Pacing Technologies* shows that the Board here

correctly applied the teaching that a "clear and unmistakable" disavowal is required to exclude embodiments from a claim's scope. 778 F.3d at 1026.

3. The claims do not require that audio be from the same source.

According to Zaxcom, "[t]he Board also erred in the construction . . . in wrongly holding that this limitation 'does not require that the local and remote audio data originate from the same source . . . .'" Zaxcom Br. 37 (quoting Appx10). Zaxcom seeks rather a "same source construction" (Zaxcom Br. 38)—i.e., that multiple recording units is not a correct interpretation because the same device must store and transmit the same local audio data. Zaxcom Br. 2, 26, 31, 37-38; *see also supra* §§ B., F.

The Board held again that this was too narrow given the express language of the claims. Appx10 (claim "does not require that the local and remote audio data originate from the same source"). The claims do not recite what device transmits the audio from what source. Zaxcom's trouble stems from failing to distinguish between "local audio" and "local audio data." Zaxcom Br. 38-41. The claims recite transmitting the former, not the latter. Zaxcom maintains that the claims require "the *same audio data* to be (i) received and stored locally, (ii) transmitted and stored remotely, and (iii) then combined" but this fails to distinguish between "audio" and "audio data." Appx502 (quoting Appx4548-4549, ¶ 23).

The claimed "audio" is (1) audio from "at least one performer during an audio event"; (2) recorded by a local audio device (e.g., "locally recording said local audio as local audio data"); (3) transmitted by some undefined device (e.g., "wirelessly transmitting said local audio") and (4) recorded by remote device (e.g., "remotely recording said transmitted local audio . . . as remote audio data"). *See* Appx195, 25:66-26:17. Thus, "local audio" is from a creator or performer, received by a local device, transmitted by the same or another device, and recorded by a device that receives the transmission. Appx9-10. This "audio" becomes "audio data" once it is recorded. Appx195, 25:66-26:17.

This distinction between "audio" (from a performer) and "audio data" (as recorded) means that Zaxcom is incorrect that the claims require "the same audio data" to be received and stored locally and transmitted and stored remotely. Zaxcom Br. 6, 37-39. While "local audio" may be transmitted as "local audio data," the claims do not require it. Appx195, 26:33-53.

The Board was therefore correct to reject Zaxcom's "same audio" interpretation, and its broadest reasonable interpretation of "said local audio data . . . is combined with said remote audio data" should be affirmed.

III. THE BOARD'S UNPATENABILITY DETERMINATIONS OF THE ORIGINAL CLAIMS SHOULD BE AFFIRMED

Zaxcom argues that if it gets its chosen claim constructions, the Board's assessment of the prior art would have changed the unpatentability result of its

original claims. Zaxcom Br. 39-40 ("Under the properly construed claims, nothing in the attempted combination of prior art shows either a 'wearable' local audio device, a 'master timecode generator' controlling a local timecode generator inside an audio device, or 'combining' of local and remote audio data."). Not so. The Board's findings are all supported by substantial evidence.

A. As the Board Held, Strub Alone and in Combination Discloses a "*Local Audio Device Wearable by a Creator*"

Strub discloses "at least one local audio device *wearable* by a creator." Zaxcom argues that "[t]he Board did not attempt to show how these [Strub] components could be arranged to be easily hidden." Zaxcom Br. 41-42. That is because "hidden" is not claimed and "[Zaxcom's] argument is based on a claim construction we do not agree with and do not apply." Appx25. Zaxcom's rejected proposal for "wearable" was cumbersome and overly narrow (*see supra* §§ D., III.A.).

Strub describes "a small, lightweight, wearable recording unit" (Appx1312, 4:29-31)), as the Board held. Appx25 ("We further agree with Petitioner that Strub's device is 'wearable.' Strub describes its device as a 'small, lightweight, wearable' unit." (citation omitted)). There is ample evidence to draw from for this determination, as Strub repeatedly emphasizes the device's comfort and wearability, including illustrations of the device worn by people in Zaxcom's brief. *See* Appx1299, Abstract; Appx1317-1318, 14:59-15:11; Appx1318-1319, 16:66-

17:24; Appx1329-1330, 38:65-39:11; Appx1343, 66:26-51; Appx1344, 67:54-68:10; Appx1346, 72:9-19; Appx1301, Fig. 1; Appx1307-1309, Figs. 8A-8C; Appx1310, Figs. 9A, 9B; Zaxcom Br. 40-42.

Zaxcom still clings to "wearability . . . can't interfere with the movement of a person," Zaxcom Br. 41 (quoting Appx4432, 47:1-8). But movement too is unclaimed. Even if it were, Zaxcom's expert could not draw a concrete line between wearable and not wearable, admitting it is subjective. *See* Appx1888-1894, 133:6-139:12. That said, there is substantial evidence that Strub's unit is also intended and designed to be worn by performers that move. Appx1314, 8:20-29 (worn by "participants in the event"); Appx1323, 25:45-46 (worn while performing with "voice or musical instruments"); Appx1344, 67:59-64 (worn "while engaging in an athletic activity" and in events that "particularly demand that the recording unit allow the recorder freedom of movement").

Zaxcom quotes its expert Mr. DeFilippis stating that Strub requires "a computer" that could "never fit into a backpack" (Zaxcom Br. 42 (quoting Appx4565-4566, ¶ 52)), but this bare assertion contradicts what Strub discloses on its face—a "small, lightweight, wearable recording unit" (Appx1312, 4:29-31) that may be "positioned within a backpack that is worn by the recorder" (Appx1318, 16:49-57); Appx1304, Fig. 6; Appx1307, Fig. 8A.

If these "wearable" arguments had any merit, they would not have been left on the cutting-room floor by Zaxcom six months ago in the related appeal. They should be rejected now.

B. As the Board Held, Strub Alone and in Combination with Woo Discloses the "*Master Timecode Generator*"

The combined teachings of Strub and Woo also render a master timecode generator obvious[7], as the Board found with substantial evidence. *See* Appx27-31. Zaxcom presents only a piecemeal attack on Woo alone rather than addressing the actual combination considered and adopted by the Board. Zaxcom Br. 42-45; *see supra* § D.

The gist of Zaxcom's argument is that Woo cannot disclose the claimed master timecode generator because Woo does not disclose the claimed local timecode generator internal to the local audio device. Zaxcom Br. 42-45. But, in the *combination* of Strub and Woo at issue, Strub discloses "at least one local timecode generator for generating a plurality of local timecodes" as recited in claim 1 of the '814 patent and claim 7 of the '902 patent. Appx105; Appx22. Zaxcom has not appealed that finding. Nor has Zaxcom appealed the Board's lengthy explanation of how and why Woo and Strub would have been obvious to combine. Appx27-31; Appx78-80; *see supra* § D. For example, the Board

[7] Claim 12 of the '902 patent does not recite a master timecode generator.

expressly credited Woo as describing the process of jam synchronization as allowing "a time code generator to follow the time code off another source." Appx111 (citing Appx1554, 3:38-46)). And the Board discussed a combination where Woo's "master clock" provides timecodes to control the local timecode generator of Strub. Appx18-19; Appx29-30. Zaxcom offers no reason on appeal why those conclusions were wrong.

In fact, Zaxcom's "control" arguments completely ignore that its own dependent claim, claim 37 of the '814 patent, expressly limits any control by the master timecode generator to the jam synchronization processes described by the Board. Appx225, 27:53-59.

Accordingly, Zaxcom's master timecode generator arguments should be rejected.

IV. THE BOARD CORRECTLY DETERMINED THAT ZAXCOM'S ORIGINAL CLAIMS LACKED A NEXUS TO THE SECONDARY CONSIDERATIONS PROFFERED

Zaxcom's arguments regarding the Board's purported error in the application of industry praise law (Zaxcom Br. 49-60 (i.e., §§ D, E)) is only relevant, of course, to the obviousness determination of the original claim 1 of the '902 patent and claim 7 of the '814 patent—both drawn to systems. (The independent method claim 12 of the '902 patent was deemed anticipated such that secondary considerations are irrelevant.)

A. There Was Substantial Evidence Supporting the Board's Finding that the Original Claims Do Not Benefit from Secondary Considerations

In the context of these systems, the Board properly assessed the purported industry praise adduced—the declarations of Mr. Sarokin and Mr. Wexler, various manuals, and both movie awards—but

> determine[d] that Patent Owner has not demonstrated a nexus exists between the evidence presented and the merits of the claimed invention because the evidence is directed to features that are not required by the claims. We determine that the evidence submitted by Patent Owner primarily is directed towards the feature of fixing dropouts. *However, the feature of repairing dropouts by replacing data is not required by claims 7, 8, and 11 [of the '902 patent], which instead are directed to locally recording and timestamping audio data*.

Appx34 (citing *Kao*, 639 F.3d at 1068–69); *see also supra* § E.

On appeal, Zaxcom does not contend that the system claims require dropout repair, nor could it. Instead, it has just two paragraphs attempting to rebut the merits of Board's decision on these original claims:

In its first paragraph, Zaxcom suggests without case law citation that since these system claims have elements that act *in support of* dropout repair, that suffices for nexus even if the praised feature is itself not claimed. Zaxcom Br. 53 ("The systems . . . include the necessary elements . . . needed to use the product to repair dropout."). So it effectively seeks an "auxiliary" or "helper" nexus: "That is," according to Zaxcom, because "fixing dropouts undisputedly results from the

systems of these claims, and it is unnecessary to claim the result / merits of the system when drafting system claims." *Id*. Zaxcom relies on no case for this proposition that would dramatically expand the nexus doctrine, permitting claims that do not actually contain the praised feature to secure nexus by proxy. But such attenuated grounds would no longer be a "nexus" probative of nonobviousness at all. Additionally, this theory was never raised before the Board as it should have been. *Singleton v. Wulff*, 428 U.S. 106, 120 (1976) ("a federal appellate court does not consider an issue not passed upon below"). It should be rejected here.

In its second paragraph, Zaxcom argues that "The Board's inexplicable inability to perceive material facts in the record alone merits reversal." Zaxcom Br. 53. Zaxcom misunderstands the law. The Board had substantial evidence for its determination of no nexus on the original claims, so this is not grounds for "reversal." *Deere & Co. v. Gramm*, 2020-1488, 2021 U.S. App. LEXIS 3153, * 6 (Fed. Cir. Feb. 4, 2021) ("A finding is supported by substantial evidence if a reasonable mind might accept the evidence as adequate to support the finding. If two inconsistent conclusions may reasonably be drawn from the evidence in record, the PTAB's decision to favor one conclusion over the other is the epitome of a decision that must be sustained upon review for substantial evidence.") (citations omitted). Simply citing a span of one's own briefing without explanation as to why the Board ostensibly erred—and ignoring the contrary, substantial

evidence relied on—does not suffice. Zaxcom Br. 53. The Board's determination that "[t]he evidence shows that the Emmy and Technical Achievement Award were awarded for, among other things, the critical feature of eliminating dropouts" is sound. Appx 34-35; *see supra* §§ E.-J.

Zaxcom also asserts that the praised product was a "digital wireless transmitter with internal recording" and that Zaxcom's "second generation" and later products" embody the system patent claims. Zaxcom Br. 54-55. This statement does not tie the system claims to the specific industry praise, however, and only confirms that secondary considerations cannot salvage the original (*or* amended) claims for two separate and undisputed reasons: (1) it confirms that the elements of the claims pertaining to what was praised were entirely within the scope of the prior art, i.e. Strub; and (2) it confirms that two purportedly key components of the praised product—(a) the wireless transmission being "digital" and (b) the recording being "internal" to the transmitter—are both unclaimed by Zaxcom.

Accordingly, the Board had substantial evidence to decline finding that Zaxcom carried its burden of showing a nexus between the awards and the *claimed* system inventions. *See supra* §§ E.-J. Thus, secondary considerations of praise cannot overcome the proposed grounds and the unpatentability determination of the original claims should be affirmed.

B. Zaxcom and Amici Incorrectly Reject *Fox Factory*'s Coextensiveness Requirement to Obtain a Presumption of Nexus

Zaxcom next challenges the relevant legal standards in *Fox*, arguing that it should have benefitted from presumption of nexus. (Zaxcom Br. 49-52, 55-60). This is incorrect.

It is black-letter law that to obtain an inference that nexus exists for objective evidence of nonobviousness—i.e., "a presumption of nexus"—the product, method, or system must (1) embody the claims, and (2) be coextensive with the claims. *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1129-30 (Fed. Cir. 2000) ("[I]f the marketed product *embodies the claimed features*, *and is coextensive with them*, then a nexus is presumed . . . ."). Thus, only in circumstances where the claimed invention is "coextensive" with the product is a *presumption* of nexus available.

Relying on *Fox*, the Board here "found a 'presumption of nexus' inappropriate because 'Patent Owner does not provide an analysis demonstrating that its products are coextensive (or nearly coextensive) with the challenged claims.'" Appx33.

Indeed, Zaxcom never mentioned "presumption of nexus" in filings before the Board. *See* Appx473-552 (Patent Owner Response); Appx429-472 (Patent Owner MTA). Lacking any suggestion below that Zaxcom qualifies for

presumptive nexus, the issue is waived.[8] By its own account, Zaxcom did not even know about the requirement for presumed nexus until after *Fox*, but by then it was too late. *See* Zaxcom Br. 49-50 & n.1 ("there would be no reason for Patent Owner to argue coextensiveness pursuant to the not yet issued *Fox Factory* decision").

On appeal, Zaxcom maintains nevertheless that it was "certainly entitled" to a presumption of nexus because *Fox* was decided incorrectly. Zaxcom Br. 57-60; *id*. at 50 n.1. According to Zaxcom:

> *Fox Factory* was a mere panel decision. . . . The *Fox Factory* decision does not show awareness of th[e *Apple, Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016)] *en banc* standard (nor even cite to *Apple* or to *WBIP*, except in one unrelated reference), and thus *Fox Factory's* relevance to this case is extremely limited.

Zaxcom Br. 57. Despite Zaxcom's assertion, the *Fox* decision did not fail to cite *Apple* or *WBIP* because it lacked "awareness" of the Court's own jurisprudence, but rather because these cases were inapposite to its disposition.

Fox correctly restated existing law on nexus—that debate is over and rehearing *en banc* was denied without dissent, as was the *certiorari* petition before

[8] It is curious that Zaxcom has now mustered *amicus* support for a point that it failed to argue below. Availability of a presumption of nexus is simply not at issue here on account of that clear waiver. Appx82-83 ("[W]e are not persuaded by Patent Owner that we misapprehended or overlooked these arguments because they were not before us . . . . [W]e find no arguments or evidence cited in Patent Owner's Response or Sur-reply directed to a presumption of nexus or demonstrating that its products are coextensive . . . .").

the Supreme Court.[9] Even since filing its opening brief here, however, Zaxcom has doubled-down on this issue. *Zaxcom, Inc. v. Lectrosonics, Inc.*, Nos. 2020-1350, -1405, Dkt. 40 (Zaxcom's Resp.) at 19-20 (Fed. Cir. Dec. 23, 2020). According to Zaxcom's recent adoption of amicus arguments,

> *Fox Factory* strays from thirty years of secondary considerations precedent and violates stare decisis in that "one panel decision—such as *Fox Factory*—cannot overrule, disregard, or conflict with this Court's prior en-banc or panel decisions."

Id. (citation omitted).

Zaxcom's latest brief suggests that *Apple* and *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317 (Fed. Cir. 2016), taught that mere embodiment leads to a "presumption" even without a coextensiveness showing:

> "Evidence that the industry praised [1] *a claimed invention or* [2] *a product that embodies the patent claims* weighs against an assertion that the same claimed invention would have been obvious." *Apple*, 839 F.3d at 1053 (*en banc*); *see also WBIP*, 829 F.3d 1329 (explicitly stating that this situation leads to the "presumption" of nexus) . . . .

Id. at 19 (annotations original). But *Apple* had nothing to do with *presumption* of nexus, discussing only showing nexus in the typical fashion. 839 F.3d at 1053. And

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[9] Amicus filer, the Honorable Judge Michel, submitted a similar paper to the Court at large in the *Fox* proceedings (*see* Brief of Amicus Curiae Paul R. Michel U.S. Circuit Judge (Ret.), in Support of Rehearing En Banc, *Fox Factory* 944 F.3d 1366 (No. 18-2024)), so the primary positions presented have already been considered and did not alter unanimous the result denying review *en banc*. *See* Order on Petition for Rehearing En Banc, *Fox Factory*, 944 F.3d 1366 (No. 18-2024), ECF No. 80 (*per curiam*).

WBIP expressly recognized the "coextensiveness" requirement going back decades: "[T]here is a presumption of nexus for objective considerations when . . . that product '*is the invention disclosed and claimed in the patent*.'" 829 F.3d at 1329 (quoting *J.T. Eaton & Co. v. Atl. Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997)). The requirement of coextensiveness for presumptive nexus was thus in effect well before *WBIP*, as it recognized. *Id*. The arguments regarding *Apple* and *WBIP* should be disregarded in this context. Zaxcom Br. 50-52.

An additional "coextensiveness" hurdle for securing a presumption of nexus makes perfect sense in this context: When the commercial product embodies *and* is coextensive with the claimed features, there is little risk that industry praise is attributable to *unclaimed* features—instead, every feature of the praised product is *necessarily claimed*. *See Fox*, 944 F.3d at 1374 ("[T]he purpose of the coextensiveness requirement is to ensure that nexus is only presumed when the product tied to the evidence of secondary considerations '*is* the invention disclosed and claimed.'" (citation omitted)).[10] The Board found that Zaxcom could not

[10] Other recent decisions also refute the Zaxcom and *amici* assertions that *Demaco* allows a presumption of nexus where the patented invention is only a small component of the product tied to the objective evidence. *See Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1332-33 (Fed. Cir. 2019) (granting presumption of nexus context because of coextensive embodiment of the claims in the product praised in industry) (citing *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1072 (Fed. Cir. 2018) ("product 'embodies the claimed features, *and is coextensive with them*'")).

qualify for the powerful presumption that would shift the burden because it had not undertaken a coextensiveness analysis whatsoever. Appx33. This determination should be upheld.

When coextensiveness cannot be shown, as here, patentee must show *prima facie* nexus in the ordinary course. *Demaco*, 851 F.2d at 1392. In *Demaco*—relied on expressly by *Fox*—the Court stated:

> When the thing that is commercially successful is not coextensive with the patented invention—for example, *if the patented invention is only a component of a commercially successful machine or process*—the patentee must show prima facie a legally sufficient relationship between that which is patented and that which is sold.

Id. And, in fact, the product involved in *Demaco was* the patented invention. 851 F.2d at 1394 ("undisputed that it was the patented paving stone that was the thing sold in commerce")). Here, to the contrary, there are many significant unclaimed features in Zaxcom's commercial product, defeating coextensiveness. *See supra* §§ G.-I.

V. THE BOARD ERRED IN GRANTING THE AMENDMENTS

The Motion to Amend should have been denied for several reasons:

First, the contingent Motion to Amend only seeks to distinguish the prior art by adding a feature—*replacing* data to repair a dropout—but that was admittedly conventional by the time the application was filed. The change to the substitute

claims would still have been rendered obvious based on express motivations to combine in the prior art, resulting in a strong case of obviousness not easily influenced by secondary considerations. *See infra* §§ VI.A.1.-2.

Second, as patentee, Zaxcom failed in its burden to show *prima facie* nexus. *Fox Factory*, 944 F.3d at 1378. Further, the Board abused its discretion in making nexus arguments for Zaxcom, overstepping after *Nike Inc. v. Adidas AG*, 955 F.3d 45, 51 (Fed. Cir. 2020). *See infra* §§ VI.B.1.-3.a.

Third, the Board committed error by failing to recognize that any objective evidence of nonobviousness must be both *claimed* and *novel* to establish nexus. *See infra* §§ VI.3.b.-c.

A. The Strub-Wood Combination Was Strong Because "Replacing" Was Conventional Before 2005

The amendments added "replacing" a dropout with a replacement, but this was no more than the predictable use of prior art elements according to established functions.[11] This conventionality is confirmed in two ways.

One, by the undisputed teachings of the prior art references. The primary reference, Strub, discloses a device that records an audio/visual signal locally and

[11] Zaxcom also amends this limitation to add the word "wearable," which it construes too narrowly. As explained, the Board's construction was correct; but even under Zaxcom's construction, Strub discloses this added limitation by describing "a small, lightweight, wearable recording unit" (Appx1312, 4:29-31) and repeatedly emphasizing the device's comfort and wearability, including illustrations of people wearing the device. *See supra* § D.

transmits it to remote recording units using a conventional TV broadcast signal. *See supra* §§ E.-G., J.; Appx244-245; Appx1316, 12:13-21, 12:31-39. Wood is combined with Strub only to perform its established function: the detection and repair of dropouts in a conventional TV broadcast signal. *Id*. In combination, these references form a strong case of obviousness. *See infra* §§ F., J., VI.A.1.

Two, Zaxcom's own witnesses confirmed that replacing a dropout with a backup was conventional, as long as you had a backup. *See supra* §§ F., G., J. It is not disputed that before the date of invention, a person of skill in the art would have known how to fix a dropout by replacing the lost portion of the audio with a backup copy. *See infra* § VI.A.2.

1. Strub and Wood Created a Strong Case of Obviousness

Supreme Court precedent teaches that especially strong obviousness cases ought to be less influenced by secondary considerations, notwithstanding that such evidence must always be considered before reaching a determination. *See Dow Chem. v. Halliburton Oil Well Cementing*, 324 U.S. 320, 330 (1945); *Jungersen v. Ostby & Barton Co.*, 335 U.S. 560, 566-67 (1949); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406-07 (2007) (*Graham* factors "continue to define the inquiry that controls"); *Merck Sharp & Dohme Corp. v. Hospira, Inc.*, 874 F.3d 724, 731 (Fed. Cir. 2017); *Ohio Willow Wood Co. v. Alps S., LLC*, 735 F.3d 1333, 1344 (Fed. Cir. 2013).

The Court has instructed that secondary considerations may be beneficial mainly in weak cases of obviousness *where there may be a risk of hindsight*; but in a strong case, where the prior art itself provides an express path to the invention claimed to be obvious, there is less need to glean from other sources a contemporaneous understanding to guard against hindsight. *Jungersen*, 335 U.S. at 566-67.

Few obviousness cases are as strong as here, where a primary reference disclosing all elements of the purportedly praised device—Strub—is combined with a second reference for the last element reciting something that occurs outside of the purportedly praised device—Wood—which also expressly teaches the entire motivation to combine. Appx1419, 1:8-26 (Wood identifying the problem of dropouts in transmissions); Appx1419-1420, 1:31-2:13 (Wood disclosing sending a request when a dropout is detected so that the content can be re-sent to replace the previously received audio); Appx1419, 1:28-30 (Wood disclosing improved signal quality via dropout repair); Appx1421, 3:4-6 (Wood identifying within its four corners a motivation for a "program free of dropouts").

Labeling this combination "weak" ignores that the correct legal standard requires looking at the reasons to modify Strub *and not the '902/'814 patents*—an analytical error made by the Board. Appx60 ("Wood focuses on repairing dropouts in a received TV broadcast signal rather than during post-processing of a

recording, *as in the '902 patent*."); Appx136 (same). The Board's legal error served as the flawed basis for failing to recognize the Strub/Wood obviousness combination was uncommonly strong.

In sum, adding such a conventional feature as "replacing" to the substitute claim would not only have been obvious, it would have been expected. Strub recognized the problem of deficient recordings and Wood disclosed a beneficial solution.

2. Zaxcom's Witnesses Confirmed Conventionality of "Replacing"

"Replacing" as dropout repair, the limitation of the amendment, was well known for more than a decade. *See supra* §§ F., G., J.; Appx1492, ¶ 105; Appx1415.

Zaxcom's expert, Mr. DeFilippis, recognized during expert cross-examination that dropout repair was known before 2005. Appx1772-1776, 17:11-21:12. Mr. DeFilippis admitted that it was known at the time to fix a dropout by replacing the lost portion of the audio with a backup copy, if available. Appx1774, 19:2-21.

Zaxcom conceded early that Wood, published in 2004, itself discloses using "replacement portions" to repair corrupted signals. Appx341. The Board also clearly found that "Wood teaches a method for repairing dropouts." Appx59-60; *see also* Appx55 ("Transceiver 20 may request a replacement undamaged copy of

the lost video and audio segments upon the detection of a lost portion of data *in order to replace the lost data*."). Indeed, since at least 1996, it was known that "to minimize the effect of a data loss or dropout during transmission of the data . . . a technique for conveying audio and other data should replace frames of the data that are not received due to dropout." Appx2117, 1:43-47.

And in one of the most significant admissions of the case, Zaxcom's witness, Mr. Wexler, admits that hooking up a portable recorder to a wireless transmitter, i.e., making a local backup copy, had been done as early as 1975. Appx1991-1992, 26:9-27:23; Appx2020-2021. Mr. Wexler candidly recognized that 45 years ago it was known to both wirelessly transmit and locally record microphone audio using a mini recorder hooked up to the microphone and wireless transmitter. Appx1991-1992, 26:9-27:23 ("I was aware of the fact that there were people that had taken the SN recorder and used it in that manner."); *see also* Appx1988, 23:11-25.[12]

Lectrosonics raised this abundant testimony in the proceedings several times, but the Board's decision entirely omits discussion of it. Appx1-61; *see* Appx590-593; Appx618-621. It was prejudicial error to ignore such highly relevant evidence. *Pers. Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 991 (Fed.

[12] Moreover, Lectrosonics provided to the Board as an exhibit Mr. Wexler's own blog post as documentary evidence corroborating these positions. Appx1604-1605. This, too, was ignored.

Cir. 2017) (must "tak[e] into account evidence that both justifies and detracts from an agency's decision.'" (citation omitted)); *see* 5 U.S.C. § 706.

* * *

At bottom, it is difficult to imagine more favorable facts for finding a "strong" case of obviousness, and, conversely, a more arbitrary decision finding such a direct route only "weak." Appx59; Appx72. With the tight link between Wood and Strub, risk of hindsight is minimized because the prior art itself contains the rationale for the combination indisputably before the time of invention, as further demonstrated by the evidence. Respectfully, if the finding of a "weak" obviousness case is affirmed, the Court, should clarify the distinction the Supreme Court has discussed and further define the relative impact of the objective indicia. *Merck Sharp*, 874 F.3d at 731; *contra id.* (Newman, J., dissenting) ("It is time to remedy our inconsistent treatment of the procedures and burdens in applying the evidentiary factors of obviousness . . . .").

B. The Objective Indicia of Nonobviousness for the Amended Claims Should Not Have Been Given Weight

In related but different IPRs, the Board held that another patent elicited the same praise and long-felt need credited to the amended claims in this case. *See Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-00972, Paper 41 (PTAB Nov. 7, 2019) (on appeal at Nos. 2020-1305, -1450). That is to say, across *different* IPRs, Zaxcom has convinced the *same* factfinders that three *different* patents, claiming

different inventions directed to solving the *same* problem, were each independently responsible for the *same* praise and long-felt need of the *same* products. This result cannot be defended. The errors detailed below run through all these matters.[13]

1. Zaxcom Did Not Carry Its Burden to Demonstrate a Nexus Between "Replacing" and the Secondary Considerations

Use of secondary-considerations evidence in obviousness challenges is not among the bundle of rights that comes with a patent; thus, Zaxcom bore the burden for establishing nexus, "because the patentee affirmatively seeks to establish a proposition not relied on by the patent challenger . . . ." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1375-76 (Fed. Cir. 2016); *ZUP, LLC v. Nash Mfg., Inc.*, 896 F.3d 1365, 1373 (Fed. Cir. 2018).

Without the benefit of a presumption, Zaxcom was left to make a *prima facie* case for nexus.[14] *Polaris*, 882 F.3d at 1072 ("[I]f the patented invention is only a component . . . [then] patentee must show prima facie a legally sufficient

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[13] Zaxcom specifically identified certain patents on its self-promoting application for the EMMY, but none of the patents-at-issue in this appeal are listed. This further demonstrates just how far Zaxcom is stretching the alleged industry praise, seeking to have it cover dozens of dozens of original and amended claims from at least three different patents. Appx4384.

[14] This is different from the overall burden of persuasion to show obviousness under 35 U.S.C. § 103, which is petitioner's at all times. *Magnum*, 829 F.3d at 1376-77 ("[P]etitioner continues to bear the burden of proving unpatentability after institution . . . ."); *ZUP*, 896 F.3d at 1373-74 ("While this burden of persuasion remains with the challenger, a patentee bears the burden of production with respect to evidence of secondary considerations of nonobviousness.").

relationship between that which is patented and that which is sold."). In its Patent Owner's Response, however, Zaxcom mentions "nexus" only once with respect to the original claims, quoting a conclusory statement from Mr. DeFilippis. Appx540 (citing Appx4598-4600, ¶ 92). The Board ultimately found that Zaxcom failed to carry its burden on nexus for the original claims. *See supra* §§ E., V.A.

Zaxcom's Motion to Amend provided even less regarding an alleged nexus for the substitute "replacing" limitation, with just one sentence on industry praise and one sentence on long-felt need. Zaxcom declared as an afterthought on the last page of its Motion to Amend:

- "The invention received industry praise and recognition including an Emmy award and a Technical Achievement Award from the Academy of Motion Picture Arts and Sciences."
- "There was a long felt need for a wearable, wireless device that could reliably capture sound data from actors recording a movie or television show and the invention recited in the substitute claims satisfied this need with a wireless, wearable, transmitter/recorder device that could replace audio segments that were not transmitted or received properly."

Appx466.

The Final Written Decision openly recognized this lack: "Patent Owner does not provide any more analysis in its Motion to Amend." Appx62.

Rather than deny the motion, the Board instead explained that *it* would fashion a nexus argument *for* Zaxcom based on statements elsewhere in the record, taking from the "totality of the evidence." *See id.* Inasmuch as the Motion to

Amend was found to offer no serious roadmap for the direction of the argument (*see id.*), it was the Board choosing the path and cherry-picking its evidence along the way. As explained below, the Board erred legally and procedurally in making Zaxcom's nexus case for the "replacing" limitation and purported evidence of long-felt need and industry praise.

2. The Board Erred in Crediting Alleged Long-Felt Need

Proving a long-felt need requires:

> (1) that the need be long felt based on the date when the problem to be solved was identified and efforts made to solve the problem, *Tex. Instrum'ts Inc. v. USITC*, 988 F.2d 1165, 1178 (Fed. Cir. 1993);
>
> (2) that the need be "unresolved," *Apple*, 839 F.3d at 1056; and
>
> (3) that the claimed features—not unclaimed features in the specification—actually fill the need, *Sjolund v. Musland*, 847 F.2d 1573, 1582 (Fed. Cir. 1988).

The Board correctly recognized that some of these elements remained unestablished by Zaxcom. Appx67.

For example, the Board found little evidence of "the date when the problem to be solved was identified and efforts were made to solve the problem." *See id.* (citation omitted). The Board held that "Although Mr. Sarokin generally asserts that there was a long-felt need as of 2005, Patent Owner's lack of further evidence regarding a specific date of the identified problem and efforts to solve the problem does not provide additional weight in favor of Patent Owner." *Id.* This failure of

evidence alone should have doomed the argument. *Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1332-33 (Fed. Cir. 2009) (finding evidence insufficient because patent owner "provided no evidence to explain how long this need was felt, or when the problem first arose"); *cf. Apple Inc. v. Samsung Elecs. Co.*, 816 F.3d 788, 804-05 (Fed. Cir.) ("[T]o demonstrate long felt need, the patentee must point to . . . [']evidence of efforts to solve that problem' which were, before the invention, unsuccessful." (citation omitted)), *vacated in part on reh'g en banc*, 839 F.3d 1034 (Fed. Cir. 2016).

The Board also failed to consider whether the problem was actually "unresolved." The identified problem was a need for a "wireless, wearable, transmitting and recording device that could reliably capture sound data from actors recording a movie or television show." Ignoring the problem Zaxcom actually identified, the Board focused on irrelevant testimony to "credit the testimony of Mr. Wexler in explaining how the 'replacing' limitation solved the long-felt need of repairing dropouts . . . ." Appx67 (citing Appx4283-4284, ¶ 6). That paragraph, however, concludes that is done by the transmitter and contains no mention of the "replacing" limitation. Accordingly, the need for such a device cannot have been "unresolved," and these findings are not supported by substantial evidence.

With necessary elements clearly missing (*e.g.*, Appx67 ("lack of further evidence regarding a specific date of the identified problem")), long-felt need was not established and deficient as a matter of law. The Board should not have credited Zaxcom's argument whatsoever. Appx68 ("We determine that the evidence of long-felt need weighs in favor of nonobviousness."). This holding was prejudicial legal error.

3. The Board Erred in Crediting Alleged Industry Praise

a. The Board Impermissibly Made Zaxcom's Nexus Case for the Amendments

All the Motion to Amend stated regarding industry praise was that "The invention received industry praise and recognition including an Emmy award and a Technical Achievement Award from the Academy of Motion Picture Arts and Sciences." Appx466. Just 25 words, as if no more were needed than to invoke the awards.

What Zaxcom lacked was a proper showing that the alleged industry praise for the product was "reasonably commensurate" in scope with the substitute claims, crediting only what is *novel* and *claimed*. *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) ("Evidence of secondary considerations must be reasonably commensurate with the scope of the claims."); *Tokai*, 632 F.3d at 1369-70 (the offered secondary consideration must actually result from what is both claimed and novel). There is no attempt to define *what* is actually praised nor show *how* it

mapped onto the amended claims—requirements if, as here, "the patented invention is only a component of a commercially successful machine or process." *Polaris*, 882 F.3d at 1072.

In its Final Written Decisions, the Board frankly noted the dearth of actual analysis from Zaxcom in support of its novel "replacing" limitation. Appx62. So the Board took it upon itself to make the case for Zaxcom:

> *Although Patent Owner does not provide any more analysis in its Motion to Amend*, Patent Owner's arguments and evidence submitted in its Response are directed to the subject matter added by amendment to the proposed substitute claims, and *we therefore consider the totality of the evidence regarding objective indicia of nonobviousness*.

Appx62. Untethered from the motion, it was the Board—not Zaxcom—that then selected from among various fragments in the record to fashion arguments regarding industry praise and tie them to the "replacing" amendment. *See* Appx62-72.

The Board erred in making the nexus arguments concerning industry praise on behalf of Zaxcom after the motion's analysis was deemed insufficient. Appx62. The *patentee* must prove nexus. *Demaco*, 851 F.2d at 1392 ("The burden of proof as to this connection or nexus resides with the patentee."); *Henny Penny*, 938 F.3d at 1332 ("To determine whether the patentee has met that burden, we consider the correspondence between the objective evidence and the claim scope."). The Board must merely "base its decision on arguments that were advanced by a party, and to

which the opposing party was given a chance to respond." *Magnum*, 829 F.3d at 1381. Notwithstanding this prohibition, the Board claimed to be able to create amendment arguments for Zaxcom on the totality of the evidence it found in the record (Appx62), stretching its role beyond recognized bounds.

To be sure, *Aqua Products, Inc. v. Matal*, 872 F.3d 1290, 1325 (Fed. Cir. 2017) (en banc) held that the Board does not "base its patentability determinations with respect to amended claims solely on the face of the motion to amend," but "must consider the entirety of the record before it when assessing the patentability of amended claims." This charge, however, is in the unique context of vetting and challenging amendments as unpatentable, not ushering them in for patent owners as the Board did here. It was clarified in the recent *Nike Inc. v. Adidas AG*, holding that "the Board may sua sponte identify a patentability issue for a proposed substitute claim based on the prior art of record," 955 F.3d at 51. This limited mandate was meant only to prevent unscrutinized claims from issuing by way of amendment when patentability issues are detected by the Board, especially when petitioner fails to act:

> Because this case involves a motion to amend, we conclude that the Board should not be constrained to arguments and theories *raised by the petitioner in its petition or opposition to the motion to amend*. . . . Otherwise, were a petitioner not to oppose a motion to amend, the Patent Office would be left with no ability to examine the new claims. It makes little sense to limit the Board, in its role within the agency responsible for issuing patents, to the petitioner's arguments in this context. Rather, based on consideration of the entire record, the

> Board must determine whether the patent owner's newly-presented, narrower claims are supported by the patent's written description and *unpatentable in the face of the prior art cited in the IPR*.

Id. (citations omitted).

To the degree that the Board now views this as broad license to make arguments for all parties in all motions to amend for all purposes, including the granting of amendments, it overreaches. The Court's continuing admonition makes clear that Board may not make affirmative arguments for the parties under anything but the most limited circumstances described. *Id*. at 52 (quoting 5 U.S.C. §§ 554(b)-(c), 557(c); *SAS Inst. Inc. v. ComplementSoft*, 825 F.3d 1341, 1350-51 (Fed. Cir. 2016) ("an agency may not change theories in midstream without giving respondents reasonable notice of the change and the opportunity to present argument under the new theory"); *Magnum*, 829 F.3d at 1381 (the Board "must base its decision on arguments that were advanced by a party, and to which the opposing party was given a chance to respond.")). Inasmuch as the Final Written Decision in this case is now designated "precedential" by the Board, its overreach in this regard is highly consequential and should be reversed.

The Board's picking-and-choosing of arguments on behalf of Zaxcom to grant the amendments was prejudicial to Lectrosonics. It is notable that in the ten pages after the Board assumed the right to select the nexus arguments, not a single citation in support is taken from the sequence of briefs associated with the Motion

to Amend. Appx62-72. All supporting Board citations are from the Patent Owner Response or Patent Owner Surreply, where the "replacing" limitation is not even specifically discussed. Appx62-72. As such, the Board must reframe and reexplain the testimony for the "replacing" limitation, breathing new life into the statements in the context of the amendment.[15] Worse still, the Board confines its consideration of Lectrosonics's counterarguments to only those made in opposition to the actual Motion to Amend. *See* Appx64; Appx69. The Board simply ignores the Lectrosonics rebuttals to those points raised in other contexts. *See supra* §§ G.-I., VI.A.2.

Furthermore, because Zaxcom's Motion to Amend was devoid of actual analysis for Lectrosonics to timely consider and address, as the Board found, it was left guessing until the end. Appx62. No coherent argument as to the nexus with "replacing" was "advanced by a party" such that it could be fairly rebutted; indeed, nothing concrete in this regard even materialized until the Board's articulation in the Final Written Decision. Lectrosonics was prejudiced by not seeing the evidence framed as it would ultimately be used in the amendment context until far too late.

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[15] *See, e.g.*, Appx62 ("That is, Mr. Wexler refers generally to the prevention of dropouts and lost audio, i.e., the 'replacing' limitation."); Appx63 ("In other words, a dropout causing an issue with remotely recorded audio can be fixed by 'replacing' . . . ."); Appx64 ("[T]he Emmy award specifically praises . . . *backup* recording of the original microphone signal. That is, the Emmy award praises the "replacing" feature . . . .").

Magnum, 829 F.3d at 1381 (citing *SAS*, 825 F.3d at 1351); 5 U.S.C. §§ 554(b)-(c), 557(c); *see also Nike*, 955 F.3d at 52-53. This procedure abused discretion.

b. The Board Erred in Finding Industry Praise Nexus for the Amended Claims

The Board also erred in its analysis by not performing a comparison of the alleged secondary consideration of industry praise to the amended language. The Board failed to recognize in several ways that the evidence cannot establish a legally sufficient nexus to what is actually claimed in the amendments.

i. Unclaimed Features in the Industry Praise

Zaxcom's commercial product allegedly praised in the industry is not "reasonably commensurate" with the amended claims of the '902 patent and '814 patents, as it must be to carry weight. *Kao*, 639 F.3d at 1068. There are many significant but unclaimed features in Zaxcom's commercial transmitter device, and the awards cited by Zaxcom focus on its *digital* technology, whereas mentioning the ability to record audio is but one feature. Appx4345; Appx4370.

Indeed, the EMMY was "[n]ot for a single component but for the system as a whole," including numerous unclaimed features. Appx4370. Zaxcom does not deny that this industry praise encompassed *at least seven other features* not in the amended claims:

- "audio file format (MARF)";
- "audio file protection in case of power failure or media removal using a unique file directory structure";
- "digital, low latency IFB (interrupted fold back) audio return signal";
- "Full-range microphone audio capture (126dB) using dual precision A/D converters";
- "Low latency digital compression and transmission (3.5mS)";
- "Efficient, high quality digital compression to increase the number of wireless microphone channels available"; and
- "Wireless digital remote control of the wireless microphone transmitter including pre-amp gains."

Id. These unclaimed features—especially digital wireless—were openly touted. *See id.*; Appx4357, ¶ 5; Appx4349-4350, ¶ 5; *see supra* §§G.-I.

Additional praise for so many unclaimed features apart from the "replacing" limitation dilutes nexus beyond where this objective evidence is probative of nonobviousness. *Dome Patent L.P. v. Rea*, 59 F. Supp. 3d 52, 86 (D.D.C. 2014) (holding that objective evidence of secondary considerations must be proportional to the scope of the claims to be probative of nonobviousness), *aff'd*, 799 F.3d 1372 (Fed. Cir. 2015). The Board suggests all that is required is that "'there [] be *a nexus to some aspect* of the claim not already in the prior art.'"

Appx61 (quoting *Kao*, 639 F.3d at 1068-69). But the Board misses the main teaching of *Kao*: "Evidence of secondary considerations must be *reasonably commensurate* with the scope of the claims." 639 F.3d at 1068.

Although relying heavily on the EMMY praise, nowhere does the Board grapple with these *unclaimed* features compared to the scope of the invention *as amended*. *See generally* Appx64; Appx69. Specifically, while the Board admits that Lectrosonics has raised the issue of significant "unclaimed" matter, at no point does the Board ever make an actual comparison to explain how the EMMY's purported praise for the multifaceted product is still "reasonably commensurate." Appx64; Appx69. Thus, the Board did not properly address "the correspondence between the objective evidence and the claim scope," a necessary determination for nexus. *Fox*, 944 F.3d at 1373 (citation omitted).

In the end, the Board merely declares in conclusory fashion that it is sufficiently "related," but does not explain how it arrived at its "commensurateness" conclusion:

> Although we agree with Petitioner that Patent Owner provides some evidence of industry praise directed to features not explicitly recited by proposed substitute claims 21–26, we are persuaded that Patent Owner provides *evidence of industry praise related to the "replacing" limitation* that specifically addresses dropouts.

Appx69-70.

This "close enough" approach abuses discretion. The agency must set forth a sufficiently detailed explanation of its determinations to enable meaningful judicial review. *Pers. Web Techs.*, 848 F.3d at 991-93. In particular, the Board "must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *Icon Health & Fitness, Inc. v. Strava, Inc.*, 849 F.3d 1034, 1043 (Fed. Cir. 2017). Because the Board provided no such "affirmative narrative" to explain "*how* and *why* [it] reached its conclusion" on "reasonably commensurate," its failure should result in reversal. *Google Inc. v. Intellectual Ventures II LLC*, 701 F. App'x 946, 953, 954 (Fed. Cir. 2017) (citation omitted) (emphasis original); *Mullins v. U.S. Dep't of Energy*, 50 F.3d 990, 992 (Fed. Cir. 1995) ("[F]ailure to provide such an explanation is grounds for striking down the action."); 5 U.S.C. § 706.

ii. There is no nexus because the primary reference alone discloses any claim element that could be attributed to a "wireless transmitter with internal recording."

To establish nexus, offered secondary considerations must actually result from what is both *claimed* and *novel* in the patent. *Tokai*, 632 F.3d at 1369. Among the most significant features praised in Zaxcom's products was *digital wireless transmission* ability, an element not in the claims, original or amended. *See supra* § I. Any praise for a wireless transmitter cannot overcome the grounds here

because it is not disputed that all the elements of the claims relating to the wireless transmitter, other than it being wearable, were known in the art. Zaxcom Br. 25-27; Appx19-Appx24, Appx102-Appx107, Appx614-Appx617, Appx8670-Appx8676.

Praise of features known in the art cannot overcome obviousness; this is because even where evidence of a nexus exists, it can be discounted when the praised features were in the prior art. *ClassCo, Inc. v. Apple, Inc.*, 838 F.3d 1214, 1220 (Fed. Cir. 2016). A nexus may not exist where, for example, the merits of the claimed invention were "readily available in the prior art." *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1580 (Fed. Cir. 1983); *see supra* §§ G.-I.

Every claim element pertaining to the wireless transmitter was "readily available in the prior art." *Id.* Each of Zaxcom's claims can be divided into two parts: the part pertaining to the local audio device and the part pertaining to what can be done outside of the local audio device. The only element in dispute relating to the claimed features of the local audio device hinge on Zaxcom's construction of wearable above. *See supra* §§ D., III.A. Thus, there is little need to guard against hindsight, which is the purpose of considering secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966) (objective indicia "serve to 'guard against slipping into use of hindsight,' and to resist the temptation to read into the prior art the teachings of the invention in issue" (citation omitted)). And the

alleged "industry praise," coming when and how it did, is far from probative evidence in this analysis.[16]

iii. The claims do not require a "digital wireless transmitter with internal recording" or "internal recording" within a transmitter.

A patent owner may attempt to show secondary considerations are the "direct result of the unique characteristics of the claimed invention." *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996). Importantly, when a patent owner asserts that unclaimed features are significant, no reasonable factfinder could find that they are insignificant when considering whether the claims must recite those features to establish a nexus. *Fox*, 944 F.3d at 1375.

Here, the requirements of "digital wireless" and "internal" recording that Zaxcom highlights are not required by the claims, defeating probative nexus arguments. *Tokai*, 632 F.3d at 1369-70. The absence of these Zaxcom-highlighted

[16] The Board's decision to rely heavily on customer declarations for "industry praise" is a paradigm shift in the law. The theory behind industry praise is that "[i]ndustry participants, *especially competitors*, are not likely to praise an obvious advance over the known art." *WBIP*, 829 F.3d at 1334. The same does not hold true for customer declarations, particularly customers that have been acquaintances for about twenty years. Appx1974, 9:18. For similar reasons, when praise is given based on the fact that a party has patents (Appx4384), it should be given no more weight than the examiner's original determination that the claims were patentable.

features in the claims shows no nexus between the claims and the purported praise of a "digital wireless transmitter with internal recording."

iv. The claims do not require "digital wireless" and many don't even require "wireless" transmission.

The claims do not require digital wireless. In fact, the original system claims did not even recite a wireless transmitter. Appx42; Appx120. And even under the proposed amendments in the substitute system claims that add a wireless transmitter, the claims do not require the transmission to be digital. *Id*. Similarly, original claim 12 and its substitute claim 24 only recite "transmitting" but do not require that the transmission be digital wireless. Appx44. Indeed, in the district court litigation, Zaxcom accuses a wearable recording device without a wireless transmitter of infringing the claims. Appx1524-1527; Appx1530.

Zaxcom identifies wireless transmission, specifically digital wireless transmission, as a critical component of its product. For example, Zaxcom states one addressed problem as, "[d]uring the wireless transmission, the system might lose or distort a portion of the audio" (Zaxcom Br. 9), and that the product was "the first digital wireless transmitter with internal recording" (Zaxcom Br. 54-55). Because Zaxcom asserts that unclaimed features are significant, no reasonable factfinder could find that they are insignificant. *Fox*, 944 F.3d at 1375.

That these unclaimed features are indeed significant—and even the actual object of praise—is confirmed by the evidence, which all refer to digital wireless as key to Zaxcom's product. The OSCAR refers to a "Digital Wireless Microphone System." Appx4346. The EMMY likewise refers to "innovations in digital wireless technology." Appx4370. The two customer testimonials styled as "industry praise" similarly refer to a "digital radio microphone" (Appx4349-4350, ¶ 5); "digital RF transmission" (Appx4357, ¶ 5); and that "NO ONE else has micro sized digital radios period (Appx4352, ¶ 7).

v. The claims do not require "internal recording" within the transmitter.

The claims also do not require recording internal to a transmitter. In fact, original system claims did not even recite a wireless transmitter as a component of the "at least one local audio device." Appx42. And even under the proposed amendment in substitute system claims that add a wireless transmitter, the claims do not require the transmitter and memory be within the same "at least one local audio device." Appx42. Similarly, original claim 12 and substitute claim 24 only recite "transmitting" and "locally recording" but do not require the transmission and recording be integrated into a single device. Appx44.

Zaxcom identifies integrated recording as a critical component of its product. For example, Zaxcom describes its product as "the first digital wireless transmitter with internal recording" (Zaxcom Br. 54-55), and specifically

highlighting "*internal recording capability*" in its arguments (*id.*). The record confirms however, that any praise was limited to a transmitter with internal recording capability. This distinction is significant because Zaxcom's witness confirmed that using a wireless transmitter connected via a cable to a pocket recorder had been done for more than thirty years prior to Zaxcom's product. *See supra* §§ G., I., VI.A.2.

That known solution of many decades is likely why more recent praise was expressly limited to a recorder internal to the transmitter:

> Mr. Wexler: "With the Zaxcom *recording transmitters*, the audio will always be available *directly from the transmitter*." Appx4357-4358, ¶ 6.
>
> Mr. Sarokin: "I purchased 12 TRX 900 *transmitters* and these *included a mini SD card slot for recording* and a built-in remote control receiver" (Appx4350-4351, ¶ 6); "*Zaxcom's invention of recording radios*" (*id.*).
>
> Oscar Technical Achievement Award: "advanced the state of wireless microphone technology by creating a fully digital modulation system . . . , which *includes local recording capability within the belt pack*." Appx4345.
>
> Emmy: "a production tool that married wireless transmission with a recording device located within the actor's body pack" (Appx4304); "Digital recording of microphone signal *in the wireless transmitter* to provide backup recording of the original microphone signal" Appx4370.

It is also significant that Zaxcom asserts that the claims are infringed by a mini or pocket recorder hooked up to the microphone and wireless transmitter via a

cable that no one credits Zaxcom with inventing. *See supra* § G.-H.; Appx1524-1527; Appx1530. The accused product is a personal data recorder that does not have an integrated transmitter. Appx1524-1527; Appx1530.

c. There is no specific praise for "said at least one remote recorder receiving and remotely recording said locally generated audio as remotely recorded audio data, receiving said local audio data, and replacing said remotely recorded audio data with said local audio data."

Zaxcom provided no meaningful analysis of how any specific praise is tied to the specific claim requirement of "said at least one remote recorder receiving and remotely recording said locally generated audio as remotely recorded audio data, receiving said local audio data, and replacing said remotely recorded audio data with said local audio data," in claim 15, or the similar element in claim 26. Instead, Zaxcom argues, as discussed above, the praised product was not limited to that embodiment. Zaxcom Br. 57.

While there is no discussion of it in the Final Written Decision, it was error for the Board to have found praise for the critical "replacing" limitation in the amendments, because none of the evidence shows that the praise was the "direct result of" the replacing limitation. *See Huang*, 100 F.3d at 140. For example, Mr. Wexler never mentions replacing remotely recording audio with local audio data to repair a dropout. Instead, he discusses simply playing back the locally recorded

data to create a new recording rather than replacing or repairing dropouts in the original remote recording:

> With the Zaxcom recording transmitters, the audio will always be available directly from the transmitter. I have done scenes where the actors have gone out of wireless range resulting in no audio at the receiver, but when the transmitters are back in range I have played back *the full track* from the transmitters, re-mixed and delivered to post-production.

Appx4357-4358, ¶ 6. Using this process, he "could always deliver a track to post-production even in those situations where there were failures of the RF transmission." Appx4358, ¶ 7.

Mr. Sarokin also never mentions "replacing" remotely recording audio with local audio data to repair a dropout. Instead, he discusses simply playing back the locally recorded data to create a new recording rather than replacing or repairing dropouts in the original remote recording:

> Zaxcom also integrated all their equipment so a sound mixer could hit a single button on a Zaxcom recorder and all the radios in use would play back from a certain take or time code start point so the scene could be re-mixed without any radio drop outs.

Appx4350-4351, ¶ 6.

The EMMY also does not discuss "replacing" or dropout repair. Instead, it only references "recording of microphone signal in the wireless transmitter to provide backup recording of the original microphone signal." Appx4370. And the OSCAR does not even mention backup. Appx4345.

The Board's scant review of the amended claims, by failing to do a detailed comparison of the praise to the state of the art or to the claim language, failed to recognize that statements Zaxcom points to contain no express nexus to what is claimed. No one credits Zaxcom with having invented what has been done since 1975: hooking up a wireless transmitter to a local recording device as a backup. *See supra* § G., VI.A.2. Instead, each statement of praise relied on is expressly qualified to limit the praise to the inclusion of the recording device within the transmitter. *See supra* pp.70 (citing Appx4357-4358, ¶ 6; Appx4345; Appx4370). This is a key feature of any praise for providing a backup, but none of the claims here require such an integration. *See supra* §§ A., C.-I.

Accordingly, because there is no connection between the praise and the "replacing" elements, let alone evidence that the praise was the "direct result of" the amendment, the Board's finding of a nexus relating to those elements should be reversed.

CONCLUSION

The Court should affirm the Board's decisions holding unpatentable the challenged claims of the patents-at-issue. On cross-appeal, the Court should reverse the Board's grant of the amended claims.

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Respectfully submitted,

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FORM 19. Certificate of Compliance with Type-Volume Limitations **Form 19**
July 2020

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATIONS

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