

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RØDE MICROPHONES, LLC AND
FREEDMAN ELECTRONICS PTY LTD,

Petitioners

v.

ZAXCOM, INC.,

Patent Owner

Case IPR2025-00557

U.S. Patent 12,051,444

PATENT OWNER'S PRELIMINARY RESPONSE

PURSUANT TO 37 C.F.R. § 42.107(a)

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PATENT OWNER’S EXHIBIT LIST

<u>Exhibit Number</u>	<u>Description</u>
2017	Declaration of James M. DeFilippis
2018	Curriculum Vitae of James M. DeFilippis
2019	Declaration of Jack Norflus
2020	Curriculum Vitae of Jack Norflus
2021	Federal Agencies Digital Guidelines Initiative, Glossary, Definition of Multitrack
2022	Notice of Allowance for the ‘443 Patent
2023	Nagra V Non-Patent Literature
2024	Electro-Voice, “Wireless Microphone Basics” Publication Defining “Body Pack” 2021
2025	Zaxcom TRX900AA Data Sheet
2026	Sennheiser SK2000 Data Sheet
2027	Lectrosonics SM Series Data Sheet
2028	American Heritage Dictionary, Definition of “Master”
2029	Petitioners Motion to Stay
2030	Judge Murphy’s Preliminary Ruling on Petitioners’ Motion to Stay
2031	“Designing Genlocked Video Systems with Deterministic Low Latency on FPGAs” White Paper, Altera

GLOSSARY OF TERMS

TERM	DEFINITION
“’207 Patent”	U.S. Patent No. 10,276,207 issued April 30, 2019
“’307 Patent”	U.S. Patent No. 9,336,307 issued May 10, 2016
“’443 Patent”	U.S. Patent No. 7,711,443 issued May 4, 2010
“’444 Patent”	U.S. Patent No. 12,051,444 issued on July 30, 2024
“’605 Patent”	U.S. Patent No. 11,610,605 issued on March 21, 2023
“’814 Patent”	U.S. Patent No. 8,385,814 issued February 26, 2013
“’902 Patent”	U.S. Patent No. 7,929,902 issued April 19, 2011
“Asserted Claims”	Claims asserted in Zaxcom, Inc. v. RODE Microphones, LLC, et al., No. 1:23-cv-01245-JFM (D. Del.), as identified in Ex-2006.
“Board”	USPTO Patent Trial and Appeal Board
“CAFC”	U.S. Court of Appeals for the Federal Circuit
“Challenged Claims”	Claims 1-7, 9-10, 12-20, 22-24, 26-27
“Cited References”	Strub, Woo, Nagai, Gleissner, and Samadani
“CTPG”	PTAB Consolidated Trial Practice Guide, November 2019
“District Court”	United States District Court for the District of Delaware
“ECF”	Electronic Case File
“Freedman”	Freedman Electronics Pty Ltd
“Freedman/Rode IPR Petitions”	Petitions filed in IPR2025-00230, IPR2025-00231, IPR2025-00232, IPR2025-00557, collectively
“FWD”	PTAB Final Written Decision
“Gleissner”	United States Patent Publication No. 2004/0028241
“IPR”	Inter Partes Review
“Samadani”	United States Publication No. 2004/0267387
“Lectrosonics IPRs”	The “Prior ’902 IPR”, the “Prior ’814 IPR”, and the “Prior ’307 IPR”, collectively

“Lectrosonics Litigation”	Zaxcom, Inc. v. Lectrosonics, Inc., No. 1:19-cv-00109-LF-KBM (D.N.M), Zaxcom, Inc. v. Lectrosonics, Inc., No. 20-1350, -1450 (CAFC), Zaxcom, Inc. v. Lectrosonics, Inc., No. 2020-1921,-1922,-1943,-1944 (CAFC), Zaxcom, Inc. v. Lectrosonics, Inc., No. 1:17-cv-3408 (E.D.N.Y
“Litigation”	Zaxcom, Inc. v. RODE Microphones, LLC, et al., No. 1:23cv-01245-JFM (D. Del.)
“MPEP”	Manual of Patent Examining and Procedure
“Nagai”	United States Publication No. 2002/0159179
“Office”	United States Patent and Trademark Office
“Parties”	Patent Owner and Petitioners
“Patent Owner or Zaxcom”	Zaxcom, Inc.
“Patents-in-Suit”	Collectively, the following patents: (i) the ’443 Patent; (ii) the ’902 Patent; (iii) the ’814 Patent (iv) the ’307 Patent; (v) the ’207 Patent; (vi) the ’605 Patent; and (vii) the ’444 Patent
“Petition”	The Petition filed in IPR2025-00557
“Petitioners”	Rode Microphones, LLC and Freedman Electronics Pty Ltd.
“POSA”	Person of ordinary skill in the art at the time of the invention
“PTAB”	Patent Trial and Appeal Board
“Prior ’307 IPR”	IPR2018-00972
“Prior ’814 IPR”	IPR2018-01130
“Prior ’902 IPR”	IPR2018-01129
“Rode”	RØDE Microphones, LLC
“Strub”	United States Patent No. 6,825,875
“SJ”	Summary Judgement
“USPTO”	United States Patent and Trademark Office

“Woo”	United States Patent No. 5,479,351
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I. INTRODUCTION

The Petition attempts to invalidate the Challenged Claims under three obviousness grounds citing to various combinations of the Cited References but fails to make such arguments with sufficient particularity as required under 35 U.S.C. § 312(a)(3). Further, the Petition fails to construe any terms of the Challenged Claims and analyzes them in direct contradiction to the language thereof and the '444 Patent. Accordingly, it is left to the Board and Zaxcom to try to decipher the proper claim construction, how the Cited References are combined, and the motivation of a POSA to make such a combination.

Instead, Petitioners repeatedly state that Zaxcom is collaterally estopped from making any arguments that differ from the rulings of the Lectrosonics IPRs, despite CAFC case law that unequivocally states that collateral estoppel is not appropriate when a different claim construction standard is applied in the two proceedings, as is the case here. Petitioners fail to cite any case law supporting collateral estoppel in these circumstances, thereby ignoring clear and binding precedent.

Further, the decisions in the Lectrosonics IPRs are inapplicable in this case as they held that the claimed “master timecode generator” was disclosed by Woo in the form of a “GPS Navigation satellite receiver and a digital signal processor.” *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 33 at 28 (P.T.A.B. Jan.

24, 2020); *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01130, Paper 32 at 24 (P.T.A.B. Jan. 24, 2020). However, unlike in the Lectrosonics’ IPRs, all of the Challenged Claims include either Element [1A] or 13[A], which require that the master timecode not only create at least one master timecode, but that it also is “configured ... **to receive audio data**” (emphasis added). *RØDE Microphones, LLC & Freedman Elecs. Pty Ltd. v. Zaxcom, Inc.*, IPR2025-00557, Paper 1 at 32-35, 66 (P.T.A.B. Feb. 7, 2025). Although the Lectrosonics’ IPR Board found that Woo’s GPS Navigation satellite receiver and digital signal processor were capable of creating a master timecode, it never addressed the issue of whether it was capable of receiving audio data. It is not, and Petitioners do not argue that Woo discloses a “master timecode generator” capable of receiving audio data.

Instead, Petitioners rely solely on Strub to teach elements 1[A] and 13[A]. The prior Lectrosonics’ IPR decisions never found that Strub disclosed a “master timecode generator” in any form. Petitioners rely on Strub’s “pulse synchronization,” or “genlocking” to show that Strub teaches this element, and claims that these pulses synchronize local clocks as taught by the ‘444 Patent. To the contrary, it is well known that “genlocking” applies to video production, not audio production, and it does not synchronize local clocks, but rather pixel clocks, which are wholly inapplicable to audio data, which does not use “pixels,” and therefore has no “pixel clock.” Accordingly, the Petition fails to show a reasonable

likelihood that the Petitioners would prevail at trial with respect to at least one Challenged Claim of the '444 Patent.

Further, Patent Owner submits that the Petition should be discretionarily denied under both 35 U.S.C. §314(a) and 35 U.S.C. §325(d) for the reasons set forth in its Discretionary Denial Brief (“DD Brief”) (*RØDE Microphones, LLC & Freedman Elecs. Pty Ltd. v. Zaxcom, Inc.*, IPR2025-00557, Paper 6 (P.T.A.B. June 7, 2025)) submitted to the Director in accordance with the March 26, 2025, Interim Processes for PTAB Workload Management Memorandum (“Guidance”). Patent Owner will not elaborate on those arguments herein, as it is Patent Owner’s understanding that, pursuant to the Guidance, the DD Brief shall be decided separately by the Director prior to this Board’s intervention in this matter.

II. RELATED LITIGATION AND IPRS

On October 31, 2024, Zaxcom filed a complaint in Delaware District Court (Ex-2001, ECF1), which was amended on November 14, 2024, alleging Petitioners’ infringement of the Patents-in-Suit. Ex-2002, ECF99. On August 30, 2024, Zaxcom provided Petitioners initial claim charts detailing the Asserted Claims in the Litigation. Ex-2003, ECF79.

The Parties substantially completed document production on February 5, 2025 (Ex-2004, ECF120), and over 350,000 documents have been produced by Petitioners. Invalidity contentions were served on December 6, 2024 (Ex-2005,

ECF103), and a final joint claim construction chart was filed with the District Court on February 21, 2025. Ex-2006, ECF127. Fact discovery closes on August 15, 2025, expert discovery closes on January 23, 2026, and all SJ and Daubert briefing are scheduled to conclude by April 10, 2026. Ex-2007, ECF98. A trial date has not been set as the District Court's Judge's policy is to set a trial date "after the close of discovery ... [or] after resolution of the summary judgment." Ex-2008, Judge Murphy's Policies and Procedures. On June 26, 2025, nearly 20 months after filing the Complaint, the Petitioners submitted a motion to stay, in response to which the July 9, 2025, Markman hearing date was maintained, while settling argument for remaining aspects of the requested stay to occur during the Markman hearing. (Exs-2029, 2030). That is, the district court has substantively ruled that at least the Markman hearing will not be stayed.

IPR petitions directed toward the '902, '443 and '207 Patents were filed by Petitioners on December 4, 2024, and were instituted on June 16, 2025. *RØDE Microphones, LLC & Freedman Elecs. Pty Ltd. v. Zaxcom, Inc.*, IPR2025-00230, Paper 14 (P.T.A.B. June 16, 2025); *RØDE Microphones, LLC & Freedman Elecs. Pty Ltd. v. Zaxcom, Inc.*, IPR2025-00231, Paper 23 (P.T.A.B. June 16, 2025); *RØDE Microphones, LLC & Freedman Elecs. Pty Ltd. v. Zaxcom, Inc.*, IPR2025-00232, Paper 14 (P.T.A.B. June 16, 2025). Requests for Director Review of all

three institution decisions are currently pending, as well as a Motion to Terminate.

RØDE, IPR2025-00231, Paper 15 (unredacted), Paper 16 (redacted).

The '902, '814, and '307 Patents were involved in the Lectrosonics IPRs, and all challenged claims were held patentable after amendment. Ex-1014, p. 65; Ex-1017, p. 74; Ex-1018, p. 94.

In summary, relevant claims from the aforementioned patents are all part of an active, ongoing district court litigation in which significant discovery has occurred, claim construction is underway, and a Markman hearing is scheduled just days away from the submittal of this POPR.

III. TECHNOLOGY BACKGROUND

A. Prior Art Audio Systems

Prior art audio systems “include a multi-track audio recorder wired to one or more microphones.” Ex-1001, 1:48-49 “[O]ne or more performers performing on a sound stage are recorded by one or more microphones that are directly wired to the multi-track recorder. The multi-track recorder combines the single track of audio received from each microphone to create one multi-track audio file.” *Id.* at 1:51-54.

Other prior art systems “include a multi-track audio recorder and an associated audio receiver that receive audio wirelessly from one or more wireless

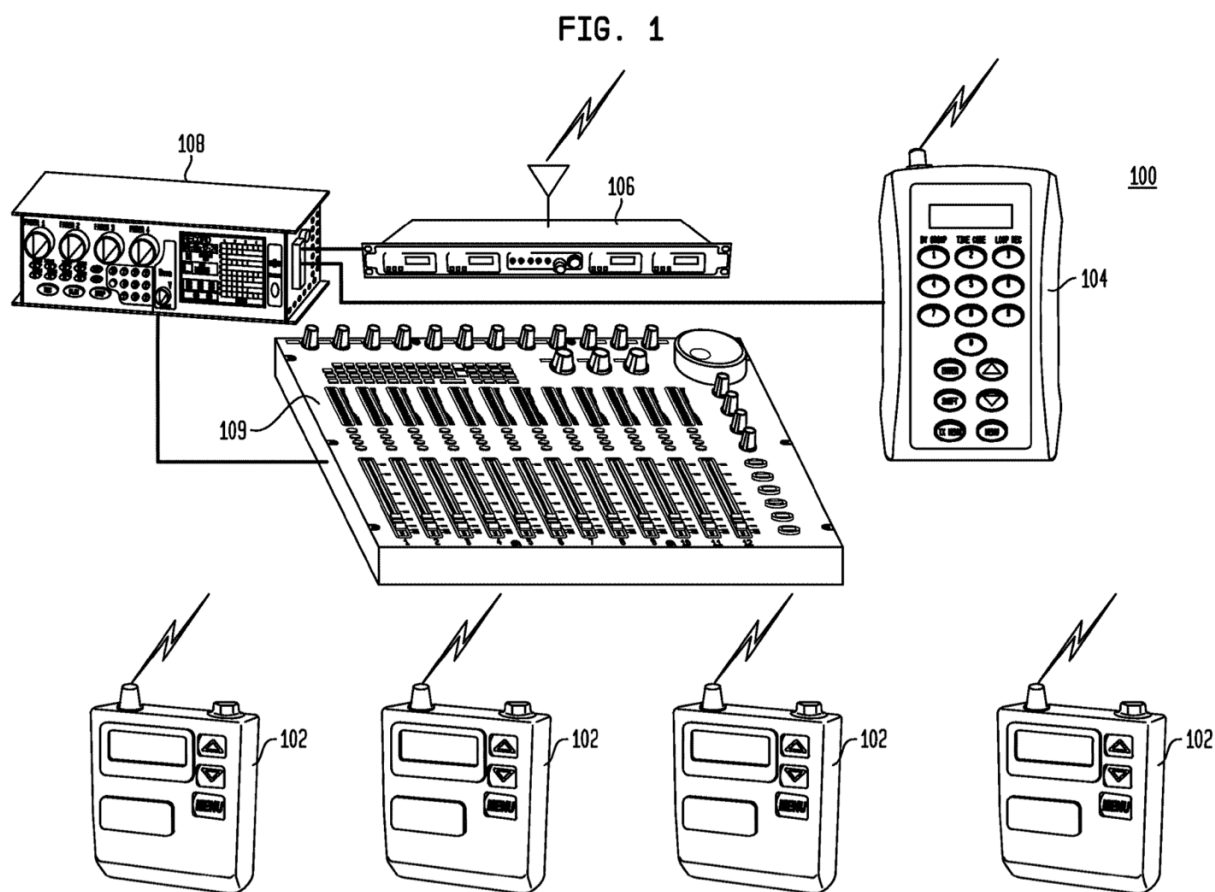
transmitters.” *Id.* at 1:63-65. An “audio receiver receives each performer’s audio from the performer’s respective body pack via an analog or digital wireless transmission and transmits it to the audio recorder.” *Id.* at 1:67-2:3. “The audio recorder then combines the wireless transmissions received from all body packs to create one multi-track audio file.” *Id.* at 2:3-5.

The ’444 Patent inventors recognized that the prior art systems had problems with “the occurrence of wireless transmission errors such as dropouts.” *Id.* at 2:6-7. Moreover, the use of redundant receivers in the prior art did “not prevent loss of data due to interference.” *Id.* at 2:15-16. “Upon the occurrence of interfering signals, audio created during a performance (e.g., a live performance) may simply be lost due to the inability of the receiver to receive a clean audio signal.” *Id.* at 2:18-21.

B. Mr. Sanders and Mr. Stark Invent A New Wireless Recording System to Address Interference and Dropout Problems

The ’444 Patent addresses the prior art’s deficiencies with a wireless recording system including wearable local audio devices 102, remote control unit 104, remote receiver 106, remote recorder 108, and mixer 109, as shown in FIG.

1:

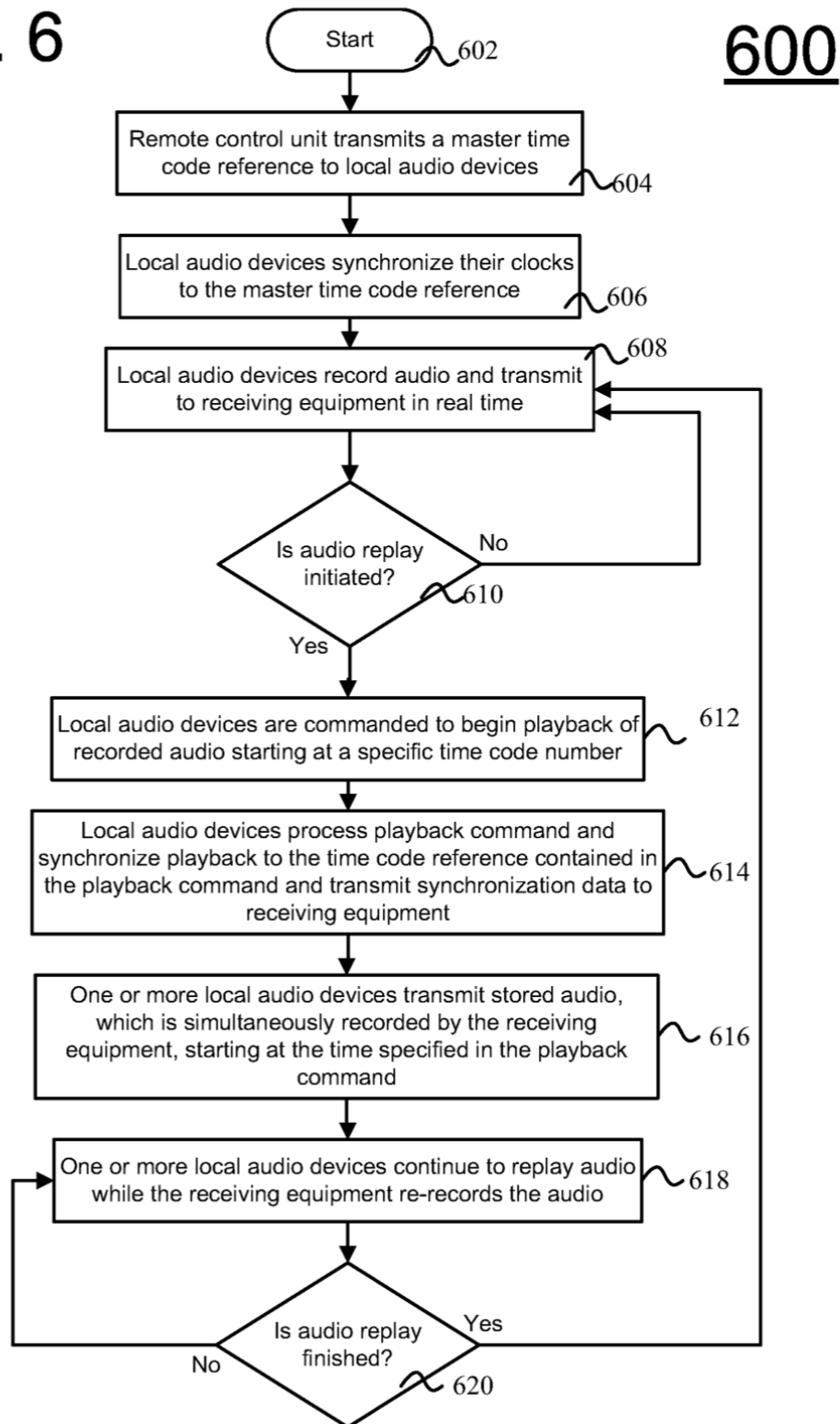


Each local audio device 102 is worn by a performer, and these components operate together to store local audio generated by each performer in the performer's wearable local audio device 102 as local audio data, to create stamped and unstamped local audio data wherein the stamped local audio data includes at least one timestamp to reference at least a portion of the local audio data to one of the master timecodes, to transmit the same local audio from each local audio device 102 to a remote receiver 106/recorder 108, to record the same local audio at the remote receiver 106/recorder 108 received from each performer as remotely

recorded audio data/remote audio data, to create a multi-track audio file at the receiver 106/recorder 108 that includes each performer's local audio, and, when a wireless transmission error causes a defect in the remotely recorded audio data or multi-track audio file, to combine the local audio data at the wearable local audio device 102 with the remotely recorded audio data at the remote receiver 106/recorder 108 to replace or repair the data lost or corrupted due to the wireless transmission error. In this manner, segments of audio that were not received properly at the remote receiver 106/recorder 108 (e.g., dropouts) because of wireless transmission errors can be replaced with corresponding segments of local audio data retrieved from the respective local audio device 102 or such local audio data may be combined into the corrupted multi-track audio file to repair such file. Additionally, various components of the recording system may interact with the mixer 109, which has the ability to adjust other qualities of the incoming audio.

This repair and replacement of data is facilitated via highly accurate timestamps on the local audio data and the remotely recorded audio data. FIG. 6 “depicts a process for recording audio and for replaying and re-recording segments of missed audio.” *Id.* at 3:15-17:

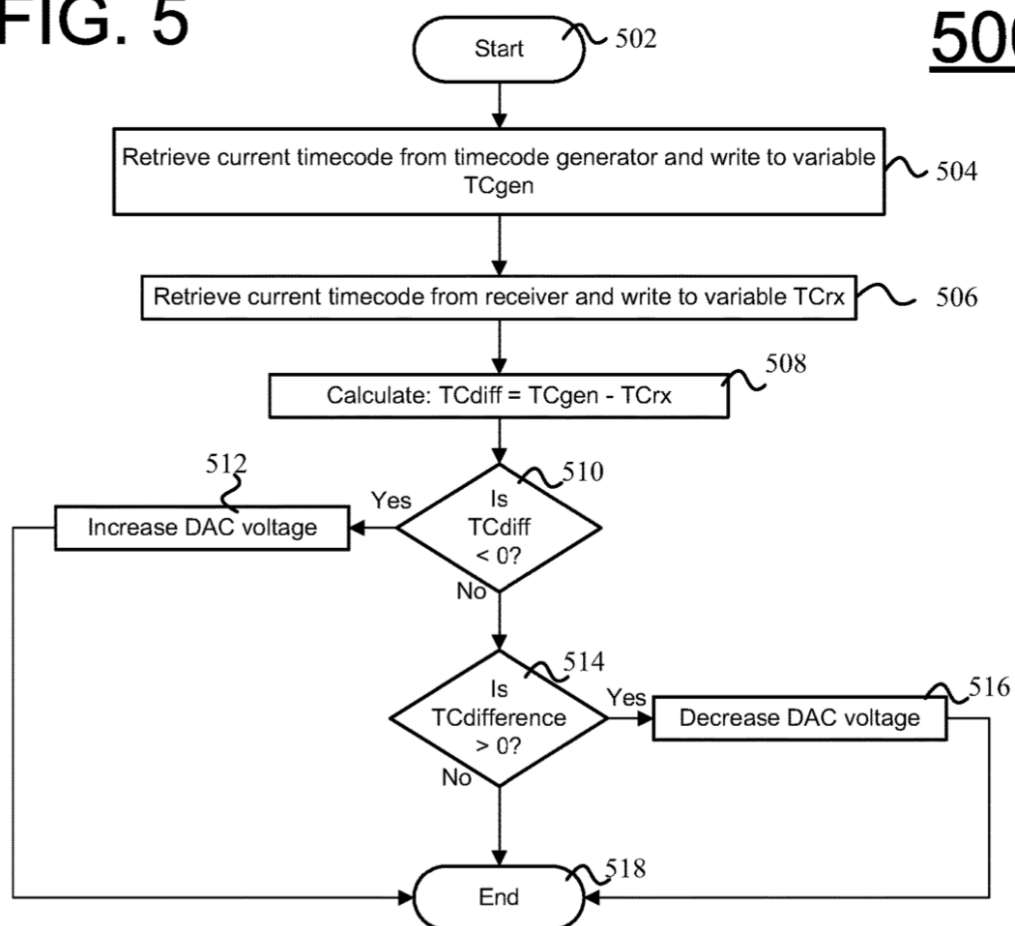
FIG. 6



“At 606, each local audio device synchronizes (e.g., jam syncs) its respective on board local timecode generator with the master timecodes received from the master unit, thereby synchronizing all local audio device timecode generators with the master timecode generator contained within the master unit.” Ex-1001, 17:12-17. *See also id.* at 14:52-56 (“[T]he local control unit reads the master timecode contained in the RX buffer and jam synchronizes the local timecode generator with the master timecode. The jam sync synchronizes the local audio device with the RCU while allowing the local audio device to supply its own timecode.”) As illustrated in steps 616 and 618, the local audio devices may transmit audio for re-recording of missed audio by the receiving equipment.

“FIG. 5 depicts a process for modifying the speed of a local timecode generator as necessary to maintain its synchronization with a master timecode generator.” *Id.* at 3:11-13:

FIG. 5



Zaxcom has received significant industry praise for these inventions including, but not limited to, an Emmy award and a Technical Achievement Award from the Academy of Motion Picture Arts and Sciences. In the Lectrosonics' IPRs, the Board evaluated this and other industry praise along with evidence of long-felt need for repairing dropouts and the failure of others to implement dropout repair and found a nexus between the evidence of secondary considerations and claims

related to the Dropout Repair Embodiment. Ex-1017, pp. 61-65 (“[C]onsidering the totality of evidence before us, we determine that Patent Owner has established a nexus between the evidence of industry praise and long-felt need and the “replacing” limitation of the proposed substitute claims.”); Ex-1014, p. 56; Ex-1018, p. 55.

IV. PERSON OF ORDINARY SKILL IN THE ART

A POSA for the '444 Patent would have a bachelor's degree in electrical engineering or a related subject and two to five years' experience working with multi-track audio and wireless communications systems in the professional performance industry. As written in the abstract, the invention includes “[s]ystems and methods for wirelessly recording multi-track audio files.” Ex-1001, abstract. *See also id.* at 1:40-52 (“Embodiments of the present invention generally relate to systems and methods for recording and processing audio received from one or more wireless device...Many systems and method have been created to record performance audio. Some such systems include a **multi-track audio** recorder wired to one or more microphones. Typically, **one or more performers performing on a sound stage** are recorded by one or more microphones that are directly wired to the **multi-track recorder**. The multi-track recorder combines the single track of audio received from each microphone to create one multi-track audio file.”) (emphasis added). Accordingly, a POSA would be required to have

the aforementioned experience, specifically with multi-track audio and wireless communication systems in the professional performance industry. An electrical engineer without at least two to five years' experience working with multi-track audio would not possess the practical knowledge necessary to understand the complexities of the invention, such as how the recorder combines individual audio tracks from multiple microphones into a single multi-track audio file.

Additionally, less education may be compensated for by a higher level of work experience. Ex-2017, ¶ 15; *see also* Ex-2019, ¶ 11.

V. ZAXCOM IS NOT COLLATERALLY ESTOPPED FROM DISPUTING THE PTAB'S PRIOR FINDINGS

Petitioners agree collateral estoppel only applies if “the issue was actually litigated in the first action.” *RØDE*, IPR2025-00557, Paper 1 at 9. “Because the Board applie[d] the broadest reasonable construction of the claims . . . the issue of claim construction under Phillips . . . has not been actually litigated.” *SkyHawke Techs., LLC v. DECA Int'l Corp.*, 828 F.3d 1373, 1376 (Fed. Cir. 2016). *See also DDR Holdings, LLC v. Priceline.com LLC*, 122 F.4th 911, 918-19 (Fed. Cir. 2024) (citing *SkyHawke* at 1376) (“‘Because the Board applies the broadest reasonable construction of the claims while the district courts apply a different standard of claim construction as explored in Phillips,’ a party is not collaterally estopped in district court proceedings by the Board's constructions during IPR”). Where a first

IPR is decided under the BRI standard, and a second IPR concerning the same patent is to be decided under the Phillips Standard, “collateral estoppel . . . is not appropriate.” *Ebates Performance Marketing, Inc. dba Rakuten Rewards et al., v. International Business Machines Corp.*, IPR2022-00646, Paper 56 at 10 (PTAB Oct. 11, 2023).

The rule change replacing the BRI standard with the Phillips Standard became effective on November 13, 2018 (“Effective Date”) and applies to all IPR petitions filed on or after this date. Ex-2013, Federal Register, Vol. 83, No. 197 (Oct. 11, 2018) (final rule). All Lectrosonics’ IPRs were interpreted “using the broadest reasonable construction in light of the specification of the patent in which they appear.” Ex-1017 at 6-7; *see also* Ex-1014 at 6-7; *see also* Ex-1018 at 6-7.

Because the Petition was filed after the Effective Date, the Phillips Standard applies to claim construction in this proceeding, and no claim construction has been made for any of the terms of the Challenged Claims under the Phillips Standard, and therefore, “the issue of claim construction under Phillips . . . has not been actually litigated.” *SkyHawke Techs.* at 1376; *see also DDR Holdings*. As a finding of obviousness requires a court to ascertain the differences between the prior art and the claims at issue, pursuant to *Graham v. John Deere Co.*, 86 S. Ct. 684, 694 (1966), the issues regarding obviousness, which rely on such claim constructions, have also not been litigated. Therefore, Zaxcom is not collaterally

estopped from disputing the findings of the Lectrosonics IPRs regarding: (1) the presence of claim elements or any materially identical elements in the Cited References; (2) the obviousness of combining the Cited References; or (3) the objective indicia of non-obviousness.

VI. CLAIM CONSTRUCTION

Under the Phillips Standard, claim terms are given their ordinary and customary meaning as understood by a POSA at the time of the invention and in the context of the entire patent disclosure. *See Phillips v. AWH Corp.*, 415 F.3d, 1303, 1312-14 (Fed. Cir. 2005). It is critical that claim terms are “read in view of the specification,” which is highly relevant, usually dispositive, and “the single best guide to the meaning of a disputed term.” *Id.* at 1315 (citations omitted).

A. “locally generated audio” (Claims 1-7, 9-10, 12-20, 22-24, 26-27)

A POSA understands that multitrack recording captures the voices of individual performers independently on separate, isolated tracks of audio to allow audio engineers to independently edit each track during and after recording. *See* Ex-2017, ¶¶ 31-34. “A multitrack recording consists of multiple, separate streams of sound ... During a typical music-recording session, **individual instruments or voices will be recorded on separate tracks;**” *see also* Ex-2021, p. 1 (Federal Agencies Digital Guidelines Initiative, Glossary) (emphasis added); *see also* Ex-2019, ¶¶ 12-21.

Accordingly, “locally generated audio” means “audio created by the wearer of the local audio device receiving the locally generated audio, such audio suitable for use as an independent track of audio,” as this definition requires each performer to create an individual, isolated audio track to be used and independently edited in the resultant multitrack recording. Any definition of these terms that collects all event audio on a single track of mixed audio without individual, isolated tracks of audio per performer/audio source directly contradicts the requirement for “multitrack” recording (Ex-2019, ¶¶ 14, 20-21), as it lacks the discrete, individual, isolated audio sources (e.g., an audio track per performer) required for creation of a multitrack recording and as taught by the ’444

Specification:

- (i) “Systems and methods for wirelessly recording multi-track audio files ... each performer is equipped with a local audio device capable of locally recording the respective performer's audio” (Ex-1001, Abstract);
- (ii) “[P]erformers may each don a local audio device (Ex-1001, 14:23-24);
- (iii) “audio from multiple local audio devices may be transmitted to a multi-track recorder for recording of the audio event while each local audio device locally records its performer’s audio” (Ex-1001, 15:21-24);

(iv) “[A]udio received from each of the local audio devices (e.g., the local audio device of each performer) may be combined to create one or more multi-track audio files,” (Ex 1001, 17:31-33).

See also Ex-2017, ¶ 32.

Also, Claims 1-7, 9-10, 12-20, 22-24, 26-27 require that the locally generated audio is created by the person wearing the local audio device. *See* Ex-1001, 43: 30-31; 44: 38-40 (“the at least one local audio device wearable by a creator of the locally generated audio.”)

Further, dependent Claims 6 and 19 depend from Claims 1 and 13, respectively, and both require that the recording device can be a multi-track recorder. Ex-1001, 44:1-3, 45:13-15. Such a dependent claim is only possible if the “locally generated audio” is of a form that is compatible with multi-track recording.

B. “local audio device wearable by a creator of said locally generated audio” (Claims 1-7, 9-10, 12-20, 22-24, 26-27)

The phrase “local audio device wearable by a creator of said locally generated audio” means “a local audio device suitable to be worn by the performer who creates the audio that is recorded by that performer’s local audio device.” The ’444 Patent repeatedly describes the wearability of the local audio devices: 1) local audio devices “are worn by the performers of the audio event” (Ex-1001, 11:10-11); 2) “each performer is equipped with a local audio device

capable of locally recording the respective performer's audio” (Ex-1001, Abstract); and 3) “allowing a wireless recorder 108 ... to accurately combine multiple independent tracks of audio, wherein each independent track of audio is received from one of the performer's local audio device 102.” Ex-1001, 12:19-23. The ‘444 Patent also describes an audio input device is (e.g., a microphone) worn by the performer and connects to the performer’s local audio device to allow it to capture the isolated audio of the specific performer wearing the local audio device. Ex-1001, 10:42-45 (“[L]ocal control unit 310 receives recordable audio from local audio input device 312, which may be worn by the performer and connects to local audio device 102...”).

The ’444 Patent is a continuation of a string of applications that all claim priority to parent application No. 11/181,062, which issued as the ’443 Patent. *See* Ex-1001, pg. 2, Related U.S. Application Data. The ’443 Patent prosecution history clarifies that “wearable” requires the local audio device to be “suitable to be worn by the performer” and excludes devices that are merely portable (e.g., able to be carried in a backpack). In the ’443 Patent’s Notice of Allowance, Examiner Elbin included a statement of reasons for allowance that distinguished between “portable” and “wearable”: “the closest prior art of record (Nagra-V) teaches a **portable** audio recorder ... The prior art fails to teach or suggest ... wherein the device is ‘**wearable** by a creator of said locally generated audio.’”

Ex-2022, p. 2 (emphasis added). The Nagra-V is portable, having dimensions of 11.4” x 8.6” x 4.5,” weighing approximately 7.6 to 9 pounds, and sold with a soft carrying case. Ex-2023, p. 2. The Nagra-V can be carried in a backpack, or its soft carrying case, yet the Examiner found that it was not “wearable.” As such, a proper construction of “local audio device wearable by a creator of said locally generated audio” excludes devices that are merely portable (e.g., carried in a backpack).

C. “master timecode generator” and “master timecodes” (Claims 7 and 20)

The term “master timecode generator” and “master timecodes” mean “a producer of a master time reference signal that controls at least one other timecode generator” and “a time reference signal used to synchronize at least one device,” respectively. The term “master” requires “[one] that has control over another or others.” Ex-2028, p. 3 (The American Heritage Dictionary, Third Edition, Houghton Mifflin Company, 1993). Figure 5 of the ’444 Patent discloses modifying the speed of a local timecode generator as necessary to maintain synchronization with a master timecode generator. Ex-1001, Fig. 5, 3:11-14. That is, the master timecode generator controls the local timecode generator by modifying its speed to maintain synchronization between devices. Figure 6 describes the master timecode generator’s use of a master timecode, or time

reference signal used to synchronize at least one device: “[a]t 604, a master unit ... transmits master timecodes to each local audio device, and ... each local audio device synchronizes (e.g., jam syncs) its respective on board local timecode generator with the master timecodes received from the master unit, thereby synchronizing all local audio device timecode generators with the master timecode generator.” Ex-1001, 17:9-16. That is, the master timecode generator creates master timecodes that are used to control the speed of the local timecode generator to ensure the two timecode generators are synchronized.

The ’444 Patent further explains that the master timecodes synchronize the audio data recorded at various components of a recording system:

- (i) “Since the local audio device and recorder timestamps are synchronized, the replayed audio may be inserted in the proper time sequence with respect to the other recorded audio samples based upon the synchronized timestamp data. Synchronization is essential to ensure that each performer's audio is synchronized with all other performers' audio and to ensure that the newly recorded replayed audio is in the correct sequence with respect to the previously recorded live audio,” (Ex-1001, 4:60-5:1);
- (ii) “When recording system 100 is operating in a synchronous mode, transmission of the master time reference signal ensures that all of the components of recording system 100 store all locally recorded audio with timestamps that are highly accurate

as compared to the timestamps of all other local audio devices 102 and/or all other components of recording system 100. The timestamps are then used ... to ensure that the replayed audio from all local audio devices 102 is synchronized with previously recorded audio and with the audio replayed by all other local audio devices 102,” (Ex-1001, 6:15-21);

- (iii) “[A] portion of the received data may be used to synchronize local timecode generator 304 to the master time code generator integral to one of the components of recording system 100 (e.g., RCU 104, recorder 108, etc.),” (Ex-1001, 11:26-30);
- (iv) “At 410, the local control unit reads the master timecode contained in the RX buffer and jam synchronizes the local timecode generator with the master timecode. The jam sync synchronizes the local audio device with the RCU while allowing the local audio device to supply its own timecode. Local supply of synchronized timecodes ensures proper timing during periods in which the master timecodes cannot be read,” (Ex-1001, 14:52-59); and
- (v) “At 604, a master unit ... transmits master timecodes to each local audio device, and ... each local audio device synchronizes (e.g., jam syncs) its respective on board local timecode generator with the master timecodes received from the master unit, thereby synchronizing all local audio device

timecode generators with the master timecode generator,” (Ex-1001, 17:9-17).

Both the claim language and the ’444 Patent support Zaxcom’s proposed constructions.

D. “body pack” (Claims 2-3 and 14-15)

“Body pack” means “a small box housing a transmitter capable of being worn on a belt or in a pocket.” The ’444 Patent teaches that the local audio devices house a transmitter, e.g., “wireless transmitters may take the form of body packs that are worn by each performer.” Ex-1001, 1:65-67. Furthermore, the local audio devices are described as “digital, wireless audio transceivers. Such audio devices may be manufactured in the form of body packs, such as those typically worn by news announcers, performers, and the like.” Ex-1001, 12:42-43. (“Local audio devices 102 may be bodypacks such as the local audio device 102 depicted in FIG. 3B.”).

The local audio device 102 is also understood to be a “small box.” Ex-1001, Figs. 1 and 3B (depicting local audio devices 102 as small boxes). “As such, a POSA would understand that a ‘body pack’ is a ‘small box housing a transmitter.’” Ex-2017, ¶ 43.

Industry publications also show that a “body pack” is “a transmitter you can wear on a belt clip or in your pocket.” Ex-2024, pp. 5. Also, “[t]ransmitters

and antennas are built into wireless microphones, either within the handheld unit or within the bodypack.” Id. at 14. Any other construction, such as one in which the bodypack is too large to be worn on a belt or put in a pocket, is inconsistent with the ’443 Patent specification, as it is not “typically worn by news announcers, performers, and the like.” Ex-1001, 8:60-61; see also Ex-2017, ¶ 72; see also Ex-2019, ¶ 22-26.

E. “multi-track recorder” (Claims 6, 19)

“Multi-track Recorder” means “a recorder capable of combining local audio data from each local audio device with the local audio data of other local audio devices to create a single multi-track data file,” i.e., multitrack creation. A POSA would have known at the time of filing of the ’444 Patent that multitrack recording is a recording that “consists of multiple, separate streams of sound . . . individual instruments or voices will be recorded on separate tracks.” See Ex-2021, pg. 1; *see also* Ex-2017, ¶ 45.

The ’444 Specification clarifies that multitrack creation requires a combination of local audio data with local audio data or local audio with local audio. Ex. 2017, ¶ 46; *see also* Ex-1001, 4:64-5:6 (“Synchronization is essential to ensure that each performer's audio is synchronized with all other performers' audio . . . Such synchronization must maintain a high accuracy for each performer's timestamps with respect to all other performers' timestamps . . .

when the multiple audio recordings are combined to create one single recording.”) *See also* Ex-2017, ¶ 46. “For example, ‘[t]he audio received **from each of the local audio devices** (e.g., the local audio device **of each performer**) may be combined **to create one or more multi-track audio files** that are stored with master timestamps generated by the receiver/recorder's internal master timecode generator.’” Ex-1001, 17:30-35 (emphasis added). “The ‘444 Specification also explains that “audio from multiple local audio devices may be transmitted to a **multi-track** recorder for recording of the audio event while each local audio device locally records **its performer's audio**.” Ex-1001, 15:21-24 (emphasis added). The multitrack requirements of the ‘444 Specification eliminate any construction of this claim term in which audio is combined from multiple recorders, who all record all audio from an event on a single track of mixed audio that does not include individual, isolated tracks of audio per performer/audio source. Such a recording eliminates the ability of an audio engineer to independently edit each audio source, which is the essence of a multitrack system.” Ex-2017, ¶ 46. Any claim construction inconsistent with multitracking is inconsistent with the ‘444 Specification as a whole. Ex-2017, ¶ 47.

VII. THE PETITION FAILS TO DEMONSTRATE A REASONABLE LIKELIHOOD THAT THE CHALLENGED CLAIMS ARE UNPATENTABLE

Petitioners' invalidity analysis is inherently flawed due to their failure to construe any claim terms. Also, Petitioners' reliance on the Lectrosonics IPRs' claim construction is misplaced because the BRI claim construction standard was applied therein, rather than the Phillips standard to be applied here. *Supra* § VI. Petitioners have failed to state a proper obviousness analysis in their Petition as their combinations of the Cited References fail to disclose every element of the Challenged Claims, and the Petition fails to show sufficient motivation for combining the Cited References.

The question of obviousness is resolved on underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; and (3) the level of skill in the art. *See Graham v. John Deere Co.*, 86 S. Ct. 684, 693-695 (1966); *see also KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 399 (2007). A petition claiming invalidation due to obviousness must demonstrate that a "skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so." *OSRAM Sylvania, Inc. v. Am. Induction Techs., Inc.*, 701 F.3d 698, 706 (Fed. Cir. 2012). The Petition's evidence must also address every element of every challenged claim.

The Board should decline to institute any ground of this IPR because the Petition fails to: (i) set forth a proper obviousness analysis because it did not identify a primary reference, the claim elements that are allegedly missing from the primary reference, or the elements allegedly taught by the secondary references; (ii) demonstrate that a POSA would have been motivated to combine the teachings of the Cited References to achieve the claimed invention with a reasonable expectation of success; and (iii) demonstrate that any proposed combination of the Cited References teaches every element of any of the Challenged Claims.

A. Petitioners Do Not Demonstrate That Any of the Cited References Teaches Elements 1[Pre], 13[Pre], 1[B], 13[B], 1[C], 13[C], Or 1[I] Because All of The Cited References Fail to Disclose “Locally Generated Audio”

Petitioners do not argue whether Elements 1[Pre] or 13[Pre] are limiting, nor do they define “locally generated audio.” Petitioners nonetheless claim that Elements 1[Pre] and 13[Pre], namely “[a] system for recording/locally recording locally generated audio”, Elements 1[B] and 13[B], namely “a local audio device...configured to receive locally generated audio”, Elements 1[C] and 13[C], namely “the at least one local audio device wearable by a creator of the locally generated audio”, and Element 1[I], namely “create time-referenced local audio data from the locally generated audio and the at least one master timecode”

are taught by Strub and/or Woo. *RØDE*, IPR2025-00557, Paper 1 at 26-32, 35-4, 53-55.

“Locally generated audio,” is “audio created by the wearer of the local audio device receiving the locally generated audio, such audio suitable for use as an independent track of audio,” as is required for incorporation of “locally generated audio” in a multitrack recording as described in the ’444 Patent specification. *Supra* § VI.A. The “locally generated audio” is the audio created by the performer wearing the local audio device. The ’444 Patent specification teaches at least one audio input configured to receive the local audio data, where the audio input device is worn by the performer and connected to the performer’s local audio device to capture only, or primarily, the audio created by the performer wearing the local audio device so that this audio may be recorded as its own independent, isolated track. This individual track of audio is then combined with other performers’ independent, isolated tracks of audio to create a multi-track audio file that includes all performers’ audio tracks. Ex-1001, Abstract, 17:30-35; *see also* Ex-2017 ¶50.

Strub and Woo teach the exact opposite of “locally generated audio,” as the audio of Strub and Woo is locally “heard” or “received” by a recorder (i.e., the person in Strub who records the audio or the equipment in Woo that records the performer) – not generated, or created, by Strub’s recorder or anyone wearing the

recorder of Woo. Ex-1003, 22:16-33; *see also* Ex-1004, 5:3-5. That is, the audio recorded by Strub's recording units 105-108, 200, and 300, and Woo's recorders 14 and 16 is the sound received by the recording units 105-108, 200, and 300 and recorders 14 and 16 from varying perspectives, which is a single track of mixed audio without individual, isolated tracks of audio per performer/audio source. This is a critical distinction - Strub nor Woo teach that the audio is locally generated, rather the recorders of Strub and Woo function like external microphones, capturing ambient sound, not performer-specific audio stream. The requirement of "locally generated audio" is not satisfied by merely capturing the sound which happens to be audible at the location of the recorder. This kind of recording is unsuitable for multi-track recording. "This received, 'heard' audio is not suitable for multi-track recording because it does not include individual, isolated tracks of audio per performer that can be independently edited." Ex-2017, ¶ 51; *see also* Ex-2019, ¶ 15 ("Multitrack recording is meant to record multiple sound sources where each source is recorded to its own individual track.")

Strub's specification repeatedly details receipt of a single track of mixed audio from an event (including the combined audio of all performers) by a recorder, rather than generation of audio by a performer that is recorded on a dedicated, isolated track:

(i) “[I]t is believed preferable to bias the audio recording in favor of recording sound from in front of the recorder for several reasons: i) a person or persons with whom a recorder is having a conversation will typically be in front of the recorder; ii) a recorder will typically face the parties participating in a conversation that does not include, but is of interest to, the recorder; iii) a recorder will often face the source of other sounds in which the recorder has an interest; and iv) conversations that occur behind a recorder are typically either conversations which the recorder does not want to hear or are conversations which the parties to the conversation may not intend the recorder to hear,” (Ex-1003, 22:21-32);

(ii) “Mounting at or just above chest level also enables the audio data acquisition device to pick up spatial imaging of the audio that is similar to that which is experienced by the recorder's ears,” (Ex-1003, 22:59-63); and

(iii) “[U]se of a directional microphone ... has been found to enhance the ability to record the voices of other people, particularly when those people are relatively distant from the recorder,” (Ex-1003, 23:8-11).

Woo teaches that the person who is creating the audio that is recorded (i.e., the performer 12) does not wear the Woo recorders 14 or 16. Rather, Woo's recorders 14 and 16 are located remotely from the performer to record the performer from independent vantage points, i.e., “[s]ystem 10 is used to record the

live performance of a performer 12 ... recorder 14 captures the performance from its vantage point while another recorder 16 independently captures the same performance from its own vantage point.” Ex-1004, 5:1-5. That is, Woo does not teach “locally generated audio” because Woo’s audio is not “created by the wearer of the local audio device receiving the locally generated audio, such audio suitable for use as an independent track of audio.” *Supra* § VI.A. Ex-1017, ¶ 53.

Further, the single track of mixed audio received by a Strub or Woo recorder cannot be used for multitrack recording as required by the ’444 Patent specification, because it does not record each performer on an individual, dedicated, isolated audio track. Neither Strub nor Woo discloses creating independent, isolated tracks of performer audio, multi-track recording, or creating a multi-track audio file. As such, Petitioners have failed to show that any Cited Reference discloses limitations 1[Pre], 13[Pre], 1[B], 13[B], 1[C], 13[C] or 1[I]. Ex-2017, ¶54.

B. Petitioners Fail to Demonstrate that Strub Teaches Elements 1[A], 13[A], 1[H], or 13[H] Because Neither Strub Nor Woo Teaches a Master Timecode Generator in the Form of a Remote Receiver That Receives Audio

In the Challenged Claims, the “remote receiver” is a “master timecode generator,” because the remote receiver “is configured to create at least one master timecode.” This point is conceded by the Petitioners in its Petition. *RØDE*,

IPR2025-00557, Paper 1 at 34. (“it would have been obvious to try using the remote receiver ... as a master timecode generator.” *Id.* at 35 (“using the remote receiver as the master timecode generator would have a high likelihood of success.”))

Petitioners propose no definition of “remote receiver,” “master timecode generator,” or “at least one master timecode” but argue that Element 1[A], i.e., “a remote receiver, the remote receiver configured to create at least one master timecode and to receive audio data” and Element 1[H], i.e., “wherein the at least one local memory stores instructions that, when executed by the at least one local processing unit, configures the local audio device to: receive the at least one master timecode from the remote receiver via the at least one local receiver” are taught by Strub. *Id.* at 32-35, 52-53. Notably, Petitioners do not argue that Elements 1[A] or 13[A] are taught by Woo (*Id.* at 32-35, 52-53) despite referencing the prior Lectrosonics IPR FWD and its statements therein relative to Woo in its argument for collateral estoppel. Patent Owner is not collaterally estopped from disputing the findings of the Lectrosonics IPR FWD for the reasons set forth *Supra* § V.

Petitioner is correct that the Lectrosonics’ IPR Board found that Woo – not Strub – discloses “at least one master timecode generator for generating a plurality of master timecodes” finding Claims 7, 8, and 11 unpatentable under 35

U.S.C. § 103 over Strub, and Nagai or Gleissner and Woo, and failing to find that Strub rendered these claims obvious on its own as originally set forth in the Lectrosonics IPR2018-01129 petition. *Lectrosonics*, IPR2018-01129, Paper 2 at 1-2; Paper 33 at 73; Paper 33 at 27, fn. 8 “Patent Owner further argues that Strub does not disclose the claimed ‘master timecode generator for generating a plurality of master timecodes,’ and ‘one local timecode generator for generating a plurality of timecodes.’ PO Resp. 40–45; PO Sur-Reply 23–25. However, as discussed above, Petitioner relies on Woo as disclosing this limitation.” However, the prior Lectrosonics’ IPRs decisions are irrelevant here for two reasons: 1) Petitioners make no argument that Woo discloses a remote receiver (or a master timecode generator in the form of a remote receiver); and 2) even if they did, the master timecode generator in the Lectrosonics’ IPRs was not required to receive audio data, as is required by the Challenged Claims, and Woo’s “master timecode generator” does not receive audio data. Further, Strub also fails to teach Elements 1[A], 13[A], 1[H] or 13[H]

1. Petitioner Makes No Argument That Woo Discloses Elements 1[A], 13[A], 1[H] or 13[H]

The only mention of Woo in the arguments relating to Elements 1[A] and 13[A] is as follows:

The Lectrosonics IPR Board found that: (1) Strub teaches (a) “a local audio device that...transmits...audio to other remote devices”—*i.e.*,

there is necessarily a remote receiver that receives audio data from local audio devices—and (b) generating—*i.e.*, creating—master time data; (2) Woo discloses a “master timecode generator for generating a plurality of master timecodes”; and (3) a POSA would have been motivated to use Woo’s synchronization techniques in Strub’s system—findings Zaxcom is collaterally estopped from disputing. *Supra* § VI.C.

RØDE, IPR2025-00557, Paper 1 at 32. Petitioners also refer to the declaration of Dr. Chris Kyriakakis, ¶ 112 in its discussion of 1[A], but the declaration references Strub only, not Woo. *RØDE*, IPR2025-00557, Paper 1; Ex-1002, 64-66.

Petitioners cannot incorporate any arguments made in the Lectrosonics IPRs in its Petition. *See* 37 C.F.R. § 42.6(a)(3) “Arguments must not be incorporated by reference from one document into another document. Combined motions, oppositions, replies, or other combined documents are not permitted.” *See also Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1369 (Fed. Cir. 2023) (“The Board declined to consider Parus's arguments and evidence ... because it found that Parus had failed to comply with 37 C.F.R. § 42.6(a)(3), which prohibits incorporation by reference.”) *See also*, CTPG at 35-36 (“§ 42.6(a)(3) prohibits incorporating arguments by reference from one document

into another.”) As such, Petitioners have made no argument that Woo discloses elements 1[A] or 1[H].

For Elements 13[A] and 13[H], Petitioners only state “[t]aught by Strub and/or Woo. *Supra* 1[A]” and “[t]aught by Strub. *Supra* 1[H],” respectively. However, Petitioners err in referring back to 1[A] to show that Element 13[A] is taught by Woo because there is no argument in 1[A] (or 13[A]) that this element is taught by Woo for the reasons described above.

2. The “Master Timecode Generator” of Woo in the Lectrosonics IPRs Did Not Receive Audio Data as Required by the Challenged Claims

When the Board in the Lectrosonics’ IPRs decided that the “master timecode generator” limitation of the challenged claims was disclosed by Woo, there was no claim present that required the “master timecode generator” to “receive audio data,” as is the case with the Challenged Claims. The Lectrosonics IPRs FWDs held:

We are not persuaded by Patent Owner’s argument that Woo fails to teach a “master timecode generator.” Rather, we agree with Petitioner 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.” Pet. Reply 7 (citing Ex. 1020, title, abstract, 3:20–24, 8:26–59, Figs. 4, 5). Woo discloses a master clock comprising a GPS navigation satellite receiver and a digital signal processor. Pet. 24–25 (citing Ex. 1020, 8:60–9:4 (“The master clock 120 comprises a GPS navigation satellite receiver 122

and a digital signal processor 124 for accumulating and averaging code epochs which occur each millisecond in time and having a precision time-base output.”)). Woo also discloses that the master clock outputs using the SMPTE timecode format. Ex. 1020, 2:2–9, 3:3–37, 4:337, 8:7–25, 9:1–4. In sum, Woo’s master timecode generator provides a “precision clock output . . . for synchronizing film and video equipment.” Id. at 8:65–9:1.

Lectrosonics, IPR2018-01129, Paper 33 at 28.

Although Woo’s GPS navigation satellite receiver and digital signal processor may arguably be a “master timecode generator,” there is no doubt that Woo does not teach receiving of audio data by its GPS navigation satellite receiver or GPS digital signal processor (“DSP”), nor do Petitioners argue that they are capable of same (despite inexplicably referencing Woo in its collateral estoppel arguments). The components of Woo that receive audio during the recording of a performer are recorders 14 and 16, not the navigation satellite receivers 18 and 22, which include the DSP 52 (Ex-1004, Fig. 3) or the GPS receiver 122 and DSP 1245 (Ex-1004, Fig. 5). Ex-2017, ¶ 58.

3. Strub Does Not Teach Elements 1[A], 13[A], 1[H] or 13[H]

Petitioners must “identif[y] ... with particularity ... the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim.” 35 U.S.C. § 312(a)(3); *Harmonic Inc. v. Avid Tech., Inc.*,

815 F.3d, 1356, 1363. Petitioner makes no showing that Woo teaches elements 1[A], 1[H], 13[A], or 13[H], but solely relies on Strub to teach these limitations.

For the “master timecode” portion of element 1[A], Petitioners argue that “Strub teaches using one of these recording units as a “‘master’ recording unit” that “transmit[s] a synchronization pulse...to each of the other recording units”—i.e., the local audio devices—to allow them to synchronize their recordings. *Id* at 38:29-39. Strub’s synchronization pulses comprise master timecodes. Ex. 1002, ¶ 112.” *RØDE*, IPR2025-00557, Paper 1 at 34. Petitioners’ arguments miss the mark entirely. A closer look at the Strub section cited by Petitioners (Ex-1003, 38:29-39) reveals that Strub does not teach that this synchronization pulse applies to “recording data,” which is what Petitioners equate to “locally generated audio” (*Id* at 33) but rather to *other* data. Furthermore, this technology is for use with “visual recording data,” not audio data. Specifically, Ex-1003, 38:29-39 (which is the only section of Strub that addressed synchronization pulses) states:

“[d]ata **other than recording data** can also be exchanged between recording units. For example, it may be desirable to coordinate the recordings obtained by recording units so that frames of **visual recording data** obtained by different recording units are temporally synchronized (e.g., so that a frame begins at the same time for each recording unit). This can be done by transmitting a synchronization pulse from a "master" recording unit to each of the other recording units ("slave" recording units). (Synchronizing **analog visual data** acquisition devices in this way is referred to as "genlocking.")

Ex-1003, 38:29-39 (emphasis added).

Genlocking synchronizes video, not audio. *See Supra* § VII.B.3; *see also* Ex-2017, ¶59 (“Genlocking is a video synchronization technique used to align the start of video frame acquisition across multiple visual data acquisition devices. It does not apply to or affect the synchronization of system clocks or audio timestamps. It is used exclusively in the video domain and has no bearing on audio synchronization). Since, genlock signals merely align the refresh rate of image capture across cameras and do not provide a reference time signal to synchronize audio data, it cannot act as a master timecode. Genlocking does not “synchronize the local clock” of any device, never mind a local audio device. Genlock synchronizes the timing of video outputs (pixel clocks), not the local system clock, and pixel clocks are not used with audio data – only video data. Use of genlocking for audio data is a technical impossibility as genlocking utilizes pixels/pixel clocks, which are not available in audio data. Petitioners state no explanation as to why a video synchronization scheme would be incorporated for the manipulation of audio data as required by the claims, particularly Elements 1[A] and 13[A], nor why a POSA would be motivated to use a video synchronization scheme for the synchronization of audio.

Further, Strub teaches use of this synchronization scheme for “data other than recording data,” not for the “recording data” itself, which the Petitioners have

equated to “locally generated audio.” So Strub does not even suggest use of this pulse synchronization scheme for the locally generated audio, as required by the language of the Challenged Claims. For at least these reasons, Strub’s synchronization pulses are not “master timecodes” capable of being used with “audio data,” nor are they intended for use with “locally generated audio” that the Petitioners claim is being recorded by the Strub recording units.

Further, even if Strub were to teach that one of its recording units creates master timecodes, nothing in Strub teaches that its recording unit is a “remote receiver,” which is the device that is required to create the “at least one master timecode” in Elements 1[A] and 13[A]. Petitioner acknowledged this failure of Strub to teach this aspect of the claims multiple times. *RØDE*, IPR2025-00557, Paper 1 at 34-35 (“A POSA would have considered it obvious for Strub’s remote receiver—the one receiving audio—to be the one to generate the master timecodes/synchronization pulses” and “Since Strub’s remote receiver is the unit receiving audio from multiple sources, a POSA would have recognized the desirability/practicality of having the remote receiver generate master timecodes for all the units so that all the received audio is synchronized to its own clock or time reference. At minimum, it would have been **obvious to try** using the remote receiver, rather than one of the other three recording units, as master timecode generator, as there is a limited number of choices ... and using the remote receiver

as the master timecode generator would have had a high likelihood of success” (emphasis added).

For all of these reasons, Petitioners fail to show a reasonable likelihood that Strub or Woo teach Elements 1[A], 1[H], 13[A], or 12[H].

C. The Prior Decision of the Lectrosonics IPR Board Is Irrelevant to Petitioners Arguments Related to the Cited References Teaching Elements 1[B] or 13[B]

Preliminary, Petitioners state “[t]he Lectrosonics IPR Board found that Strub teaches ‘a local audio device that records local audio and transmits the local audio to other remote devices,’ the local audio device including an ‘at least one audio input port for receiving said locally generated audio from an audio input device.’ *Supra* § VI.C. Zaxcom is collaterally estopped from disputing that finding. *Id.*” Zaxcom is not collaterally estopped from disputing this finding for the reasons set forth *Supra* § V. Further, Petitioners seem to reach this assertion by equating “transmits the local audio to other remote devices” from the prior Lectrosonics’ IPR proceedings to “a local audio device **capable of communicating with** the remote receiver” in the current proceeding. Transmit and communicate are not equivalent, and Petitioners have made no argument to the contrary. As such, this argument should be disregarded.

D. Petitioners Fail to Demonstrate that any Combination of the Cited References Teaches Elements 1[C] and 13[C] Because Neither Strub

nor Woo Teach a “Local Audio Device Wearable by a Creator of the Locally Generated Audio”

Petitioners do not define “local audio device wearable by a creator of the locally generated audio,” but nonetheless state these limitations 1[C] and 13[C] are taught by Strub and Woo. *RØDE*, IPR2025-00557, Paper 1 at 35-40 and 66.

1. Petitioners Fail to State Any Support to Show That a Strub Recording Unit Having the Features of Claims 1 and 13 is Wearable

Petitioners must “identif[y] ... with particularity ... the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim.” *See* 35 U.S.C. § 312(a)(3); *see also Harmonic*, 815 F.3d at 1363. Strub discloses different variations of recording units – some with basic recording capabilities (the “Basic Strub Recording Unit”) and some with transmitter/receiver capabilities (the “Advanced Strub Recording Unit”). Strub’s recording units 105-108 are described as Basic Strub Recording Units without any mention of having a transmitter, a receiver, or an ability to transmit or receive data. Ex-1003, 8:13-29. Similarly, Strub’s recording unit 200 is also described as a Basic Strub Recording Unit including only system controller 201, data acquisition device 202, data storage device 203, and control interface device 204 – no transmitter or receiver. Ex-1003, Fig. 2. In contrast, Strub’s recording unit 300 is an Advanced Strub Recording Unit that includes a transmitter 309 and receiver 310, and for which a data acquisition is performed via two devices (video

data acquisition device 302 and audio data acquisition device 303) instead of the one data acquisition device of the Basic Strub Recording Unit 200. Ex-1003, 11:48-50, 12:13-16.

The Petition repeatedly equates the ‘444 Patent’s local audio device to Strub’s recording unit 300, presumably because it includes a receiver, as required for the local audio device of the Challenged Claims. *RØDE*, IPR2025-00557, Paper 1 at 35-40. Petitioners refer to Fig. 1 to prove wearability, i.e., “Strub expressly states that each of its local audio devices—recording units 105-108, 200, and 300—is wearable by a creator of the locally generated audio—participants 101-104. See, e.g., Ex. 1003, Fig. 1” *Id.* at 41. The only recording units shown in Fig. 1 are recording units 105-108 – recording units 200 and 300 are NOT shown in Fig. 1. Without a receiver, recording units 105-108 cannot be equated to the local audio device of the Challenged Claims. The additional support cited by Petitioners for same (i.e., Ex-1003, 8:7-12, 14:59-15:11, 16:66-17:24, 38:65-39:11, 66:33-51, 67:54-68:10, 72:9-19) also does not teach such a device. *RØDE*, IPR2025-00557, Paper 1 at 41.

Petitioners’ additional support to show Strub’s disclosure of Elements 1[C] and 13[C] (*RØDE*, IPR2025-00557, Paper 1 at 40 and 66), is equally unpersuasive and proves that the Strub device is not wearable. Strub at 8:7-12 explains that FIG. 1 illustrates four people participating in an event; each equipped with a Strub

recording unit with no receiver. Strub at 14:59-15:11 and 16:66-17:24 discuss wearability of the visual acquisition device – not the recording unit – and proves that the visual acquisition device of a Strub recording unit is not wearable because it must be attached to a “wearable apparatus,” e.g., “helmet, headband, or head harness ... that is worn by the recorder” or “mating Velcro™ strips ... can be used to attach the visual data acquisition device ... on headgear, and armband, a leg band, or other wearable apparatus.” Ex-1003, 17:1, 7-24. The “wearable apparatus” is wearable, but the visual data acquisition device is not, hence the need to attach it to a “wearable apparatus.”

“Strub at 38:65-39:11 only pertains to wearability of an ‘audio communication device’ – not a recording unit.” Ex-2017, ¶ 69. Strub at 66:33-51 does not describe wearability of a recording unit with a receiver because it describes a “data acquisition device” which is used in the Basic Strub Recording Unit. *See* Ex-1003, Figs. 2 and 3, 66:33-51. And, the lead in to Strub at 66:33-51 clarifies that this Basic Strub Recording Unit without a receiver may not even be wearable: “it is desirable to ‘package’ the recording unit components in any manner that achieves some or all of the desired characteristics of a recording unit ..., e.g., small size, low weight, unobtrusiveness, and capability of being mounted on a recorder (or, at least, capability of being easily carried by the recorder).” Ex-1003, 66:27-32 (emphasis added). “In other words, even the Strub specification

questions whether a Basic Strub Recording Unit without a receiver is actually wearable.” Ex-2017, ¶ 69. Strub at 67:54-68:10 and 72:9-19 refers to the wearability of a Basic Strub Recording Unit 700 with no receiver. Ex-1003, 68:11-14. Accordingly, Petitioners have not shown that Strub discloses a wearable device having all features required by Claims 1 and 13.

2. The Strub Recording Unit is Portable, Not Wearable

“Fig. 6 illustrates a recording unit . . . Most of the components of the recording unit are enclosed within a backpack 601” and “a recording unit as shown in Fig. 6 . . . weighs about 24 pounds.” Ex-1003, 67:30-33, 45-47. If Strub’s recording unit was “wearable,” it would not require a backpack to attach it to a recorder’s body. “The Strub recording unit is not worn – it is carried within a backpack. One might send a child to school with a sandwich in the child’s backpack – this does not make the sandwich wearable.” Ex-2017, ¶ 71. A proper claim construction of Element 1[C] and 13[C] excludes portable devices. *Supra* § VI.B.

3. The Strub Recording Unit is Not Suitable to be Worn by a Performer

Neither Strub nor Woo disclose a local audio device, nor a local audio device that is “suitable to be worn by a performer.” The ’444 Specification describes a recording system that “wirelessly records audio events such as performances, move

takes, etc.,” and the local audio devices “are worn by the performers of the audio event.” Ex-1001, 3:64-66.

In 2005, when the parent application of the ‘444 Patent was filed, a bodypack transmitter used in the motion picture industry weighed between 2.7 to 6 ounces. Ex-2025, p.1; *see also* Ex-2026, p. 14; Ex-2027, p. 20. Zaxcom’s TRX900 transmitter is depicted in Fig. 3B. *See* Ex-1001, Fig. 3B, 3:4-6, 12:42-43.

Strub’s recording units are not “local audio device[s] wearable by a creator,” as they are too large, visible, heavy, and imposing to be worn during the filming of performances. Strub’s recording units’ purpose of “social recording” (Ex-1003, Abstract), and to “facilitate later reminiscence” (Ex-1003, 2:63), does not require the same portability and discreteness as a device used to record performance audio as required by the ‘444 Specification. Ex-1001, 3:64-66 (“Recording system 100 wirelessly records audio events, such as performances, movie takes, etc. having one or more performers.”). Local audio devices must be of a size, weight, and shape that can be worn by performers without distracting the audience from the visual performance of the events, or “breaking the fourth wall.” Ex-2019, ¶ 22. The weight, size, and shape of the Strub recording unit prohibits such application. Figure 6 of Strub teaches a Basic Strub Recording Unit without a receiver that “weighs about 24 pounds.” Ex-1003, 67:45-47; Ex-1001, 23:42.

Accordingly, a Strub recording unit having all features of the challenged claims will exceed 24 pounds. “While one might carry in excess of 24 pounds for recreational filming, performers (e.g., those performing in motion pictures, concerts, news reporting, opera, etc.) are unable to carry such a weight while delivering such a performance, particularly without disturbing their hair, makeup, and costumes.” Ex-2017, ¶ 74; *see also* Ex-2019, ¶ 22-23. Furthermore, Strub’s disclosure that the “components of the recording unit are positioned **within a backpack that is worn by the recorder**” is not feasible in the performance industry, as it would impair the visual aspects of the performance. Ex-1003, 16:51-54 (emphasis added), Fig. 1, Fig. 6, Figs. 8A-C; *see also* Ex-2019, ¶ 24-25. The ’444 Specification requires a local audio device suitable to be “worn by news announcers and performers,” including those “manufactured in the form of body-packs, such as those typically worn by news announcers, performers, and the like.” Ex-1001, 8:59-61. Such bodypacks may be worn on a belt or otherwise hidden on the performer (e.g., in a pocket). Ex-2024, pg. 5.

4. Strub and Woo Do Not Teach Wearing of the Local Audio Device by a Performer Who Creates the Audio Recorded by the Local Audio Device

Elements 1[C] and 13[C] require “a local audio device wearable by the creator of the locally generated audio.” *Supra* § VI.B. Whereas the ’444 Specification teaches a local audio device that records the isolated tracks of audio

created by the performer who is wearing the local audio device, the Strub and Woo recording units record mixed audio that the recorder receives or hears. *Supra* § VII.A. Strub's and Woo's recording units both record mixed event audio, not performer audio, wherein the event audio is the mixed audio of multiple sources participating in the event occurring in front of the Strub or Woo recorder. *See* Ex-1003, 8:8-16, 22:21-32; Ex-1004, 5:1-5. This negates the ability of Strub or Woo to create a multitrack recording because there are no independent, isolated tracks of each audio source that may be independently manipulated during or after creation of a multi-track audio file.

E. Petitioners Fail to Demonstrate that any Combination of the Cited References teaches Elements 1[I] Because the Synchronization Pulses (Genlocking) of Strub Do Not Teach Synchronization of the Local Clocks in a Local Audio Device and Petitioners have Failed to Show that Strub or Woo Teaches At Least One Master Timecode Created By The Remote Receiver

1. The Synchronization Pulses (Genlocking) of Strub Are For Use With Video - Not Audio - And Do Not Teach Synchronization of the Local Clocks in a Local Audio Device

Petitioners argue that “Strub’s local audio device receives at least one synchronization pulse – i.e., master timecode-from the remote receiver ...

Strub’s synchronization pulses would synchronize the local clock in the local audio device... and Strub’s local audio device uses its synchronized local clock to ‘time-stamp’-i.e., time reference-the local audio data, creating time-referenced

local audio data... Since the time references are created using a local clock synchronized from the master timecode, the time-referenced local audio data has been created from the locally generated audio and the at least one master timecode.” *RØDE*, IPR2025-00557, Paper 1 at 53-54 (emphasis added). This assertion is incorrect and inaccurate from a technical standpoint. Strub refers to these synchronization pulses as “genlocking.” Ex-1003, 38: 34-39 (“This can be done by transmitting a synchronization pulse from a ‘master’ recording unit to each of the other recording units (‘slave’ recording units). (Synchronizing analog visual data acquisition devices in this way is referred to as ‘genlocking.’)).

Genlocking does not “synchronize the local clock” of any device, never mind a local audio device. Genlock synchronizes the timing of video outputs (pixel clocks), not the local system clock, and pixel clocks are not used with audio data – only video data. The internal clock (such as a CPU or real-time clock) is not synchronized by genlock; only the video timing circuits are aligned to the reference. Ex-2031, *Designing Genlocked Video Systems with Deterministic Low Latency on FPGAs*, pg. 2 (“The output video timing in a typical video pipeline is controlled by a Video Timing Generator (Vtiming) IP. The Vtiming IP adds horizontal and vertical blanking intervals to the active pixel data coming from the video processing system... [A] VCXO-less Controller – to generate an output pixel clock synchronized (i.e., genlocked) with an input pixel

clock by using only internal FPGA resources... to measure differences between the input and output pixel clocks and to generate a control word that allows tracking and locking the phase of the output pixel clock relative to the input pixel clock.”). Genlocking applies to video, not audio data. Nor does genlocking synchronize the local clock of a device, but rather, when applicable, a “pixel clock.” As such, Petitioners’ assertion that “synchronization pulses [genlocking] would synchronize the local clock in the local audio device” is incorrect.

2. Petitioners have Failed to Show that Strub or Woo Teaches At Least One Master Timecode Created By The Remote Receiver

Petitioners further argue that “Strub discloses creating time-referenced local audio data by adding GPS time stamps, which are also master timecodes, to the locally generated audio. *Id.* 63:12-49 (using “GPS time signal” to “generate time-stamps for the recording data”).” *RØDE*, IPR2025-00557, Paper 1 at 54. However, the cited section of Strub fails to teach the claimed language which requires the at least one master timecode that is used to create the time-referenced local audio data be “**created** by the remote receiver,” i.e., Element 1[A] and 13[A]. *Id.* at Challenged Claim Listing (emphasis added). This claim language requirement differs from the prior Lectrosonics’ IPR proceedings, in which there was no requirement that the master timecode be created by a remote receiver. As such, the prior Lectrosonics’ IPR Board never issued a ruling on this issue.

Strub does not teach **creation** of at least one master timecode by the recording unit but rather **receipt** of the signal from a GPS satellite. Ex-1003, 62: 41-43 (“A GPS receiver can also be used to **receive** a signal representing the current time...”)(emphasis added). That is, the Strub “master timecode” is created by a GPS satellite, not a remote receiver. And the GPS satellite cannot be a remote receiver because it is not capable of receiving audio data, as required by the Challenged Claims.

The same argument applies to Petitioners’ arguments that Woo discloses Element 1[I]. Petitioners argue:

Woo also teaches this element. Woo’s local audio device includes “a date and time tag unit 56,” Ex. 1004, 7:59, Fig. 3, that provides time stamps, which comprise master timecodes and are used to stamp at least a portion of the local audio data. *Id.*, 8:11-21, 8:25-44, Figs. 3, 4; see also *id.* 1:60-2:1, 5:37-45. The time stamps/timecodes can be **based on GPS signals from GPS receivers 18/22 or provided by “commercially-available time code generator 43.”** *Id.* 4:13-19 (SMPTE timecodes based on GPS timing signals), 4:45-48 (GPS), 5:5-13, 7:26-29, 7:29-35 (timecodes from “commercially-available time code generator 43”), 7:49-53 (time code generator “can be used as a master clock.”), 8:25-36 (tagging recording with date/time information from satellite receiver), 9:33-39, 10:44-60, Figs. 2-4; Ex. 1002, ¶ 142.

RØDE, IPR2025-00557, Paper 1 at 54 (emphasis added).

This cited sections of Woo which reference receiving timecodes from GPS receivers or commercially available timecode generators also fail to teach the claimed language which requires the at least one master timecode that is used to create the time-referenced local audio data be “**created** by the remote receiver,” i.e., Element 1[A] and 13[A]. *Id.* at Challenged Claim Listing (emphasis added). Petitioners make no showing that Woo teaches a remote receiver at all. *See Supra* § VII.B., nor the **creation** of at least one master timecode by any type of remote receiver but rather **receipt** of the signal from a GPS receiver 18/22 or a commercially available time code generator. That is, the Woo master timecode is created by a GPS satellite or a commercially available timecode generator, not a remote receiver. And neither the GPS satellite nor the commercially available timecode generator are remote receivers because, at a minimum, neither is capable of receiving audio data, as required by the Challenged Claims.

Further, Petitioners argue that Woo’s “local audio device includes ‘a date and time tag unit 56 ... that provides time stamps, which comprise master timecodes and are used to stamp at least a portion of the local audio data.’” *RØDE*, IPR2025-00557, Paper 1 at 54. However, the Challenged Claims require that the “remote receiver [is] configured to create at least one master timecode,” not the “local audio device.” That is, in the Challenged Claims, the local audio device does not create “master timecodes” but receives them from a “remote

receiver.” *RØDE*, IPR2025-00557, Paper 1 at 32-35, 52-53. Petitioners fail to argue that Woo discloses such a remote receiver or that such a remote receiver creates at least one master timecode.

F. Petitioners Fail to Demonstrate that any Combination of the Cited References Teaches Element 13[I]

Regarding Element 13[I], i.e., “synchronize a local timecode with the at least one master timecode,” Petitioners state:

The Lectrosonics IPR Board found that Woo discloses synchronizing a local clock with a master time clock and that a POSA would have been motivated to use Woo’s synchronization techniques in Strub’s system—findings Zaxcom is collaterally estopped from disputing. *Supra* § VI.C.

RØDE, IPR2025-00557, Paper 1 at 67.

This comparison is completely inapposite as Element 13[I] requires synchronization of a local **timecode** with a master **timecode**, and the Lectrosonics IPR Board opined on synchronization of a local **clock** with a master **clock**. Timecodes and clocks are not the same thing, therefore, there is no relevance here to this comparison, and it should be disregarded by the Board.

Petitioners also argue that the “synchronization pulse” disclosed in Strub teaches Element 13[I], but, as discussed *supra* § VII.B.3., synchronization pulses do not apply to audio, only video, and therefore do not teach this element.

G. Petitioners Fail to Demonstrate That a Combination of Any of the Cited References Teaches Claims 2-3 or 14-15

Petitioners state that the elements of Claims 2-3 and 14-15, i.e., “at least one local audio device is a body pack” is taught by Strub, without argument, and in a single sentence:

Strub’s local audio device can be a body pack—e.g., a backpack or pack worn on the recorder’s body. Ex. 1003, 11:11-17 (‘[T]he recording unit [is] mounted on (e.g., attached on, or worn by)...the recorder’), 16:49-65 (backpack), 22:3-7, 66:52-56, 70:52-67, 71:53-66 (attached to body with waist strap), 73:24-50 (harness, backpack), Figs. 1, 4, 6, 8A-9B (depicting body packs); Ex. 1002, ¶ 148.

RØDE, IPR2025-00557, Paper 1 at 57.

Petitioners define “body pack,” as “a backpack or other package worn on the recorder’s body” by citing to Strub. However, the ‘444 Specification is the proper reference to determine for the meaning of “body pack” – not Strub. As explained *supra* § VI.D., a proper construction of “body pack” is “a small box housing a transmitter capable of being worn on a belt or in a pocket.” As also

discussed *supra* § VII.D.2, if a backpack is required to “wear” a device, this inherently means that the device itself is not wearable. The bodypack of Fig. 3B and the ‘443 Specification is worn directly by a user without the need for a “backpack” or other “wearable apparatus.” Further, backpacks are not “typically worn by news announcers, performers, and the like” and any such construction of bodypack is inconsistent with the ‘444 Specification. Ex-1001, 8:59-61.

Petitioners’ Strub citations do not cure these deficiencies. “Ex. 1003, 11:11-17 ([T]he recording unit [is] mounted on (e.g., attached on, or worn by)...the recorder’)” (Paper 1 at 57), is incorrectly quoted and inexplicably replaces “be adapted to be” with “[is],” which changes the entire context of what Strub teaches. The proper and full quotation is “it is highly desirable that the recording unit **be adapted to be** mounted on (e.g., attached on, or worn by), *rather than held by*, the recorder.” Ex-1003, 11:11-13 (emphasis added). The bolded text is the text incorrectly omitted without citation in Petitioners’ quotation, and the italicized text was replaced by an ellipsis in Petitioners’ quotation. When properly quoted, it is clear that Strub does not teach a recording unit able to be worn on the recorder’s body – it is meant to be held by a recorder unless it is adapted in some manner to make it wearable on a recorder (not a performer).

Petitioners' remaining citations all fail to show that Strub's recording unit is a bodypack, and further prove that the Strub recording unit is not even wearable because these devices all require a wearable apparatus to allow a user to wear the recording unit (i.e., a "backpack," a "waist strap," a "harness," or the myriad of other wearable apparatus shown in the cited Strub figures). As discussed *supra* § VII.D.1, even assuming *arguendo* that Figs. 1, 4, 6, 8A-9B depict a wearable recording unit in the form of a bodypack, Petitioners failed to show that the depicted Strub recording units include all of the local audio device elements required by the Challenged Claims (e.g., a receiver).

VIII. PETITIONERS FAIL TO DEMONSTRATE THAT A POSA WOULD BE MOTIVATED TO COMBINE THE CITED REFERENCES TO CREATE THE INVENTION OF THE CHALLENGED CLAIMS

A. Petitioners Failed to Demonstrate That a POSA Would Have Been Motivated to Modify Strub With Woo, Nagai, Gleissner, or Samadani to Achieve the Inventions Recited in the Challenged Claims With a Reasonable Expectation of Success

The Petitioners have failed to show why a POSA would attempt to solve a dropout problem of a "Systems and Methods for Repairing Remotely Recorded Audio Data" (Ex-1001, Title), by combining the Cited References, as none teach multi-track recording nor the capture of individual, isolated sources of audio as required for multi-track recording. To the contrary, both Strub and Woo capture

single tracks of mixed audio that do not include individual tracks of audio per performer/audio source.

Petitioners' motivation to combine Strub and Woo is rooted in forbidden hindsight analysis and merely makes conclusory statements that Strub and Woo recognize and solve the problem of "generating master timecodes with a master timecode generator, providing those timecodes to a local recording device, and using the timing information in those timecodes to time-stamp the locally recorded audio data." *RØDE*, IPR2025-00557, Paper 1 at 79.

As explained by Mr. DeFilippis, "[i]t is unclear how the teachings of Strub and Woo could be combined as suggested by the Petitioners to achieve the claimed invention with a reasonable expectation of success, because the references disclose methods that substantially differ from each other and the claimed invention." Ex-2017, ¶ 96. The '444 Patent and its family recognizes a master timecode generator that is "a producer of a master time reference signal that controls at least one other timecode generator," and creates a "a time reference signal used to synchronize at least one device," wherein this time reference signal is non-GPS-based and is used to coordinate the various tracks of a multi-track recording system. *Supra* § VI.C.

Strub discloses a GPS time signal that produces time stamps but does not control another timecode generator and does not produce a time reference signal

used to synchronize at least one device. “A GPS receiver can also be used to receive a signal representing the current time that can be used as a clock to generate time-stamps for the recording data.” Ex-1003, 63:40-49; Ex-2017, ¶ 98.

Quite differently, Woo discloses a “master clock 120 compris[ing] a GPS navigation satellite receiver 122 and a digital signal processor 124 for accumulating and averaging code epochs.” Ex-1004 at 8:60-63.

Indeed, it is Mr. DeFilippis’s opinion that a POSA “would not have been motivated to combine Strub and Woo, since they use different approaches, and it is not clear that the outcome of this combination improves anything, never mind solving the problem of dropouts in multi-track recording systems as neither Strub nor Woo teach multi-track recording or capture individual sources of audio as required for multi-track recording.” Ex-2017, ¶ 99.

A POSA would not have been motivated to combine Strub and Woo because “Strub already discloses a solution to post-production editing (i.e., participants share their locally recorded audio after a recorded event). Ex-2017, ¶ 100; *see also* Ex-1003, 80:52-58. Therefore, applying the Woo solution in post-production in Strub would have been unnecessary. “A POSA would not have been motivated to change Strub’s simple system used by recreational recorders with a complex technical solution requiring multiple GPS receivers, video sync generators, delay circuitry, commands and requests, etc., especially because doing

so would dramatically increase the size, weight and battery requirements of the Strub recording units, making them even more unwieldy, cumbersome and impractical than they already were.” Ex-2017, ¶ 100.

1. Strub and Woo are Non-Analogous Art to the Claimed Invention.

A reference that is not analogous art to the claimed invention may not be used in an obviousness rejection. *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). A reference is analogous art to the claimed invention only if it is: (i) from the same field of endeavor; or (2) reasonably pertinent to the problem faced by the inventor. *Id.* at 1325. A reference is not "reasonably pertinent" to the problem unless it "logically [] commended itself to an inventor's attention in considering his problem." *In re Klein*, 647 F.3d 1343, 1348 (Fed. Cir. 2011) (quoting *In re Clay*, 966 F.2d 656,658, 23 USPQ2d 1058, 1061 (Fed. Cir. 1992)).

Strub and Woo are not in the same field as the claimed invention, and their disclosures are not reasonably pertinent to the problem faced by the '444 Patent inventors because they are not in the field of multi-track recording, nor are they capable of multi-track recording as they do not record individual, isolated sources of audio. Rather, Strub is in the field of low attention, social recording and Woo discloses a “GPS receiver [that] comprises a data output port for communicating time code information formatted according to standards.” Ex-1004, Abstract.

The ‘444 Specification does not mention any “GPS satellite or receiver; it instead relates to using a master timecode generator to control other timecode generators in other recorders and ‘to accurately stamp its recorded audio ... [which] allows multiple individually recorded audio tracks to be combined into one or more multi-track audio files.’” Ex-2017, ¶ 101 (citing Ex-1001, 4:1-4:11). GPS signals are known to be incompatible with performance recording as many recording locations (e.g., subways or other underground locations, government buildings, professional recording studios) are not capable of receiving satellite signals. Ex-2019, ¶ 27.

2. Modifying Strub with Woo Nagai, Gleissner, or Samadani Would Change the Principle Operation of Strub and Render it Unusable for its Intended Purpose of Low Attention, Social Recording.

The Petition fails to show obviousness of the Challenged Claims via a combination of the Cited References because the proposed modification of a reference: (1) cannot change the principle operation of a reference; and (2) cannot render the reference unsuitable for its intended purpose. *See Plas-Pak Indus. v. Sulzer Mixpac AG*, 600 F. App'x 755, 758 (Fed. Cir. 2015) (“[C]ombinations that change the ‘basic principles under which the [prior art] was designed to operate ... or that render the prior art ‘inoperable for its intended purpose ... may fail to support a conclusion of obviousness.’”) (quoting *In re Ratti*, 270 F.2d 810, 813

(CCPA 1959) and *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984), respectively).

The Petition fails to identify the primary reference, how it is modified, or what elements of the claims are missing from the primary reference. Based upon the Petition's assertion that "Woo provides express motivations to use its synchronization methods in a wireless, multi-recorder system such as Strub's" (*RØDE*, IPR2025-00557, Paper 1 at 22), Zaxcom will assume the reference being modified is Strub.

Strub's intended purpose is low attention, social recording that allows multiple recorders to record the same event from multiple viewpoints. Ex-1003, Abstract. To obtain complete event audio, each recorder's audio recording (of the recorder's personal audio) would be combined into a single multitrack recording of the event – which would result in only one audio recording for any given event despite the number of recorders or possible viewpoints. Such an outcome changes the principle operation of Strub and renders it unsuitable for its intended purpose because Strub no longer performs "social recording," i.e., recording in which multiple participants in an event are recording the event" from multiple viewpoints. Ex-1003, Abstract. Since the modification of Strub with the teachings of Woo, Nagai, Gleissner, and Samadani would change the principle operation of Strub and render it unsuitable for its intended purpose, there is no

suggestion or motivation to make the proposed combination. *See Plas-Pak*, 600

F. App'x at 758.

IX. CONCLUSION

For all the reasons expressed herein, the Petitioners did not show a reasonable likelihood that at least one of the claims challenged in the petition is unpatentable on any of the proposed grounds of rejections. Accordingly, the Petition should be denied.

Date: July 7, 2025

Respectfully Submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), I certify that this “PATENT OWNER’S PRELIMINARY RESPONSE PURSUANT TO 37 C.F.R. § 42.107(a)” contains 13,005 words, as determined by Microsoft Word, excluding the portions exempted by 37 C.F.R. § 42.24(a)(1). More specifically, the portions exempted from this word count are the title page, table of contents, table of authorities, table of exhibits, glossary of terms, this certificate, and the certificate of service. Accordingly, this Preliminary Response complies with the requirements of 37 C.F.R. § 42.24(b)(1).

Dated: July 7, 2025

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CERTIFICATE OF SERVICE

The undersigned certifies that on July 7, 2025, a complete and entire copy of the foregoing “PATENT OWNER’S PRELIMINARY RESPONSE PURSUANT TO 37 C.F.R. § 42.107(a)” is being served on the petitioners at the electronic addresses shown below per consent.

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