

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.

IPR2025-00230
Patent 7,711,443

REPLY TO PATENT OWNER'S RESPONSE

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A. INTRODUCTION

Patent Owner (“PO”) has failed to rebut Petitioners’ evidence that the cited references teach all elements of the challenged claims and would have been obvious to combine. All challenged claims should be found unpatentable

B. PERSON OF ORDINARY SKILL IN THE ART

A POSA within Petitioners’ definition, Paper 1, at 3, would have the appropriate level of experience with the relevant technologies, including audio recording, RF transmission, data storage, audio signal processing, timing signals, GPS, etc. PO’s extra requirements of “two to five years’ experience working with multi-track audio and wireless communications systems in the professional performance industry,” POR, at 6, are unnecessary and overly specific, since (1) multi-track audio is a basic concept known for decades, (2) off-the-shelf wireless components available in 2005 could be employed without lengthy, hands-on experience, and (3) none of the challenged claims are limited to a professional environment. Regardless, Dr. Kyriakakis was at least a POSA in July 2005 under either party’s definition. Ex. 1073, ¶¶ 4-5.

C. PETITIONERS HAVE DEMONSTRATED THAT EACH CHALLENGED CLAIM IS UNPATENTABLE

1. 1[Pre] and Element 1[F]: “locally generated audio” and “local audio data”

a. Claim Construction

“Locally generated audio” is audio generated near the local audio device. Ex. 1073, ¶ 10. PO fails to identify any definitions or disclaimers requiring such audio be “separate, isolated audio” of the wearer. PO’s citations are exemplary and do not preclude others from also generating local audio. Ex. 1001, Abstract (“In *some aspects* ...”) 12:26-28 (“For example,...”), 13:18-21 (same); *Id.*, ¶¶ 7-10.

Nor must “locally generated audio” be “suitable for use as an independent track of audio.” That is an intended use, not the meaning. The only recitation of “independent track of audio” does not mention “locally generated audio” and cannot be definitional. Ex. 1001, 10:4-34; *id.*, ¶ 9.

For “local audio data,” PO fails to identify any definitions or disclaimers, or cite to specification teachings, that the control unit of element 1[F] creates “mono or stereo” or “multi-track” audio files that are stored in memory. Instead, a generic “new audio file is created” in memory. Ex. 1001, FIG. 4A, 13:1-5. PO’s construction also makes claim 15 redundant. Ex. 1073, ¶¶ 13-14.

Dr. Kyriakakis merely acknowledged a “goal of multitrack recording,” (POR, 9 (citing Ex. 2119, 52:10-12, 19-21)), not agree with PO’s constructions. His testimony concerning a “scratch track” and “ambient mic” are irrelevant because it

does not follow that a track containing audio of both wearer and non-wearer(s) would be useless. Ex. 1073, ¶¶ 11-12.

b. **Strub teaches “locally generated audio” and “local audio data”**

Strub’s local audio devices 105-108, 200, and 300 receive “locally generated audio,” Ex. 1003, 8:50-52 (“recording unit...obtain[s] audio data representing an aural record of the event.”), 8:7-20, 3:30-38, FIG. 3 (audio acquisition device (microphone) 303), 12:4-16, 21:65-22:2, and record resulting “local audio data” in memory 305. *Id.*, 12:16-21; 35:31-41; Ex. 1073, ¶¶ 45-46.

In Strub, the wearer of the recording unit is an event “participant”—*i.e.*, someone who generates audio and not merely an observer. *Id.*, 8:7-18 (“recording unit[]...enables the...**participant** (recorder) to [record the event without] interfere[ing] with **participation in** ... the event.”), 11:11-17 (“[T]he recording unit [is]...**worn by**...the recorder...[without] obstruct[ing]...the recorder from **participation** in the event.”), 1:24-35 (recording of event by “**participants**”); Ex. 1073, ¶¶ 47-48.

Strub describes the participants/performers, which would include the wearer, as “singing...‘Happy Birthday.’” *Id.*, 52:18-26; Ex. 1076, 69:14-70:16. Strub also teaches other group and solitary events: “group hike” (*id.*, 2:55-65), “family’s trip to an amusement park” (*id.*), ping pong (*id.*, 67:56-64), snow skiing (*id.*, 67:59-61), bicycling (*id.*, 65:15-22, 26:32-39, 47:35-48), and water skiing (*id.*, 70:52-71:3),

where the participant/wearer would also generate local audio. The POR's citation to 22:16-33 confirms this, as that passage describes that the "recorder is having a conversation," so the microphone is necessarily receiving the recorder/wearer's side of that conversation. Ex. 1076, 47:5-48:6. It would at least have been obvious to a POSA that the device wearer would generate audio. Ex. 1073, ¶¶ 49-50.

Even if the audio must be isolated audio of the wearer, this is also clear from Strub. POR, 15. For example, participants 101-104 (FIG. 1) can be far enough apart from one another to only record their own voices, and/or they may participate in a solitary event, e.g., skiing or cycling, where the locally generated audio would include only the wearer's audio (e.g., their narration). Those recordings would be isolated, independent tracks. At a minimum, this would have at least been obvious to a POSA. Ex. 1073, ¶¶ 49-53.

2. **Element 1[B]: "at least one local audio device wearable by a creator of said locally generated audio including:"**

a. **Claim Construction**

PO's construction is "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." POR, 11. Petitioners disagree with the definite article "the" highlighted above, which should be deleted. It implies the audio must be generated **only** by the creator for whom the device is wearable and exclude all other audio. But the specification does not preclude locally generated audio from including audio from performers other

than the wearer. Further, Claim 1 is a “comprising” claim that permits additional local audio generated by other creators. Indeed, “a creator” means one or more creators, which could include the wearer as well as additional nearby creators. Ex. 1073, ¶¶ 15-17.

b. **Strub teaches Element 1[B]**

Zaxcom argues that the wearable recording units depicted in FIG. 1 of Strub are not recording units 200 and 300 and do not include the receiver and transmitter claim elements. POR, 16. This is both inconsequential and inaccurate.

Strub expressly and generally teaches in its “Overview of Recording Unit Apparatus and Operation” section that “a recording unit according to the invention” may be “worn by” the recorder. Ex. 1003, 11:1-17. The “Summary of the Invention” teaches the same. *Id.*, 4:19-30. Those general teachings are sufficient, especially since the enhanced recording unit 300 is similarly characterized as being “in accordance with the invention.” *Id.*, 11:57-59, 7:44-47. Strub also provides design guidance concerning wearability, including making it “small size, low weight,” “unobtrusive[,],” “compact as possible,” a “single apparatus” housing all the components, and using a “flexible encasement” to make the unit “comfortable to wear.” *Id.*, 66:26-51, 9:15-33; Ex. 1073, ¶¶ 54-55, 60.

Figure 1 depicts wearable recording units 105-108 “in accordance with the invention.” *Id.*, 7:39-40, 8:7-15. Column 11 begins with a general introduction to

such wearable recording units “according to the invention.” *Id.*, 11:1-24. The bottom of column 11 introduces recording unit 200 as being a species of such a recording unit, and column 12 introduces enhanced recording unit 300 as being an alternate species “in accordance with the invention.” *Id.*, 11:31-12:57. Therefore, a POSA would understand that recording units 105-108 may comprise species 300, which discloses the pertinent components. Further, recording units 105-108 are described as “adapted to obtain data regarding the position of the recording unit” (*id.*, 8:59-62) as well as “communicate with each other” (*id.*, 10:40) to “enable recordings to be shared” (*id.*, 10:26-32). This indicates they have receivers and transmitters consistent with recording unit 300. Ex. 1073, ¶¶ 55-57.

Zaxcom cherry-picks Figure 6 to allege that ***all*** embodiments in Strub are “portable, not wearable” because it weighs up to 24 pounds. POR, 17. But Figure 6 is merely “***another way*** of packaging a recording unit according to the invention.” Ex. 1003, 7:54-55; 67:30-31, 7:53-54. It neither applies to all embodiments nor negates Strub’s wearability teachings. *Id.*, 4:20-30, 11:9-13, 66:33-51, 67:54-68:2, 72:9-19. In any event, it is depicted as wearable. Furthermore, a 24-lb backpack is wearable by many/most adults, and the claims do not impose a weight limit or wearability by everyone. Moreover, the unit can be made “lighter (and smaller),” especially since visual data acquisition device (camera 603) would not be needed for the challenged claims. *Id.*, 67:45–51; Ex. 1073, ¶ 64.

Strub's backpack form-factor is a non-limiting example. *Id.*, 16:50-53 (“recording unit...**can be** implemented [with] components...within a backpack”). Strub describes a recording unit that is “small, lightweight, wearable,” and “adapted to be...worn....” *Id.*, 4:28-30, 11:9-13. Zaxcom's sandwich-in-a-backpack analogy is inapposite. The exemplary recording unit is not merely *in* a backpack but is itself “*constructed in manner similar to a conventional backpack.*” *Id.*, 70:56-60; Ex. 1073, ¶¶ 65-66.

The challenged claims simply require “wearable by a **creator** of...locally generated audio,” *not* suitability for invisible use by professional actors in “the motion picture industry.” POR, 18; Ex. 1073, ¶ 67.

Even under Zaxcom's erroneous constructions, Strub teaches a “local audio device wearable by a creator of said locally generated audio.” Strub's units are worn during solitary activities such as snow skiing (Ex. 1003, 67:59-61), bicycling (*id.*, 65:15-22, 26:32-39, 47:35-48), and water skiing (*id.*, 70:52-71:3), where the participant/recorder would be the *only* creator generating audio. That would have at least been obvious to a POSA. Such audio is not a “scratch” track of “all audio sources,” POR, 18-19, but a separate/isolated/independent audio track created by the wearer/performer. Ex. 1073, ¶ 67.

3. **Element 1[A]: “at least one master timecode generator for generating a plurality of master timecodes”**

a. **Claim Construction**

“Master timecode generator” should bear its ordinary meaning - “a generator of master timecodes.” Ex. 1001, 2:1-2, 9:45-48. See also Ex. 1056, Abstract; Ex. 1057 5:48-50, FIG. 2; Ex. 1073, ¶ 26.

A master timecode generator need **not** control another timecode generator, and this would exclude the “asynchronous” embodiment where master timecodes directly timestamp audio. *Id.*, 5:52-57 (“[I]n...asynchronous mode,...the master time reference signal allows the files containing recorded audio to be timestamped with the master time reference information to allow the recorded audio to be accurately synchronized...”), 9:45-52. Asynchronous mode permits the local timecode generator to be “**eliminated**” such that there is no other timecode generator to control. *Id.*, 17:10-16. PO’s construction of “master timecodes” would also exclude asynchronous mode by requiring the timecodes be “used to synchronize at least one device.” Ex. 1073, ¶¶ 27-31.

b. **Strub and Woo teach Element 1[A]**

Strub and Woo teach “at least one master timecode generator for generating a plurality of master timecodes,” even under Zaxcom’s construction. Strub uses GPS satellites (master timecode generators) producing GPS signals (master timecodes) either to directly timestamp audio data or to synchronize, i.e., control, the clocks

(local timecode generators) of recording units (local audio devices) to perform such time-stamping. Ex. 1003, 13:50-58, 62:26-63:60, 79:54-80:9; Ex. 1073, ¶¶ 68, 70-71.

Zaxcom partially quotes Ex. 1003 at 80:7-9, which uses optional/alternative language—“**Or**, the recording units **may** not include clocks for enabling time-stamping of the recordings”—POR, 19, while omitting the preceding portion: “[A]recording unit according to the invention typically includes a clock that is used to time-stamp recording data as the recording data is acquired.” Ex. 1003, 79:63-65. Strub repeatedly teaches that the local/internal clock is used to time-stamp data. *Id.*, 13:52-58 (“clock...used to time-stamp the recording data”), 63:56-60; Ex. 1073, ¶¶ 69, 72.

Strub twice discloses synchronizing the local clocks to GPS time. First, Strub teaches that GPS signals are acquired in “about a minute” and then used to synchronize the local clock about “once a second.” However, if the GPS signals are “blocked,” then the local clock will begin to “drift” away from the GPS time it was previously synchronized to. Ex. 1003, 63:41-60; Ex. 1073, ¶¶ 70-71. Second, Strub teaches that the “clocks of different recording units may not be adequately synchronized” but that such mis-synchronization will not occur while receiving GPS signals, indicating that GPS is being used to synchronize the clocks. *Id.*, 79:63-80:9; Ex. 1073, ¶ 72.

Woo provides an express and generalized teaching of controlling a local timecode generator using a master timecode generator. Ex. 1004, 3:37-45. Contrary to Zaxcom, Woo’s “slave or jam sync” process includes a master timecode generator (per Woo, “another source”) that executes either “hard”/continuous or “soft”/initial lock to control a local/“slave” timecode generator. *Id.* Indeed, “jam syncing” means synchronizing one time reference/clock to another. *See, e.g.*, Ex. 1039, 8:46-54, 9:27-29, 10:7-11; Ex. 1073, ¶¶ 73-74. Woo provides an exemplary embodiment where GPS receivers 18/22 output date/time information (master timecodes), and local timecode generator 43 “jams”/synchronizes to —*i.e.*, is controlled by—the GPS receiver output. Ex. 1004, FIG. 3, 7:18-38; Ex. 1073, ¶ 76.

Zaxcom erroneously argues that Woo’s GPS embodiment “is not capable of acting as a master time reference signal because it must be combined with a pulse....” POR, 20. But this “highly accurate pulse” is generated based on information in the received GPS signal, in particular the accumulation of the GPS code epochs. Ex. 1004, 8:13-21, 9:6-9; Ex. 1073, ¶¶ 77-78. And in any event, the exemplary GPS embodiment does not negate Woo’s generalized teaching of jam-sync. *Id.*, 3:37-45.

Even if GPS signals are blocked ***sometimes***, the challenged claims do not require “continuous” timecodes or any particular level of availability. Ex. 1073, ¶¶ 79, 109.

To the extent Strub is found to not teach a master timecode generator/timecodes, they are clearly taught by Woo. And a POSA would have been motivated to use Woo's technique in Strub since they both employ GPS, GPS is free and avoids the cost and complexity of providing a master timecode generator, and Woo's soft jam-sync permits the local timecode generator to continue to operate and free run through any intermittent blockages of the GPS signal. Ex. 1073, ¶¶ 75, 80, 109.

4. **Claim 15: "A system according to claim 1, wherein said local audio data is combined electronically to create a single multi-track data file."**

a. **Claim Construction**

This term should bear its ordinary meaning - "a data file comprising multiple tracks of audio," which is agnostic to the source and content of the tracks. The specification does not mention "separate streams," "instruments" or "voices," let alone "individual" ones. PO's citations are exemplary, not definitional, and merely refer to the use/goal of creating multi-track files. POR, 12 (citing Ex. 1001, 15:18-21, 13:18-21); Ex. 1073, ¶¶ 18-20.

If anything, undated Exhibit 2014 supports Petitioner. The definitional first sentence does not require each stream to be independent or include only one individual voice or instrument. The second sentence relied upon by PO is prefaced by "[d]uring a typical recording session ..." and is merely illustrative. Ex. 1073, ¶¶

23-24. A contemporaneous dictionary refutes PO's construction by indicating that the tracks may be of the "same or different material." Ex. 1066, 3; Ex. 1073, ¶ 25.

b. **Strub and Woo disclose Claim 15**

Petitioners do not "admit multi-track data file creation is not taught by Strub." *Id.*, 23; Petition, 64-65. Each recording unit can "blend[] the audio recording data" from other recording units "in any appropriate way" using an "audio mixer." Ex. 1003, 92:24-42, 37:18-40. A POSA would understand this to include combining recordings into a single file of separate tracks. Ex. 1073, ¶ 81.

For instance, Strub teaches stereo microphones/recording, Ex. 1003, 25:35-48, 68:63-65, which comprises storing audio tracks as separate Right and Left tracks in a single stereo (i.e., multi-track) file. Strub repeatedly emphasizes preserving the "spatial" and "imaging" aspect of an audio performance, *id.*, 93:3-11, 22:59-63, 24:18-30, 24:43-60, which is accomplished using stereo multi-track recording. *See* Ex. 1040, 155:58 ("... a good stereo image is perceived ..."), 5:12-23; Ex. 1041, 11:18-24 ("stereo (i.e., spatial) information"); Ex. 1042, FIG. 1, 2:52-58 (left/right "stereo...sound image"); Ex. 1043, 5:1-2 ("... a good stereo image is perceived ..."). Furthermore, mixing multiple tracks to produce a two-track stereo file was a standard technique. *See* Ex. 1046, 1:17-36 (mixing audio channels from different sources "to produce a stereophonic master recording" was "well known"), FIG. 1,

4:66-5:22; Ex. 1076, 81:3-5 (stereo recording/mixing “commonplace” since 1960s); Ex. 1073, ¶¶ 82-83.

Strub’s disclosures regarding recording unit 300 and post-processing apply equally to units 105-108, which, as discussed above, are recording units in accordance with the invention. See Ex. 1003, 35:51-41:52, 79:42-93:11. Ex. 1073, ¶ 84.

Strub’s “audio mixer,” *id.*, 92:39, is an **audio** mixer, not “a ‘video mixer.’” POR, 22. The adjacent paragraphs repeatedly refer to “audio.” *Id.*, 92:24-50. Strub’s references to “display[ing]” audio during mixing/blending means **audibly playing** it on speakers, not showing it on a “screen.” *Id.*, 92:7-9 (“the audio recording **display** will be generated **using speakers**”), 92:14-16, 59:26-28 (“audio display is typically a speaker”); POR 21-22; Ex. 1073, ¶ 85.

A POSA would understand that Strub teaches saving the blended/mixed recording to a file because that is the objective/purpose of columns 92 and 93. *Id.*, 92:24-42 (blending recordings using audio mixer to “select audio recording data from multiple audio recordings”); 92:51-93:11 (ameliorating problems in the original recordings by “addition of other recordings”). There is no reason or point to blending/mixing recordings to address problems in the original recordings if the output is not going to be saved as a new data file. Ex. 1073, ¶ 86.

Claim 15 recites obvious, standard editing functionality that could have been performed with widely available software—*e.g.*, Pro Tools, Avid Media Composer, Short/cut 2000. *See* Ex. 1002, ¶ 240; Ex. 1073, ¶ 87.

Woo also discloses and/or renders obvious the limitations of Claim 15. Even without the term “multi-track,” a POSA would understand that Woo describes multi-track audio recording since it uses separate tracks from separate recording units 14/16 to capture a performance from different vantage points, Ex. 1004, FIG. 1, 5:3-8, and combines the tracks into a “composite [(*i.e.*, multi-track)] third recording,” *Id.*, 1:25-28, 5:37-42, 8:45-59, FIG. 4 at 114, 116. It is irrelevant whether Woo uses the word “microphone” because it explicitly refers to “audio” and “sound” recording. *Id.*, 1:24-28, 2:56-66, 5:16-19, 5:45-50, 8:58-59. And Woo is analogous art in the same field as Strub since they both concern audio recording along with other common objectives (*e.g.*, audio transmission, time-stamping). Ex. 1073, ¶¶ 88-90, 116-120; Ex. 1045; Ex. 1047; Ex. 1062.

5. **Claim 17: “A system according to claim 1, wherein said at least one control unit is a digital signal processor.”**

a. **Strub and Woo disclose Claim 17**

Strub teaches audio processing “by the system controller or data processing device(s),” *e.g.*, a DSP. Ex. 1003, 31:51-62; Ex. 1002, ¶ 242. Thus, a POSA would understand that Strub’s system controller may comprise a DSP, or that this would at

least have been obvious, to perform functions such as beam forming, conversion, and compression. *Id.*, 27:45–51, 12:16–21, 38:15–20; Ex. 1073, ¶ 92.

The word “alternative” does not mean that Strub’s system controller cannot be a DSP. POR, 24. Strub’s “microcontroller” is exemplary; the controller may be “any device or devices,” including some “other processing device.” Ex. 1003, 14:1–13. It was well-known that a DSP is a species of, and often integrated with, a microcontroller. *See* Ex. 1049, FIG. 4a, 8:32 (“a digital signal processor/microcontroller”), 9:20-23 (“the digital signal processing of the microcontroller”); Ex. 1044, FIG. 5, 8:1-8 (microcontroller CPU may be a DSP); Ex. 1052, 5:46-47 (“DSP microcontroller”). Strub never says the DSP must be separate from the microcontroller. A POSA would have considered it obvious to implement Strub’s control unit as or including a DSP. Ex. 1002, ¶ 243. Ex. 1073, ¶¶ 93-94.

6. **Claim 19: “A system according to claim 1, wherein said at least one local audio device is a body pack.”**

a. **Claim Construction**

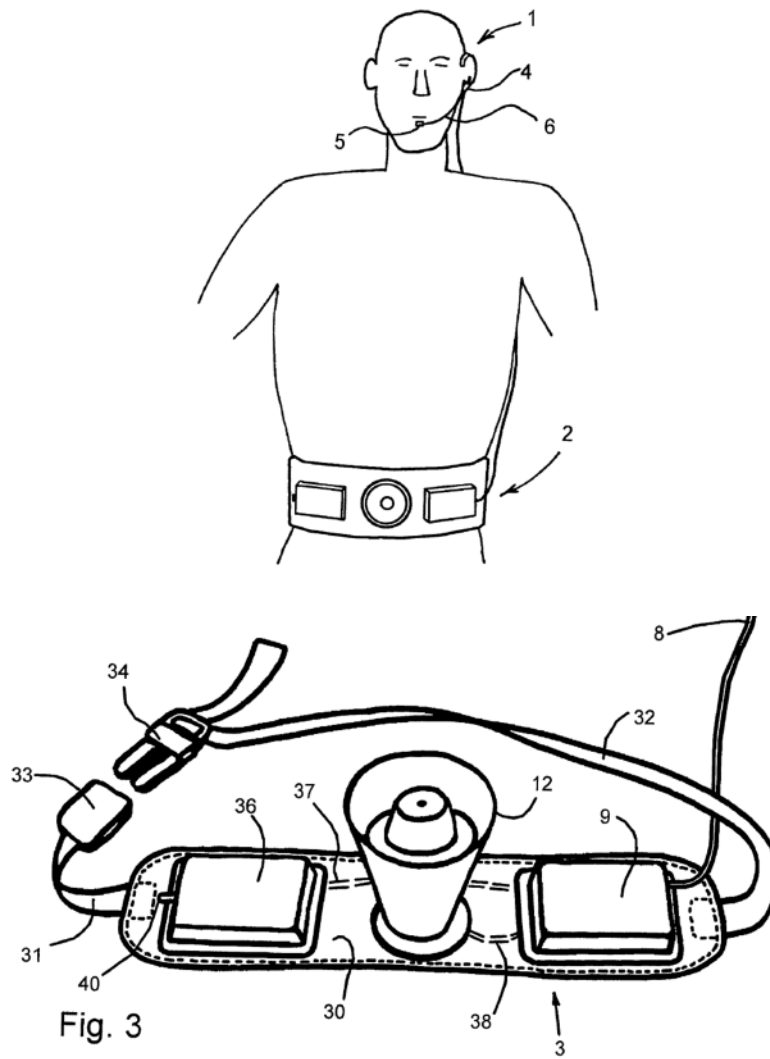
Petitioners’ ordinary meaning construction - “a compact bundle of equipment arranged for convenience for carrying on the body” - conforms to the definition of “pack”— modified such that the pack is carried on the “body.” *See* Ex. 1058, 6; Ex. 1073, ¶¶ 32-33.

The specification's mentions of "body pack" (Ex. 1001, 1:40-47, 7:46-60, 10:52-53) merely indicate that a transmitter *may be* included in a body pack, not that all body packs include a transmitter, and say nothing about a body pack being a "small box." Figures 1 and 3B as illustrative, not definitions of "body pack." Ex. 1073, ¶¶ 34-38.

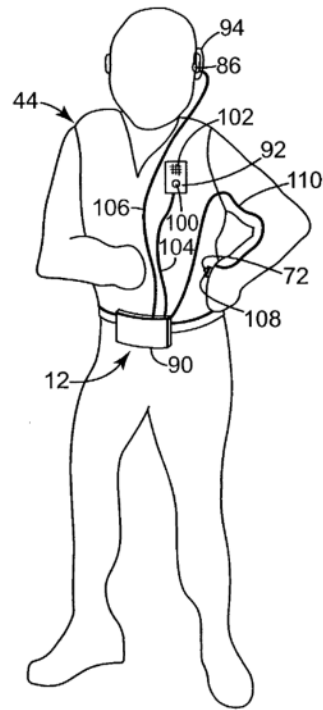
Exhibits 2020 and 2025 are non-contemporaneous (2012, 2016) and merely *use* the term rather than *define* it. Further, they recite a "bodypack transmitter," demonstrating that "bodypack" does not necessarily include one. Ex. 2020, 14; Ex. 2025, 7. And the depicted products do not demonstrate that *all* body packs must be small boxes. Ex. 1073, ¶¶ 40-41.

A contemporaneous 2003 definition supports Petitioner: "a body pack is the device a performer wears somewhere on his or her body that houses the electronics" Ex. 1059, Ex. 1060, Ex. 1073, ¶¶ 42. Non-box-shaped body packs are also confirmed by prior art. Ex. 1073, ¶¶ 42-44.

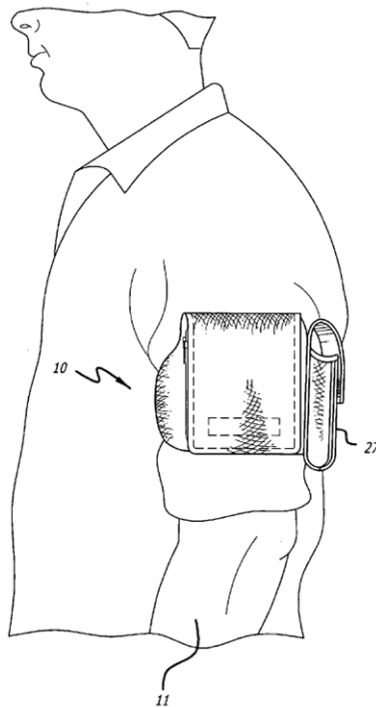
Ex. 1061, FIGS. 1-3, [0019]-[0025]:



Ex. 1067, FIGs. 2-3, [0039]-[0041], [0017], [0024]:



Ex. 1068, FIGs. 1-2, [0018], [0010], [0024], [0028]:



b. **Strub and Woo teach the additional limitations of Claim 19**

Strub discloses a body pack since it states that its recording units are wearable—*i.e.*, compact enough and arranged for carrying on the body. Ex. 1003, 11:11-13 (recording unit “worn by” the user), Abstract (“wearable recording unit”), 66:45-49, 67:66-67, 4:28-30. Strub’s recording unit can take the form of a specialized backpack worn by the “recorder.” *Id.*, FIGs. 1, 6, 8, 67:30-33; 16:50-53. A POSA would consider a backpack a bodypack since it is carried on the body and encloses the recording unit components. Ex. 1073, ¶¶ 95-97.

The word “adapted,” Ex. 1003, 11:11-13, does not mean Strub’s unit must be ***modified*** to be worn, but is standard patent terminology for a device having a certain ***design, configuration, or capability***. See *In re Man Mach. Interface Techs. LLC*, 822 F.3d 1282, 1286 (Fed. Cir. 2016). Regardless, teaching that a unit can be ***adapted*** to be worn teaches wearability. Ex. 1073, ¶ 100.

The exemplary recording unit is not merely in a backpack but is “constructed in a manner similar to a conventional backpack.” Ex. 1003, 70:56-60. Strub’s specialized backpack is the recording unit’s enclosure/housing and thus part of the recording unit. When the backpack is worn, the unit is worn. Ex. 1073, ¶¶ 97-98, 65-66.

As explained above, recording unit 300 is an assembly of components, including a transmitter and receiver, that is in accordance with the invention and may

comprise the recording units of FIGs 1, 6, 8. *See* Ex. 1003, 8:7-15, 67:30-31, 67:56-59, 68:3-8, 70:52-54, 73:18-20. Ex. 1073, ¶¶ 101, 54-56.

7. **A POSA Would Have Been Motivated To Combine the Cited References**

Petitioners need not show that the prior art sought to address dropouts, an *unclaimed* objective of the challenged claims. Strub and Woo are directed to substantially overlapping inventions/objectives, including recording an event (Ex. 1003, 4:20-30, 8:7-53; Ex. 1004, 4:3-5, 4:62-5:20), transmitting the audio (Ex. 1003, 12:31-46, Ex. 1004, 5:37-42), timecodes for synchronization (Ex. 1003, 7:11-24, 13:48-58, 63:56-60, 79:63-65; Ex. 1004, 4:6-8, 4:20-26), GPS for timing signals (Ex. 1003, 63:41-56, 80:2-7; Ex. 1004, 4:13-19, 8:13-19), and post-recording editing (Ex. 1003, 92:24-50; Ex. 1004, Abstract, 5:42-45, 8:34-59). Therefore, a POSA would have been motivated to consider and apply the teachings of both when developing a recording system with transmission and timecode capabilities, especially since they both use conventional, mature, and predictable technology. Ex. 1073, ¶¶ 105-107

For instance, while they both teach GPS for syncing a local timecode generator, to the extent this is not taught in Strub (which it is), a POSA would have been motivated to apply Woo's teaching of using GPS to "jam-sync" a local timecode generator. Ex. 1004, 3:37-45, 4:13-19. GPS is free and avoids the cost and complexity of providing an alternate master timecode generator, and for those occasional situations where GPS may be blocked, use of GPS jam-sync enables the

local timecode generator to continue to accurately timestamp for a useful period of time until the GPS is re-acquired. Ex. 1073, ¶ 107. Furthermore, since both Strub and Woo seek to record an event/performance, a POSA would use Strub's wearable bodypack recording units as Woo's recording units to increase flexibility, mobility, and convenience. *Id.*

Zaxcom contends that a POSA would not have changed Strub's system to make it more complex as this would increase size, weight and battery. POR, 27. But this assumes PO's mistaken argument that Strub's enhanced recording device 300, which already contains all the components of FIG. 3, is not wearable. It also ignores the repeated teachings in Strub that the recording is wearable and can be made small, lightweight, and unobtrusive. Ex. 1003, Abstract, 11:9-17, 9:4-33, 66:26-51. Furthermore, the heaviest, bulkiest, most power-hungry components of Strub's recording unit 300—the video camera and LCD (*id.*, 14:38-40, 22:3-15, 45:8-15) are not required by the challenged claims and could be eliminated in an audio-only unit. Ex. 1073, ¶¶ 110-111.

Winningstad does not “teach[] away from postproduction editing” by mentioning an **optional** password. POR, 28; Ex. 1008, 2:31-35, 8:12-16. The user would simply enter the password to perform editing. A POSA would have been motivated to incorporate Winningstad's external interface port into Strub's remote control to recharge the batteries, upload/download files, and/or change the remote's

configuration settings. Ex. 1003, FIG. 3 (308), FIG. 5, FIG. 7 (702), 12:27-31, 45:51-46:9, 60:12-62:25, 70:26-37; Ex. 1008, FIGS. 3-5, 5:17-20, 5:54-67, 6:7-9, 6:19-38, 6:55-65. 8:38-41. Ex. 1073, ¶¶ 112-115.

D. PATENT OWNER FAILS TO SHOW CONCEPTION AND DILIGENCE BEFORE WINNINGSTAD (APRIL 20, 2005)

PO relies upon Ex. 2134 (POR, 30-31), but for “unstamped local audio data” (element 1[H]) and “unstamped local audio data [that] does not include a reference to said master timecodes” (element 1[J]), neither the single sentence cited by PO (POR, 31), nor Ex-2134 as a whole, say anything about unstamped local audio data, let alone unstamped local audio data not including a reference to master timecodes. This is dispositive.

Zaxcom also fails to show conception of Elements 1[F] and 1[G]. POR, 30. Neither the passages cited by PO, nor Ex-2134 as whole, say anything about a control unit, let alone a control unit in communication with the recited components, let alone a control unit that creates local audio data from the locally generated audio.

While not relied upon by PO for conception, Ex. 2046 also fails to show Elements 1[F]-[G], [H], [J]. POR, 31-33 (no mention in table of a control unit in communication with claimed components for creating local audio data from locally generated audio, or unstamped local audio data).

Mr. Sanders’ alleged demonstration of the “TRX900” and “IFB900” products at the April 2005 NAB conference, POR, 29, does not cure the deficiencies. While

not relied upon for conception, Ex. 2131 (User's Manual for "TRX900AA" rather than "TRX900") also fails to show Elements 1[F], [H]-[J]. Ex. 2140, ¶ 289. For Element 1[F], Mr. Defilippis, in the context of secondary considerations, cites pages 7 ("Transport Control") and 12 ("IFB Receive to Transmit time"). But these pages include no description of a control unit, let alone one in communication with a local device receiver, audio input device, and memory that creates local audio data from locally generated audio. For Elements 1[H]-[J], Mr. Defilippis cites to Ex. 2131 at pages 5, 14-15. But these pages only indicate that timecodes are received over ZaxNet, not that the audio data is stamped, let alone stamped with reference to a master timecode. Nor is there any disclosure of unstamped audio data. Ex. 1073, ¶¶ 144-146. Finally, Ex. 2131 is dated 2013, eight years after the alleged conception, and appears to apply to a different "AA" variant.

Zaxcom's diligence evidence for constructive reduction to practice shows a one-month gap from April 8, 2005 (date of Ex. 2134) to May 9, 2005 (date of next chronological document, Ex. 2147, 16). Ex. 2147, 4-26 (no documented activity between April 8 and May 9). Nearly three weeks of that gap was on or after Winningstad's April 20 priority date. Another one-month gap occurs between May 16 to June 16, when only a minor change was made to FIG. 3 on June 3rd. Ex. 2147, at 16-26 (no documented activity between 5/16/2005 and 6/16/2005 except Ex. 2105). *Compare* Ex. 2042 (5/16/2005, Ex. 2147, 21) to Ex. 2105 (6/3/2005, Ex.

2147, 26). Other than generalized testimony by Mrs. Chipperson, no specifics are provided to account for the nearly two months of inactivity. Ex. 2030, ¶ 78.

E. STRUB IS ENABLING

PO erroneously uses Strub’s filing date of April 2000, rather than one year before the effective filing date of the challenged patent – July 14, 2004. POR, 34, 40, 54-56; Ex. 2140, ¶ 290; Ex. 1076, 18:22-19:16; *Intas Pharms. Ltd. v. Atossa Therapeutics, Inc.*, PGR2023-00043, Paper 37 at 18 (PTAB Jan. 29, 2025). This is fatal.

PO’s analysis erroneously requires Strub to enable ***its own disclosure*** rather than one embodiment of the ***challenged claims***. *Id.* at 16; POR, 34 (“Strub teaches a fantastical, futuristic device ... with virtually unlimited features”), 37 (“create a Strub product”), 38 (criticizing amount of disclosure to “teach its invention”), (“building Strub’s system”), 40-41 (“Strub’s device”). More particularly, PO focuses ***heavily*** on the “video” aspects of Strub, including synchronization, transmission, capture, digitization, processing, compression, decoding, displaying, and storing of “video.” *Id.*, 40, 42-43, 45-50, 52-53 (reciting “video” at least **32 times**). PO also focuses on the artificial intelligence and LCD display teachings of Strub. *Id.*, 43, 52. But the challenged claims do not require video, AI, or displays. This is also fatal. Ex. 1073, ¶ 152.

The challenged claims were enabled by Strub even by April 2000. It is undisputed that microphones and compact digital recorders (e.g., Sony TCD-D7 Walkman) were well known. Ex. 1070; Ex. 1073, ¶ 153. Solid state memories up to 128MB were available and suitable for storing audio. Ex. 1048; Ex. 1051; Ex. 1073, ¶ 154. Radio technology, including 900 MHz (e.g., Conexant RF105/109 chipsets), 802.11, and GSM were well known, available, and suitable for digital audio transmission. Ex. 1071; Ex. 1072; Ex. 1073, ¶ 155. Microcontrollers were available and suitable for audio processing, storage, and control of the various components, including Strub’s Motorola 68HC11 and TI’s TMS320C5x family. Ex. 1064; Ex. 1073, ¶ 156. Thus, the relevant components and technologies were well understood, mature, and predictable. Ex. 1073, ¶ 157. By July 2004, the situation was even clearer, with the availability of larger flash memories, more advanced RF technology, and even the specific Motorola TMS320C5509A chip described in the challenged patent. *Id.*, ¶¶ 160-164; Ex. 1050; Ex. 1054; Ex. 1055; Ex. 1065. A POSA was readily able to make a lightweight compact device for recording and transmitting audio. Ex. 1073, ¶ 104; Ex. 1069.

PO cites Mr. Kyriakakis’ testimony concerning a “team of engineers” (POR, 37), but (i) that testimony was about making **Strub’s invention**, not the challenged claims, (ii) he clearly testified that it was “common engineering knowledge” and no “experimentation would be required,” and (iii) he was merely explaining that for a

real world project various tasks would be assigned among several engineers. Ex. 1073, ¶ 159.

F. OBJECTIVE INDICIA DO NOT WEIGH IN FAVOR OF NONOBVIOUSNESS

Messrs. Wexler and Sarokin fail to identify any pre-existing long-felt need for the claimed system. Mr. Wexler did not think about the benefits of the invention until using Mr. Sanders's device. Ex. 2126, ¶ 5. Mr. Sarokin likewise did not give any thought to such a system until Mr. Sanders demonstrated it to him. Ex. 2127, ¶ 5; Ex. 1075, 72:20-73:8. Messrs. Wexler, Sarokin, and DeFilippis do not identify any failed attempts by others, let alone show nexus. Ex. 1073, ¶¶ 131-135.

Further, PO's declarations rely upon unclaimed features and therefore lack nexus. Mr. Wexler focuses on the *digital* transmission capability and use of microSD cards by Zaxcom's product. Ex. 2126, ¶¶ 5-6; Ex. 1074, 41:4-42:18. He mentions the ability to transmit and record, but it is undisputed that this basic feature was well known in the art (Strub, Woo, Winningstad). He fails to mention timecodes, which is a major focus of the challenged claims. Mr. Sarokin focuses on the benefits of digital transmission, remote controllability, and the size of the product. Ex. 2127, ¶¶ 5-7; Ex. 1075, 32:10-33:21, 37:2-38:12, 76:22-77:2, 77:9-79:12. The microSD card and product size are unclaimed features. Digital transmission and remote control are features that only appear in certain dependent

claims for which PO has not made any independent non-obviousness argument. Ex. 1073, ¶¶ 136-139.

The purported industry praise by Messrs. Wexler and Sarokin should also be given minimal weight because they are friends of Mr. Sanders, and PO fails to cite any similar statements prepared by persons in the art that were not specifically prepared for these proceedings. Ex. 1074, 25:10-26:16; Ex. 1075, 17:10-18:15.

The Academy Award and Emmy also fail to show nexus because they rely on unclaimed features. The cited documents heavily emphasize **digital** transmission over analog, wherein only dependent claim 24 recites digital transmission. See Ex. 1063; Ex. 2114; Ex. 2112. The Emmy similarly relies on unclaimed elements such as file format, file protection, audio return signal, latency, compression, remote control, number of channels, distortion levels, etc. Ex. 2128, 11; Ex. 2129, 3; Ex. 2130, 3; Ex. 1073, ¶¶ 140-142.

In the Lectrosonics IPRs involving similar claims, the PTAB rejected PO's arguments that the objective indicia supported non-obviousness—*except* for claims that expressly recited repair/replacement/dropout correction, which none of the presently challenged claims do. Ex. 1014, 23-25; Ex. 1017, 31-35; Ex. 1018, 28-31.

Even if probative, the closeness of the prior art in this case overshadows the purported objective evidence. Ex. 1073, ¶ 143.

G. CONCLUSION

For the foregoing reasons, the Board should find all challenged claims unpatentable.

Dated: December 1, 2025

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WORD COUNT CERTIFICATION

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Reply contains 5,552 words (excluding the title page, table of contents, table of authorities, this certificate, and the certificate of service), as determined by Microsoft Word.

Dated: December 1, 2025

/ Michael A. Fisher /

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CERTIFICATE OF SERVICE

I certify that today in:

RØDE Microphones, LLC., et al. v. Zaxcom, Inc., IPR2025-00230 (U.S. Patent 7,711,443)

I caused to be served copies of:

The foregoing Reply to Patent Owner's Response
Exhibits 1039-1076

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Patent Owner agreed to have the above-listed counsel accept electronic service of papers filed in this IPR on December 23, 2024. *See* 37 CFR § 42.105(b) ("Upon agreement of the parties, service may be made electronically....").

Dated: December 1, 2025

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