

2020-1921, -1922, -1943, -1944

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United States Court of Appeals for the Federal Circuit

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**Zaxcom, Inc.,**  
*Appellant*

v.

**Lectrosonics, Inc.,**  
*Cross-Appellant*

v.

**Andrew Hirshfeld**, Performing the Functions and Duties of the  
Under Secretary of Commerce for Intellectual Property and  
Director of the United States Patent and Trademark Office,  
*Intervenor*

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

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**BRIEF FOR INTERVENOR**

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### Illustrative Original and Substitute Claim

U.S. Patent No. 7,929,902 Claim 21 (substitute for original claim 7)

A system for locally recording locally generated audio and remotely recording the locally generated audio comprising:

at least one remote recorder;

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

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

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

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

at least one memory;

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

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

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

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

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

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

Appx42-43 (brackets indicate material removed from claim 7; underlining indicates material added).

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### Statement of Related Cases

The district court case listed in Zaxcom's and Lectrosonics' statements of related cases, *Zaxcom, Inc. v. Lectrosonics, Inc.*, No. 1:19-cv-109 (D.N.M.), involves the two patents at issue in this appeal, U.S. Patent Nos. 7,929,902 (the '902 patent) and 8,385,814 (the '814 patent). Two prior district court cases involving the '902 and '814 patents are *Zaxcom, Inc. v. Lectrosonics, Inc.*, No. 1:17-cv-3408 (E.D.N.Y.) (transferred to District of New Mexico), and *Zaxcom, Inc. v. Lectrosonics, Inc.*, No. 2:17-cv-2840 (D.N.J.) (dismissed without prejudice). Another inter partes review proceeding involving a related patent—U.S. Patent No. 9,336,307 (the '307 patent)—is on appeal in this Court in *Zaxcom, Inc. v. Lectrosonics, Inc.*, Nos. 20-1350, -1405 (Fed. Cir.) (involving IPR2018-00972). The appeals for the three inter partes reviews have been set as companion appeals and will be assigned to the same merits panel.



### **Statement of the Issues**

Zaxcom's specification describes a system for recording a performance by multiple actors. Each actor has a microphone that picks up the actor's audio and (1) sends it via a wired connection to a local recording device worn by the actor, and (2) transmits it wirelessly to a remote central computer that can also record it. This allows for two capabilities: first, the central computer can combine the various received signals into a single "multitrack" recording, and second, if there was a problem with the transmission to the central computer (i.e. a "dropout"), portions of the local recording can be substituted for the missing or corrupted segments of the remote recording. A user can make both types of combinations by matching a timestamp of one recording to a corresponding timestamp of another recording.

Lectrosonics petitioned for inter partes review of many of the claims of the '902 and '814 patents (IPR2018-01129 and IPR2018-01130, respectively), alleging that the claims were anticipated by Strub, or obvious over combinations of prior art references including Strub. Strub discloses multiple local recording units recording a single event, where one recording unit may transmit its recording to another unit to combine them to form a multitrack recording. Strub, however, does not disclose replacing parts of a recording to repair audio dropouts.

The Board agreed with Lectrosonics that original claims 12, 14, and 15 of the '902 patent are anticipated by Strub. The Board further agreed that original claims

7, 8, and 11 of the '902 patent, and all of the challenged claims (claim 1 being the lone independent claim at issue) of the '814 patent, would have been obvious to one of ordinary skill in the art in view of Strub combined with one or more other prior art references. Original independent claim 12 of the '902 patent recites local audio data and remotely recorded audio data, where the data can be “combined.” The Board determined that the “combined” limitation covers both multitrack (i.e., combining multiple different audio tracks) and dropout repair (i.e., replacing missing or damaged portions of a single audio track) embodiments. The Board found that Strub anticipates claim 12 because it teaches every element, including the multitrack embodiment.

Neither original independent claim 7 of the '907, nor original independent claim 1 of the '814 patent, recite “combining” audio data; they recite recording and timestamping audio data. The Board found that Strub (in addition to Nagai or Gleissner, which are not relevant on appeal) taught those limitations except for the recited “master timecode generator” for the timestamping, which was disclosed by Woo.

The Board addressed Zaxcom’s objective evidence of nonobviousness for the original claims (other than claims 12, 14, and 15 of the '902 patent, which were anticipated). In addition to other documentary and testimonial evidence, Zaxcom had received an Emmy award for its commercial product, particularly for its ability to repair dropouts in the remote audio. Applying *Fox Factory, Inc. v. SRAM, LLC*,

944 F.3d 1366 (Fed. Cir. 2019), the Board determined that the relevance of the evidence, or nexus, depended on the claims being directed to repairing dropouts. Because the original claims subjected to review for obviousness did not recite any audio data processing, let alone repairing dropouts, the Board found that Zaxcom had not demonstrated a nexus between its evidence and original claim 7 of the '907 patent, or claim 1 of the '814 patent. The Board thus found that Lectrosonics had adequately demonstrated that the original claims were unpatentable under § 103.

While arguing for the patentability of the original claims, Zaxcom alternatively proposed contingent narrower substitute claims in both the '907 and '814 patents that expressly recite replacing remotely recorded audio with locally recorded audio, thus repairing dropouts. Lectrosonics argued that adding Wood to the original obviousness combination renders the substitute claims obvious, because Wood teaches repairing dropouts in live television broadcasts and an artisan would have been motivated to combine that teaching with the other art to arrive at the invention recited in the substitute claims.

The Board disagreed, finding it nonobvious to add Wood's dropout repair. The Board cited key differences between the prior art and the claimed invention in finding Lectrosonics' obviousness case weak, including that Strub does not contemplate dropouts in transmission of local audio to a remote recorder and that Wood

covers a different type of repair in the context of television broadcasts. Further, because the substitute claims are expressly limited to repairing dropouts, the Board found that Zaxcom had established a nexus between its objective evidence of non-obviousness, primarily focused on that feature, and the substitute claims. The Board found that objective evidence—particularly the industry praise—weighed heavily in favor of nonobviousness, ultimately determining that Lectrosonics had failed to demonstrate the substitute claims’ unpatentability. The Board thus granted Zaxcom’s contingent motion to amend.

Also relevant to this appeal, the Board addressed the claim construction for the term “wearable,” which appears in the claims of the two patents on appeal here as well as the ’307 patent (considered by the Board in IPR2018-00972, which is the subject of companion Appeal No. 20-1350). The Board construed the term in the same way here as it did for the ’307 patent, employing the definition “suitable and in a condition to be worn.” Zaxcom did not challenge that construction in Appeal No. 20-1350, nor did it argue in that appeal that Strub’s device is not “wearable,” as found by the Board in all three proceedings.

The Board also addressed the prior art’s disclosure of the claimed timestamps, construing “master timecode generator” in the way Zaxcom proposed—requiring it to control other time code generators—and finding that the prior art discloses that generator.

The issues on appeal are:

(1) for the original claims, whether substantial evidence supports the Board’s findings of anticipation based upon Strub, and obviousness based on Strub in combination with other references, including (a) whether the Board correctly construed the “combined” limitation recited in original claim 12 of the ’907 patent as not limited to an embodiment that repairs dropouts, (b) whether the Board correctly construed “wearable” and whether Zaxcom is precluded from making this argument by not raising it in Appeal No. 20-1350, and (c) whether substantial evidence supports the Board’s finding that the prior art discloses the claimed “master timecode generator”;

(2) for both the original and substitute claims, whether substantial evidence supports the Board’s findings concerning whether Zaxcom demonstrated a nexus between its claims and objective evidence of nonobviousness, where the industry praise focused on the particular achievement in repairing dropouts, which is recited only in the substitute claims; and

(3) for the substitute claims directed to repairing dropouts, whether substantial evidence supports the Board’s findings underlying its nonobviousness determination.

Because we already discussed the same specification, and claims that raise many of the same issues, in Appeal No. 20-1350, the USPTO focuses the discussion here to issues that are different from those in Appeal No. 20-1350.

### **Statement of the Case**

This appeal arises from inter partes reviews of the '902 and '814 patents, which share a specification with the '307 patent and are all owned by Zaxcom. Appx169; Appx197.<sup>1</sup> The Board instituted two proceedings based upon petitions filed by Lectrosonics: IPR2018-01129, to review claims in the '902 patent (“-1129IPR”), and IPR2018-01130, to review claims in the '814 patent (“-1130IPR”). See Appx1-75 (-1129IPR final written decision); Appx87-151 (-1130IPR final written decision).

The Board found original claims 12, 14, and 15 of the '902 patent anticipated by Strub, U.S. Patent No. 6,825,875 (Appx1299-1357).<sup>2</sup>

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<sup>1</sup> As Zaxcom and Lectrosonics have done, we primarily cite the '902 patent and its corresponding proceeding, the -1129IPR, with citations to the '814 patent/-1130IPR where helpful or necessary.

<sup>2</sup> Lectrosonics alternatively argued that claims 12, 14, and 15 of the '902 patent were rendered obvious by Strub combined with Wood, World Intellectual Property Organization Publication No. WO 2004/091219 (Appx1417-1431). Although the Board's summary table states that it agrees that those claims are rendered obvious (Appx73), the Board in fact addressed only anticipation for those claims and did not reach the obviousness challenge to those claims (Appx36-41 & n.10).

The Board found (a) original claims 7, 8, and 11 of the '902 patent, and (b) original claims 1-4, 9, 10, 12, 15, 31, 36, 37, and 41-45 of the '814 patent obvious over Strub combined with Woo, U.S. Patent No. 5,479,351 (Appx1549-1558), as well as Nagai, U.S. Patent Application Publication No. 2002/0159179 (Appx1358-1399), or Gleissner, U.S. Patent Application Publication No. 2004/0028241 (Appx1400-1405). *See* Appx73; Appx149 (adding another reference for claim 45). The Board found substitute claims 21-26 of the '902 patent, and 50-65 of the '814 patent, nonobvious over the applied references plus Wood. *See id.*

The Board considered Zaxcom's proffered objective evidence of nonobviousness in reaching its patentability determinations for both the original and substitute claims (other than for claim 12 of the '902 patent, which was found to be anticipated by Strub). The Board found that Zaxcom failed to demonstrate a nexus between that evidence and its original claims, where the evidence focused on the dropout repair feature not recited in the original claims. Accordingly, the Board held that Lectrosonics had demonstrated the obviousness of the relevant original claims. Conversely, the Board found that Zaxcom had established a nexus between the evidence and proposed substitute claims, given the latter's express recitation of dropout repair. The Board found Zaxcom's evidence of industry praise and long-felt need strongly probative of nonobviousness. The Board determined that strong evidence, coupled

with Lectrosanics' weak showing of unpatentability, supported the proposed substitute claims' patentability and granted the motions to amend. *See* Appx42-72 (-1129IPR final written decision); Appx119-148 (-1130IPR final written decision).

On appeal, Zaxcom argues that the Board erred in its determination that the original claims were shown to be unpatentable. Lectrosanics argues that the Board erred in granting Zaxcom's motion to amend.

**A. Zaxcom's patent discusses combining audio and repairing dropouts**

The USPTO discussed the disclosure of the '307 patent in our brief in Appeal No. 20-1350 (ECF No. 39); as the disclosure of the '902 and '814 patents are the same, the USPTO will not repeat those facts here.

The claimed subject matter in the '902 and '814 patents, however, differs from that of the '307 patent. In the '902 patent, Lectrosanics challenged original claims 7, 8, 11, 12, 14, and 15; claims 7 and 12 are independent. Appx4. Zaxcom later moved to amend these claims, with proposed substitute claims 21 and 24 replacing original claims 7 and 12, respectively. Proposed substitute claim 21 recites the following:

[7] 21. A system for locally recording locally generated audio and remotely recording the locally generated audio comprising:

at least one remote recorder;

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



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

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

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

at least one memory;

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

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

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

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

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

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

Appx42-43 (brackets indicate material removed from claim 7; underlining indicates material added). Original claim 7 of the '902 patent does not recite “replacing” or “combining” remotely recorded audio data with local audio data—the claim recites

a system for time-stamping audio data. Zaxcom added the “replacing” limitation—and thus dropout repair—via proposed substitute claim 21.

Original claim 12, and corresponding substitute claim 24, of the '902 patent are method claims with similar claim limitations and changes. Appx44. As relevant here, original claim 12 recites that the local audio data “is combined with” the remotely recorded audio data; in substitute claim 24, Zaxcom removed that broad language and instead more narrowly recited “replacing” the remotely recorded audio data with the local audio data. *Id.*

Lectrosonics challenged original claims 1-4, 9, 10, 12, 15, 31, 36, 37, and 41-45 of the '814 patent, of which only claim 1 is independent. Appx90. Zaxcom later proposed substitute claim 50 for original claim 1:

[1] 50. A system for locally recording locally generated audio and remotely recording the locally generated audio comprising:

at least one remote recorder;

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

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

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

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

at least one memory;

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

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

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

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

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

Appx120-121 (brackets indicate material removed from claim 1; underlining indicates material added). Like original claim 7 of the '902 patent, original claim 1 of the '814 patent does not recite “replacing” or “combining” remotely recorded audio data with local audio data; proposed substitute claim 50 incorporates the narrow “replacing” limitation. Proposed substitute claims 51-65 contain the same language as their original counterparts. Appx121-123.

## **B. The prior art**

The USPTO discussed the relevant teachings of Strub, Nagai, Gleissner, and Wood in its brief in Appeal No. 20-1350, so we will not repeat that discussion here.

Woo is an additional reference that Lectrosonics relied on for its disclosure of the claimed “master timecode generator.” Woo discloses a “time-keeping system for synchronizing sound and picture recordings from a plurality of independent recording devices at a shared performance.” Appx1554 [4:62-65]. Woo is designed “to create tracks on each recording for re-synchronizing the pictures and sounds in post-performance editing.” Appx1549 [Abstract]. Woo’s timekeeping system includes a master clock with a GPS navigation satellite receiver and a digital signal processor. Appx1556 [8:60-63]; Appx1552 [Fig. 5]. The master clock outputs a timecode that is compatible with, and sent to, master clock input ports of commercially available film and video production equipment. Appx1557 [9:1-4]. It uses the formatting standards published by the Society of Motion Picture and Television Engineers (SMPTE) (Appx1549 [Abstract]), as does Strub (Appx1348 [75:25-51]).

### **C. The Board’s decisions**

#### **1. The Board found all of the elements of the original claims disclosed in the prior art**

As it did for the ’307 patent, the Board found all of the elements of the original claims for the ’902 and ’814 patents disclosed in the prior art. The Board first construed the “combining” limitation, present in original independent claim 12 of the ’902 patent, where the “local audio data ... is combined with” the remotely recorded audio data, and, for the same reasons it did for the ’307 patent, held that the limitation is broad enough to encompass the multitrack embodiment. Appx7-10. The Board

determined that “Strub discloses a local audio device that records local audio and transmits the local audio to other remote devices.” Appx39-41. Based on its claim construction, the Board explained that Strub discloses the “combining” limitation “because Strub discloses local audio devices transmitting recordings to other recording units” where the audio is then combined based on timestamps in post-processing. Appx40-41.

The Board also construed the term “wearable.” As it had for the ’307 patent, the Board declined to impose Zaxcom’s many limitations of “small, lightweight, unobtrusive, easily hidden, not visible, and designed to be worn on the body of a creator of audio (*i.e.*, performer).” Appx10-11. Instead, the Board adopted Lectrosonics’ construction, “suitable and in a condition to be worn.” Appx11-12; *see also* Appeal No. 20-1350, ECF No. 47, Appx10-12 (adopting same claim construction for the same reasons)<sup>3</sup>. And, for the same reasons it gave for the ’307 patent, the Board determined that Strub’s device is “wearable” within the meaning of the claims, where Strub describes its device as a “small, lightweight, wearable” unit. Appx25 (quoting Appx1312 [4:29-31]); *see also* Appeal No. 20-1350, ECF No. 47, Appx22 (quoting same). Appeal No. 20-1350 is already fully briefed. Zaxcom did not appeal the construction of “wearable” in Appeal No. 20-1350, nor did it appeal the finding that Strub discloses a “wearable” device.

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<sup>3</sup> “ECF No. 47” in Appeal No. 20-1350 is the Joint Appendix for that appeal.

Finally, the Board addressed the term “master timecode generator” and, agreeing with Zaxcom’s proposed definition, construed the term to mean “a producer of a plurality of master timecodes controlling other time code generators.” Appx12-14. The Board determined that Woo discloses the claimed master timecode generator (Appx27-31), relying on Woo’s master timecode generator that provides a “precision clock output . . . for synchronizing film and video equipment” (Appx28 (quoting Appx1556-1557 [8:65-9:1])) and allows “a time code generator to follow the time code off another source” (*id.* (quoting Appx1554 [3:39-40])).

The Board found all of the other limitations of the original claims present in the prior art references.

**2. The Board found that Strub anticipated original claims 12, 14, and 15 of the ’902 patent, and that it would have been obvious to modify Strub to arrive at the other original claims**

Because Strub teaches every limitation of independent claim 12—including the “combining” limitation—as well as dependent claims 14 and 15 of the ’902 patent, the Board found that Strub anticipated those claims. Appx39-41.

On claims 7, 8, and 11 of the ’902 patent, and all of the challenged claims of the ’814 patent, other references were needed to supply additional limitations: Nagai or Gleissner supplied an input port (an issue not disputed on appeal), and Woo supplied the “master timecode generator.” In addition to challenging some of those

teachings, Zaxcom further argued that it had demonstrated a nexus between its proffered objective evidence of nonobviousness and the original claims, evidence that supported concluding that it would not have been obvious to combine Strub with other references to achieve the claimed inventions.

The Board disagreed. The Board addressed *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366 (Fed. Cir. 2019), which this Court issued after the Board’s decision on the ’307 patent and before the Board’s decisions here. Appx32-33; Appx61. The Board explained—consistent with its decision on the ’307 patent—that Zaxcom had not established a nexus between its evidence and original claims under *Fox Factory*. While recognizing that Zaxcom had won an Emmy for its commercial product, the Board explained that the product did not embody original claims 7, 8, and 11 of the ’902 patent. Appx31-35. The Board found that the evidence “primarily is directed toward the feature of fixing dropouts,” which was “not required by claims 7, 8, and 11, which instead are directed to locally recording and timestamping audio data.” Appx34-35 (citing, e.g., Appx4385; Appx4370).<sup>4</sup> The same finding applies to independent claim 1, and its dependent claims, in the ’814 patent. *See* Appx117. Thus, there was no nexus between the objective evidence—covering the commercial product—and the invention as originally claimed.

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<sup>4</sup> Zaxcom also points to an Oscar award it received. *See, e.g.,* Zaxcom Br. 1. Before the Board, it primarily focused on the Emmy award in support of its original claims. Appx536-541.

**3. On the substitute claims, the Board found that it would not have been obvious to further modify Strub with Wood’s dropout repair functionality, given the strong evidence of industry praise and long-felt need**

The Board then addressed Zaxcom’s proposed substitute claims, which, like the substitute claims of the ’307 patent, add narrower language limiting the claims to an embodiment that replaces remotely recorded audio data with local audio data—the so-called “dropout repair” embodiment. Appx42-45. After determining that the substitute claims comply with the rules for amendment and the requirements of 35 U.S.C. § 112, the Board addressed their patentability over the original references plus Wood. Appx55-74.

As with the ’307 patent, the Board agreed with Zaxcom that the substitute claims are not rendered obvious by adding Wood to the applied prior art references, finding the proposed combination “at best only slightly weigh[s] in favor of a conclusion of obviousness.” Appx59-60. On the other side, the Board found that Zaxcom presented a strong case for nonobviousness based on objective evidence, relying, as it did for the ’307 patent, on the fact that the evidence such as industry praise focused on repairing dropouts. Appx60-72. Weighing the disclosures of Strub and Wood in conjunction with the objective evidence of nonobviousness, the Board concluded that Lectrosonics had not met its burden of proving the substitute claims unpatentable, and granted Zaxcom’s motion to amend. Appx72.

\* \* \*



The Board denied Zaxcom's request for rehearing. *See* Appx76-85 (-1129IPR rehearing decision); Appx152-161 (-1130IPR rehearing decision). The USPTO then decided to make the Board's final written decision on the '902 patent precedential. *See* <https://www.uspto.gov/patents/ptab/decisions-and-opinions/precedential> (designating as "precedential" Paper No. 33 (final written decision) in -1129IPR); *id.* (also making precedential the Board's interlocutory order in these IPR proceedings (Appx418-428; Paper No. 15), laying out information and guidance on the requirements and burdens for motions to amend under 35 U.S.C. § 316(d)).

### **Summary of the Argument**

Issue preclusion prevents Zaxcom from arguing here that the Board misconstrued the term “wearable” or that Strub does not disclose a “wearable” device. The ’307 patent, like the patents at issue here, claims a “wearable” device; the Board construed the term “wearable”; and the Board found that Strub discloses such a wearable device. Zaxcom appealed the Board’s decision on the ’307 patent in Appeal No. 20-1350, arguing that the original claims should have been upheld, but never argued that the Board erred with respect to the term “wearable.” That determination by the Board is final, and Zaxcom should be precluded from contesting it now. Regardless, the USPTO agrees with Lectrosonics that the Board’s construction was correct.

Substantial evidence supports the Board’s determination that Woo discloses the claimed “master timecode generator” and that it would have been obvious to include that feature in Strub. Woo is designed to provide master timecodes in a standard format to synchronize independent sound, film, and video recorders. And contrary to Zaxcom’s argument, Woo’s device need not have already been incorporated into Strub’s device to render the claims obvious. Rather, it can render Zaxcom’s claims obvious because it can be incorporated into Strub’s device, and the record contains an articulated explanation for why such a combination would have been within the ordinarily skilled artisan’s grasp.

Finally, as the USPTO argued in its brief in Appeal No. 20-1350, substantial evidence supports the Board's determinations regarding the obviousness of the original and substitute claims, specifically its disposition on Zaxcom's objective evidence of nonobviousness. As the USPTO argued in the prior appeal, the record supports the Board's finding that Zaxcom's industry praise and long-felt need evidence is primarily directed to its dropout repair functionality. As applied here, the Board correctly found that under *Fox Factory*, Zaxcom had failed to establish a nexus presumption, or otherwise demonstrate nexus, between that evidence and original claim 7 of the '902 patent. So, too, with original claim 1 of the '814 patent. Neither claim requires any post-recording audio data processing, let alone dropout repair. Zaxcom, supported by amici, presses that this Court's *Fox Factory* decision was wrong or otherwise does not apply. But the Board's decisions were fully consistent with *Fox Factory*. Here, *Fox Factory* issued before the Board's decisions, and the Board followed it. *Fox Factory* is consistent with this Court's precedent and makes sense; if an applicant wants to show that industry praise was really praise for the *claimed* invention, he should have to show reasonable focus of that evidence on what was claimed.

Similarly, on the proposed substitute claims, substantial evidence supports the Board's finding that Zaxcom demonstrated a nexus between those substitute claims—now expressly reciting dropout repair—and the evidence directed to that

feature. Lectrosonics wishes to reweigh that evidence on appeal, but the Board's reading of the evidence comports with the record and should be affirmed. Lectrosonics' additional challenge that its obviousness case was too strong to be affected by the evidence similarly fails. The Board's finding that Zaxcom's industry praise evidence—including an Emmy and Oscar—reflects strong objective evidence of nonobviousness finds strong roots in the cited evidence, as does its long-felt need findings. The Board's finding that Lectrosonics presented a weak case of obviousness for the substitute claims is similarly supported by the record. Lectrosonics' disagreement with the Board's findings does not constitute error.

### **Argument**

#### **A. Standard of review**

Zaxcom and Lectrosonics each have the burden to show that the Board committed reversible error. *In re Watts*, 354 F.3d 1362, 1369 (Fed. Cir. 2004). Obviousness under 35 U.S.C. § 103 is a legal conclusion based on underlying findings of fact. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007). Factual findings include the scope and content of the prior art, the differences between the claimed invention and the prior art, and objective evidence of nonobviousness. *Eisai Co. Ltd. v. Dr. Reddy's Laboratories, Ltd.*, 533 F.3d 1353, 1356 (Fed. Cir. 2008). Whether a nexus exists between that secondary considerations evidence and the claimed invention is also a question of fact. *Fox Factory*, 944 F.3d at 1373.

This Court upholds the Board’s factual findings as long as they are supported by substantial evidence. 5 U.S.C. § 706(2)(E); *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000). “Where two different conclusions may be warranted based on the evidence of record, the Board's decision to favor one conclusion over the other is the type of decision that must be sustained by this court as supported by substantial evidence.” *In re Bayer Aktiengesellschaft*, 488 F.3d 960, 970 (Fed. Cir. 2007). The Board’s weighing of evidence before it, including objective indicia of nonobviousness, is given “broad deference.” *In re Inland Steel Co.*, 265 F.3d 1354, 1366 (Fed. Cir. 2001); *see WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1331-1332 (Fed. Cir. 2016) (stressing the highly factual nature of nexus questions and stating that “[i]t is within the province of the fact-finder to resolve these factual disputes regarding whether a nexus exists between [the evidence] and its patented features...” (citations omitted)).

For claim construction in inter partes review proceedings filed as early as this one (before November 13, 2018 (*see* Appx6-7)), the Board gives terms their broadest reasonable interpretation consistent with the specification. *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2146 (2016). This Court may apply issue preclusion in the first instance based on a judgment that becomes preclusive while the case is on appeal. *MaxLinear, Inc. v. CF Crespe LLC*, 880 F.3d 1373, 1376 (Fed. Cir. 2018).

**B. Issue preclusion prevents Zaxcom from disputing the Board’s construction of the term “wearable,” which is correct regardless**

Zaxcom argues that the Board misconstrued the term “wearable” in original claim 7 of the ’902 patent, and original claim 1 of the ’814 patent. Zaxcom Br. at 28-30. Zaxcom presses that, under its correct construction, neither Strub nor any of the other references discloses a “wearable” device. Zaxcom Br. at 29-30. Issue preclusion forecloses this argument, which lacks merit in any event.

The parties disputed, and the Board resolved, the construction of the term “wearable,” and related dispute about Strub’s disclosure, for the ’307 patent in the same manner that the Board resolved those issues here. Zaxcom argued for the same construction for the term as used in the ’307 patent in the earlier proceeding, based on the same disclosure in the specification shared with the ’902 and ’814 patents involved here.<sup>5</sup> And the Board rejected Zaxcom’s construction for the same reasons in all three IPRs. *Compare* Appx10-12 (-1129IPR final written decision) and Appx93-95 (-1130IPR final written decision), *with* Appeal No. 20-1350, ECF No. 47, Appx10-12 (-972IPR final written decision). Zaxcom similarly argued that Strub did not disclose a “wearable” device based on its proposed construction for the ’307 patent, and the Board disagreed there, just as it did here. *Compare* Appx25

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<sup>5</sup> As a reminder, the -1129IPR involved the ’902 patent, and the -1130IPR involved the ’814 patent. Earlier Appeal No. 20-1350 involves the -972IPR and the ’307 patent.

(-1129IPR final written decision) and Appx108 (-1130IPR final written decision), with Appeal No. 20-1350, ECF No. 47, Appx22 (-972IPR final written decision). In Appeal No. 20-1350 from the final written decision involving the '307 patent, Zaxcom argued for the patentability of its '307 patent claims, but declined to argue error in the Board's construction of "wearable" or that the claims were separately patentable because the prior art did not disclose a "wearable" device. *See generally* Appeal No. 20-1350, ECF No. 26, Zaxcom Principal Brief.

"When an issue of fact or law is actually litigated and determined by a valid and final judgment, and the determination is essential to the judgment, the determination is conclusive in a subsequent action between the parties, whether on the same or a different claim." *B & B Hardware, Inc. v. Hargis Indus., Inc.*, 135 S. Ct. 1293, 1303 (2015). This Court has held that issue preclusion applies between two different inter partes review proceedings. *MaxLinear*, 880 F.3d at 1376-78; *Papst Licensing GMBH v. Samsung Electronics America, Inc.*, 924 F.3d 1243, 1250-51 (Fed. Cir. 2019).

"[I]ssue preclusion applies even though the precluding judgment comes into existence while the case as to which preclusion is sought (this case) is on appeal." *MaxLinear*, 880 F.3d at 1376. Here, the Board's judgment as to the construction of the term "wearable" became final when Zaxcom appealed the decision on the '307

patent and declined to appeal that construction.<sup>6</sup> As in *Papst*, the earlier '307 patent judgment is part of a set of appeals that will be argued concurrently, but Zaxcom's choice to not appeal certain issues in Appeal No. 20-1350 makes those issues final. 924 F.3d at 1249; 18A Charles A. Wright, et al., Federal Practice and Procedure § 4433 (3d ed. Apr. 2021 Update) (“A party who elects to appeal on one issue, omitting another issue on which it lost, is subject to issue preclusion on the issue not appealed.”); *see also XY, LLC v. Trans Ova Genetics, L.C.*, 890 F.3d 1282, 1294 (Fed. Cir. 2018) (applying collateral estoppel based on resolution of separately appealed case argued same day).

As in *Papst*, it would be hard to argue that the '307 patent was somehow not worth defending on the merits in Appeal No. 20-1350. *Papst*, 924 F.3d at 1251-52. Zaxcom is still pursuing the patentability of the '307 patent claims reciting “wearable” in Appeal No. 20-1350, just not on that issue. And, as in *Papst*, the earlier inter partes review “resolved against [the patent owner] the claim-construction and [prior-art]-teaching issues now before [the Court], and those resolutions were essential to the Board’s decision.” *Id.* at 1252. If Strub had not disclosed a “wearable” device,

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<sup>6</sup> While we agree with Lectrosonics on the overall preclusion point, we do not agree that statutory estoppel under 35 U.S.C. § 315(e) based on the Board’s final written decision applies here. *See* Lectrosonics Br. 25. Statutory estoppel is a separate creature from common-law estoppel. Here, statutory estoppel does not apply; 35 U.S.C. § 315(e) applies only to the same claim of the same patent, not separate related patents.



the Board could not have provided the unpatentability determination it provided on the '307 patent's original claims. Because Zaxcom declined to appeal "wearable" in Appeal No. 20-1350, it cannot appeal the same issue here.

Even if issue preclusion were not to apply, the USPTO agrees with Lectrosonics that the Board reasonably construed the term "wearable," and, therefore, the Board's claim construction should be affirmed alternatively on the merits. *See* Lectrosonics Br. 22-26; Appx10-12. At a minimum, as Lectrosonics points out, the same term should carry the same meaning across the related '307, '902, and '814 patents. Lectrosonics Br. 26. Zaxcom's concession as to the meaning of "wearable" for the '307 patent in Appeal No. 20-1350 means that the same construction is required for the other two patents here.

Similarly, because the Board's construction was reasonable, Zaxcom's related appeal argument that Strub fails to teach "wearable" under Zaxcom's overly narrow construction must be rejected. The USPTO agrees with Lectrosonics that the Board correctly found Strub to disclose a "wearable" device as that term as claimed in the '902 and '814 patents here. *See* Lectrosonics Br. 34-36; Appx25 (-1129IPR final written decision); Appx108 (-1130IPR final written decision).

**C. Substantial evidence supports the Board's determination that Woo discloses the claimed "master timecode generator"**

Zaxcom asserts that the Board erred in finding that Woo discloses the "master timecode generator" recited in claim 7 of the '902 patent and claim 1 of the '814

patent. *See* Zaxcom Br. 42-45. Zaxcom’s appeal arguments fail to appreciate the obviousness theory that the Board found persuasive and, more specifically, Strub’s role in that determination. *See* Appx18-19, Appx27-30, & Appx79-81 (-1129IPR final written decision and rehearing decision); Appx101-102, Appx110-112, & Appx155-157 (-1130IPR final written decision and rehearing decision).

Zaxcom accepts the Board’s construction requiring that the timecodes produced by the master generator “control[] other time code generators.” *See* Appx12-14. Zaxcom does not challenge the Board’s finding that Woo teaches “a master timecode generator that provides an SMPTE timecode for use in synchronizing film and video equipment, using the same SMPTE format used in the ’902 patent.” Appx28; *see* Appx18. Nor does Zaxcom challenge the Board’s finding that “Woo discloses jam synchronizing to control other timecode generators.” Appx28-29 (emphasis added); *see* Appx79-80.

Instead, Zaxcom argues that the Board failed to identify in Woo a local timecode generator controlled by Woo’s master timecode generator. Zaxcom Br. 42-45. Zaxcom improperly ignores that the Board, relying on Lectrosonics’ arguments, found that Strub already teaches the recited “local timecode generator” located inside the local audio device. *See* Appx22. Zaxcom does not challenge the Board’s finding. If Strub teaches the limitation, then there is no need for Woo to separately teach it. Further, the Board found ample record support for why the ordinarily skilled

artisan would utilize Woo’s master timecode generator in combination with Strub’s disclosures. *See* Appx18-19; Appx29-30. Zaxcom does not challenge the Board’s motivation findings on appeal. Zaxcom cannot demonstrate error in the obviousness determination here by isolating Woo from Strub, while conceding that the relevant disclosures could be combined. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

**D. The Board correctly determined that the “combining” limitation in original claim 12 of the ’902 patent encompasses the multitrack embodiment and is unpatentable**

The Board construed the term “combining,” recited in original independent claim 12 of the ’902 patent,<sup>7</sup> to cover the multitrack embodiment described in the specification. *See* Appx7-10. As part of that construction, the Board also determined that claim 12 did not require that the “local audio data” and the “remote audio data” come from the same source. *See id.* The Board found Strub anticipatory because it discloses the multitrack embodiment, as well as the other limitations in claim 12 (and its dependent claims 14 and 15).<sup>8</sup> *See* Appx36-41.

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<sup>7</sup> Independent original claim 7 of the ’902 patent does not recite the “combining” limitation. Similarly, none of the original claims in the ’814 patent, which are limited to locally recording and time-stamping audio data, recite “combining” audio data.

<sup>8</sup> For original claims 12, 14, and 15 of the ’902 patent, the Board rested on the anticipation ground and did not reach the additional argument that those claims would have been obvious based upon Strub and Wood. *See* Appx6, Appx41 n.10. Thus, Zaxcom’s suggestion that its secondary considerations evidence, if properly credited, supports reversing the Board’s unpatentability determination regarding claims

On appeal, Zaxcom challenges the Board's construction of the "combining" limitation in claim 12, arguing the term is limited to the dropout repair embodiment. Zaxcom Br. 30-39. Because Strub does not teach repairing dropouts, Zaxcom presses that Strub does not anticipate these original claims under Zaxcom's alternative construction. Zaxcom Br. 46. Zaxcom does not challenge the anticipation finding under the Board's construction.

The Board's claim construction analysis of the "combining" and related audio data source language here mirrors the Board's analysis in the decision involved in Appeal No. 20-1350 (there, for original claims 1 and 12 of the '307 patent). *Compare* Appx7-10 *with* Appeal No. 20-1350, ECF No. 47, Appx7-10. Similarly, Zaxcom offers the same (albeit pared down) arguments here that it offered in Appeal No. 20-1350 to limit "combining" to the dropout embodiment. *Compare* Zaxcom Br. 30-39 *with* Appeal No. 20-1350, ECF No. 26, Zaxcom Principal Br. 25-42. The USPTO Brief in Appeal No. 20-1350 responded to Zaxcom's claim construction arguments. *See* Appeal No. 20-1350, ECF No. 39, USPTO Br. 18-23. There are no meaningful differences between the two cases on this construction issue; resolution of the issue in the 20-1350 Appeal should control the same issue here for original claim 12 of

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12, 14, and 15 of the '902 patent (Zaxcom Br. 46-49) is not correct; such evidence is not germane to anticipation under 35 U.S.C. § 102.

the '902 patent.<sup>9</sup> Accordingly, the USPTO relies on its responses in the 20-1350 Appeal here, and will not repeat them.

**E. The Board's handling of Zaxcom's secondary considerations evidence comports with precedent and is supported by substantial evidence**

Zaxcom offered generally the same objective evidence on industry praise and long-felt need here that it offered for the '307 patent involved in Appeal No. 20-1350, including an Emmy and Oscar. As it did for the '307 patent, the Board determined here that the evidence—particularly, industry praise—largely focused on the dropout repair feature. The Board accordingly found here that no nexus had been demonstrated between that evidence on the one hand, and original claim 7 of the '902 patent or claim 1 of the '814 patent on the other hand, neither of which recite that feature. *See generally* Appx31-35 (-1129IPR final written decision); Appx81-85 (-1129IPR rehearing decision); Appx114-117 (-1130IPR final written decision); Appx157-161 (-1130IPR rehearing decision).

Conversely, substitute independent claims 21 and 24 of the '902 patent, and substitute independent claim 50 of the '814 patent, add a “replacing” step that restricts the claims to audio data dropout repair. The Board thus found a nexus between Zaxcom's evidence of industry praise and long-felt need, and the substitute claims.

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<sup>9</sup> The USPTO agrees that Strub does not anticipate original claim 12 if the Court accepts Zaxcom's argument to limit “combining” to a dropout repair embodiment.

Strub does not teach dropout repair; the Wood reference, identified by Lectrosonics in its opposition to the motion to amend, teaches that functionality, but for use in the different context of received television broadcast signal rather than post-production audio work. The Board determined that Lectrosonics' relatively weak evidence of obviousness, coupled with Zaxcom's strong objective evidence of nonobviousness, supported concluding that the substitute claims had not been shown to be unpatentable under § 103. *See generally* Appx60-72 (-1129IPR final written decision); Appx137-141 (-1130IPR final written decision).

**1. Substantial evidence supports the Board's finding that Zaxcom's objective evidence was directed to dropout repair, and thus lacks a nexus with the original claims not reciting that feature**

Zaxcom faults the Board's nexus analysis in the context of its original claims. The Board's underlying nexus findings on the original claims here mirror those in Appeal No. 20-1350. The difference is that the Board here expressly relied on *Fox Factory*, and applied its nexus findings to the inventions recited in original claim 7 of the '902 patent and original claim 1 of the '814 patent. The Board decision involving the '307 patent, at issue in Appeal No. 20-1350, did not discuss *Fox Factory* because *Fox Factory* had not issued at the time the Board rendered its final decision there. However, the USPTO addressed *Fox Factory* as it pertains to all three Board decisions in our brief in Appeal No. 20-1350. Like the Board decision at issue in

Appeal No. 20-1350, the Board decisions here are consistent with *Fox Factory*. Appeal No. 20-1350, ECF No. 39, USPTO Br. 33.

Zaxcom and amici argue here that *Fox Factory* is wrong or otherwise does not apply. Zaxcom Br. 49-52, 57-60. *Fox Factory* is consistent with this Court's prior case law. Precedent has always required a nexus—"a legally and factually sufficient connection"—between the objective evidence and the claims. *Fox Factory*, 944 F.3d at 1373 (quoting *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1332 (Fed. Cir. 2019), which quotes *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988)); see *WMS Gaming Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1359 (Fed. Cir. 1999)). This Court's nexus precedent compels that the commercial product be commensurate in scope with the patented invention, including the cases relied upon in *Fox Factory*. See *Demaco*, 851 F.2d at 1392 (requiring that the product "is the invention disclosed and claimed"); *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000) (patentee must show that the product "embodies the claimed features, and is coextensive with them"); *Sight-Sound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1319 (Fed. Cir. 2015) ("If a product both embodies the claimed features and is coextensive with the claims at issue, a nexus is presumed. In other words, a nexus exists if the commercial success of a product is limited to the features of the claimed invention." (marks omitted)); *Therasense, Inc. v. Becton, Dickinson & Co.*, 593 F.3d

1325, 1336 (Fed. Cir. 2010) (When “the claims are broad enough to cover devices that either do or do not solve” the problem underlying long-felt need evidence, that “evidence of non-obviousness fails because it is not commensurate in scope with the claims which the evidence is offered to support”) (internal citation and quotation marks omitted). *See also MeadWestVaco Corp. v. Rexam Beauty and Closures, Inc.*, 731 F.3d 1258, 1264-65 (Fed. Cir. 2013) (reversing district court’s nexus finding where the claims at issue were broad enough to cover both the product that alleged to support long-felt need and commercial success, but also other products). And it makes sense to require coextensiveness; if an applicant wants to show that, *e.g.*, industry praise was really praise for the claimed invention, he should have to show that the basis for that praise is reasonably commensurate in scope with the claimed invention.

Nor does *Fox Factory* (or the Board’s decisions here) conflict with *WBIP*. *Zaxcom Br.* 50-51, 59-60. Both *WBIP* and *Fox Factory* state that a presumption of nexus for objective considerations exists when the patentee shows that the asserted objective evidence is tied to a specific product and that product “is the invention disclosed and claimed in the patent.” *Compare Fox Factory*, 944 F.3d at 1373, with *WBIP*, 829 F.3d at 1329. Indeed, *WBIP* and *Fox Factory* both rely directly on *Demaco*, 851 F.2d at 1392-93, for the same coextensiveness standard. Further, in affirming the finding of coextensiveness, the Court in *WBIP* relied on the fact that



the patent owner there presented evidence that the specific products underlying its secondary evidence embodied the asserted marine engine claims, and was “tied to the claimed gen-sets achieving safe carbon monoxide levels.” *WBIP*, 829 F.3d at 1329-30.

Zaxcom’s related assertions that “*Fox Factory* was a mere panel decision” and that it “does not show awareness of [an alleged earlier] *en banc* standard” (Zaxcom Br. 57-60) cannot undo the precedential nature of the decision. Regardless, if the conflicts posited by Zaxcom existed, resolving them would require *en banc* consideration that the Court denied in *Fox Factory* itself and that Zaxcom does not actually request here. *Cf.* Zaxcom Br. 60 n.4 (merely observing that the Court can sua sponte order *en banc* consideration, but not requesting it). And Zaxcom’s complaints about *Fox Factory* are immaterial here. *Fox Factory* recognizes that a patent owner should receive the ““opportunity to prove nexus by showing that the evidence of secondary considerations is the direct result of the unique characteristics of the claimed invention”” even where a presumption of nexus would be inappropriate. Zaxcom Br. 57-58 (quoting *Fox Factory*, 944 F.3d at 1373-74); *see also id.* at 58 (“Zaxcom has no need for a presumption of nexus (though it is certainly entitled to it.”). The Board considered, and properly rejected, Zaxcom’s attempt to prove nexus between its evidence and original claims, which Zaxcom has challenged on appeal.

Thus, as applied to these proceedings, the Board explained that Zaxcom was not entitled to a presumption of nexus because “Patent Owner does not provide an analysis demonstrating that its products are coextensive (or nearly coextensive) with the challenged claims.” *See* Appx33; Appx82-83. Zaxcom does not identify where in the administrative record it attempted to show coextensiveness.

In a footnote, Zaxcom alleges that the evidence shows “the industry-praised product is coextensive with the patent claims in that the praised product (*i.e.*, the TRX900) is the claimed invention” because the features of local recording and timestamping audio data recited in original claim 7 of the ’902 patent, and claim 1 of the ’814 patent, make possible the unclaimed dropout repair. Zaxcom Br. 50 n1; *see also id.* at 53. Zaxcom forfeited this factual argument by making it for the first time on appeal. *See, e.g., In re Google Tech. Holdings LLC*, 980 F.3d 858, 862-864 (Fed. Cir. 2020). Further, footnote arguments are not properly preserved appellate arguments. *See SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1320 (Fed. Cir. 2006). And Zaxcom’s argument does not change the fact that what Zaxcom refers to as “the merits of the invention, namely, dropout repair” (Zaxcom Br. 50 n.1) is an important feature of the relevant product, but not part of the claimed invention. *See, e.g., Fox Factory*, 944 F.3d at 1374-75 (concluding that coextensiveness could not be demonstrated where a “critical” feature of the relevant commercial product underlying secondary considerations evidence was not claimed). Accepting

Zaxcom’s position that it suffices for nexus purposes that the claimed features simply relate to, or work with, an unclaimed feature underlying the secondary considerations evidence would undercut the purpose of the nexus requirement in the first instance—namely, to ensure that the evidence speaks to the claimed invention’s patentability.

The Board correctly recognized that “the patent owner is still afforded an opportunity to prove nexus by showing that the evidence of secondary considerations is the ‘direct result of the unique characteristics of the claimed invention.’” Appx33 (quoting *Fox Factory*, 944 F.3d at 1373-74, which quotes *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996)). As it did in the decision involving the ’307 patent at issue in Appeal No. 20-1350, the Board correctly found here that Zaxcom had not proven a nexus between the inventions recited in the original claims and its evidence, which “primarily is directed towards the feature of fixing dropouts.” Appx34; *see* Appx84. The same substantive evidence discussed by the USPTO in Appeal No. 20-1350 underlies the same finding here that the objective evidence focused on dropout repair. *See* Appeal No. 20-1350 USPTO Br. at 25-26. *See, e.g.*, Appx4357-4358 (¶6) (Zaxcom’s witness Mr. Wexler stressing problem with “RF dropouts” allegedly solved by product: “[i]f there is a drop out of the RF signal, the identical recording in the transmitter can be used by post production” to fix it). *See also* Appx62-63 (finding in the context of proposed substitute claims that evidence repeatedly praises

dropout repair feature is “strongly probative” of nexus between the evidence and claims reciting that feature).

Zaxcom argues error in that finding by minimizing the industry praise evidence focused on dropout repair, and highlighting statements about other features. Zaxcom Br. 53-54; *see also id.* at 23-25. As the Board pointed out, Zaxcom’s nexus arguments and evidence emphasized evidence characterizing “the problem being solved [by the praised products] as ‘dropouts.’” Appx84 (citing Appx536-537 [Patent Owner Response], which relied upon, *e.g.*, Appx4357-4358 [¶ 6] (Mr. Wexler emphasizing how Zaxcom products solved problem with lost data due to dropouts) and Appx4498 [ll. 4-12] (Mr. Tinsman’s deposition testimony confirming wireless devices had a “potential for dropouts” prior to 2005)). Even the evidence Zaxcom cites on appeal highlights the critical link between dropout repair and the industry praise. *See* Zaxcom Br. 23-25 (relying on praise evidence at Appx4357-4358 (¶¶ 5-7) and Appx4350-4351 (¶ 6), which refer to the dropout feature when describing product as a “game changer” that would not have been obvious to the ordinarily skilled artisan). It can hardly be surprising that the Board focused on the dropout repair feature as critical to the industry praise.

And the Board acknowledged that Zaxcom’s evidence discussed things other than the audio/dropout repair. *See, e.g.*, Appx34-35 (“The evidence shows that the Emmy and Technical Achievement Award were awarded for, among other things,

the critical feature of eliminating dropouts.”) (emphasis added); Appx84. But the Board properly found that the evidence, considered collectively, supported finding that the evidence was “primarily” directed to the “critical feature” of dropout repair. Appx34-35. The Board further found that the “persuasive testimonial evidence of industry praise was directed towards fixing ‘dropouts,’ the problem Patent Owner asserts the claimed invention solved.” Appx84-85 (citing Appx34 and Appx537).

The Board’s weighing of Zaxcom’s evidence is reviewed for substantial evidence and given “broad deference.” *Inland Steel*, 265 F.3d at 1366. Zaxcom’s attempt on appeal to revisit and reweigh the evidence does not demonstrate error in the Board’s nexus findings, which are supported by the record. *See WBIP*, 829 F.3d at 133-1332 (stressing the highly factual nature of nexus questions and stating that “[i]t is within the province of the fact-finder to resolve these factual disputes regarding whether a nexus exists between [the evidence] and its patented features...” (citations omitted)); *Bayer*, 488 F.3d at 970.

Zaxcom also presses that the praised products nonetheless embody the claimed invention even if the original claims lack a limitation directed towards the critical dropout repair feature. *See Zaxcom Br.* 51-56. This Court’s precedent requires that objective evidence be “‘reasonably commensurate with the scope of the claims’.” *ClassCo, Inc. v. Apple, Inc.*, 838 F.3d 1214, 1220 (Fed. Cir. 2016) (quoting *Rambus Inc. v. Rea*, 731 F.3d 1248, 1257 (Fed. Cir. 2013), which quotes *In re Kao*,

639 F.3d 1057, 1068 (Fed. Cir. 2011)); *see Fox Factory*, 944 F.3d at 1373 (To determine whether the patentee has met its burden of demonstrating nexus, “we consider the correspondence between the objective evidence and the claim scope”) (quoting *Henny Penny*, 938 F.3d at 1332). The Board conducted that inquiry here, and reasonably determined that the absence of a limitation directed to the dropout repair feature figuring prominently in Zaxcom’s evidence precluded finding the required nexus. *See* Appx34. That determination was further consistent with the Board’s finding that “persuasive testimonial evidence of industry praise was directed towards fixing ‘dropouts.’” Appx84. Lastly, the Board found that Zaxcom’s primary evidence purportedly linking the industry praise with the particular features recited in the claims contained only a “conclusory allegation that the ‘recognition include[d] in the features [] are recited in the issued [] claims’,” was insufficient to prove nexus. Appx85 (quoting Appx4598-4600 [¶ 92]). Zaxcom’s disagreement with these findings, and how the Board weighed the evidence, does not demonstrate error in the Board decision. *See WBIP*, 829 F.3d at 1331-1332; *Bayer*, 488 F.3d at 970.

**2. The Board correctly determined that the substitute claims, limited to dropout repair, are patentable**

For its part, Lectrosonics’ appeal on the Board’s treatment of the secondary considerations evidence—industry praise and long-felt need—regarding proposed substitute independent claims 21 and 24 of the ’902 patent, and substitute independent claim 50 of the ’814 patent, asserts no error in the Board’s reliance upon *Fox*

*Factory*. Indeed, in Appeal No. 20-1350, Lectrosonics argued that the Board’s decision here on the ’902 patent was consistent with *Fox Factory*, and only the earlier Board decision on the ’307 patent was inconsistent. *See* Appeal No. 20-1350, ECF No. 35, Lectrosonics Br. 27-30.

Rather, Lectrosonics contends that Zaxcom made only a cursory, insufficient nexus demonstration that the Board then improperly filled in. *See* Lectrosonics Br. at 51-54, 56-61. The Board explained that the combination of Zaxcom’s nexus arguments and evidence and its secondary considerations evidence in its Motion to Amend, as well as its Patent Owner Response, formed the relevant material in evaluating the nexus issue. *See* Appx62. The Board explained that Zaxcom’s response arguments were “directed to the subject matter added by amendment to the proposed substitute claims”—namely, the “replacing” limitation that Zaxcom argued was already present in the original claims. The Board repeatedly cited to Zaxcom’s filings for the nexus arguments and evidence analyzed. *See* Appx62-64 (citing, e.g., Appx536-538, 540 (Patent Owner Response); Appx4357-4358 [¶¶ 6-7] (Wexler Decl.); Appx4348-4352 [¶¶ 3-7] (Sarokin Decl.); Appx4360-4379 (Emmy award).

Lectrosonics does not appear to contest that the Patent Owner Response arguments and evidence considered by the Board were relevant to the language added to the substitute claims; their complaint is that the material was not presented in the motion to amend. There is nothing improper about considering record arguments

and evidence relevant to the proposed substitute claims. *See Aqua Products, Inc. v. Matal*, 872 F.3d 1290, 1325 (Fed. Cir. 2017 (*en banc*)). Lectrosonics acknowledges *Aqua Products* but suggests that it applies only to “the unique context of vetting and challenging amendments as unpatentable.” Lectrosonics Br. 58. There was no error in the Board’s procedure here, where the Board considered properly presented record arguments and evidence on objective indicia of nonobviousness relevant to proposed substitute claims.

Lectrosonics argues that the Board erred in finding that Zaxcom demonstrated a nexus between its industry praise evidence and the proposed substitute claims because the evidence praises unclaimed features. Lectrosonics Br. 61-72. The Board properly rejected this argument, explaining that the evidence specifically correlates its praise to the dropout repair functionality reflected in the “replacing” limitation. *See* Appx64-65 (citing Appx4357-4358 [¶ 6] (Wexler Decl.); Appx4348-4351 [¶¶ 3, 4, 6] (Sarokin Decl.); Appx540 (addressing Emmy award); *see also* Appx69 (acknowledging that “Patent Owner provides some evidence of industry praise directed to features not explicitly recited by proposed substitute claims 21-26,” which does not speak to patentability). Indeed, the Board earlier found that “the evidence submitted by Patent Owner primarily is directed towards the feature of fixing dropouts,” describing it as “the critical feature.” Appx34-35. Lectrosonics’ preference for reading the evidence differently only highlights why the Board’s weighing of evidence



is reviewed with “broad deference” for substantial evidence. *See Inland Steel*, 265 F.3d at 1366. The Board’s reading of Zaxcom’s industry praise to focus on the dropout feature, establishing sufficient nexus to that feature as recited in the proposed substitute claims, is supported by the record and should be affirmed.

On the merits of Zaxcom’s evidence with respect to the obviousness determination, there is no dispute that Zaxcom documented significant industry praise for its dropout repair functionality, as well as wearable digital recording devices, in the form of its Emmy and Oscar awards, coupled with testimonial evidence. *See* Appx68-70. Substantial evidence supports the Board’s industry-praise findings. *See, e.g.*, Appx4358 [¶7] (Wexler stating: “With Zaxcom’s brilliant invention, I had the fool-proof solution that I could only have imagined; using the digital recording wireless transmitter I had the assurance and confidence that I could always deliver a track to post production even in those situations where there were failures of the RF transmission. Zaxcom was the first and only company to provide this; nothing else even came close.”); Appx4350-4352 [¶¶ 6, 8] (Sarokin explaining the “revolution[ary]” nature of Zaxcom’s products in the industry); Appx4598-4600 [¶ 92] (DeFilippis testimony explaining basis for Emmy award); Appx4370 (explaining that the Emmy award is “[n]ot for a single component but for the system as a whole,” and discussing, first, “provid[ing] backup recording of the original microphone signal”); Appx4380-4382 (Emmy award press release, praising Zaxcom’s product as, among

other things, “a production tool that married wireless transmission with a recording device located within the actor’s body pack”); Appx4346 (Oscar technical achievement award for “advanc[ing] the state of wireless microphone technology by creating a fully digital modulation system with a rich feature set . . .”).

Substantial evidence thus supports the Board’s finding that Zaxcom’s significant industry praise “strongly weighs” in favor of nonobviousness. Appx70; *see* Appx72. Lectrosonics argues that the praise cannot support nonobviousness because dropout repair was known in the prior art. Lectrosonics Br. 46-51. As the USPTO explained in Appeal No. 20-1350, that argument misses the point of objective indicia evidence. Secondary considerations evidence comes into play only when the various claim elements have been shown to be “known” at the time of the invention; it assists the trier of fact in assessing whether the ordinarily skilled artisan would have combined the known features in the manner claimed. *See InTouch Techs., Inc. v. VGO Communications, Inc.*, 751 F.3d 1327, 1347-48 (Fed. Cir. 2014) (crediting objective evidence because “that which may be made clear and thus ‘obvious’ to a court, with the invention fully diagrammed and aided, may have been a breakthrough of substantial dimension when first unveiled” (citation omitted)); Appeal No. 20-1350, ECF No. 39, USPTO Br. 31.

Lectrosonics also attacks the Board’s findings regarding the strength of its obviousness showing, faulting the Board for failing to look for “reasons to modify

Strub” rather than the involved patents. Lectrosonics Br. 48-49. But Strub, like the ’902 and ’814 patents, focuses on post-production audio data manipulation. The finding disputed by Lectrosonics on appeal thus observes that Wood’s different focus on repairing dropouts in a received TV broadcast signal weakens the argument that it would have been obvious to one of ordinary skill in the art to combine teachings from the two. That is the same point the Board made in its other findings on the strength of Lectrosonics’ showing, findings unchallenged by Lectrosonics on appeal. *See* Appx59-60. The Board observed that Strub did not actually identify “deficiencies resulting from dropouts” as a possible problem. One of ordinary skill in the art therefore would be unlikely to seek to combine Strub with Wood, which fixes such a deficiency. Appx59. Similarly, the Board found that the argument that an artisan would combine a “small, wearable device for recording the audio of an event, as taught in Strub, with a method for repairing a TV broadcast signal, as taught in Wood, does not support a strong showing of obviousness.” Appx60. While Lectrosonics argues that other considerations support a different finding on the strength of its showing, the Board’s finding that Lectrosonics “presents a weak case of obviousness” is consistent with the record.

The Board additionally correctly found that Zaxcom’s evidence of long-felt need favored nonobviousness. *See* Appx65-68. In doing so, the Board “credit[ed] the testimony of Mr. Sarokin and Mr. Wexler, who both identify repairing dropouts

as a long-felt need.” Appx66. The Board further “credit[ed] the testimony of Mr. Sarokin” who explained that the dropout repair capability “solved the major limitation of radio mics.” Appx66-67. On appeal, Lectrosonics reweighs Zaxcom’s long-felt need evidence to lobby for a different finding. Lectrosonics Br. 54-56. But the Board considered the totality of evidence, including the deficiencies pressed by Lectrosonics on appeal, in crediting Zaxcom’s evidence. Substantial evidence supports the Board’s finding that while Zaxcom had not shown a precise date upon which the need arose, the evidence showed a persistent need for repairing dropouts using a wearable device to record and transmit audio data, a need met by Zaxcom’s claimed invention. Appx65-68 (crediting Appx4350 [¶ 6] (Sarokin stating: “By 2005 my sound cart was fully digital” after incorporating Zaxcom’s products, which solved a “major limitation of radio mics”), and Appx4357-4358 [¶ 6] (Wexler explaining, as found by Board, “how the ‘replacing’ limitation solved the long-felt need of repairing dropouts.”)). The Board’s findings, owed significant deference on appeal, should be affirmed.

### **Conclusion**

This Court should affirm the Board’s determination that Zaxcom’s original claims are unpatentable and that the substitute claims are patentable.

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Respectfully submitted,

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**RULE 32(a)(7) CERTIFICATE OF COMPLIANCE**

I certify pursuant to Fed. R. App. Proc. 32(a)(7) that the foregoing BRIEF FOR INTERVENOR complies with the type-volume limitation required by the Court's rule. The total number of words in the foregoing brief, excluding the sections noted in Fed. R. App. Proc. 32(f) and Fed. Cir. R. 32(b), is 10,271 words as calculated using the Word® software program.

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