

Case IPR2023-01003
Patent No. 9,226,090

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner,

v.

EIGHT KHZ, LLC,
Patent Owner.

Case IPR2023-01003
Patent 9,226,090

**PATENT OWNER'S OBJECTIONS TO PETITIONER'S
DEMONSTRATIVES**

Pursuant to the Board's Order Setting Oral Argument, *see* Paper 39 at 4–5 (PTAB September 10, 2024), Patent Owner respectfully submits the following objections to the demonstratives filed by Petitioner. Ex.1056. The parties met and conferred on October 25, 2024, and were able to narrow the objections.¹ Below are the remaining objections not yet resolved.

Every objection below is based on the Board's "strict prohibition against the presentation of new evidence or arguments at the hearing," as stated in the Hearing Order, Paper 39 at 4. Patent Owner's objections below are confined to the demonstratives; if Petitioner introduces new arguments at the hearing, Patent Owner reserves the right to object to any such new arguments at the hearing.

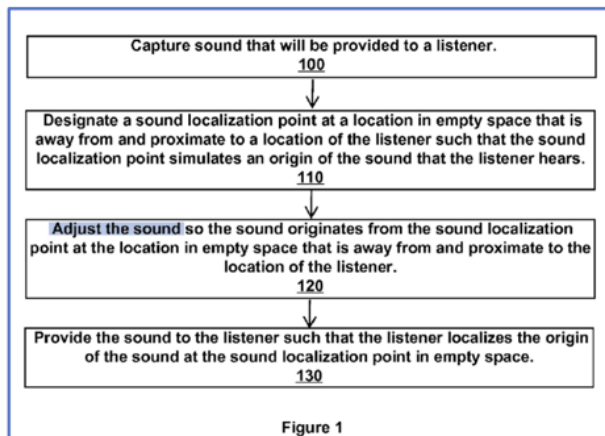
¹ The parties agreed to a timetable for exchanging demonstratives and objections, which included a Meet and Confer scheduled for Noon CDT on the filing date, October 25. Despite raising nearly 105 unique objections to Patent Owner's demonstratives, and receiving Patent Owner's written responses to the same, Petitioner was prepared to discuss only seven of its objections at the Meet and Confer. These objections were directed at Patent Owner's slides 5, 32, 99, 100, 156, and 157. No meet and confer occurred on the remaining objections raised by Petitioner. In contrast, Patent Owner engaged with Petitioner on each of its objections and many were able to be resolved because of those discussions.

Just as Patent Owner was preparing to file its objections to Petitioner's demonstratives, it received Petitioner's objections. Petitioner includes substantive arguments and explanations to support its objection to Dr. Begault's image in Patent Owner's demonstratives. *See* Paper 54, 4-5. This is improper and in direct contravention of the Scheduling Order, which states: "The objections shall identify with particularity which portions of the demonstratives are subject to objection (and should include a copy of the objected-to portions) and include a one (1) sentence statement of the reason for each objection. **No argument or further explanation is permitted.**" Paper 39, 4. Therefore, PO is responding to Petitioner's improperly presented arguments in its objections to Patent Owner's demonstratives.

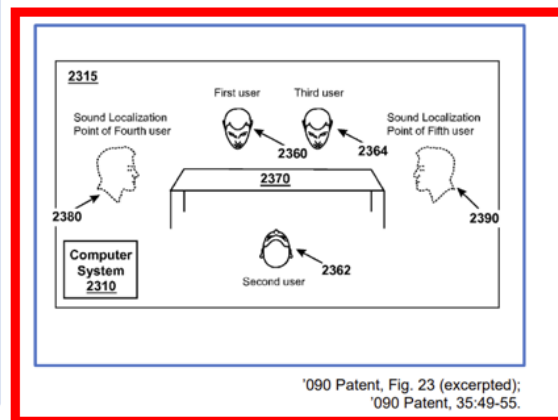
The demonstratives hold no evidentiary value, and Dr. Begault's image is included solely to aid Patent Owner's Leap Practitioner in presenting its arguments. Moreover, Dr. Begault's deposition was conducted via video, making his video deposition part of the record. Notably, his image also appears in Ex.1050, which Petitioner introduced into this proceeding. *See* Reply, 13. Petitioner cited Ex.1050 without pinpointing a specific section. *Id.* By omitting a pinpoint citation for Ex.1050, Petitioner has incorporated the entirety of Ex.1050 into its Reply, including Dr. Begault's image.

Objection #1

Patent Owner objects to use of **EX1001, Fig. 23 on slide #5**. Fig. 23 was never relied upon before by Petitioner and constitutes presenting new evidence, and thus any arguments raised during the oral hearing based on Ex.1001, Fig. 23 constitute a new argument.

'090 Patent: Localization by Adjusting Sound

'090 Patent, Fig. 1 (annotated).



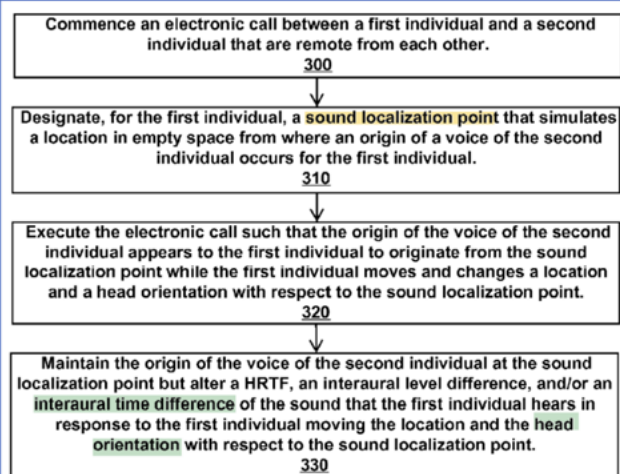
Objection #2

Patent Owner objects to use of **EX1001, Fig. 3 on slide #9**. Fig. 3 was never relied upon before by Petitioner and constitutes presenting new evidence, and thus any arguments raised during the oral hearing based on Ex.1001, Fig. 3, and specifically in relation to Claim 8, constitute a new argument.

Relevant Claim Limitations

8. A non-transitory computer readable storage medium storing instructions that cause a computer system to execute a method, comprising:
commence an electronic call between a first individual wearing an electronic earphone and a second individual that are remote from each other;
designate, for the first individual, a sound localization point that simulates a location in empty space from where an origin of a voice of the second individual occurs for the first individual through the electronic earphone such that the sound localization point in empty space is located away from and proximate to the first individual;
execute the electronic call such that the origin of the voice of the second individual appears to the first individual to originate from a fixed location that is the sound localization point in empty space while the first individual moves and changes a location and a head orientation with respect to the sound localization point; and
maintain the origin of the voice of the second individual at the sound localization point but alter an interaural time difference of the voice that the first individual hears in response to the first individual moving the head orientation with respect to the sound localization point.

'090 Patent, cl. 8.



'090 Patent, Fig. 3 (annotated).

Pet. 11.

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Objection #3

Patent Owner objects to “**Petitioner’s Construction**” column in Table on **slide #23**, as constituting a new argument. In Reply at 2, Petitioner included a table similar to the table on this slide, except on this slide Petitioner has omitted “a distance from” from the table in Reply at 2, thereby advancing a new argument.

Parties’ Proposed Constructions

Whether Independent Claims Require HRTFs

Petitioner’s Construction	Patent Owner’s Construction
plain and ordinary meaning	“externalization of sound through HRTFs and 6DOF tracking of the listener relative to the SLP that represents the talker”
Pet. 15-16.	Begault Decl. ¶79 (cl. 8); see also ¶¶64-65 (cl. 1), ¶85 (cl. 15); POR 43; Sur-Reply 7.

Objection #4

Patent Owner objects to **“Patent Owner’s Construction”** column in Table on slide #23, as mischaracterizing PO’s position and being highly prejudicial. PO never proposed any construction, and importantly, the language in the Table cannot be found in any of PO’s papers, and thus Petitioner’s use of quotation marks is misleading.

Parties’ Proposed Constructions**Whether Independent Claims Require HRTFs**

Petitioner’s Construction	Patent Owner’s Construction
plain and ordinary meaning	“externalization of sound through HRTFs and 6DOF tracking of the listener relative to the SLP that represents the talker”
Pet. 15-16	Begault Decl. ¶79 (cl. 8); see also ¶¶64-65 (cl. 1), ¶85 (cl. 15); POR 43; Sur-Reply 7.

Objection #5

Patent Owner objects to **“Patent Owner’s Construction” column in Table on slide #32**, as mischaracterizing PO’s position and highly prejudicial. PO never proposed any construction, and importantly, the language appeared in Table cannot be found in any of PO’s papers, and thus Petitioner’s use of quotation marks is misleading.

Parties’ Proposed Constructions

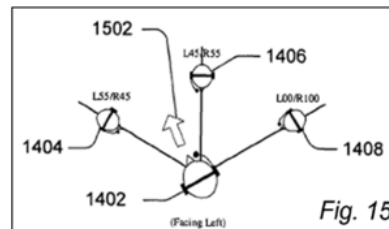
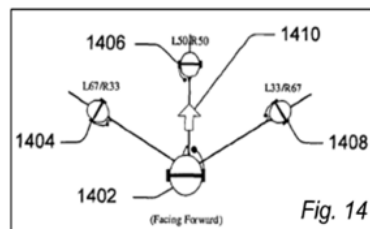
“capturing ... binaural sound”

Petitioner’s Construction	Patent Owner’s Construction
Plain and ordinary meaning	“capturing each and every sound wave at the talker’s system binaurally”
Pet. 15-16.	POR 1.

Objection #6

Patent Owner objects to use of **EX2016, 160-161 on slide #44**. EX2016, 160-161 was never relied upon before by any parties and constitutes presenting new evidence, and thus any arguments raised during the oral hearing based on EX2016, 160-161 constitute a new argument.

Bedingfield Is A Binaural Reference



[T]he human hearing mechanism (including the ears, nerves and brain processing, subsequently referred to as 'the ear') detects placement of a speaker (or source of sound)...by detecting [differences]...perceived by the listener's two ears ... the listener may hear a second speaker, located at the 3 o'clock position relative to the listener, in stereo sound with an increased volume level in the right audio channel and a decreased volume level in the left audio channel, as compared to the right and left volume levels received from the first speaker.

I'm using the word "stereo" here as it is sometimes used colloquially to mean two channels. Stereo only is stereo if you play it back over loudspeakers, as we said early on today, but it is often used this way.

EX1007 (Bedingfield),
3:35-4:12, Figs. 14, 15.

EX2016 (Kyriakakis Tr.), 160-161.

Reply 16-18.

DEMONSTRATIVE EXHIBIT - NOT EVIDENCE

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Meta Platforms, Inc. - Ex. 1056

Objection #7

Patent Owner objects to use of **EX1054, 30 on slide #53**. EX1054, 30 was never relied upon before by any parties and constitutes presenting new evidence, and thus any arguments raised during the oral hearing based on EX1054, 30 constitute a new argument.

Motivation to Combine: Ballas Teaches Binaural Techniques

Transaural audio is a three-dimensional sound spatialization technique which is capable of reproducing **binaural** signals over loudspeakers. It is based on the cancellation of the acoustic paths occurring between loudspeakers and the listeners ears.

EX1054, 30 (cited in EX1005, ¶52).

Petitioner's Expert Dr. Kyriakakis's Reply Declaration

Transaural sound is **binaural sound** processed and delivered through speakers instead of headphones.

EX1055 (Kyriakakis Reply), ¶52.

Reply 25.

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Meta Platforms, Inc. - Ex. 1056

Objection #8

Patent Owner objects to **slides #53-54** pending the Board's decision on Patent Owner's motion to exclude. These slides show content from EX1054 and EX1055, which are subject of Patent Owner's Motion to Exclude.

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Date: October 28, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on October 28, 2024, I caused a true and correct copy of the foregoing Patent Owner's Objections to Petitioner's Demonstratives to be served via electronic mail at PH-Meta-Eight-KHZ-IPR@paulhastings.com upon the following attorneys of record for the Petitioner:

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