

Filed on behalf of: Meta Platforms, Inc.

Entered: October 18, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner,

v.

EIGHT KHZ, LLC,
Patent Owner.

Case IPR2023-01024
Patent 11,290,836 B2

**PETITIONERS' REPLY TO THE
PATENT OWNER'S PRELIMINARY RESPONSE**

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1003	Declaration of Dr. Agnieszka Roginska in Support of Petition for <i>Inter Partes</i> Review of the ’836 Patent
1004	Curriculum Vitae of Dr. Agnieszka Roginska
1005	Daniel J. Finnegan et al., <i>Compensating for Distance Compression in Audiovisual Virtual Environments Using Incongruence</i> , Chi’ 16: Proc. of the 2016 CHI Conf. on Hum. Factors in Computing Sys. (2016) (“Finnegan”)
1006	Durand R. Begault, <i>3-D Sound for Virtual Reality and Multimedia</i> , NASA/TM—2000-209606 (Aug. 2000) (“Begault”)
1007	U.S. Patent No. 9,226,090 (“Norris”)
1008	V.R. Algazi et al., <i>The CIPIC HRTF Database</i> , IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (2001) (“Algazi”)
1009	U.S. Patent No 7,876,903 (“Sauk”)
1010	U.S. Patent No. 10,979,843 (“Shivappa”)
1011	Zhiying Zhou et al., <i>An Experimental Study on the Role of Software Synthesized 3D Sound in Augmented Reality Environments</i> , 16 Interacting with Computs. 989 (2004) (“Zhou”)
1012	Declaration of Ingrid Hsieh-Yee in Support of Petition for <i>Inter Partes</i> Review of the ’836 Patent (“Hsieh-Yee”)
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1016	U.S. Patent No. 9,041,622 (“McCulloch”)
1017	U.S. Patent No. 10,509,466 (“Miller”)
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1019	U.S. Patent No. 9,232,336 (“Nishio”)
1020	U.S. Patent No. 9,578,440 (“Otto”)
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1024	U.S. Patent No. 9,787,846 (“Srinivasan”)
1025	U.S. Patent Application Publication No. US 2012/0183161 A1
1026	U.S. Patent No. 9,530,426 (“Wright”)
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1030	V. Ralph Algazi & Richard O. Duda, <i>Headphone-Based Spatial Sound</i> , 28 IEEE Signal Processing Mag. 33 (2011) (“Algazi 2011”)
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1032	Wolfgang Fohl et al., <i>A System-On-Chip Platform for HRTF-Based Realtime Spatial Audio Rendering With an Improved Realtime Filter Interpolation</i> , 4 Int’l J. Advances Intelligent Sys. 309 (2011)
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1034	Masayuki Morimoto & Yoichi Ando, <i>On the Simulation of Sound Localization</i> , 1 J. of Acoustical Soc’y Japan (E) 167 (1980)

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1036	Douglas S. Brungart & William M. Rabinowitz, <i>Auditory Localization of Nearby Sources. Head-related transfer Functions</i> , 106 J. Acoustical Soc'y of Am. 1465 (1999)
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1041	Amy Turner et al., <i>Can the Perception of Depth in Stereoscopic Images Be Influenced by 3D Sound?</i> , 7863 Stereoscopic Displays & Applications (2011)
1042	Elizabeth M. Wenzel et al., <i>Development of a Three-Dimensional Auditory Display System</i> , 20 SIGCHI Bull. 52 (1988)
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1046	Dmitry N. Zotkin et al., <i>Customizable Auditory Displays</i> , Proc. of the Inte'l Conf. on Auditory Display (July 2002)

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1047	<i>Asserted U.S. Patent No. 11,290,836 “Providing Binaural Sound Behind an Image Being Displayed with an Electronic Device, Plaintiff’s Infringement Contentions Exhibit 27, Eight KHZ, LLC v. Meta Platforms, Inc., No. 6:22-cv-00575 (W.D. Tex. Mar. 3, 2023)</i>
1048	<i>Asserted U.S. Patent No. 11,290,836 “Providing Binaural Sound Behind an Image Being Displayed with an Electronic Device, Plaintiff’s Infringement Contentions Exhibit 18, Eight KHZ, LLC v. Meta Platforms, Inc., No. 6:22-cv-00575 (W.D. Tex. Mar. 3, 2022)</i>
1049	<i>Asserted U.S. Patent No. 11,290,836 “Providing Binaural Sound Behind an Image Being Displayed with an Electronic Device, Plaintiff’s Infringement Contentions Exhibit 36, Eight KHZ, LLC v. Meta Platforms, Inc., No. 6:22-cv-00575 (W.D. Tex. Mar. 3, 2023)</i>
1050	Rasmus Konig Sorenson, <i>Review: Oculus Rift DK2 – Next-Level Virtual Reality</i> , flatpanelshd (Aug. 13, 2014), https://www.flatpanelshd.com/review.php?subaction=showfull&id=1407909173
1051	U.S. Patent No. 9,392,212 (“Ross”)
1052	Mark Wherry, <i>Audio Add-ons For Macbook Pro, Apple Notes, SoundonSound</i> (Mar. 2007), https://www.soundonsound.com/techniques/audio-add-ons-macbook-pro
1053	Defendants Opening Claim Construction Brief, <i>Eight kHz, LLC v. Meta Platforms, Inc., No. 6:22-cv-00575 (W.D. Tex. Apr. 12, 2023)</i> , ECF No. 83
1054	Plaintiff’s Claim Construction Reply Brief, <i>Eight kHz, LLC v. Meta Platforms, Inc., No. 6:22-cv-00575 (W.D. Tex. May 3, 2023)</i> , ECF No. 92
1055	Plaintiff’s Claim Construction Reply Brief, Exhibit 7, <i>Eight kHz, LLC v. Meta Platforms, Inc., No. 6:22-cv-00575 (W.D. Tex. May 3, 2023)</i> , ECF No. 92-7
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1058	Deposition transcript of Durand Begault, Ph.D., <i>Eight Khz, LLC v. Meta Platforms, Inc.</i> , No. 6:22-cv-00575 (W.D. Tex. May 22, 2023)
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1080	John C. Middlebrooks, <i>Individual Differences in External-Ear Transfer Functions Reduced by Scaling in Frequency</i> , 106 J. Acoustical Soc’y Am. 1480 (1999) (“Middlebrooks”)
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1082	U.S. Patent No. 9,037,468 (“Osman”)
1083	Durant R. Begault et al., <i>Design and Verification of HeadZap, A Semi-Automated HRIR Measurement System</i> , 120th Proc. of the Audio Eng’g Soc’y Convention (2006) (“HeadZap”)
1084	Bill Gardner & Keith Martin, <i>HRTF Measurements of a KEMAR Dummy-Head Microphone</i> , MIT Media Lab Perceptual Computing – Tech. Rep. 280 (1994)
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1142	Order Resetting Markman Hearing Via Zoom, <i>Eight kHz, LLC v. Meta Platforms, Inc.</i> , No. 6:22-cv-00575 (W.D. Tex. Sept. 11, 2023), ECF No. 142
1143	Order Granting Joint Motion to Amend Scheduling Order, <i>Eight kHz, LLC v. Meta Platforms, Inc.</i> , No. 6:22-cv-00575 (W.D. Tex. Aug. 30, 2023), ECF No. 140

I. Institution Is Appropriate Under *Fintiv*

Petitioners have executed a stipulation pursuant to *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 16-19 (PTAB Dec. 1, 2020) (precedential as to § II.A), agreeing not to pursue in the parallel district court litigation the same grounds or any grounds that could have reasonably been raised before the PTAB. *See Sotera Stipulation* (Ex. 1141). Specifically, Petitioners stipulate:

If the PTAB institutes the pending IPR in IPR2023-01024 challenging the patentability of claims 8-17 of the '836 patent, then [Defendants Meta Platforms, Inc., Meta Platforms Technologies, LLC, and Twisted Pixel Games, LLC] will not pursue as to the challenged claims any ground raised or that could have been reasonably raised in the IPR in the above-captioned district court litigation (No. 6:22-cv-00575-ADA). *See Sotera*, IPR2020-01019, Paper 12 at 16-19.

Sotera Stipulation at 3. Such a *Sotera* stipulation “mitigates any concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions,” and the PTAB should not discretionarily deny institution in view of the parallel district court litigation given that stipulation. *Sotera*, Paper 12 at 19; *see Fintiv Memo* (Ex. 2003) at 7.

Indeed, the Director's *Fintiv Memo* instructs that “the PTAB will not discretionarily deny institution of an IPR or PGR in view of parallel district court litigation where a petitioner” provides a *Sotera* stipulation. *Fintiv Memo* at 7. It

explains that “[w]hen a petitioner stipulates not to pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition, it mitigates concerns of potentially conflicting decisions and duplicative efforts between the district court and the PTAB.” *Id.* (citing *Sotera*, Paper 12 at 18-19). “With such a stipulation, if an IPR ... is instituted, the grounds the PTAB resolves will differ from those present in the parallel district court litigation.” *Id.*

II. Patent Owner Inaccurately Represented the District Court Schedule

In arguing that the Board should discretionarily deny institution under *Fintiv*, Patent Owner asserted that fact discovery opened on June 28, 2023 and closes on December 21, 2023. POPR at 55-59 (citing April 18, 2023 Scheduling Order (Ex. 2002)). But as of the time the POPR was filed, discovery was slated to open, and in fact opened, on October 5, 2023, and was slated to close on February 16, 2024. Ex. 1142 (setting Markman hearing for October 3, 2023); Ex. 1143 (scheduling fact discovery to open two days after the Markman hearing); POPR at 58-59.

* * *

Petitioners' *Sotera* stipulation mitigates any concerns of potentially conflicting decisions and duplicative efforts between the District Court and the PTAB. The Board should decline Patent Owner's request to deny institution under *Fintiv*.

Respectfully submitted,

Dated: October 18, 2023

By: / Inge A. Osman /

Inge A. Osman (Reg. No. 74,480)
inge.osman@lw.com
Latham & Watkins LLP
555 Eleventh Street, NW, Ste. 1000
Washington, DC 20004-1304
Telephone: 202.637.2200
Fax: 202.637.2201

*Counsel for Petitioners
Meta Platforms, Inc., Meta Platforms
Technologies, LLC, and Twisted Pixel
Games, LLC*

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I certify that on this 18th day of October, 2023, a true and correct copy of the foregoing **Petitioners' Reply to the Patent Owner's Preliminary Response and all Exhibits** were served by electronic mail on Patent Owner's lead and backup counsel at the following email addresses:

Kevin S. Tuttle (Reg. No. 52,307)
Kyle L. Elliott (Reg. No. 39,485)
Homayoon Rafatijo (Reg. No. 80,870)
Spencer Fane LLP
1000 Walnut Street, Suite 1400
Kansas City, MO 64106
Tel: (816) 474-8100
Fax: (816) 474-3216
ktuttle@spencerfane.com
kelliott@spencerfane.com
hrafatijo@spencerfane.com

Erick S. Robinson (Reg. No. 51,354)
Patrick M. Dunn (Reg. No. 70,474)
Spencer Fane LLP
3040 Post Oak Boulevard, Suite 1300
Houston, TX 77056
Tel: (713) 212-2638
Fax: (713) 963-0859
erobinson@spencerfane.com
pdunn@spencerfane.com

By: / Inge A. Osman /

Inge A. Osman (Reg. No. 74,480)
inge.osman@lw.com
Latham & Watkins LLP
555 Eleventh Street, NW, Ste. 1000
Washington, DC 20004-1304

Telephone: 202.637.2200

Fax: 202.637.2201

Counsel for Petitioners

*Meta Platforms, Inc., Meta Platforms
Technologies, LLC, and Twisted Pixel
Games, LLC*