

EXHIBIT 7

INFRINGEMENT POSITIONS APPLICABLE TO ALL ASSERTED CLAIMS AND CHARTS

Plaintiff contends that Defendants infringe the asserted claims under 35 U.S.C. § 271(a), and further contends that Defendants are liable for induced infringement under § 271(b) and contributory infringement under § 271(c). Plaintiff contends that each asserted limitation is met literally by the accused products; alternatively, to the extent any limitation is found not to be literally present, Plaintiff contends it is met under the doctrine of equivalents. To the extent infringement depends on acts by multiple components, devices, services, or persons/entities (including users or third parties), Plaintiff contends such infringement is attributable to one or more Defendants under principles of direction and control and/or other bases for attribution recognized under applicable law. Plaintiff will further specify the roles of particular parties as discovery proceeds.

These contentions are based on publicly available information and information currently in Plaintiff's possession, custody, or control, and Plaintiff reserves the right to supplement or amend based on discovery. Unless expressly stated otherwise, these positions apply to all asserted claims and all infringement charts. By way of example and non-limitation, the charts address the Meta Ray-Ban Wayfarer Gen 1 and associated variants (including hardware variants, firmware/software versions, and region-specific versions). The exemplary product charted herein is representative of the Infringing Products which share the same or substantially similar architectures, components, and functionalities. Plaintiff does not presently contend that any asserted claim limitation is governed by 35 U.S.C. § 112(f); accordingly, no corresponding structures/acts/materials are identified at this time, subject to revision based on claim construction or discovery.

U.S. Pat. No. 10,306,389 Claim 1	Evidence of Use – Meta Ray-Ban Wayfarer Gen 1
[1.Pre] An apparatus to be worn on a user's head, comprising:	The Meta Ray-Ban Wayfarer Gen 1 (the "Meta Ray-Ban") constitutes an apparatus configured to be worn on a user's head. The Meta Ray-Ban is sold and marketed as a pair of eyeglasses with a front frame, lenses, and side temple arms worn like traditional eyewear: ¹

¹ META, *AI Glasses – Ray-Ban Meta*, <https://www.meta.com/smart-glasses/ray-ban-meta/> (last visited August 7, 2025).



² *Id.* (depicting the Meta Ray-Ban's with labeled hardware components, including embedded microphones and electronics); *see also* Intretech secrets of scale, *Ray-Ban Meta Smart Glasses Teardown*, YOUTUBE (Nov. 18, 2023), <https://www.youtube.com/watch?v=SbTc-a29dUQ>.

[1.1] a head wearable device,

The Meta Ray-Ban is designed to be worn on a user's head like traditional eyeglasses, but with integrated electronics including microphones, speakers, and wireless communication modules. The design and marketing make clear that the entire apparatus is intended to be worn on a user's head and functions in that orientation to perform its smart features.³



³ See *AI Glasses – Ray-Ban Meta*, *supra* note 1 (describing and showing the Meta Ray-Ban as head-worn smart wearable devices).

⁴ Intretech secrets of scale, *Ray-Ban Meta Smart Glasses Teardown*, YOUTUBE (Nov. 18, 2023), <https://www.youtube.com/watch?v=SbTc-a29dUQ> (showing the Meta Ray-Ban intended to be worn; the disassembly identifies structural elements designed for head-wearability).

[1.1.1] the head wearable device is configured to be worn on the user's head;

The Meta Ray-Ban is configured to be worn on a user's head, as it adopts the form factor and function of traditional eyeglasses. The arms, nose bridge, and lens layout are shaped and arranged for placement on a human head, and the device's ergonomic geometry, sizing, and balance confirm its intended use in this orientation:⁵



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⁵ See *AI Glasses – Ray-Ban Meta*, *supra* note 1 (describing and showing the Meta Ray-Ban as head-worn smart wearable devices).

⁶ *Id.* (showing the Meta Ray-Ban being worn and featuring integrated open-ear speakers for audio delivery).

[1.2] a first microphone,

The Meta Ray-Ban includes at least a first microphone embedded in the frame. Teardown analysis depicts the presence of at least one microphone embedded in the right-hand side of the nose piece, electrically connected to an internal processing unit.⁷



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⁷ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 4, at 5:31–5:35 (showing microphone embedded in the right-hand nose piece of the Meta Ray-Ban).

⁸ *Id.*



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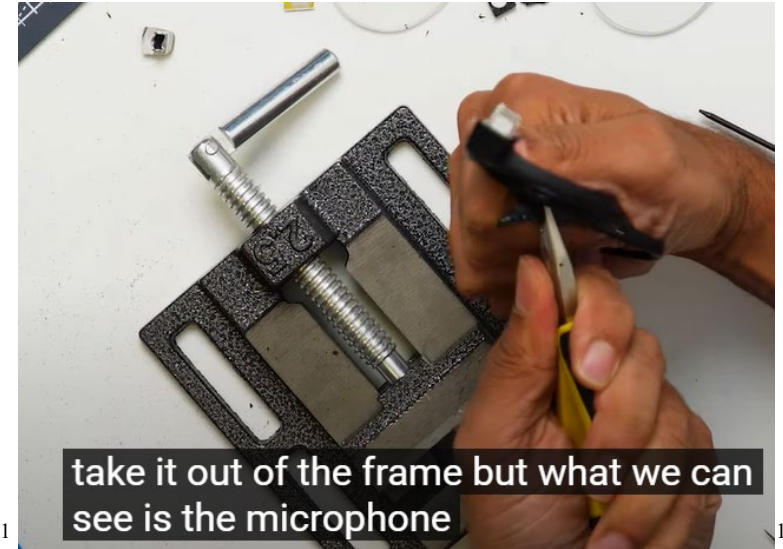
⁹ REDDIT, *Keep nose area clean on meta glasses*, https://www.reddit.com/r/RayBanStories/comments/1c82vw8/keep_nose_area_clean_on_meta_glasses/ (showing the location of a microphone on the nose bridge of the Meta Ray-Ban) (last visited Dec. 19, 2025).

[1.2.1] the first microphone is coupled to the head wearable device,

The Meta Ray-Ban includes a microphone embedded into the nose bridge of the head-wearable device, confirming it is physically coupled to the frame and part of the integrated electronics.¹⁰



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¹⁰ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 4, at 5:29–5:34 (showing embedded microphone in nose bridge of the Meta Ray-Ban).

¹¹ *Id.* (showing teardown of the Meta Ray-Ban, including visual confirmation of a microphone embedded into the right-hand side of the nose piece and frame disassembly revealing hardware components).

¹² *Id.* at 5:20.

[1.2.2] and is positioned on the head wearable device to receive a voice signal from the user when the head wearable device is on the user's head,

The Meta Ray-Ban includes a first microphone embedded into the right-hand side of the nose piece of the head-wearable device, positioned to receive a user's voice signal when the device is worn on a user's head. The teardown confirms "the microphone embedded into the right-hand side of the nose piece" of the glasses, demonstrating its placement for direct voice capture.¹³

How to use live AI

- To start a session, say "Hey Meta, start live AI."
 - After you start a session you won't need to say "Hey Meta" for the rest of the session.
 - You can interrupt Meta AI at any time by saying "Stop" or by asking another question.
- To pause a session, say "Pause live AI" or tap the touchpad. Say "Hey Meta, resume live AI" or tap the touchpad again to resume.
 - Pausing a session turns off the microphone and camera on your glasses.
 - Once you resume a session, you can pick up where you left off. Meta AI can still reference the things you previously talked about.
- To stop a session, say "Stop live AI," or tap and hold the touchpad.

What you can do with live AI

Here are just a few examples of what you can do with live AI.

Get help with meal prep:

- "How much salt did you say I needed for that stew recipe?"
- "Do you see a substitute for butter and how much would I need?"

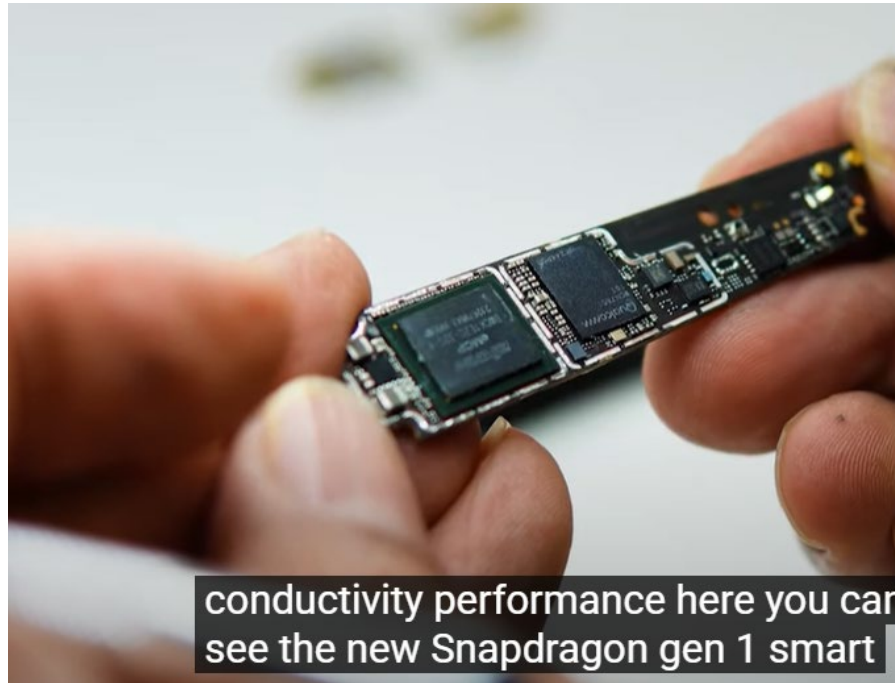
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¹³ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 4, at 5:29–5:34 (showing embedded microphone in nose bridge of the Meta Ray-Ban).

¹⁴ META, *How to use live AI on AI glasses*, Meta Help Center, <https://www.meta.com/help/ai-glasses/894093646030348/> (last visited Aug. 11, 2025) (showing that during live AI sessions, the Meta Ray-Ban's camera and microphone remain continuously active so Meta AI can provide real-time, context-aware feedback related to what a user is seeing evidencing voice commands).

[1.2.3] a first signal from the first microphone is to be input as a main channel to a two-stage noise cancellation unit;

The Meta Ray-Ban includes a first microphone whose signal is provided as the main channel input to a two-stage noise cancellation unit.¹⁵ The embedded nose-piece microphone is electrically connected to the internal processing circuitry,¹⁶ which implements multi-stage noise reduction to enhance the wearer's voice signal during operation.¹⁷



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¹⁵ See *AI Glasses – Ray-Ban Meta*, *supra* note 1 (describing integrated microphone components enabling voice capture for calls and voice commands).

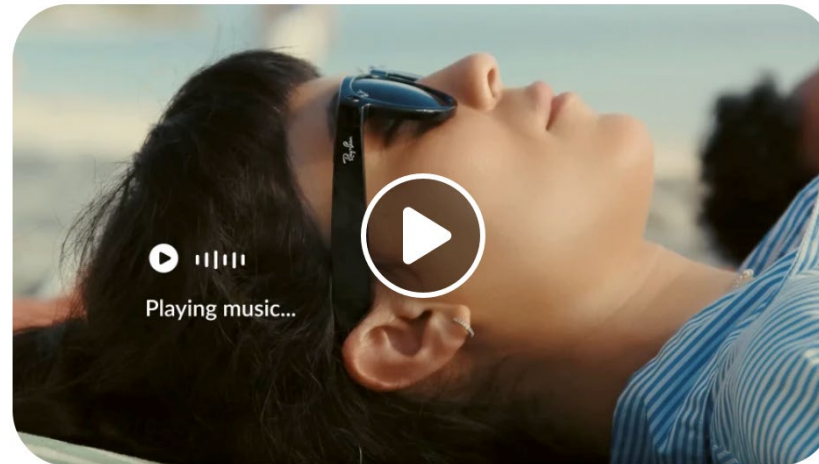
¹⁶ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 4, at 5:29–5:34 (showing the microphone embedded in the right-hand side of the nose piece, physically coupled to the frame and connected to internal electronics for audio processing); see also *id.* at 3:36–3:39 (identifying a Snapdragon Gen 1 smart glass chip and onboard 32 GB memory on the main board PCB).

¹⁷ *Id.* at 3:15–3:43 (noting that the mainboard contains multiple shielding cans and a Snapdragon Gen 1 smart glass chip, evidencing that separate stages of signal conditioning and processing facilitate noise reduction); see also *AI Glasses – Ray-Ban Meta*, *supra* note 1 (highlighting a “five mic system” to capture sound with “precision and clarity,” supporting that the Meta Ray-Ban employs multi-stage noise reduction or beamforming). While public materials describe multi-stage noise filtering and voice enhancement and Meta’s internal DSP architecture will confirm the precise two-stage implementation.

¹⁸ *Id.* at 3:38.

[1.3] a second microphone,

The Meta Ray-Ban features at least a “five mic system” demonstrating the presence of more than one microphone, including at least a second microphone, for audio capture functionality.¹⁹



Listen

Bluetooth-connected speakers built into the arms of the glasses deliver sound only you can hear, while 5 built-in microphones pick up crisp audio for phone calls.



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¹⁹ META, *AI Glasses – Ray-Ban Meta, Capture what you see and hear hands free*, <https://www.meta.com/smart-glasses/ray-ban-meta/> (last visited August 7, 2025) (stating that the device features a five-mic system to capture sound, indicating the presence of multiple microphones, including at least a second microphone).

²⁰ META, *About Ray-Ban Meta Wayfarer*, <https://www.meta.com/ai-glasses/wayfarer/> (last visited December 19, 2025) (stating that 5 built-in microphones pick up crisp audio for phone calls)

[1.3.1] the second microphone is coupled to the head wearable device,

The Meta Ray-Ban integrates their five-microphone array into the wearable frame, with at least another microphone embedded into the temple (arm) portions of the glasses, thereby coupling at least a second microphone to the head-worn device.²¹

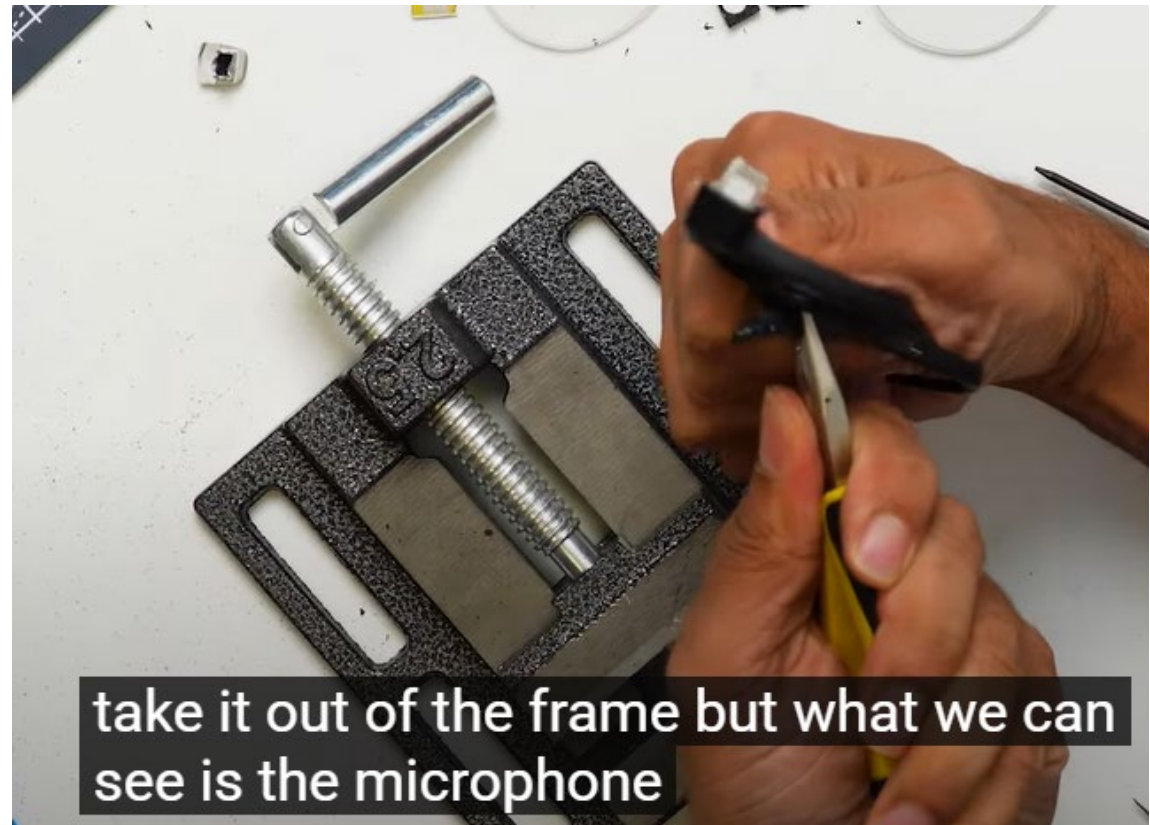


²¹ *Id.* (the five-mic system confirms that the Meta Ray-Ban has more than one microphone, distributed across the frame for directional pickup and noise cancellation).

²² See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 4, at 10:10 (multiple small metal-can components with acoustic ports are visible in the teardown image, matching the form factor of MEMS microphones and appearing in separate positions, consistent with the advertised five-mic system).

[1.3.2] a first acoustic distance between the first microphone and the user's mouth is less than a second acoustic distance between the second microphone and the user's mouth when the head wearable device is on the user's head,

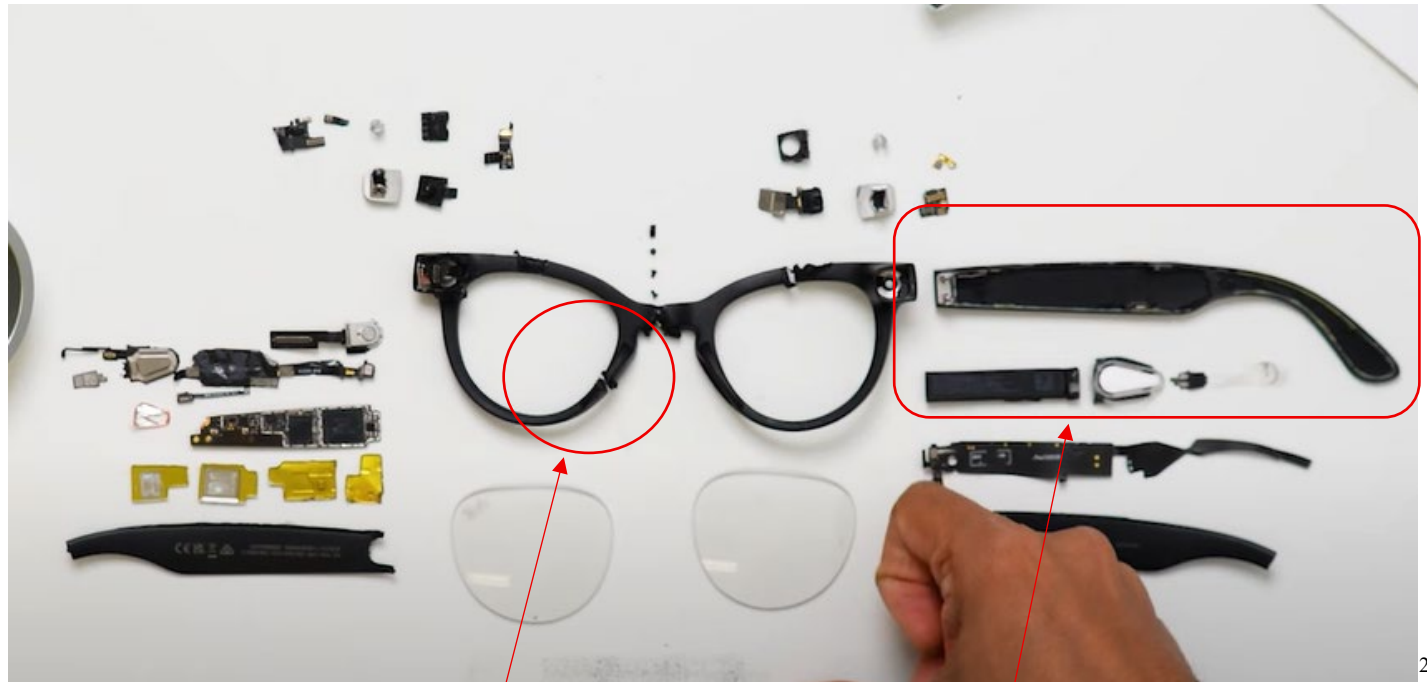
The Meta Ray-Ban incorporates at least two microphones positioned at different distances from the wearer's mouth. A first microphone is embedded in the right-hand side of the nose bridge, adjacent to the mouth region when worn. A second microphone is located toward the temple/arm region of the frame, further from the mouth. When the device is worn, the acoustic path from the first microphone to the wearer's mouth is shorter than that from the second microphone.²³



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²³ See *AI Glasses – Ray-Ban Meta*, *supra* note 1 (“...The ultrawide 12 MP camera and five mic system captures ... sound with precision and clarity.”); see also LENSRAFTERS, *Ray-Ban Meta Wayfarer Eyeglasses*, <https://www.lenscrafters.com/lc-us/ray-ban/8056262721407> (the same language—“the ultrawide 12 MP camera and five-mic system captures ... [sound] with precision and clarity”—now appears on a LensCrafters product page regarding the Gen 2).

²⁴ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 4, at 5:29 (depicting the teardown step in which the nose bridge assembly is opened, exposing the embedded microphone positioned adjacent to the wearer's mouth when worn, thereby showing the “first microphone” with a shorter acoustic distance to the mouth).



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Showing the microphone embedded in the nose piece, physically connected to the device's internal electronics. The video states that the first microphone was embedded in the right-hand side of the nose piece; it's location in this image on the left side of the frame likely reflects a change in camera orientation rather than a different physical location.

Depicting disassembled components, including the temple arm assembly containing a MEMS microphone positioned further from the wearer's mouth when worn; the frames include at least a "second microphone" with a longer acoustic distance to the mouth from the microphone located by the nose bridge.

²⁵ See Ray-Ban Meta Smart Glasses Teardown, *supra* note 4 at 10:11 (depicting disassembled components).



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Illustration showing two microphones positioned at different distances from the mouth.

²⁶ SAMMOBILE, *Meta is testing new object recognition AI on Ray-Ban smart glasses*, <https://www.sammobile.com/news/meta-testing-new-object-recognition-ai-ray-ban-smart-glasses/> (last visited December 19, 2025) (showing the approximate location of the 5 different microphones, with annotations showing that the distance from the mouth to two different microphones is different).

[1.3.3] a second signal from the second microphone is to be input as a reference channel to the two-stage noise cancellation unit,

The Meta Ray-Ban includes multiple microphones configured for directional pickup and environmental noise suppression. The second microphone, located toward the temple region, provides an audio input used as a reference channel for adaptive noise cancellation processing in the onboard DSP. Consumer review materials describe the five-mic system as enabling improved call clarity through advanced noise cancellation that removes environmental noise such as wind and traffic,²⁷ and reducing background noise through gating and filtering techniques consistent with multi-stage noise cancellation processing.²⁸

²⁷ Cristina Arcega-Punzalan, *Ray-Ban Meta Smart Glasses Complete Review and Buying Guide for Every User*, AMW (Jul. 1, 2025), <https://www.amworldgroup.com/blog/rayban-meta-smart-glasses> (last visited August 8, 2025) (describing the five-mic system as using advanced noise cancellation to filter wind, traffic, and other background noise).

²⁸ *Ray-Ban Meta Has One Problem – Review (With Sound Samples)*, LOUD N WIRELESS (Apr. 15, 2024), <https://www.loudnwireless.com/blog/ray-ban-meta-has-one-problem-review-with-sound-samples> (last visited August 8, 2025) (noting that the five-microphone array improves speech pickup and employs noise gating to reduce background noise).

[1.4] wherein a first signal-to-noise ratio of the first signal from the first microphone is larger than a second signal-to-noise ratio of the second signal from the second microphone,

The Meta Ray-Ban is configured such that the first microphone, embedded in the right-hand side of the nose bridge adjacent to the wearer's mouth, captures speech with greater direct sound energy and less environmental noise, producing a higher signal-to-noise ratio (SNR). The second microphone, positioned in the temple region farther from the wearer's mouth, receives weaker speech energy, resulting in a lower SNR. This difference in microphone placement inherently produces a first SNR greater than the second SNR.²⁹

²⁹ See *Ray-Ban Meta Has One Problem – Review (With Sound Samples)*, *supra* note 28 (reporting that the five-microphone array captures a user's voice clearly and uses noise gating to cut background noise in windy and noisy environments, indicating that the primary, mouth-adjacent microphone produces a cleaner signal than microphones positioned farther from the mouth); see also *Ray-Ban Meta Smart Glasses Complete Review and Buying Guide for Every User*, *supra* note 27 (describing the five-mic system as using noise cancellation to filter wind, traffic, and other background noise, indicating that the primary microphone near the mouth produces a clearer signal than microphones positioned farther away).

[1.4.1] and the two-stage noise cancellation unit is configured to reduce noise from any arrival angle of desired audio,

The Meta Ray-Ban multi-microphone array and onboard DSP are designed to filter out ambient sounds from various directions, while preserving the wearer’s speech or other desired audio. Public materials describe the “five mic system” as enhancing voice clarity through noise cancellation that targets wind, traffic, and background chatter—sources that arrive from multiple angles relative to the wearer.³⁰

³⁰ See also *Ray-Ban Meta Smart Glasses Complete Review and Buying Guide for Every User*, *supra* note 27 (explaining that the five-mic system uses advanced noise cancellation to filter environmental noise from all around the wearer; reporting that the glasses’ microphone array performs well in noisy environments, isolating the wearer’s voice from background sounds such as traffic, crowds, and wind, which arrive from multiple direction).

[1.4.2] where the arrival angle is relative to an axis passing through the first microphone and the second microphone.

The Meta Ray-Ban includes a first microphone on the right-hand side of the nose bridge and at least a second microphone in the temple/arm assembly, creating a fixed axis between them.³¹ The spatial arrangement of these microphones defines an axis, and the system is configured to distinguish desired audio from background noise³² based on the spatial orientation of sound sources relative to that axis, as evidenced by public materials describing spatial noise filtering and guides showing effective suppression of environmental noise while preserving the wearer's voice. Reviews note that the microphone array performs well in noisy environments, isolating the wearer's voice from background sounds such as traffic, crowds, and wind from multiple directions. Meta's public materials also describe the five-mic system as designed to capture sound with precision and clarity and improve voice pickup through spatial noise filtering.³³



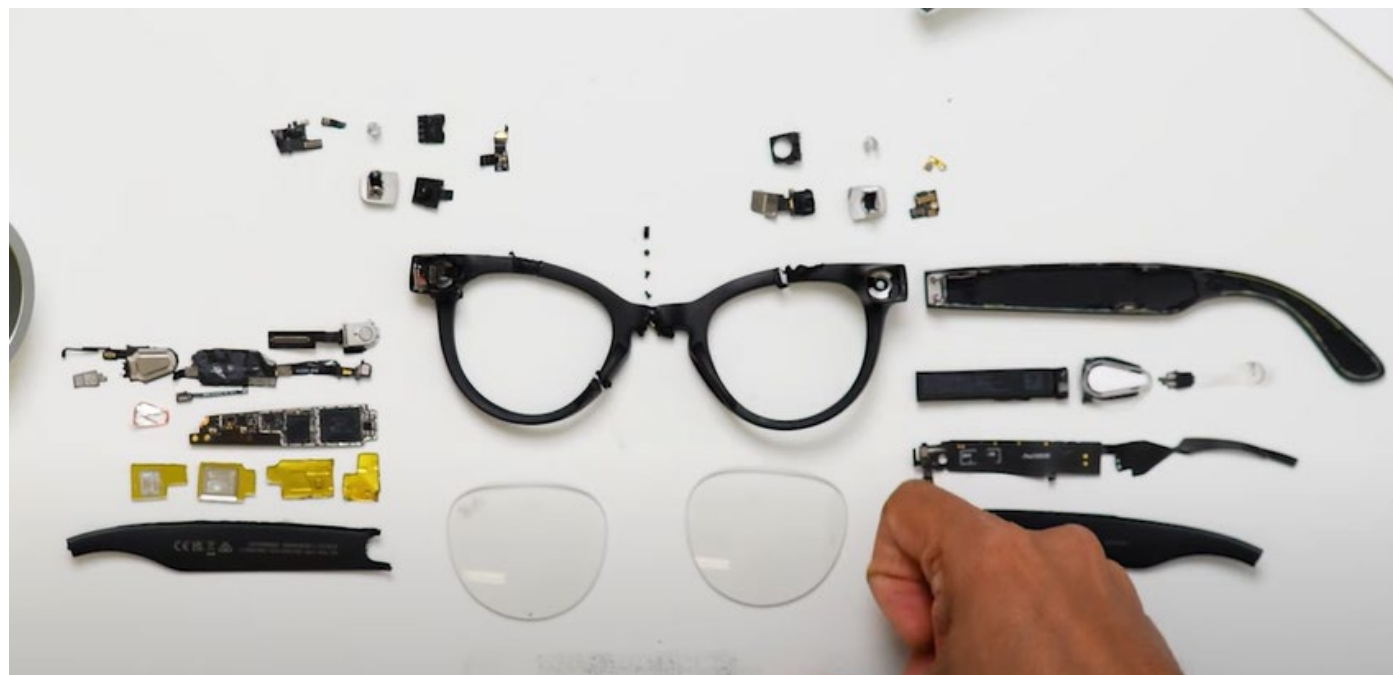
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³¹ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 4, at 5:29–5:34, 10:11 (showing a microphone embedded in the right-hand side of the nose piece and another in the temple region, defining an axis between them).

³² See *Ray-Ban Meta Smart Glasses Complete Review and Buying Guide for Every User*, *supra* note 27 (explaining that the five-mic system uses advanced noise cancellation to filter environmental noise from all around the wearer; reporting that the Meta Ray Ban's microphone array performs well in noisy environments, isolating the wearer's voice from background sounds such as traffic, crowds, and wind, which arrive from multiple direction).

³³ See *AI Glasses – Ray-Ban Meta*, *supra* note 1 (describing the five-mic system designed to capture sound with precision and clarity and improve voice pickup through spatial noise filtering).

³⁴ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 4, at 5:32.



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³⁵ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 4, at 10:10 (showing small metal-can components with acoustic ports are visible in the teardown image, matching the form factor of MEMS microphones and appearing in separate positions, consistent with the advertised five-mic system).

U.S. Pat. No. 10,306,389 Claim 2	Evidence of Use – Meta Ray-Ban Wayfarer Gen 1
[2.] The apparatus of claim 1, further comprising:	<p>The Meta Ray-Ban Wayfarer Gen 1 (the “Meta Ray-Ban”) constitutes an apparatus configured to be worn on a user’s head, comprising a head wearable device.</p> <div data-bbox="856 306 1646 678" data-label="Image"> </div> <div data-bbox="856 721 1646 1138" data-label="Image"> </div>

³⁶ META, *AI Glasses – Ray-Ban Meta*, <https://www.meta.com/smart-glasses/ray-ban-meta/> (last visited August 7, 2025) (depicting the Ray-Ban Meta glasses as a device to be worn on a user’s head).

³⁷ Intretech secrets of scale, *Ray-Ban Meta Smart Glasses Teardown*, at 0:25, YOUTUBE (Nov. 18, 2023), <https://www.youtube.com/watch?v=SbTc-a29dUQ> (showing the temple arm opened to reveal the battery and a flex PCB running along the arm identified as the Bluetooth and wireless antenna, physically integrated into the glasses and connected to internal electronics).

[2.1] a wireless communication system,

The Meta Ray-Ban incorporates a wireless communication system by integrating a Bluetooth and wireless antenna into the temple arm of the head-wearable device. This antenna, embedded alongside the battery, is part of the internal electronics and enables the device to transmit and receive audio and data signals for functionalities such as voice calls, music playback, and voice assistant interaction.³⁸



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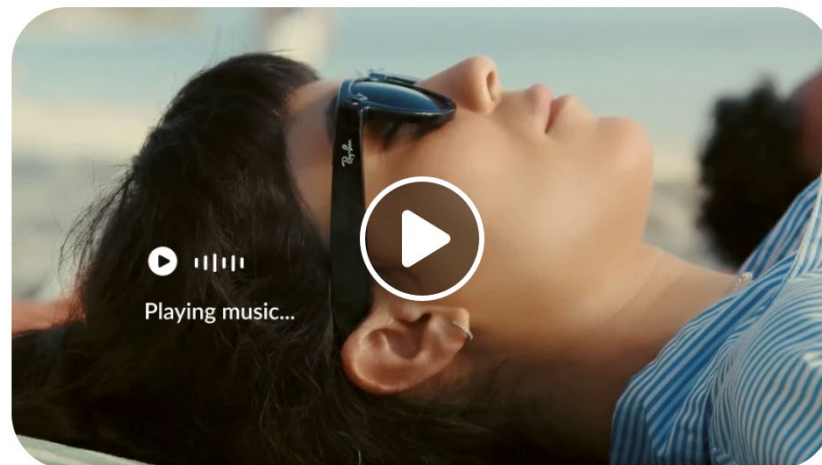
³⁸ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 37 (depicting the right-hand arm opened to expose internal electronics, including the battery and associated flex PCB assembly containing the Bluetooth/wireless antenna for the device's wireless communication system).

³⁹ *Id.* at 4:12 (showing the right-hand arm opened to reveal the internal configuration, including a flex PCB located beneath the battery and running along the arm).



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⁴⁰ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 37 (depicting the flex PCB identified in the narration as the Bluetooth and wireless antenna, physically integrated into the arm and connected to the device's electronics).



Listen

Bluetooth-connected speakers built into the arms of the glasses deliver sound only you can hear, while 5 built-in microphones pick up crisp audio for phone calls.



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⁴¹ META, *About Ray-Ban Meta Wayfarer*, <https://www.meta.com/ai-glasses/wayfarer/> (last visited December 19, 2025) (stating that the glasses use Bluetooth for wireless communication).

[2.1.1] the wireless communication system is coupled to the head wearable device

The Meta Ray-Ban's wireless communication system, including the Bluetooth and wireless antenna, is physically integrated into the temple arm of the glasses, which is part of the head-wearable device. This integration demonstrates that the wireless communication hardware is coupled to the head-wearable device's structure.⁴²



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⁴² See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 37 at 4:06–4:15 (showing the temple arm opened to reveal the internal configuration, including a flex PCB located beneath the battery and running along the arm); *id.* at 4:15–4:17 (depicting the flex PCB identified in the narration as the Bluetooth and wireless antenna, physically integrated into the arm and connected to the device's electronics).

⁴³ *Id.* at 4:18.

[2.1.2] and is electrically coupled to the first microphone and to the second microphone.

The wireless communication system is electrically connected to both the first microphone, embedded in the right-hand side of the nose piece, and the second microphone, located toward the temple region of the frame, in order for the device to process audio signals and wirelessly transmit them off-device, for example to a smartphone. This electrical coupling enables captured audio from each microphone to be transmitted wirelessly to paired devices for functions such as phone calls, voice commands, and recordings.⁴⁴



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⁴⁴ See *Ray-Ban Meta Smart Glasses Teardown*, *supra* note 35 at 5:29–5:34 (showing the microphone embedded in the right-hand side of the nose piece, physically connected to the device’s internal electronics); *id.* at 10:10–10:11 (depicting an additional microphone within the temple/arm assembly, electrically linked to the internal processing and wireless modules).

⁴⁵ *Id.* at 10:10 (showing the fully disassembled Meta Ray Ban, including multiple small metal-can components with acoustic ports located in separate positions within the frame and arms, evidencing the presence of both the first and second microphones electrically connected to the device’s internal electronics).

U.S. Pat. No. 10,306,389 Claim 3	Evidence of Use – Meta Ray-Ban Wayfarer Gen 1
<p>[3.] The apparatus of claim 2, wherein the wireless communication system is compatible with a BLUETOOTH® communication protocol.</p>	<p>The Meta Ray-Ban Wayfarer Gen 1 (the “Meta Ray-Ban”) wireless communication system operates using the BLUETOOTH® communication protocol to pair with smartphones and other compatible devices. This protocol is used to transmit and receive audio and data, enabling features such as phone calls, music streaming, and voice assistant activation.</p>  <p>like this could be the Bluetooth and wireless antenna</p>

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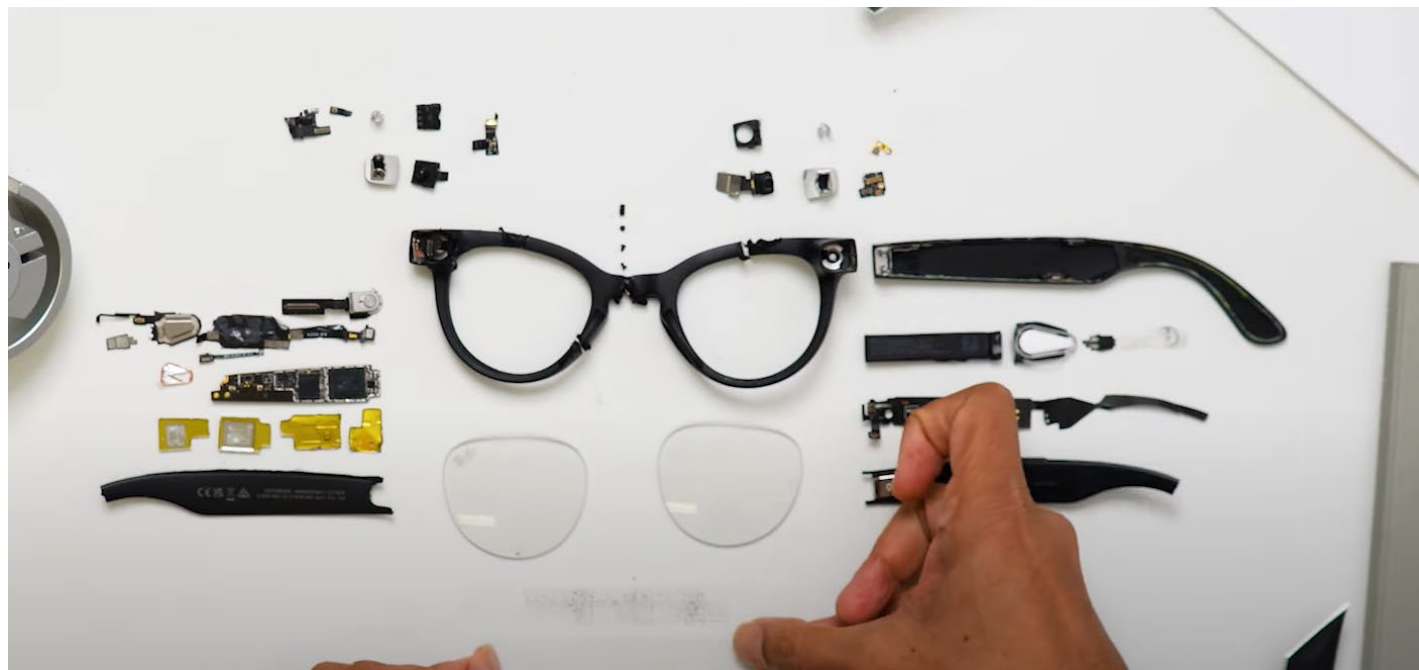
⁴⁶ Intretech secrets of scale, *Ray-Ban Meta Smart Glasses Teardown*, at 4:01–4:17, YOUTUBE (Nov. 18, 2023), <https://www.youtube.com/watch?v=SbTc-a29dUQ> (depicting the flex PCB identified in the narration as the Bluetooth and wireless antenna, physically integrated into the arm and connected to the device’s electronics).

U.S. Pat. No. 10,306,389
Claim 9

[9.] The apparatus of claim 1, wherein the first microphone and the second microphone have substantially omni-directional response patterns.

Evidence of Use – Meta Ray-Ban Wayfarer Gen 1

The Meta Ray-Ban Wayfarer Gen 1 (the “Meta Ray-Ban”) incorporates a first microphone embedded in the right-hand side of the nose piece and a second microphone located toward the temple region, both implemented as MEMS microphones with substantially omni-directional pickup patterns. This configuration allows the microphones to capture the wearer’s voice and environmental sounds from multiple directions, enabling advanced noise cancellation and voice command features. The omni-directional nature is consistent with the physical design shown in the teardown and the product’s ability to capture audio from various arrival angles.⁴⁷



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⁴⁷ Intretech secrets of scale, *Ray-Ban Meta Smart Glasses Teardown*, YOUTUBE (Nov. 18, 2023), <https://www.youtube.com/watch?v=SbTc-a29dUQ> at 5:29–5:34 (showing the microphone embedded in the right-hand side of the nose piece); *id.* at 10:10 (showing the fully disassembled Meta Ray Ban with multiple MEMS microphones in separate positions, consistent with omni-directional microphone designs).

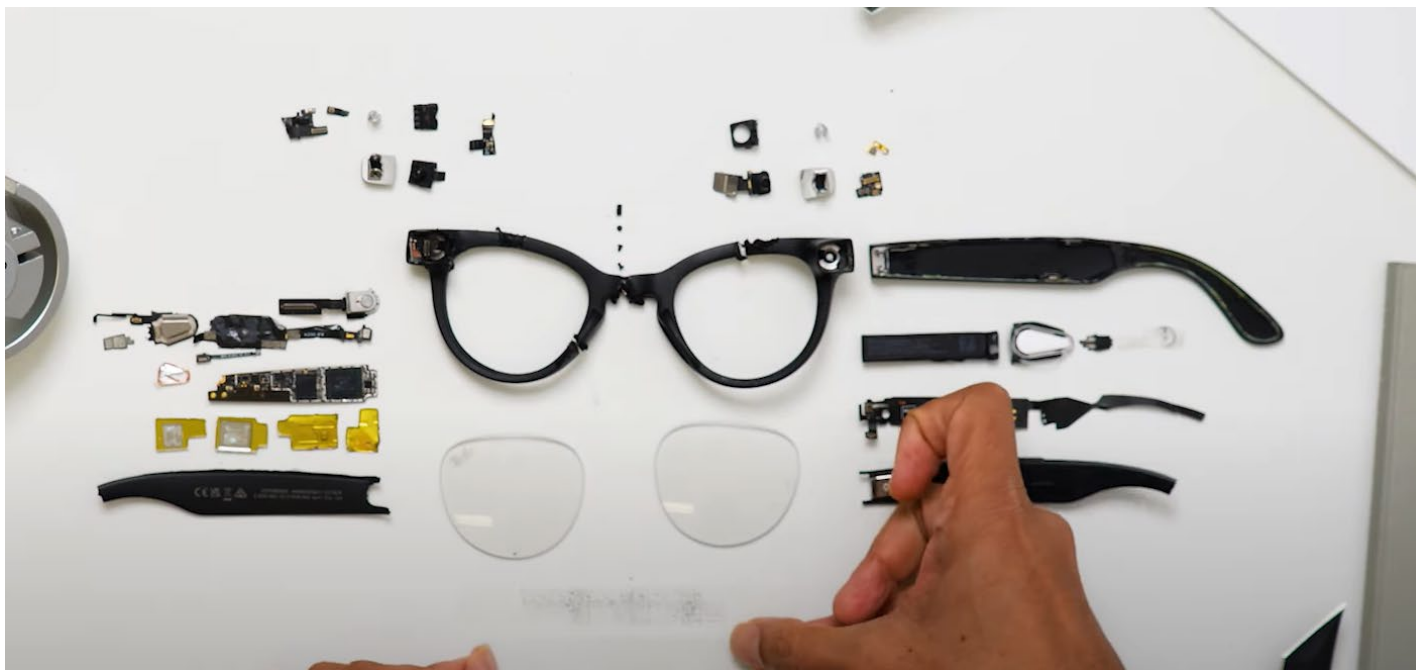
⁴⁸ *Id.*

U.S. Pat. No. 10,306,389
Claim 10

[10.] The apparatus of claim 9, wherein a first location for the first microphone and a second location for the second microphone provide a signal-to-noise ratio difference.

Evidence of Use – Meta Ray-Ban Wayfarer Gen 1

The Meta Ray-Ban Wayfarer Gen 1 (the “Meta Ray-Ban”) positions the first microphone in the right-hand side of the nose piece, adjacent to the wearer’s mouth, and the second microphone toward the temple region, farther from the mouth. This difference in location results in the first microphone capturing speech with greater direct sound energy and less environmental noise, thereby producing a higher signal-to-noise ratio (SNR) than the second microphone. The second microphone, positioned farther from the mouth, receives weaker speech energy, resulting in a different SNR.⁴⁹



⁴⁹ Intretech secrets of scale, *Ray-Ban Meta Smart Glasses Teardown*, YOUTUBE (Nov. 18, 2023), <https://www.youtube.com/watch?v=SbTc-a29dUQ> at 5:29–5:34 (showing the microphone embedded in the right-hand side of the nose piece, adjacent to the wearer’s mouth) & at 10:10–10:11 (depicting an additional microphone within the temple/arm assembly, positioned farther from the wearer’s mouth).

⁵⁰ *Id.*