



"USPTO Provisional Call Alert Headphone 180739_64080085_06-01-2026_SPEC.PDF" application. This is structured to provide a highly readable, high-level overview of the technology for your investor portal.

Call Alert: Provisional Patent Summary

The Technical Problem

- Modern wearable audio devices utilizing Active Noise Cancellation (ANC) indiscriminately isolate users from their environment.
- This auditory isolation poses severe safety risks, as users often fail to hear approaching emergency vehicles.
- Existing "Transparency Modes" force users to listen to all ambient noise, causing auditory fatigue, while modern V2X (Vehicle-to-Everything) warnings are ineffective against legacy emergency vehicles lacking smart-city transmitters.

The Hybrid Acoustic Firewall Solution

- **Universal Emergency Acoustic Database (UEAD):** The device features a localized memory module pre-loaded with a global library of emergency vehicle acoustic signatures, such as sirens and public alarms. The digital signal processor (DSP) continuously monitors the environment and automatically overrides media playback to pass emergency audio through the ANC wall without requiring user programming.
- **"Pin Drop" User-Defined Fingerprinting:** Users can actively record specific ambient sounds, such as a baby crying or a door knock. The DSP generates a mathematical "Semantic Audio DNA" hash to selectively interrupt the ANC and pass the programmed alert directly to the user.
- **V2X Telemetry Handshake:** The system pre-empts ANC to deliver audio-spatial directional warnings upon receiving a digital handshake from municipal telematics or approaching autonomous vehicles.
- **Biometric Priority Override:** A verified guardian can remotely trigger a priority override within a dependent's wearable node to deliver direct voice communication.

Representative Claims Overview

- The primary claim covers a wearable computational audio apparatus equipped with a localized microphone array, a DSP, and a memory module pre-loaded with the UEAD.
- A dynamic attenuation controller continuously monitors ambient audio, automatically interrupting media playback strictly upon detecting a UEAD emergency signature, while actively suppressing all other non-emergency frequencies.
- Additional claims secure the user-programmable acoustic fingerprinting module, the V2X telematics receiver for proximity-based safety handshakes, and the location-based tokenization triggered by commercial network beacons.

This summary covers the core problem, the technological solution, and the foundational claims.