
FEATURED CONTENT / Voice-to-Skull Patents

Voice-to-Skull Patents: Microwave Hearing and Radio-Frequency Auditory Effects

A focused guide to U.S. patents describing microwave hearing, radio-frequency auditory effects, and intelligible speech conveyed without a conventional speaker.

CLASSIFICATION

Patent Research Series

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CONTENT PDF

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THE COMPLETE CONTENT

Voice-to-Skull Patents: Microwave Hearing and

Part 1 of 6 in the MaxisRichards.com Patent Research Series.

This entry isolates the radio-frequency auditory patents from the larger directory so the V2K record can be read, checked, and cited without wading through unrelated technologies.

What a patent establishes: A patent records what an inventor claimed and disclosed. It does not, by itself, prove that every embodiment works as described, that a system was deployed operationally, or that it was used against any specific person. This series separates the patent record from interpretation.

Patent Records

The term "VoicetoSkull" describes the experience of hearing a voice that no one else around you can hear—a voice that appears to originate inside your own head. The underlying technology exploits the microwave auditory effect (also called the Frey effect), whereby pulsed radiofrequency or microwave energy causes a tiny thermoelastic expansion in the cochlea or brain tissue, generating a perceived sound.

Foundational V2K Patents

US4877027A - "Hearing system" (Brunkan)

* Inventor: Wayne B. Brunkan

* Filed: June 6, 1988 | Granted: October 31, 1989

* Summary: Sound is induced in the head by irradiating the subject with microwaves in the 100 MHz to 10,000 MHz range. The carrier is modulated with frequency-modulated bursts that create an intelligible auditory sensation in the irradiated person.

* TI community relevance: This is the earliest explicit "microwave hearing" patent. It demonstrates that a voice can be placed directly inside the skull without a speaker or earpiece.

* View patent

US4858612A - "Hearing device" (Stocklin)

* Inventor: Philip L. Stocklin | Assignee: Mentec AG

* Filed: December 19, 1983 | Granted: August 22, 1989

* Summary: Multifrequency microwaves are focused on the auditory cortex to simulate sounds, including speech, music, or tones. The device can be used for covert

communication or as a hearing aid.

* TI community relevance: Another early patent in the microwave-hearing record; it describes auditory-cortex stimulation using focused microwave signals.

* View patent

US6470214B1 - "Method and device for

implementing the radio frequency hearing

effect" (O'Loughlin/Loree)

* Inventors: James P. O'Loughlin, Diana L. Loree

* Assignee: United States Department of the Air Force

* Filed: December 13, 1996 | Granted: October 22, 2002

* Summary: A suppressed carrier modulation and preprocessing method that produces intelligible subjective sound when an encoded RF signal is demodulated through the RF hearing effect. The patent explicitly states that the invention may be manufactured and used by or for the Government without royalty.

* TI community relevance: Air Force ownership directly links the technology to the military. The patent describes exactly the "headvoices" reported by TIs.

* View patent

US6587729B2 - "Apparatus for audibly

communicating speech using the radio frequency

hearing effect" (O'Loughlin/Loree)

* Inventors: James P. O'Loughlin, Diana L. Loree

* Assignee: United States Department of the Air Force

* Filed: December 28, 2001 | Granted: July 1, 2003

* Summary: Builds on the earlier Air Force patent; provides apparatus for encoding intelligible speech so that it is clearly understood after demodulation through the RF hearing effect.

* TI community relevance: Shows continued government investment in perfecting V2K voice

transmission.

* View patent

US20200390360A1 - "Automatic Machine for

Identifying Victim of Abuse Voice to Skull and

Remote Neural Monitoring Technology..." (Da Li,

abandoned application)

* Inventor: Da Li | Filed: August 19, 2020 | Status: Abandoned

* Summary: A published (nongranted) application that explicitly names "Voice to Skull" and "Remote Neural Monitoring" and proposes a machine to identify victims and operators.

* TI community relevance: This was published as an application but was not granted. It is included because it explicitly uses the terms "Voice to Skull" and "Remote Neural Monitoring," not as proof that its proposed machine was validated.

* View application

Continue the Patent Research Series

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* Remote Neural Monitoring Patents: Brainwave Sensing, Communication, and Inner-Voice Research

* Electromagnetic Neuromodulation Patents: Nervous-System Effects, Sensory Resonance, and RF Systems

* Synthetic Telepathy and Ultrasound Patents: Direct Communication and Noninvasive Neuromodulation

* Subliminal Influence Patents: Silent Messaging and Behavior-Modification Systems

* Dream and Sleep Manipulation Patents: REM Detection, Sensory Input, and Sleep-State Technology

Author's note: This content presents research, analysis, and opinion about public patent records. It is published for documentation, education, advocacy, and public discussion.