Title (en)

INCREASING ANTENNA PERFORMANCE FOR WIRELESS HEARING ASSISTANCE DEVICES

Title (de)

ERHÖHUNG DER ANTENNENLEISTUNG FÜR DRAHTLOSE HÖRHILFEGERÄTE

Title (fr)

AUGMENTATION DES PERFORMANCES D'ANTENNE POUR DISPOSITIFS D'ASSISTANCE AUDITIVE SANS FIL

Publication

EP 2942979 A1 20151111 (EN)

Application

EP 15166855 A 20150507

Priority

US 201414272185 A 20140507

Abstract (en)

Disclosed herein, among other things, are methods and apparatus for increasing antenna performance for hearing assistance devices. One aspect of the present subject matter includes a receiver-in-canal (RIC) hearing assistance device for a wearer including an antenna within a device housing, an audio receiver configured to be worn in an ear canal of a wearer, and a cable assembly configured to connect the audio receiver to the device housing. A circuit component, such as a ferrite bead or an inductor, is connected to the cable assembly and configured to adjust coupling between the cable assembly and the antenna by modifying high frequency current through the wires of the cable assembly. According to various embodiments, the circuit component is configured to enhance radiation from the cable assembly conductors to assist in wireless communications. In other embodiments, the circuit component is configured to limit and make more consistent the radiation from the cable assembly conductors that interfere with antenna transmissions.

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H04R 25/554 (2013.01 - EP US); H04R 2225/0216 (2019.04 - EP US); H04R 2225/51 (2013.01 - EP)

Citation (search report)

- [X] US 2009196444 A1 20090806 - SOLUM JEFFREY PAUL [US]
- [X] US 2009169038 A1 20090702 - KNUDSEN OVE [DK], et al

Cited by

EP4027657A1; US11882410B2; US11653158B2; US11917374B2

Designated contracting state (EPC)

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Designated extension state (EPC)

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