

Title (en)
A HEARING AID WITH AN ANTENNA

Title (de)
HÖRGERÄT MIT EINER ANTENNE

Title (fr)
AIDE AUDITIVE COMPORTANT UNE ANTENNE

Publication
EP 3404934 A1 20181121 (EN)

Application
EP 18170270 A 20131111

Priority
• EP 18170270 A 20131111
• EP 13192317 A 20131111

Abstract (en)
A hearing aid having an antenna is provided, the hearing aid being adapted for wireless communication, such as for wireless communication with accessory and/or other hearing aids. The hearing aid comprises a hearing aid assembly having a microphone for reception of sound and conversion of the received sound into a corresponding first audio signal, and a signal processor for processing the first audio signal into a second audio signal compensating a hearing loss of a user of the hearing aid. The hearing aid comprises a wireless communication unit configured for wireless data communication, and an antenna for emission or reception of an electromagnetic field. The antenna is interconnected with the wireless communication unit, and the antenna has a total length between three quarters of a wavelength and five quarters of a wavelength. At least a part of the antenna extends from a first side of the hearing aid to a second side of the hearing aid, and the antenna may have a midpoint at said part of the antenna or a distance between the antenna midpoint and said part may be less than a quarter of a wavelength.

IPC 8 full level
H04R 25/00 (2006.01); **H01Q 1/27** (2006.01); **H01Q 7/00** (2006.01); **H01Q 9/26** (2006.01)

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Citation (search report)
• [XAY] EP 2200120 A2 20100623 - STARKEY LAB INC [US]
• [Y] EP 2458674 A2 20120530 - GN RESOUND AS [DK]
• [A] EP 2645478 A1 20131002 - NXP BV [NL]
• [A] US 6380896 B1 20020430 - BERGER H STEPHEN [US], et al
• [E] EP 2723101 A2 20140423 - GN RESOUND AS [DK]
• [A] MINEMURA T ET AL: "A study on loop antenna with uniform current distribution", ANTENNAS AND PROPAGATION SOCIETY SYMPOSIUM, 2004. IEEE MONTEREY, CA, USA JUNE 20-25, 2004, PISCATAWAY, NJ, USA, IEEE, vol. 3, 20 June 2004 (2004-06-20), pages 3233 - 3236, XP010722074, ISBN: 978-0-7803-8302-9, DOI: 10.1109/APS.2004.1332068
• [A] LI L-W ET AL: "Method-of-moments analysis of electrically large circular-loop antennas: Nonuniform currents", IEE PROCEEDINGS: MICROWAVES, ANTENNAS AND PROPAGAT, IEE, STEVENAGE, HERTS, GB, vol. 146, no. 6, 8 December 1999 (1999-12-08), pages 416 - 420, XP006013604, ISSN: 1350-2417, DOI: 10.1049/IP-MAP:19990784

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