

Title (en)

BTE HEARING AID HAVING A BALANCED ANTENNA

Title (de)

BTE-HÖRGERÄT MIT EINER AUSGEGLICHENEN ANTENNE

Title (fr)

PROTHÈSE AUDITIVE BTE POSSÉDANT UNE ANTENNE ÉQUILIBRÉE

Publication

EP 3468230 B1 20220629 (EN)

Application

EP 18202039 A 20130705

Priority

- DK PA201270412 A 20120706
- DK PA201270411 A 20120706
- DK PA201270410 A 20120706
- EP 13175258 A 20130705

Abstract (en)

[origin: EP2723101A2] An behind the ear hearing aid is disclosed comprising a microphone for reception of sound and conversion into a corresponding audio signal, a signal processor for processing the audio signal, a receiver for converting the audio signal to an output sound signal and a transceiver for wireless data communication being interconnected with an antenna for emission and reception of an electromagnetic field. The antenna extends on a first side of the hearing aid and a second side of the hearing aid and a first segment of the antenna extends from proximate the first side of the hearing aid to proximate the second side of the hearing aid. A feed system is provided for exciting the antenna to thereby induce a current in at least the first segment, wherein the feed system is configured such that the current induced in the first segment has a first local maxima proximate the first side of the hearing aid and a second local maxima proximate the second side of the hearing aid.

IPC 8 full level

H01Q 1/24 (2006.01); **H01Q 1/27** (2006.01); **H01Q 9/24** (2006.01); **H04R 25/00** (2006.01)

CPC (source: EP US)

H01Q 1/24 (2013.01 - EP US); **H01Q 1/273** (2013.01 - EP); **H01Q 9/24** (2013.01 - EP); **H04R 25/554** (2013.01 - EP); **H04R 25/552** (2013.01 - EP); **H04R 2225/021** (2013.01 - EP US); **H04R 2225/51** (2013.01 - EP)

Citation (examination)

EP 2207238 A1 20100714 - OTICON AS [DK]

Citation (opposition)

Opponent : Oticon A/S

- US 2010158293 A1 20100624 - POLINSKE BEAU JAY [US], et al
- EP 2105989 A2 20090930 - EMMA MIXED SIGNAL CV [NL]
- US 2005024287 A1 20050203 - JO YOUNG-MIN [US], et al
- EP 2207238 A1 20100714 - OTICON AS [DK]
- US 2012093324 A1 20120419 - SINASI OEZDEN [DK]
- US 4924237 A 19900508 - HONDA KAZUHIRO [JP], et al

Opponent : Sivantos Pte. Ltd.

- EP 2200120 A2 20100623 - STARKEY LAB INC [US]
- US 2012093324 A1 20120419 - SINASI OEZDEN [DK]
- EP 2207238 A1 20100714 - OTICON AS [DK]
- US 7183994 B2 20070227 - WEIGAND STEVEN [US]
- US 6600450 B1 20030729 - EFANOV ANDREW A [US], et al
- US 2010171676 A1 20100708 - TANI KAZUYA [JP], et al
- JP 2011229143 A 20111110 - HARADA IND CO LTD
- JP 2002043826 A 20020208 - MATSUSHITA ELECTRIC IND CO LTD

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2723101 A2 20140423; **EP 2723101 A3 20140604**; **EP 2723101 B1 20181024**; DK 2723101 T3 20190204; DK 3468230 T3 20220829; EP 3468230 A1 20190410; EP 3468230 B1 20220629

DOCDB simple family (application)

EP 13175258 A 20130705; DK 13175258 T 20130705; DK 18202039 T 20130705; EP 18202039 A 20130705