

Title (en)

A HEARING AID WITH ULTRASONIC TRANSCEIVER

Title (de)

HÖRGERÄT MIT ULTRASCHALL-SENDEEMPFÄNGER

Title (fr)

PROTHÈSE AUDITIVE AVEC ÉMETTEUR-RÉCEPTEUR ULTRASONORE

Publication

**EP 4311262 A1 20240124 (EN)**

Application

**EP 23157312 A 20230217**

Priority

EP 23157312 A 20230217

Abstract (en)

Disclosed herein is a hearing aid. In some examples, the hearing aid includes an input unit configured to convert a sound in an environment of the hearing aid to at least one electrical input signal representative of the sound. The hearing aid can include an ultrasonic transceiver configured to output an ultrasonic signal and to receive a reflected ultrasonic signal from the environment. The hearing aid can include a signal processor configured to determine, based on the reflected ultrasonic signal and optionally the at least one electrical input signal, an audio parameter indicative of an object in the environment.

IPC 8 full level

**H04R 1/10** (2006.01); **H04R 25/00** (2006.01)

CPC (source: EP)

**H04R 1/1041** (2013.01); **H04R 25/453** (2013.01); **H04R 25/50** (2013.01); **H04R 25/558** (2013.01)

Citation (search report)

- [X] DE 102008036803 B3 20091217 - SIEMENS MEDICAL INSTR PTE LTD [SG]
- [X] US 2017188157 A1 20170629 - PARK HONG JUNE [KR], et al
- [X] EP 4040809 A1 20220810 - OTICON AS [DK]
- [A] EP 3764656 A1 20210113 - INFINEON TECHNOLOGIES AG [DE]
- [A] CN 112866863 A 20210528 - SHENZHEN WONDER SOUND TECH 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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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