

Title (en)

MULTI-PURPOSE HIGH PERFORMANCE HEARING AID WITH A MOBILE END DEVICE IN PARTICULAR SMARTPHONE

Title (de)

MEHRZWECK-HOCHLEISTUNGSHÖRGERÄT MIT EINEM MOBILEN ENDGERÄT, INSBESONDERE SMARTPHONE

Title (fr)

APPAREIL AUDITIF POLYVALENT HAUTE PERFORMANCE POURVU D'UN TERMINAL MOBILE, EN PARTICULIER D'UN TÉLÉPHONE INTELLIGENT

Publication

EP 3679729 B1 20220622 (DE)

Application

EP 18769105 A 20180904

Priority

- EP 17189224 A 20170904
- EP 2018073718 W 20180904

Abstract (en)

[origin: WO2019043246A1] The invention relates to a hearing aid system comprising a hearing unit (1) at the ear and a remote processing unit (3). The remote processing unit (3) is a mobile terminal (smartphone) and has a compensation path (5) having a compensator (50) and a splitter (53). The compensator (50) determines compensation signals from an applied basic signal (72) depending upon the user's hearing defect. The splitter (53) splits the basic signal such that the output signal (74) transmitted to the hearing unit (1) consists only or at least primarily of the compensation signal, the compensation signal being synchronously overlaid on the external sound signal in the ear canal. The compensation signal is determined as emphasis to the basic signal, and the basic signal is split by a splitter. Thus during the signal processing, the basic signal is consequently not fully entrained. A considerable reduction of the data quantity is achieved. This produces faster signal processing and a shorter latency period. Thus the compensation signal can be mixed with the basic signal directly in the ear canal, which basic signal passes the ear canal anyway when the earphone is open.

IPC 8 full level

H04R 25/00 (2006.01)

CPC (source: EP US)

H04R 25/55 (2013.01 - EP US); **H04R 25/558** (2013.01 - EP); **H04R 25/04** (2013.01 - EP); **H04R 25/43** (2013.01 - EP); **H04R 25/556** (2013.01 - EP US)

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)

WO 2019043246 A1 20190307; EP 3679729 A1 20200715; EP 3679729 B1 20220622

DOCDB simple family (application)

EP 2018073718 W 20180904; EP 18769105 A 20180904