Title (en)

HEARING AID FOR INDICATING A PATHOLOGICAL CONDITION

Title (de)

HÖRGERÄT ZUR ANZEIGE EINES PATHOLOGISCHEN ZUSTANDS

Title (fr)

PROTHÈSE AUDITIVE POUR INDIQUER UN ÉTAT PATHOLOGIQUE

Publication

EP 3139638 A1 20170308 (EN)

Application

EP 15184032 A 20150907

Priority

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Abstract (en)

According to an embodiment, a hearing aid adapted to indicate a pathological condition of a user of the hearing aid when the hearing aid is in use is disclosed. The hearing aid includes an input transducer, a processing unit, an output transducer and a feedback measurement unit. The input transducer is adapted to transform an input sound signal into an electrical input signal. The processing unit adapted to generate an electrical output signal by processing the electrical input signal. The output transducer is adapted to transform the processed electrical output signal to an acoustic output signal and to direct the acoustic output signal towards a tympanic membrane of the user. The feedback measurement unit is adapted to measure an acoustic feedback produced by the tympanic membrane in response to the acoustic output signal. During a time duration, a feedback path logger is adapted to continuously track the measured acoustic feedback and a feedback path modeller is adapted to generate a base pattern across a plurality of frequencies of the tracked acoustic feedback. During a subsequent time duration, the feedback path logger is adapted to continuously track the measured acoustic feedback and the feedback path modeller is adapted to generate a measured pattern across the plurality of frequencies of the tracked acoustic feedback. The hearing aid further includes a comparator and a state classifier. The comparator is adapted to determine a variation between the measured pattern and the base pattern and the state classifier adapted to identify at least one pathological condition corresponding to the determined variation.

IPC 8 full level

H04R 25/02 (2006.01); **A61B 5/12** (2006.01)

CPC (source: EP)

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