

Title (en)

Hearing aid with oscillation detector and method for detecting oscillations in a hearing aid

Title (de)

Hörhilfsgerät mit Oszillationsdetektor sowie Verfahren zur Feststellung von Oszillationen in einem Hörhilfsgerät

Title (fr)

Prothèse acoustique avec détecteur d'oscillations et méthode de detection d'oscillations dans une prothèse acoustique

Publication

**EP 1052881 A3 20080423 (DE)**

Application

**EP 00109229 A 20000428**

Priority

- DE 19922133 A 19990512
- DE 19922132 A 19990512

Abstract (en)

[origin: EP1052881A2] The hearing aid includes a microphone (1), a signal processing arrangement (2), a loudspeaker (3), and an oscillation detect (4) for determining an acoustic feedback. The oscillation detector comprises a periodic measurement element (5) for determining respective number of digitised sample values in successive periods of an input signal (11) of the microphone (1). The oscillation detector comprises elements for determining a long-term average value and a short-term average value from t digitised sample values. There is also a comparator element (8) for comparing the long-term average value and the short-term ave value. An absolute value element (13) is used for correcting a sign of the corresponding difference, and a further average value element is provided for smoothing the difference between the long-term average value and the short-term average value.

IPC 8 full level

**H04R 25/00** (2006.01)

CPC (source: EP US)

**H04R 25/453** (2013.01 - EP US)

Citation (search report)

- [DA] DE 3733983 A1 19890420 - BOSCH GMBH ROBERT [DE]
- [DA] DE 3927765 A1 19900329 - BELTONE ELECTRONICS CORP [US]
- [DA] DE 3802903 A1 19890810 - SIEMENS AG [DE]
- [DA] WO 9635314 A1 19961107 - TOEPHOLM & WESTERMANN [DK], et al

Cited by

DE102004050304B3; DE102009016845B3; DE102011001793A1; EP1851994A4; US8259974B2; US8096937B2; US8840540B2; US2016345107A1; US10284968B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Designated extension state (EPC)

AL LT LV MK RO SI

DOCDB simple family (publication)

**EP 1052881 A2 20001115; EP 1052881 A3 20080423; EP 1052881 B1 20101020;** DE 50016012 D1 20101202; DK 1052881 T3 20110214; US 7024011 B1 20060404

DOCDB simple family (application)

**EP 00109229 A 20000428;** DE 50016012 T 20000428; DK 00109229 T 20000428; US 56789400 A 20000510