

Title (en)

Apparatus and method for feedback compensation in an acoustic amplification system, especially in a hearing aid

Title (de)

Vorrichtung und Verfahren zur Rückkopplungskompensation in einem akustischen Verstärkungssystem, insbesondere in einem Hörhilfsgerät

Title (fr)

Dispositif et procédé de compensation de la rétroaction dans un système d'amplification acoustique, notamment dans une prothèse auditive

Publication

**EP 1398993 A3 20090325 (DE)**

Application

**EP 03019877 A 20030901**

Priority

DE 10242700 A 20020913

Abstract (en)

[origin: EP1398993A2] The acoustic amplifying system comprises feedback compensator (1) of signal generated during amplifying of input signal (3) on feedback path (7) from amplified output signal (11) to input signal. An adaptive feedback compensation filter (15) generates a compensation signal (8) based on amplified output signal. At least one first filter (13,21,23) limits the frequency range for compensation signal. The first filter(s) is adaptable in its function during operation of feedback compensator. Independent claims are included for compensation method for feedback signal and for hearing aid.

IPC 8 full level

**H04R 25/00** (2006.01); **H04R 3/02** (2006.01)

CPC (source: EP US)

**H04R 25/453** (2013.01 - EP US); **H04R 3/02** (2013.01 - EP US)

Citation (search report)

- [DA] WO 0019605 A2 20000406 - HOUSE EAR INST [US]
- [A] EP 0124798 A1 19841114 - SIEMENS AG [DE]
- [A] DE 19904538 C1 20000713 - SIEMENS AUDIOLOGISCHE TECHNIK [DE]

Cited by

WO2010040863A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

Designated extension state (EPC)

AL LT LV MK

DOCDB simple family (publication)

**EP 1398993 A2 20040317**; **EP 1398993 A3 20090325**; **EP 1398993 B1 20110817**; AT E521197 T1 20110915; DE 10242700 A1 20040506; DE 10242700 B4 20060803; DK 1398993 T3 20111205; US 2004125966 A1 20040701; US 2008123885 A1 20080529

DOCDB simple family (application)

**EP 03019877 A 20030901**; AT 03019877 T 20030901; DE 10242700 A 20020913; DK 03019877 T 20030901; US 2825908 A 20080208; US 65923003 A 20030910