

Title (en)

Hearing device and method of operating a hearing device

Title (de)

Hörgerät sowie Verfahren zum Betrieb eines Hörgerätes

Title (fr)

Prothèse auditive et procédé d'utilisation d'une prothèse auditive

Publication

**EP 1858292 A1 20071121 (EN)**

Application

**EP 06120253 A 20060907**

Priority

EP 06114038 A 20060516

Abstract (en)

The method for operating a hearing device (1) having an adjustable transfer function (G) comprising M sub-functions (g1...gM), wherein M is an integer with M #¥ 1, and wherein said transfer function (G) describes how input audio signals (S1) generated by an input transducer unit (2) of said hearing device (1) relate to output audio signals (S2) to be fed to an output transducer unit (5) of said hearing device (1), comprises the steps of: - deriving said input audio signals (S1) from a current acoustic environment; and for each of said M sub-functions (g1,..., gM): - deriving, on the basis of said input audio signals (S1) and for each class of N classes (C1,...,CN) each of which describes a predetermined acoustic environment, a class similarity factor (p1;...;pN) indicative of the similarity of said current acoustic environment with the predetermined acoustic environment described by the respective class, wherein N is an integer with N #¥ 2; - deriving from N predetermined base parameter sets (B1/1,...,B1/N;...;BM/1,...,BM/N) assigned to the respective sub-function (g1;...;gM) and in dependence of said class similarity factors (p1,...,pN) an activity parameter set (a1;...;aM) for the respective sub-function (g1;...;gM), wherein each of said N base parameter sets (B1/1,...,B1/N;...;BM/1,...,BM/N) assigned to the respective sub-function (g1;...;gM) is assigned to a different class (C1;...;CN) of said N classes (C1,..., CN); - adjusting the respective sub-function (g1;...;gM) by means of said activity parameter set (a1;...; aM). It is suggested to use a time-averaged activity parameter set (a1\*). An improved adaptation of the hearing device to a current acoustic environment can be achieved.

IPC 8 full level

**H04R 25/00** (2006.01)

CPC (source: EP)

**H04R 25/70** (2013.01); **H04R 25/407** (2013.01); **H04R 25/502** (2013.01); **H04R 2225/41** (2013.01)

Citation (applicant)

- WO 0120965 A2 20010329 - PHONAK AG [CH], et al
- WO 0122790 A2 20010405 - PHONAK AG [CH], et al
- WO 0232208 A2 20020425 - PHONAK AG [CH], et al
- WO 9965275 A1 19991216 - OTICON AS [DK], et al
- EP 1404152 A2 20040331 - SIEMENS AUDIOLOGISCHE TECHNIK [DE]
- EP 0788290 A1 19970806 - SIEMENS AUDIOLOGISCHE TECHNIK [DE]
- EP 1307072 A2 20030502 - SIEMENS AUDIOLOGISCHE TECHNIK [DE]

Citation (search report)

- [XY] EP 1404152 A2 20040331 - SIEMENS AUDIOLOGISCHE TECHNIK [DE]
- [X] EP 0788290 A1 19970806 - SIEMENS AUDIOLOGISCHE TECHNIK [DE]
- [Y] EP 1307072 A2 20030502 - SIEMENS AUDIOLOGISCHE TECHNIK [DE]
- [DA] WO 0232208 A2 20020425 - PHONAK AG [CH], et al

Cited by

EP4415390A1; EP3345263B1; EP2369859A3; EP3843427A1; US11153693B2; US11323827B2; WO2018196973A1; WO2009143898A1; EP2369859A2; US8571242B2; EP3345263A1; WO2023104865A1; EP2654321B1; EP3120578B1; EP3120578B2

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DOCDB simple family (application)

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