

Title (en)

Adaptive microphone system for a hearing aid and accompanying operating method

Title (de)

Adaptives Mikrofonsystem für ein Hörgerät und zugehöriges Betriebsverfahren

Title (fr)

Système de microphone adaptatif pour un appareil auditif et procédé correspondant destiné au fonctionnement

Publication

**EP 2182739 B1 20110223 (DE)**

Application

**EP 09168233 A 20090820**

Priority

DE 102008055760 A 20081104

Abstract (en)

[origin: US2010046776A1] A microphone system and an associated method are proposed. The microphone system comprises at least two omnidirectional, microphone signal-emitting directional microphones connected electrically to one another to establish directivity, at least one filter unit with at least one adaptation parameter for the adaptive filtering of the at least two microphone signals and a control unit to change the at least one adaptation parameter such that the sum of interference power is reduced. The value range of the at least one adaptation parameter is limited. The control unit determines limits from a comparison of the noise floor of the ambient noise with a microphone noise number. The adaptation range of an adaptive differential directional microphone is a function of stationary component of background noise, so the directivity can be selected such that the non-stationary microphone noise resulting due to directivity is masked by the stationary component of the background noise.

IPC 8 full level

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

CPC (source: EP US)

**H04R 25/407** (2013.01 - EP US); **H04R 3/005** (2013.01 - EP US); **H04R 2430/03** (2013.01 - EP US)

Cited by

EP2373065B1; EP2373065B2

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

**US 2010046776 A1 20100225; US 8358789 B2 20130122;** AT E499805 T1 20110315; DE 102008055760 A1 20100520;  
DE 502009000397 D1 20110407; DK 2182739 T3 20110614; EP 2182739 A1 20100505; EP 2182739 B1 20110223

DOCDB simple family (application)

**US 61197209 A 20091104;** AT 09168233 T 20090820; DE 102008055760 A 20081104; DE 502009000397 T 20090820;  
DK 09168233 T 20090820; EP 09168233 A 20090820