

Title (en)
Hearing device and corresponding method for ownvoices detection

Title (de)
Hörvorrichtung und entsprechendes Verfahren zur Eigenstimmendetektion

Title (fr)
Appareil auditif et procédé correspondant pour la détection de voix-propres

Publication
EP 1744589 B2 20140423 (DE)

Application
EP 06116535 A 20060704

Priority
DE 102005032274 A 20050711

Abstract (en)
[origin: EP1744589A2] The aid has two microphones (ME1, ME2) comprising an audio input for picking up ambient sound from a vicinity of a user and auditory channel sound in an auditory channel (GG) of the user. An own-voice detection device (ED) detects the user's own voice of the microphones signals. A blind source separation (BSS) device identifies separate sources from the microphone signals. An automatic gain control (AGC) device is temporarily deactivated based on the detection of the user's own voice. A directional microphone is deactivated based on the detection of the user's own voice. An independent claim is also included for a method for operating a hearing apparatus.

IPC 8 full level
H04R 25/00 (2006.01)

CPC (source: EP US)
H04R 25/453 (2013.01 - EP US); **H04R 25/405** (2013.01 - EP US)

Citation (opposition)
Opponent :

- EP 1017253 A2 20000705 - SIEMENS CORP RES INC [US]
- EP 1509065 A1 20050223 - BERNAFON AG [CH]
- JP H0193298 A 19890412 - PILOT PEN CO LTD
- LUCAS C. PARRA, CHRISTOPHER V. ALVINO: "Geometric Source Separation: Merging Convolutional Source Separation With Geometric Beamforming", IEE TRANSACTIONS ON SPEECH AND AUDIO PROCESSING, vol. 10, no. 6, September 2002 (2002-09-01), pages 352 - 362, XP011079661
- SHOJI MAKINO, SHOKO ARAKI, RYO MUKAI, HIROSHI SAWADA: "AUDIO SOURCE SEPARATION BASED ON INDEPENDENT COMPONENT ANALYSIS", IEE, 2004, pages 668 - 671, XP010720352
- SHOKO ARAKI, SHOJI MAKINO, RYO MUKAI, YOICHI HINAMOTO, TSUYOKI NISHIKAWA, HIROSHI SARUWATARI: "EQUIVALENCE BETWEEN FREQUENCY DOMAIN BLIND SOURCE SEPARATION AND FREQUENCY DOMAIN ADAPTIVE BEAMFORMING", IEEE, 2002, pages 1785 - 1788, XP032015144
- NIKOLAOS MITIANOUDIS, MIKE E. DAVIES: "Audio Source Separation: Solutions and Problems", INTERNATIONAL JOURNAL OF ADAPTIVE CONTROL AND SIGNAL PROCESSING, 2002, pages 1 - 15

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Designated contracting state (EPC)
CH DE DK ES FR GB LI

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DOCDB simple family (application)
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