

## Title (en)

Method for generating stereo signals for spaced sources and corresponding acoustic system

## Title (de)

Verfahren zur Erzeugung von Stereosignalen für getrennte Quellen und entsprechendes Akustiksystem

## Title (fr)

Procédé de génération de signaux stéréo pour sources séparées et système acoustique correspondant

## Publication

**EP 1655998 A3 20061011 (DE)**

## Application

**EP 05110440 A 20051108**

## Priority

DE 102004053790 A 20041108

## Abstract (en)

[origin: EP1655998A2] A method for generating stereo signals for at least two separate sound sources, in which a blind source separation (BSS) of at least two microphone signals is carried out for obtaining from the transmission functions of filters from a first filter device ( $W_{11}(\omega)$ ). A second filter device ( $G_{11}(\omega)$ ) is determined from the transmission functions of the filters with the help of the transmission function of the first filter device ( $W_{11}(\omega)$ ), in which its transmission function corresponds to the quotients from a power density spectrum component ( $P_{11}(\omega)$ ) of the respective sound source, and the total power density spectrum ( $S_{x1x1}$ ) of the respective microphone signal ( $X_1(k)$ ) and filters of the at least two microphone signals, respectively, with at least two filters of the second filter device ( $G_{11}(\omega)$ ) so for each microphone signal, two stereo signals are obtained. An independent claim is included for an acoustic signal for generating stereo signals.

## IPC 8 full level

**H04R 25/00** (2006.01); **H04S 1/00** (2006.01)

## CPC (source: EP US)

**H04R 3/005** (2013.01 - EP US); **H04R 25/407** (2013.01 - EP US); **H04R 25/552** (2013.01 - EP US); **H04S 1/00** (2013.01 - EP US)

## Citation (search report)

- [XP] EP 1509065 A1 20050223 - BERNAFON AG [CH]
- [XA] US 6704369 B1 20040309 - KAWASAKI NAOTO [JP], et al
- [A] EP 1326478 A2 20030709 - PHONAK AG [CH]
- [A] WITTKOP T ET AL: "Strategy-selective noise reduction for binaural digital hearing aids", SPEECH COMMUNICATION, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 39, January 2003 (2003-01-01), pages 111 - 138, XP002266432, ISSN: 0167-6393

## Cited by

DE102006047983A1; EP1962556A3; CN110636423A; CN110675892A; DE102006047982A1; DE102007033877B3; DE102006047986A1; EP1912471A3; DE102006047986B4; US8199949B2; US8325957B2; US9185500B2; EP1962556A2; US9031242B2; US8325954B2; US9485589B2; US9924283B2; EP1912474A1; US8194900B2; US8515107B2; EP2018079A1; WO2008043731A1; US8331591B2; US8705751B2; US9332360B2

## Designated contracting state (EPC)

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

## DOCDB simple family (publication)

**EP 1655998 A2 20060510**; **EP 1655998 A3 20061011**; **EP 1655998 B1 20141015**; DE 102004053790 A1 20060518; DK 1655998 T3 20150119; US 2006120535 A1 20060608; US 7831052 B2 20101109

## DOCDB simple family (application)

**EP 05110440 A 20051108**; DE 102004053790 A 20041108; DK 05110440 T 20051108; US 26905805 A 20051108