

Title (en)
Self-calibration of microphone arrays

Title (de)
Selbstkalibrierung von Arraymikrofonen

Title (fr)
Auto-étalonnage d'un réseau de microphones

Publication
EP 1453348 A1 20040901 (DE)

Application
EP 03450050 A 20030225

Priority
EP 03450050 A 20030225

Abstract (en)
The array microphone has individual microphones (1-4) connected with a signal processor (11) having digital filters. A loudspeaker (5) is placed in an acquisition area of the microphones. An electronic circuit applies a signal to the loudspeaker to emit a preset periodic noise signal. The processor evaluates the response signals from the microphones and the digital filters as a response to the reception of the noise signal. An independent claim is also included for a method for checking array microphones.

Abstract (de)
Die Erfindung betrifft ein Arraymikrofon mit mehreren Einzelmikrofonen (1 - 4) wobei ein Lautsprecher (5) im Erfassungsbereich jedes der Mikrofone angeordnet ist und eine elektronische Schaltung vorgesehen ist, die den Lautsprecher (5) so beaufschlagt, dass er ein vorbestimmtes akustisches Testsignal abstrahlt, und dass die von jedem der Mikrofone als Antwort auf den Empfang des Testsignals kommenden Testantwortsignale ausgewertet.
<IMAGE>

IPC 1-7
H04R 3/00; H04R 1/40; H04R 29/00

IPC 8 full level
G10L 15/20 (2006.01); **G10L 15/28** (2013.01); **G10L 21/0208** (2013.01); **H04R 1/40** (2006.01); **H04R 3/00** (2006.01); **H04R 29/00** (2006.01)

CPC (source: EP US)
H04R 1/406 (2013.01 - EP US); **H04R 3/005** (2013.01 - EP US); **H04R 29/006** (2013.01 - EP US)

Citation (search report)

- [Y] EP 0268788 A2 19880601 - KRUPP GMBH [DE]
- [Y] WO 9939497 A1 19990805 - ERICSSON TELEFON AB L M [SE]
- [Y] US 5719526 A 19980217 - FINK DENNIS [US]
- [Y] US 2002146136 A1 20021010 - CARTER CHARLES H [US]
- [A] DAHL M ET AL: "Simultaneous echo cancellation and car noise suppression employing a microphone array", ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 1997. ICASSP-97., 1997 IEEE INTERNATIONAL CONFERENCE ON MUNICH, GERMANY 21-24 APRIL 1997, LOS ALAMITOS, CA, USA,IEEE COMPUT. SOC, US, 21 April 1997 (1997-04-21), pages 239 - 242, XP010226179, ISBN: 0-8186-7919-0

Cited by
DE102019205534A1; CN110070868A; DE102016213698A1; DE102018222780A1; DE102019211331A1; DE102019211331B4; EP2362681A1; DE102010001935A1; US8064285B2; WO2020127432A1; WO2007065779A1; US8340321B2; US8477964B2

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