

Title (en)

Device and method for step-size control of an adaptive filter

Title (de)

Vorrichtung und Verfahren zur Schrittweitensteuerung eines adaptiven Filters

Title (fr)

Dispositif et procédé de commande de la taille de pas d'un filtre adaptatif

Publication

**EP 1874082 A3 20080702 (DE)**

Application

**EP 07110325 A 20070615**

Priority

DE 102006029194 A 20060626

Abstract (en)

[origin: EP1874082A2] The device (6) has an analyzing unit for analyzing an input signal such as microphone signal, in two frequency bands, and comprising an edge detection unit. The edge detection unit detects steep signal edges in the individual frequency bands, where a slope of the edges possesses or exceeds a given measurement. A step determination unit is attached to the analyzing unit for controlling an adaptive filter at an adaptation step based on number of frequency bands. An independent claim is also included for a method for step controlling an adaptive filter to acoustic feedback suppression.

IPC 8 full level

**H04R 3/02** (2006.01); **H04R 25/00** (2006.01); **H04R 3/00** (2006.01)

CPC (source: EP US)

**H04R 25/453** (2013.01 - EP US); **H04R 3/02** (2013.01 - EP US)

Citation (search report)

- [X] DE 102004050304 B3 20060614 - SIEMENS AUDIOLOGISCHE TECHNIK [DE]
- [A] DE 19904538 C1 20000713 - SIEMENS AUDIOLOGISCHE TECHNIK [DE]
- [A] CHI H-F ET AL: "Band-limited feedback cancellation with a modified filtered-X LMS algorithm for hearing aids", SPEECH COMMUNICATION, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 39, no. 1-2, 1 January 2003 (2003-01-01), pages 147 - 161, XP002295470, ISSN: 0167-6393

Cited by

EP2239962A3; US9628923B2

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 MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**EP 1874082 A2 20080102**; **EP 1874082 A3 20080702**; **EP 1874082 B1 20111019**; AT E530032 T1 20111115; DE 102006029194 A1 20071227; DE 102006029194 B4 20100415; DK 1874082 T3 20120213; US 2007297627 A1 20071227; US 8611572 B2 20131217

DOCDB simple family (application)

**EP 07110325 A 20070615**; AT 07110325 T 20070615; DE 102006029194 A 20060626; DK 07110325 T 20070615; US 82195807 A 20070626