Title (en)

METHOD AND DEVICE FOR SUPPRESSING FEEDBACK

Title (de)

VERFAHREN UND VORRICHTUNG ZUR RÜCKKOPPLUNGSUNTERDRÜCKUNG

Title (fr)

PROCEDE ET DISPOSITIF DE SUPPRESSION DE L'EFFET LARSEN

Publication

EP 2981099 A3 20160316 (DE)

Application

EP 15178938 A 20150729

Priority

DE 102014215165 A 20140801

Abstract (en)

[origin: US2016037269A1] A method and an apparatus reduce feedback in a hearing aid device. The method includes the step of acquiring a first feedback transfer function at a first point in time on a feedback path from a signal processing device via an electro-acoustic transducer, an acoustic signal path from the electro-acoustic transducer to an acousto-electric transducer and via the acousto-electric transducer back to the signal processing device. In a further step, a weighted mean value function is determined in a manner dependent on amplitude absolute values of the first feedback transfer function. A second feedback transfer function is estimated by an adaptive filter, wherein coefficients of the adaptive filter are determined in a manner dependent on the weighted mean value function. The adaptive filter is applied to a signal which is derived from an acoustic input signal of the acousto-electric transducer.

IPC 8 full level

H04R 25/00 (2006.01)

CPC (source: EP US)

H04R 25/453 (2013.01 - EP US); H04R 2225/41 (2013.01 - EP US); H04R 2460/01 (2013.01 - US)

Citation (search report)

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- [A] US 6876751 B1 20050405 - GAO SHAWN X [US], et al
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- [XYI] PUDER HENNING ET AL: "Controlling the adaptation of feedback cancellation filters - problem analysis and solution approaches", 2004 12TH EUROPEAN SIGNAL PROCESSING CONFERENCE, IEEE, 6 September 2004 (2004-09-06), pages 25 - 28, XP032760401, ISBN: 978-3-200-00165-7, [retrieved on 20150403]

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Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2981099 A2 20160203; **EP 2981099 A3 20160316**; **EP 2981099 B1 20221228**; AU 2015207943 A1 20160218; CN 105323692 A 20160210; CN 105323692 B 20190222; DE 102014215165 A1 20160218; DK 2981099 T3 20230313; US 10334371 B2 20190625; US 2016037269 A1 20160204; US 2018041846 A1 20180208; US 9872114 B2 20180116

DOCDB simple family (application)

EP 15178938 A 20150729; AU 2015207943 A 20150731; CN 201510659334 A 20150731; DE 102014215165 A 20140801; DK 15178938 T 20150729; US 201514816189 A 20150803; US 201715788851 A 20171020