

Title (en)

REDUCING NOISE IN A SOUND SIGNAL OF A HEARING DEVICE

Title (de)

REDUZIERUNG DES RAUSCHENS IN EINEM TONSIGNAL EINES HÖRGERÄTS

Title (fr)

RÉDUCTION DU BRUIT DANS UN SIGNAL SONORE D'UN DISPOSITIF AUDITIF

Publication

**EP 3503581 A1 20190626 (EN)**

Application

**EP 17209252 A 20171221**

Priority

EP 17209252 A 20171221

Abstract (en)

A method for reducing noise in a sound signal of a hearing device (10) comprises: receiving an inside channel sound signal (Si) from a first microphone (12) in an ear channel of a user, a first outside channel sound signal (S) from a second microphone (14) outside of the ear channel and a second outside channel sound signal (S) from a third microphone (16) outside of the ear channel; determining a desired signal (S) from the first and second outside channel sound signals (S, S) and a disturb signal (SD) from the first and second outside channel sound signals; determining a frequency band dependent weight factor ( $\omega$ ) by dividing a magnitude value of the desired signal (S) in a frequency band through at least a magnitude value of the disturb signal (S) in the frequency band; and generating a noise reduced sound signal (S) by multiplying the inside channel sound signal (S) with the weight factor ( $\omega$ ).

IPC 8 full level

**H04R 3/00** (2006.01); **G10L 21/0208** (2013.01); **H04R 25/00** (2006.01)

CPC (source: EP)

**G10L 21/0232** (2013.01); **H04R 25/407** (2013.01); **H04R 25/405** (2013.01); **H04R 2225/021** (2013.01); **H04R 2225/025** (2013.01); **H04R 2225/43** (2013.01); **H04R 2410/01** (2013.01); **H04R 2430/20** (2013.01)

Citation (applicant)

US 2010329492 A1 20101230 - DERLETH RALPH PETER [CH], et al

Citation (search report)

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- [Y] EP 2088802 A1 20090812 - OTICON AS [DK]
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CN112309110A; CN114598981A; US2022038828A1; US11558696B2

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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DOCDB simple family (application)

**EP 17209252 A 20171221**; DK 17209252 T 20171221