

Title (en)
A hearing aid with improved localization

Title (de)
Hörgerät mit verbesserter Lokalisation

Title (fr)
Prothèse auditive avec une meilleure localisation

Publication
EP 2750410 A1 20140702 (EN)

Application
EP 12199720 A 20121228

Priority
EP 12199720 A 20121228

Abstract (en)
A method of determining parameters of a BTE hearing aid having at least one ITE microphone and at least one BTE microphone, the method includes: determining Head-Related Transfer functions $HRTF_I(f)$; determining a hearing aid related transfer function $H_{I,j}BTECF$ of a j th microphone of the at least one ITE microphone for direction I ; determining a hearing aid related transfer functions $H_{I,j}BTECF$ of a j th microphone of the at least one BTE microphone; determining transfer functions $G_{i,j}IECF$ of a i th cue filter of at least one cue filter filtering audio sound signals of the at least one ITE microphone; and determining transfer functions $G_{j,j}BTECF$ of a j th cue filter of the at least one cue filter filtering audio sound signals of the at least one BTE microphone; wherein the transfer functions $G_{i,j}IECF$ and the transfer functions $G_{j,j}BTECF$ are determined using a processing unit based on equation: $\min G_{i,j}IECF, G_{j,j}BTECF \quad l = 0 \text{ L} - 1 \text{ W} \quad l \neq 0 \text{ W} \quad f \neq HRTF_I(f) - \sum_i G_{i,j}IECF \neq H_{I,j}BTECF - jG_{j,j}BTECF$.

IPC 8 full level
H04R 25/00 (2006.01); **H04S 7/00** (2006.01)

CPC (source: EP US)
H04R 25/70 (2013.01 - EP US); **H04R 25/407** (2013.01 - EP); **H04R 25/453** (2013.01 - EP); **H04R 2225/0216** (2019.04 - EP US); **H04S 2420/01** (2013.01 - EP)

Citation (search report)

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- [I] EP 2088802 A1 20090812 - OTICON AS [DK]
- [A] EP 1594344 A2 20051109 - PHONAK AG [CH]
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EP3185589A1; US10375485B2; EP3038381A1; US9774960B2

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

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