

Title (en)
Frequency transformation by means of non-linear processes in the cochlea

Title (de)
Frequenztransformation durch nichtlineare Prozesse in der Cochlea

Title (fr)
Transformation de fréquence par des processus non linéaires dans la cochlée

Publication
EP 2034769 A2 20090311 (DE)

Application
EP 08105071 A 20080819

Priority
DE 102007042106 A 20070905

Abstract (en)
The device has a tone generator e.g. sinus-wave generator, generating a continuous tone for a sound signal with a constant frequency of 2-10 kiloHertz set to adjust the hearing device to a hearing-device wearer. The tone generator comprises a switching element that generates an electrical voltage with a characteristic time response. An electro-acoustic output converter e.g. micro-loudspeaker, outputs the continuous tone to the hearing-device wearer. An electroacoustic input converter e.g. microphone, receives the sound signal that is amplified by an amplifying unit. An independent claim is also included for a method for operating a hearing device.

Abstract (de)
Die Erfindung betrifft ein Hörgerät, aufweisend einen elektroakustischen Ausgangswandler, dadurch gekennzeichnet, dass das Hörgerät einen Tongenerator zur Erzeugung eines Dauertons mit konstanter Frequenz aufweist. Durch Erzeugen des Dauertons können im Innenohr über nicht-lineare Transformationsprozesse Hochtontfrequenzen in hörbare Bereiche transformiert werden.

IPC 8 full level
H04R 25/00 (2006.01)

CPC (source: EP US)
H04R 25/353 (2013.01 - EP US)

Cited by
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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2034769 A2 20090311; EP 2034769 A3 20130417; DE 102007042106 A1 20090326; US 2009060239 A1 20090305

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EP 08105071 A 20080819; DE 102007042106 A 20070905; US 23141508 A 20080902