



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
24.01.2007 Bulletin 2007/04

(51) Int Cl.:
H04R 25/00 (2006.01)

(43) Date of publication A2:
27.09.2006 Bulletin 2006/39

(21) Application number: **06006023.3**

(22) Date of filing: **23.03.2006**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK YU

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(54) **Method for individually fitting a hearing instrument**

(57) The invention relates to a method for individually fitting a hearing instrument (10, 12) to a user, comprising at least one microphone (20) for generating an input audio signal from ambient sound, an audio signal processing unit (26) for processing the input audio signal into a processed output audio signal, and a transducer for stimulation of the human auditory system according to the processed output audio signal as input to said transducer, the method comprising: providing the user with the hearing instrument and starting operation of the hearing instrument; pre-defining a desired target loudness function, wherein loudness perception of a stimulus by the user when using the hearing instrument is defined as function of frequency and input sound pressure level at the microphone; measuring for a given measurement parameter set of perceived loudness levels and frequencies or frequency bands the respective transducer input audio signal level to be applied to the transducer input in order to achieve the respective perceived loudness level at the respective frequency or frequency band, said measurement parameter set comprising at least a low loudness level, an intermediate loudness level and a high loudness level, and said intermediate loudness level being measured for a larger number of frequencies or frequency bands and with a finer frequency resolution than said low and high loudness levels; calculating an individual gain function to be implemented in the audio signal processing unit in order to achieve the predefined target loudness

function by taking into account the measured transducer input audio signal levels; and operating the hearing instrument with the individual gain function.

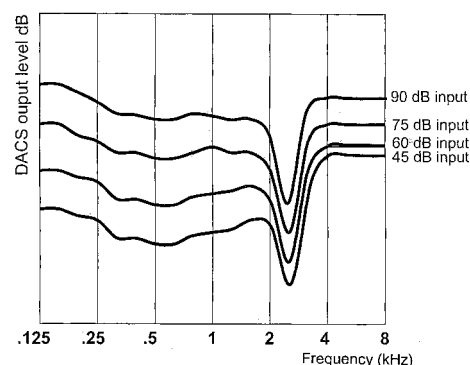


Fig. 8

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC) A61F A61N H04R A61B
Place of search The Hague		Date of completion of the search 11 December 2006	Examiner Timms, Olegs
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 06 00 6023

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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