

Title (en)

Method for individually fitting a hearing instrument

Title (de)

Verfahren zur individuellen Anpassung eines Hörgeräts

Title (fr)

Procedé pour l'adaptation individuelle d'un appareil auditif

Publication

EP 1705950 B1 20140806 (EN)

Application

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Priority

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Abstract (en)

[origin: EP1705950A2] 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.

IPC 8 full level

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CPC (source: EP)

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Cited by

EP2849458A1; CN103177727A; EP2234414A3; US9253586B2; US8542841B2; US8315402B2; US8571224B2; US8452021B2; US8712081B2; US8374370B2; US9107015B2; EP3000398B1

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