

Title (en)

Method to determine a feedback threshold in a hearing device

Title (de)

Verfahren zur Bestimmung einer Rückkopplungsschwelle in einem Hörgerät

Title (fr)

Procédé pour déterminer le seuil de couplage dans une prothèse auditive

Publication

**EP 1624719 A2 20060208 (EN)**

Application

**EP 05019858 A 20050913**

Priority

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Abstract (en)

The present invention uses the fact that the gain during feedback in the forward path of a compressive system, as it is the case for a hearing device used to compensate a hearing loss, after having reached its steady state in "closed loop" operation, is equal to the feedback threshold gain ( $V_{\text{RIT}}$ ). The steady state is reached soon after having applied a low input signal level to the hearing device, which input signal level is below 55 dB SPL (Sound Pressure Level), for example, and would result, for the open loop compressive system, in a larger gain than the feedback threshold gain of the closed loop system, respectively, would result in the maximum possible hearing device gain ( $V_{\text{max}}$ ) if maximum possible hearing device gain ( $V_{\text{max}}$ ) is below feedback threshold gain ( $V_{\text{KRIT}}$ ). The signal feedback gain is assessed in this steady state.

IPC 8 full level

**H04R 25/00** (2006.01)

CPC (source: EP)

**H04R 25/30** (2013.01); **H04R 25/453** (2013.01); **H04R 25/70** (2013.01)

Citation (applicant)

- US 6134329 A 20001017 - GAO SHAWN X [US], et al
- US 6128392 A 20001003 - LEYSIEFFER HANS [DE], et al

Cited by

EP1830602A1; EP2227038A1; EP1830603A3; EP2339870A3; US8638949B2; US8582793B2; US8045737B2; WO2008000843A3; WO2008000842A3; EP4333463A1; US8351613B2; US9729976B2; US10924870B2; US11818544B2; US9654885B2

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