

## Title (en)

N band FM demodulation to aid cochlear hearing impaired persons

## Title (de)

N-Band FM-Demodulation als Hilfe zur Hörverbesserung von Cochlea-Hörgeschädigten

## Title (fr)

Démodulation FM à bandes multiples pour aider les personnes à déficience cochléaire

## Publication

**EP 2184929 A1 20100512 (EN)**

## Application

**EP 09175148 A 20091105**

## Priority

- EP 2008065196 W 20081110
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## Abstract (en)

The invention relates to: A signal processing device comprising a signal processing unit for processing an electrical SPU-input signal comprising frequencies in the audible frequency range between a minimum frequency and a maximum frequency, and providing a processed SPU output signal. The invention further relates to its use and to a method of operating an audio processing device. The object of the present invention is to provide a scheme for improving a user's perception of an acoustic signal. The problem is solved in that an FM to AM transformation unit for transforming an FM2AM input signal originating from the SPU-input signal and comprising at least a part of the frequency range of the SPU-input signal from a frequency modulated signal to an amplitude modulated signal to provide an FM2AM output signal, which is used in the generation of the processed SPU output signal. This has the advantage of providing an improved perception by a hearing impaired user of an input sound.

## IPC 8 full level

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## Citation (applicant)

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