

plementation of various types of adaptive processing such as for instance speech intelligibility optimisation are becoming more widespread in the signal processing in hearing aids.

Unfortunately, fine-adjustments carried out on the compression characteristic during the fine-fitting of the hearing aid to the individual hearing aid user may be regarded as deviations from the optimal compression characteristic and may therefore to a great extent be eliminated or reduced by the adaptive processing. Hence, the effect of the fine-fitting of the hearing aid to the individual user is to a great extent never experienced by the user.

All in all, the existing method of processing and fitting has difficulties in meeting any requirement of individual deviation from the above described typical pattern of hearing loss of many hearing impaired.

Hence, a need for a more flexibly adjustable compressor gain exists so as to be able to fit the actual hearing loss and individual preferences of the hearing aid user better.

Also, there is a need for a manner of avoiding that the effect of any fine-fitting is reduced or eliminated by other processing in the hearing aid, such as for instance adaptive processing.

It is an object of the present invention to alleviate or overcome at least some of the above-mentioned problems.

The above objects are obtained by providing in a first aspect of the invention a method of processing a signal in a hearing aid, comprising the steps of picking up an acoustical signal, deriving an input signal from the acoustical signal, deriving a control signal from said input signal, processing said input signal in a signal processing device in accordance with said control signal so as to provide an output signal by multiplying the input signal with a number derived from said control signal, where the process of deriving said control signal comprises: estimating a signal level for the input signal hereby providing an input signal level estimate, executing a standard processing including determining for said input signal a standard compressor gain control output in accordance with a standard compression characteristic, using the input signal level estimate as input to the standard compressor, hereby providing a standard

possible.

In an embodiment according to the second aspect of the present invention, said user adjusts said individualized compressor gain. This enables the user her- or himself to try different adjustments and evaluate them in everyday use situations and to make adjustments fitting her or his specific requirements.

In an embodiment according to the second aspect of the present invention, said method of fitting comprises: adjusting a plurality of parallel individualized compressor gains in accordance with a corresponding plurality of respective individualized compression characteristics, each respective individualized compressor gain is adjusted independently of the others.

This provides for the possibility of the complex fine-fitting taking into account the need for different compression characteristics for different sound situations, such as listening to music, to a speaker at a conference or to multiple simultaneous conversations at for instance a cocktail party.

Turning now to the third aspect of the present invention, the above-mentioned objects are obtained by providing a hearing aid comprising means for picking up an acoustical signal; means for deriving an input signal from the acoustical signal; means for deriving a control signal from the input signal; means for amplifying the input signal in accordance with the control signal hereby providing an output signal; and means for converting the output signal into an acoustical signal, wherein the means for deriving the control signal includes: a standard compressor having a standard compressor characteristic adapted for providing a standard control signal component, an individualized compressor having an individualized compressor characteristic adapted for providing an individualized control signal component, ~~a signal level estimator for providing the input for the standard and individualized compressor and multiplication means for multiplying together the standard and the individualized control signal component to form the control signal~~adaptive processing means adapted for providing an adaptive processed control signal component, using the standard processed control signal component, a signal level estimator for providing the input for the standard and individualized compressor and the adaptive processing means, and multiplication means for multiplying together the standard processed control signal component, the individualized processed control signal component and the adaptive processed control signal component to form the control signal, wherein the standard, individualized and adaptive processings are carried out in the same frequency band.

In the following, embodiments of the different aspects of the invention will be described by way of example and accompanied by sche-