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ABSTRACT

The processing of audio signals is shown in which a first gain-adjustable amplifier is configured to receive a feed forward signal from an input and a second gain-adjustable amplifier is configured to receive a feedback signal from an output. A gain controller supplies a first gain control signal to the first gain-adjustable amplifier, wherein the gain controller supplies a complementary second gain control signal to the second gain-adjustable amplifier, which may be the reciprocal of the first gain control signal. A first combiner is arranged to combine a first output from the first gain-adjustable amplifier with a second output from the second gain-adjustable amplifier. A plurality of filter elements are configured in parallel, wherein each filter element receives an output from the first combiner. A second combiner combines outputs from the filter elements with the original input signal and the filter elements have mutually different filtering characteristic.

