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(54) Title: HEARING AID WITH AUDIO CODEC AND METHOD

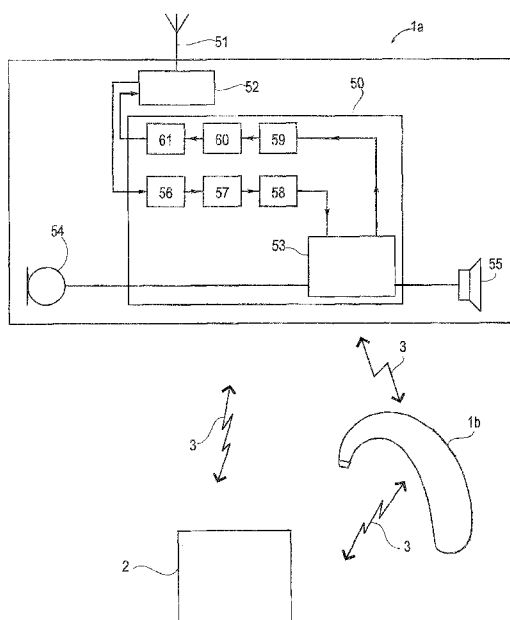


Fig. 1

(57) Abstract: A hearing aid (1a, 1b) comprising a
time domain codec. The code comprises a decoder
adapted to generate a decoded output signal based
on an input quantization index and comprising a
predictor (4) and a predictor adaptation (11) as well
as an encoder for generating an output quantization
index based on an input signal, said encoder com-
prising said decoder and a predictor (4) receiving
an excitation signal and outputting a prediction sig-
nal. The output quantization index is determined by
repeated decoding of the quantization indices in or-
der to minimize the error between the input signal
and the prediction signal, and the predictor adapta-
tion (11) uses a recursive autocorrelation estimate
for updating the predictor (4). The invention further
provides a method of encoding an audio signal.