

FEEDBACK CANCELLER AND HEARING AID

ABSTRACT

Provided is a hearing aid including a receiver, a microphone, an adaptive filter estimating a feedback transfer function from the receiver to the microphone, a subtractor, a hearing aid processor, a first whitening filter, a second whitening filter having a whitening filter coefficient identical to that of the first whitening filter, a coefficient updater, and a controller controlling the adaptive filter and the first and second whitening filters. The controller updates and saves, as a stabilization coefficient, the coefficient of the adaptive filter in a condition in which the autocorrelation of the first signal is low, determines the presence or absence of a change in the feedback transfer function based on the coefficient of the adaptive filter and the stabilization coefficient, and performs, when it is determined that the feedback transfer function has changed, the control in order that effectiveness of whitening by the first and second whitening filters is reduced as compared to that when it is determined that the feedback transfer function does not change.

[FIG. 1]