



Abstract of the Disclosure

The present invention is an adaptive equalizing receiver and a maximum likelihood sequence estimating receiver that compensate deterioration of transmission characteristics. A transmission line estimating circuit (5) estimates an impulse response of a transmission line with a received signal. A switch (7) selectively supplies an output of an adaptive equalizing circuit (10) that adaptively equalizes the received signal or an output of a code deciding circuit (9) that decides the code of the received signal and outputs the signal corresponding to the estimated impulse response.

A number-of-tap variable type adaptive filter adaptive equalizes the received signal. A number-of-tap setting means controls the number of taps of the adaptive filter corresponding to the impulse response estimated.

A transversal matched filter and a status estimating circuit that performs maximum likelihood estimation for a transmitted symbol sequence with an output of the transversal matched filter adaptive equalize the received signal. The number-of-tap setting means controls the number of taps of the matched filter and the number of statuses to be considered for the status estimating circuit corresponding to the estimated impulse response.

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