

AN ADAPTIVE AUTO EQUALIZER

ABSTRACT OF THE DISCLOSURE

In an adaptive auto equalizer for automatically amending a signal distorted through propagation in a transmission line to the expected value, each multiplication unit includes a plurality of weight coefficient holding units for storing weight
5 coefficients. The number of these weight coefficient holding units is the same as the clock number which is equal to a delay required for updating the weight coefficients. An adder calculates weight coefficients every clock. The storage
10 location of the calculated weight coefficients is switched by a selector, and the weight coefficients calculated every clock are serially held in a corresponding one of the weight coefficient holding units. The other selectors serially select one of the plurality of weight coefficient holding units and the weight
15 coefficients thus held are given to the multiplication units. Consequently, each of the weight coefficients held in the weight coefficient holding units is given to a corresponding one of the multiplication units in a time period corresponding to the clock number equal to the delay time required for updating the weight
20 coefficients. Thus, even if there is a delay before the update of the weight coefficients, an output error does not diverge, which makes it possible to obtain an ideal output signal in a short time and in a stable manner.

(Fig. 3)