Abstract

The invention relates to a method for equalizing a received signal in a digital receiver with the aid of a DFB [sic] (Decision Feedback Equalizer) structure. The received signal is based on a signal constellation (for example BPSK, GMSK, OQPSK) which is one-dimensional or can be transformed to be one-dimensional. The coefficients of the DFE are fixed so as to minimize the expected value of the squared real part of the error in the received signal. In contrast with the prior art, the error, which is a complex value per se, is not used as a basis for optimization. However, calculation is limited to the real value. Instead of being complex, the filter coefficients can also be real. The essential point is that the performance of the DFE structure can be improved in this basically simple way, it even being possible to reduce the computational outlay by comparison with the prior art.

(Figure 4c)