

Abstract

The effective channel channel shortening equalisers (CSE) using blind adaptive algorithms have run into great interest. These are very important for orthogonal sub-carrier maintained for multicarrier modulation (MCM) and reduce consequently the complexity of multi-users detection algorithms. We review in this paper the evolution from classical equalisation to the channel shortening equalisation. We utilise the calculus of maximum kurtosis for determining the optimal time domain equaliser (TEQ) and synchronisation delay for the maximum shortening signal to noise ratio (MSSNR) algorithm. We compare the optimal filters obtained by other methods and the proposed method based on maximum kurtosis