

In this paper, a proposed model based on phase matrix rotation was suggested to improve the performance of Multicarrier-Code Division Multiple Access (MC-CDMA) lies in Fast Fourier Transform (FFT) algorithm under the Additive White Gaussian Noise (AWGN) and frequency selective fading channel. This model is used to reduce the effect of multipath fading. The results extracted by a computer simulation for a single user, then it compared with the original technique for MC-CDMA based on FFT for both systems. As a result, it can be seen from the proposed technique that a high performance improvement was obtained over the conventional MC-CDMA, where the Bit Error Rate (BER) is widely reduced under different channel characteristics for frequency selective fading and the AWGN channel