Abstract

Multi Carrier Code Division Multiple Access (MC-CDMA), a promising technology for the 4G communication systems is considered in this paper. The foremost limitation of such system is the Multiple Access Interference (MAI) which is due to frequency-selective fading, near-far effect, frequency offset, and nonlinear power amplification due to clipping noise. The performance of MC-CDMA under such scenario is poor and optimal detection is one of the solutions with a high complexity is required. In this paper the Bit Error Rate (BER) performance is compared under clipping noise with sphere decoding and Global search algorithm based Multiuser detectors

Reference

- Hideki Ochiai, Hideki Imai “Performance of OFDM-CDMA with Simple Peak Power Reduction” European Transactions on Telecommunications, Volume 10 Issue 4, Pages 391 – 398
- S.Sivanesskumar and R.Sukanesh “ Performance analysis of Miulti-Carrier Code Division Multiple Access system under Clipping noise” European Journal of Scientific Research, Vol. 38 No. 4 pp590-595

Index Terms

Computer Science

Communication

Key words

MC-CDMA System
Multiuser detectors

- Clipping Noise
- Sphere decoding
- Global search algorithm