Abstract

Communication is one of the important aspects of life to exchange their information and thoughts. With the advancement in age and user's growing demands, there has been rapid exponential growth in the field of communications. Signals, which were initially sent in the analog domain, are being sent more and more in the digital domain these days. For better transmission, even single-carrier waves are being replaced by multi-carriers. Multi-carrier systems like CDMA and OFDM (Orthogonal Frequency Division Multiplex) are now a days being implemented commonly. One of the challenging issues for Orthogonal Frequency Division Multiplexing (OFDM) system is its high Peak-to-Average Power Ratio (PAPR). That is the time domain OFDM signal which is a sum of several sinusoids leads to high peak to
average power ratio (PAPR). Numbers of techniques have been proposed in the literature for reducing the PAPR in OFDM systems. In this paper the modified companding technique is proposed for reducing the PAPR, effect of $\alpha$ and PR (Peak-Ratio) are discussed.

References

- Takyu O, Ohtsuki T, Nakagawa M. Companding system based on time clustering for reducing peak power of OFDM symbol in wireless communication. IEICE Transactions on Fundamentals of Electronics Communications and Computer Sciences 2006; E89-A(7):1884–91

Index Terms

Computer Science  Computational Intelligence

Keywords

Complementary cumulative distribution function (CCDF)  high power amplifier (HPA)  Orthogonal Frequency Division Multiplexing (OFDM)

Peak-to-Average Power Ratio (PAPR)