Low complexity ADRG-PTS scheme for PAPR reduction in OFDM systems

ABSTRACT

In this paper a novel technique for reducing the peak to average power ratio (PAPR) reduction based on the addition of random signals with a complex Gaussian distribution (ADRG) and combining it with partial transmit sequence (PTS) is proposed. Unlike the conventional PTS (C-PTS) which needs several inverse fast Fourier transform (IFFT) operations, the proposed ADRG-PTS technique requires only half IFFT operations. Simulation and results are examined with 16 QAM OFDM signal.

Keyword: ADRG; IFFT; OFDM; PTS; PAPR