A crest factor reducing method for the OFDM system generating by IDFT

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ABSTRACT

A Crest Factor (CF) reduction method is proposed for the OFDM system that is generated by Inverse Discrete Fourier Transform (IDFT). By reducing the number of bits transmitted by an OFDM symbol, the crest factor can be reduced as the number of bits transmitted by a OFDM symbol decreases. The simulation results can confirm the reducing number of bits transmitled by an OFDM symbol. However, the calculation criterion is based on a CCDF of . From 4 bits to 3 bits and 2 bits, a reduction of 2.2 dB and 3.4 dB in crest factor can be obtained, respectivcly. As a result, we found that the proposed method is able to reduce the CF effectively.

Keywords : IDFT、Crest Factor、PAPR、CCDF

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