

# Abstract

**Ehab Farouk Badran**

## **A Comparison Between Clipping and $\mu$ -law Companding Schemes for the Reduction of Peak-to-Average Power Ratio of OFDM**

Signal clipping and  $\mu$ -law companding have been suggested as simple and effective peak-to-average power ratio (PAPR) reduction schemes for orthogonal frequency-division multiplexing (OFDM). This paper, addresses the problem of PAPR and the relation between it and the number of subcarriers, and analyzes clipped and companded M-ary phase-shift keying (M-PSK) OFDM signals. Their performance in AWGN channel with the presence of nonlinear power amplifier is evaluated and compared using computer simulation.