

Implementation of Multi-Carrier Pulse Width Modulation Techniques in Multilevel Inverter

Authors : M. Suresh Kumar, K. Ramani

Abstract : This paper proposed the Multi-Carrier Pulse Width Modulation for the minimization of Total Harmonic Distortion in Cascaded H-Bridge Multi-Level Inverter. Multicarrier Pulse Width Modulation method uses Alternate Position of Disposition scheme to determine the appropriate switching angle to Multi-Level Inverter. In this paper simulation results shows that the validation of Multi-Carrier Pulse Width Modulation method does capably eliminate a great number of precise harmonics and minimize the Total Harmonic Distortion value in output voltage waveform.

Keywords : alternate position, fast fourier analysis, multi-carrier pulse width modulation, multi-level inverter, total harmonic distortion

Conference Title : ICECECE 2015 : International Conference on Electrical, Computer, Electronics and Communication Engineering

Conference Location : Amsterdam, Netherlands

Conference Dates : May 14-15, 2015