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

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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
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