International J. of Engg. Research & Indu. Appls. (IJERIA). ISSN 0974-1518, Vol.1, No. IV (2008),pp 143-153

## EMBEDDED CONTROLLED MULTILEVEL INVERTER WITH REDUCED HARMONICS

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## Abstract

This paper deals with the simulation of three-level neutral-point-clamped (NPC) inverter. Multilevel inverters have significant advantages over conventional ones because of the capability of operating the motor with nearly sinusoidal current waveforms and higher output voltages. Moreover, the harmonics in the output are very much reduced. The output of the multilevel inverters has 'm' different voltage levels. These different voltage levels are obtained by driving the appropriate MOSFETs. The functionality verification of the multilevel inverter circuit is done through ORCAD PSPICE. The harmonic reduction was achieved by selecting proper switching angles simulation and implementation of the embedded controlled multilevel inverter is presented.

Keywords: neutral point clamped inverter, multilevel inverter