

ADJACENT POSSIBLE SWITCHING DCMI AND CASCADED H-BRIDGE MULTILEVEL INVERTER WITH REDUCED NUMBER OF SWITCHES

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Abstract

This paper presents two new types of multilevel inverter topologies with adjustable voltage and frequency control. In adjacent possible switching diode clamped multilevel inverter, the adjacent possible switching technique is used to increase the number of levels than in a conventional DCMI. In the new topology of cascaded H-bridge multilevel inverter the number of switches is reduced to half. In this new topology of H-bridge multilevel inverter binary logic is used to achieve 2^n levels per leg. This paper provides the MatLab simulation results of the above mentioned topologies.

Keywords : DCMI, Adjacent possible switching Technique, Cascaded multilevel inverter, Binary logic.