

TITLE: - A Comparative Analysis of PWM Techniques for ZSI in Application of Electric Vehicles

JOURNAL NAME: - Journal of Electrical Systems

ABSTRACT:- This paper focus on, three pulse width modulation (PWM) techniques such as simple boostcontrol (SBC), maximum boost control (MBC) and constant boost control (CBC) are analyzed for impedance source inverter (ZSI)topology, because of its boosting capability of applied inputvoltage, compared with traditional voltage or current source inverters. For the purpose ofcomparison, the ZSI topology is simulated by using different PWMtechniques for the same input voltage, switching frequency, peak voltage of inverter and duty ratio. These simulationshave been developed for ZSI for electric vehicle applications. The comparison results show that constant boost control technique is a suitable PWM method for ZSI topology.

Keywords: Zsi; sbc; mbc; cbc; Electric Vehicle (EV).

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