

ABSTRACT OF THE DISCLOSURE**PULSE WIDTH MODULATION METHOD FOR POWER TRANSFORMING APPARATUS**

An improved pulse width modulation method for a power transforming apparatus which is capable of decreasing a switching efficiency loss by providing a phase having the maximum size of a phase current which is not switched. The method includes the steps of a first step for computing a phase voltage command in accordance with a phase of a voltage from the load circuit, a second step for performing a three-phase pulse width modulation with respect to the phase voltage command when the voltage and frequency applied to the load circuit are below a predetermined value, a third step for computing new phase voltage commands which have the same phase as the phase of a current when the voltage and frequency applied to the load circuit are above a predetermined value, and a fourth step for performing a pulse width modulation so that a switching operation having the maximum absolute value of the current among the new phase voltage commands obtained in the third step becomes idle.

(Fig. 8)