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SERIAL CONNECTING OF RESONANT VOLTAGE INVERTERS FOR HIGH-FREQUENCY INDUCTION HEATING EQUIPMENT

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Abstract

This paper deals with investigation of high-frequency (440 kHz and higher) transistor resonant inverters for induction heating equipment which are designed on the base of serial and parallel inverters connecting. Using of low-voltage high-frequency MOSFETs in inverters whose inputs are connected in series allows to rise frequency and reduce power loss in converters transistors, comparing with high-voltage MOSFET. Inverters with serially connected inputs require circuitry for voltage equalizing; it is suggested necessary equalizing circuitry in the paper. References 10, figures 4.

Key words: induction heating, high-frequency resonant inverter.

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