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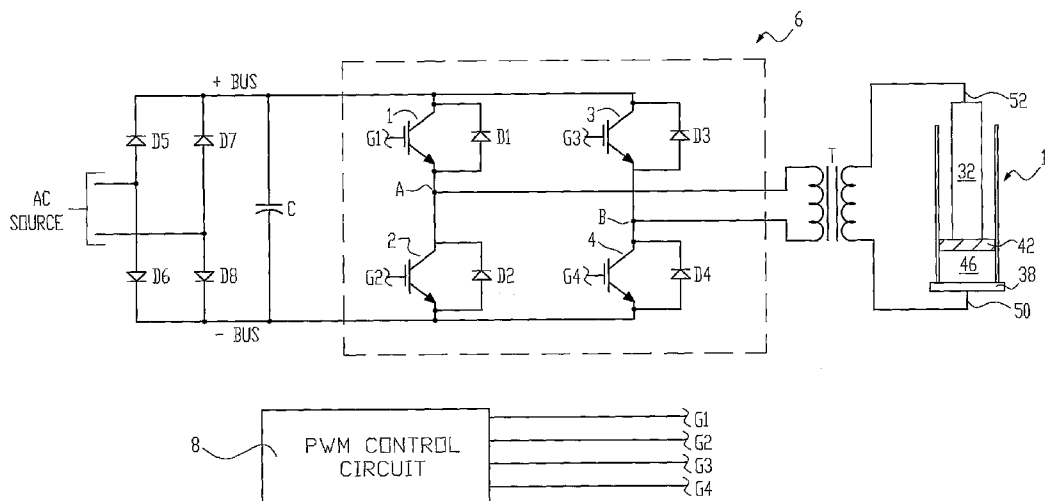
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(54) Title: PULSE WIDTH MODULATED POWER INVERTER OUTPUT CONTROL



(57) Abstract: A method is provided for output control of a pulse width modulated power inverter used with a substantially resistive, single phase, ac load such as an electro-slag remelting furnace. In one application of the method, during each of the inverter's half cycle outputs, active switching devices are alternatively pulsed on and off during the half cycle so that only half of the switching transients in the half cycle are handled by one of the active switching devices.

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## INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H02P 5/00 (2007.01)

USPC - 318/293

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

MicroPatent

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,838,127 (YOUNG et al) 17 November 1998 (17.11.1998) entire document	1, 3, 11, 13, 21, 23
Y		2, 4-10, 12, 14-20, 22, 24-30
Y	US 6,775,162 B2 (MIHAL et al) 10 August 2004 (10.08.2004) entire document	2, 12, 22
Y	US 6,748,618 B1 (DARBY et al) 15 June 2004 (15.06.2004) entire document	4-10, 14-20, 24-30
Y	US 6,842,355 B2 (KLEVELAND) 11 January 2005 (11.01.2005) entire document	7, 10, 17, 20, 27, 30
A	US 6,259,615 B1 (LIN) 10 July 2001 (10.07.2001) entire document	1-30
A	US 6,891,739 B2 (NADD et al) 10 May 2005 (10.05.2005) entire document	1-30

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