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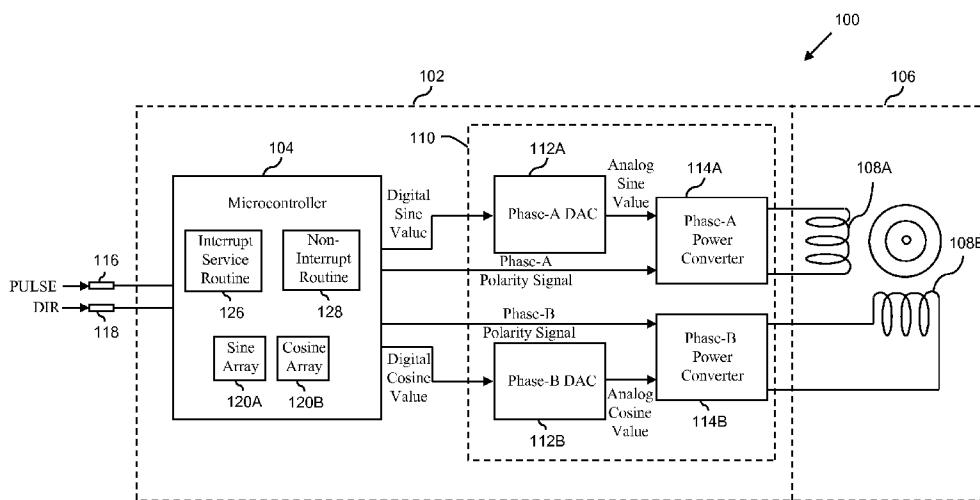
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(54) Title: MICROSTEPPER MOTOR DEVICE AND METHOD OF CONTROLLING THE DEVICE



(57) Abstract: A microstepper motor device and method of controlling the device uses a microcontroller that provides current sinusoidal values from at least one array of sinusoidal values to power circuitry of the device in response to control signals. The power circuitry is connected to a stepper motor of the device to supply power signals to the stepper motor using the current sinusoidal values. The microcontroller is configured to index the at least one array of sinusoidal values to the current sinusoidal values in response to the control signals as part of an interrupt service routine of the microcontroller. The microcontroller is further configured to transmit the current sinusoidal values to the power circuitry as part of a non-interrupt routine of the microcontroller.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2007/080556

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - H02P 8/00 (2008.01)
 USPC - 318/696
 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)
 IPC(8) - H02P 8/00 (2008.01)
 USPC - 318/696

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, GOOGLE PATENT

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----	US 6,140,793 A (CARR et al) 31 October 2000 (31.10.2000) entire document	1, 3-11, 13-20
Y		2, 12
Y	US 5,849,178 A (HOLM et al) 15 December 1998 (15.12.1998) entire document	2, 12
A	US 4,929,879 A (WRIGHT et al) 29 May 1990 (29.05.1990) entire document	1-20

Further documents are listed in the continuation of Box C.

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 "A" document defining the general state of the art which is not considered to be of particular relevance
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 "P" document published prior to the international filing date but later than the priority date claimed
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