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(54) Title: SYSTEM AND METHOD OF DYNAMIC REGULATION OF REAL POWER TO A LOAD

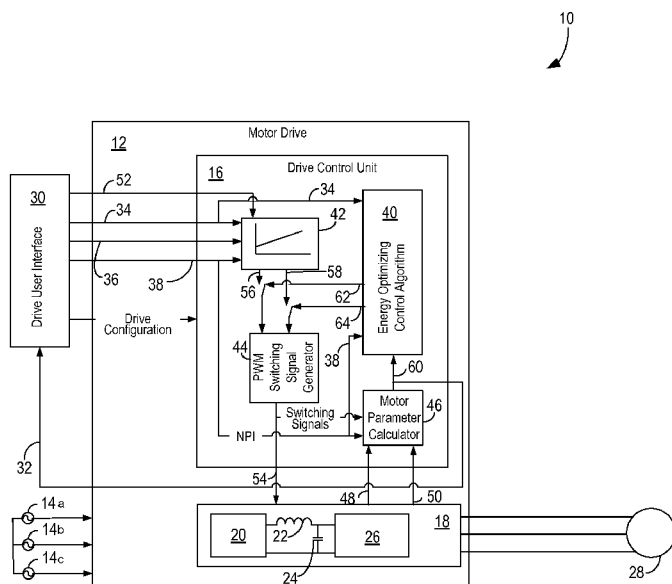


FIG. 1

(57) Abstract: A system and method for controlling an AC motor drive includes a control system programmed with an algorithm configured to optimize operation of the motor drive. Specifically, the control system is programmed to input an initial voltage-frequency command to the drive. The initial voltage-frequency command includes a voltage reference and a frequency reference corresponding to an operating point of an initial voltage/frequency (V/Hz) curve. The control system monitors a real-time output of the drive, modifies the voltage reference based on the real-time output of the drive, and transmits a modified voltage-frequency command to the drive. The modified voltage-frequency command corresponds to an operating point of a modified V/Hz curve defined by the modified voltage reference and the initial V/Hz curve.



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INTERNATIONAL SEARCH REPORT

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/315033 A1 (LU BIN [US] ET AL) 16 December 2010 (2010-12-16) the whole document -----	1-20
X	US 2010/315034 A1 (LU BIN [US] ET AL) 16 December 2010 (2010-12-16) the whole document -----	1-20
A	US 2007/024231 A1 (LEE KEVIN [US] ET AL) 1 February 2007 (2007-02-01) paragraph [0029] - paragraph [0040]; figures 2-4 -----	1-20
A	EP 0 330 477 A2 (MATSUSHITA ELECTRIC WORKS LTD [JP]) 30 August 1989 (1989-08-30) column 7, line 54 - column 8, line 60; figures 3-5 ----- -/--	1-20



Further documents are listed in the continuation of Box C.



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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 959 431 A (XIANG YOUQING [US]) 28 September 1999 (1999-09-28) column 8, line 37 - line 57; figure 7 -----	1-20

INTERNATIONAL SEARCH REPORT

Information on patent family members

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