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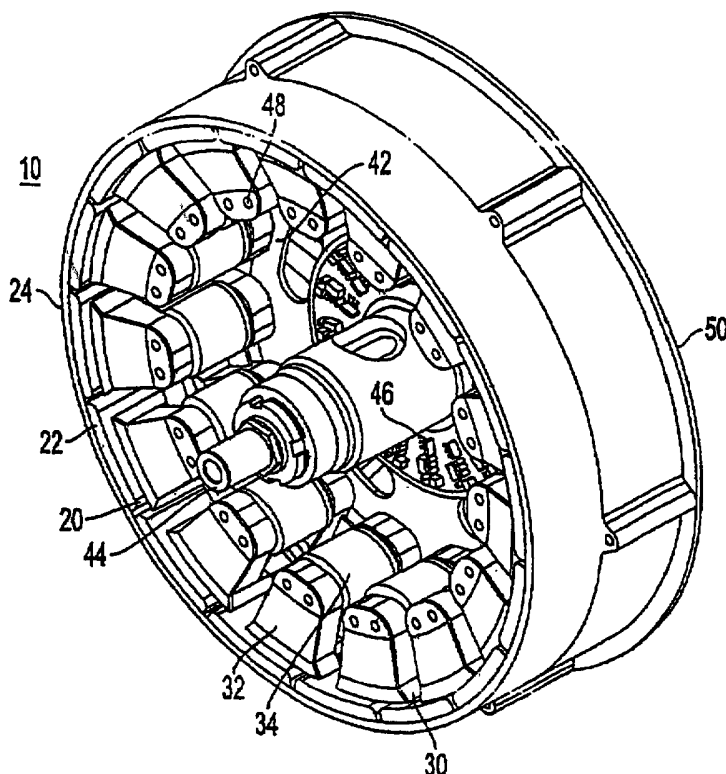
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[Continued on next page]

(54) Title: ADAPTIVE CONTROL ARCHITECTURE FOR ELECTRIC MACHINES



(57) Abstract: A distributed architecture for electric motors and generators. This distributed architecture motor can deliver high power at low voltage and low phase current. It works by distributing total current across several "phases," or electromagnetic circuits of the motor. That creates several advantages. These motors can deliver the high power needed by an electric car at 50 volts or less, which is safer for humans. They improve safety by allowing a motor to operate in an emergency even when one or more phases has a fault. Low voltage motors in electric vehicles allow batteries and fuel cells to have fewer cells. The low voltage and distributed current makes heat easier to handle. The distributed architecture lowers cost by allowing cheaper power electronics to be used. The distributed architecture allows smaller, lighter motors to be made with light wiring, switches and connectors. In addition, it opens the path to lower cost battery and fuel cell technologies, simplified battery and fuel cell management, and wider packaging options.

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INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H02P7/05 H02P6/00 H02K3/52

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 7 H02P H02K

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 practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	figure 1	3-6
Y	WO 99/26802 A (OVONIC BATTERY CO) 3 June 1999 (1999-06-03) page 11, line 13 - page 12, line 30 figure 1	3-6
A	DE 195 03 492 A (BOSCH GMBH ROBERT) 8 August 1996 (1996-08-08) figure 6	1
A	US 6 492 756 B1 (MASLOV BORIS ET AL) 10 December 2002 (2002-12-10) cited in the application abstract figure 1	1

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Information on patent family members

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