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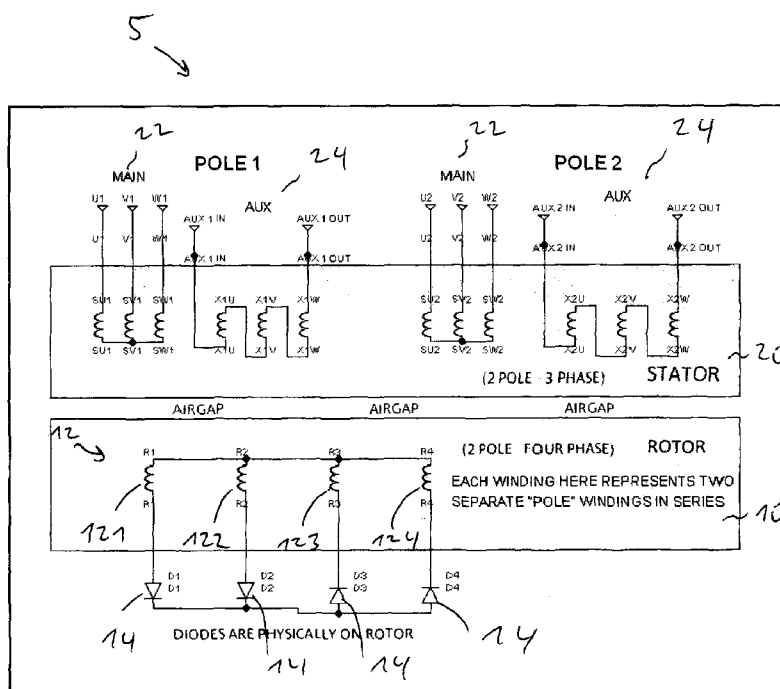
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(54) Title: SYNCHRONOUS ELECTRIC MACHINE



(57) Abstract: This invention relates to a synchronous electric machine including a stator and a rotor, wherein the stator includes a multi-pole stator winding set, the rotor includes a multi-pole cylindrical rotor design or salient pole design with at least two-phase rotor winding set on the cylindrical rotor having the same number of poles as the stator, and the stator windings provide excitation to the rotor by means of stator current imbalance or superimposition, by secondary windings to produce harmonic flux or by a three-phase winding with an external source of excitation. Furthermore, the invention relates to a method for operating a synchronous electric machine.



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A. CLASSIFICATION OF SUBJECT MATTER
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ADD.

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)
H02K H02P

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)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	column 2, lines 13-19; figures 1,2 column 3, lines 32-49 column 4, lines 1-21	2-16
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Y	column 2, lines 26-50; figure 3 column 2, lines 24-43	2-16
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Further documents are listed in the continuation of Box C.



See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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