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(54) **Electric motors and commutators therefor.**

(57) An electric motor (1, Fig. 1) has a commutator (24, Figs. 2 and 3) which has commutator bars (42) having two upstanding tangs (44, 46) for the attachment of the armature coil wires (56). Furthermore the wires (56) may be wound as a pair of wires (70, 72, Fig. 5) one wire (70) being attached to one tang (44) and the other wire (72) being attached to the other tang (46).

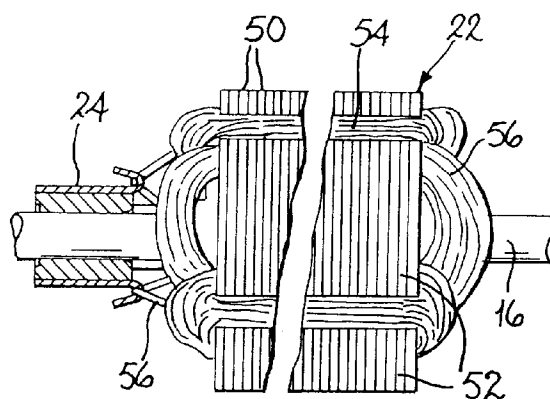


FIG. 7



European Patent
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EUROPEAN SEARCH REPORT

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EP 92 30 1492

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	PATENT ABSTRACTS OF JAPAN vol. 10, no. 20 (E-376)(2077) 25 January 1986 & JP-A-60 180 458 (ASUMO) 14 September 1985 * abstract *	1,2,5-7, 11-15	H01R39/04
A	US-A-4 792 714 (D.C. SCHLIETER) * column 2, line 49 - line 56; figures 1,2 *	1,2,5,6, 11-15	
A	US-A-3 126 618 (R.F. SHARROW ET AL.) * column 2, line 37 - column 3, line 8; figure 1 *	1,2,8, 14,15	
A,P	EP-A-0 459 629 (BLACK & DECKER) * abstract *	1,2,6, 12,14,15	
E	EP-A-0 478 996 (LICENTIA-PATENT-VERWALTUNGS-GMBH) * column 2, line 15 - column 3, line 19; figures 1,4-7 *	1-6,8,9, 11-15	TECHNICAL FIELDS SEARCHED (Int. Cl.5) H01R H02K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 09 DECEMBER 1992	Examiner LOMMEL A.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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