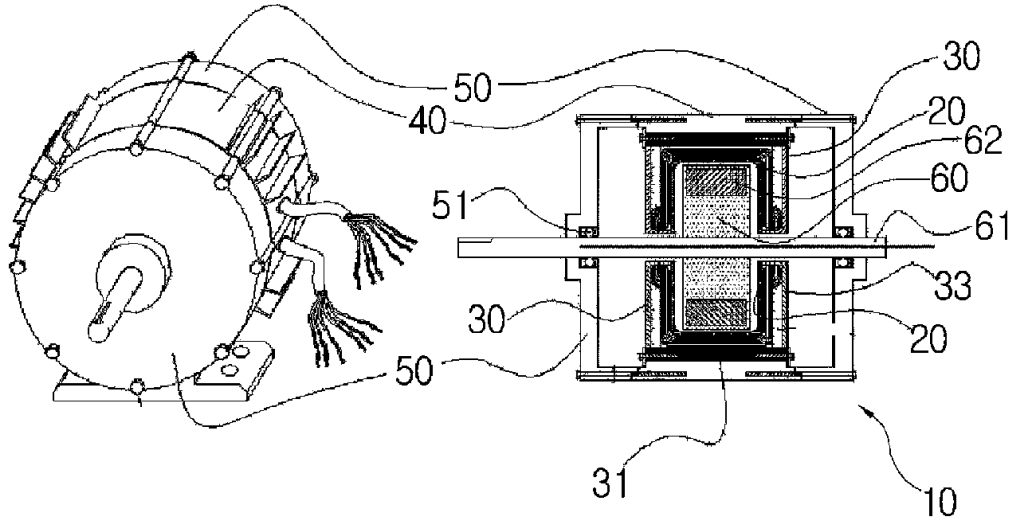


[Fig. 1]



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We Claim:-

【Claim 1】

A segmented armature motor comprising: ~~a plurality of armature coils (20) enclosing~~

a coil frame having an internal space;

~~a rotor (60) inserted into the coil frame and having a rotary shaft (61); an armature (30) housing the armature coils (20); and coupled in a segmented form; a motor frame (40) coupled with the armature (30) so as to enclose the armature (30); and motor covers (50) coupled to front and rear faces of the motor frame (40).~~

a plurality of armature coils formed so as to enclose the rotor and installed on an outer circumference of the coil frame,

wherein each armature coil is formed in a hollow shape, is bent from one or opposite ends of an intermediate portion thereof, and is formed in a horseshoe or U shape, and

each armature coil is installed so as to enclose an outer circumference and opposite sides of the rotor in three directions.

【Claim 2】

The segmented armature motor according to claim 1, wherein each ~~armature coil (20) is formed~~the rotor includes permanent magnets whose N and S poles are disposed in a hollow shape, is bent from one or opposite ends~~rotating direction of an intermediate portion thereof, and includes armature coil terminals (21) on one side thereof~~the rotor.

【Claim 3】

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~~The segmented armature motor according to claim 1, wherein each armature coil (20) is formed in a horseshoe or U shape, and includes armature coil terminals (21) on one side thereof.~~

The segmented armature motor according to claim 2, wherein the permanent magnets are configured so that the neighboring ones thereof are disposed so as to have repulsive poles.

【Claim 4】

~~The segmented armature motor according to claim 1, further comprising a wherein the coil frame (70) is segmented into upper and mounted between the armature coils (20) lower coil frames having a semi-circular cross section, and the rotor (60) upper and lower coil frames are assembled so as to face each other.~~

【Claim 5】

~~The segmented armature motor according to claim 4, wherein the coil frame (70) includes coil frame partitions (71) which are formed on the outer surface thereof and each of which has support slots (72) formed at intervals.~~

The segmented armature motor according to claim 4, wherein the armature is made up of the armature coils that are installed on an outer circumference of each of the upper and lower coil frames, and of the rotor installed in the upper and lower coil frames.

【Claim 6】

~~The segmented armature motor according to claim 5, wherein each of the coil further comprising a motor frame partitions (71) includes a coil frame support wall (73) slantingly formed on one or opposite sides thereof enclosing the armature.~~

【Claim 7】

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~~The segmented armature motor according to claim 1, wherein the armature (30) includes an armature frame (31) having an armature cable (32), and armature covers (33) coupled to front and rear faces of the armature frame (31).~~

The segmented armature motor according to claim 6, wherein the motor frame is formed in a shape of a cylinder segmented into two left-hand and right-hand parts that are assembled with the armature inserted thereinto.

【Claim 8】

~~The segmented armature motor according to claim 46, wherein the motor frame (40) is segmented into two parts which are has a shape corresponding to the armature so as to allow the armature to be inserted thereinto, and assembled in respective opposite directions of the rotary shaft (61) includes coil recesses, first protrusions, and second protrusions formed therein.~~

【Claim 9】

~~The segmented armature motor according to claim 86, wherein the motor frame (40) is an armature formed by laminating a plurality of iron core having coil recesses (141), and first and second protrusions (142, 143) that fill spaces of the armature (30) sheets.~~

【Claim 10】

~~The segmented armature motor according to claim 1, wherein the motor frame (40) includes motor frame cooling fins (41) protruding from each armature coil is formed in such a way that an outer surface interval thereof at intervals in order to cool the armature.~~

~~【Claim 11】~~

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~~The segmented armature motor according to claim 10, wherein the motor frame (40) includes motor frame insertion grooves (42) formed in an inner surface thereof at intervals.~~

~~—【Claim 12】—~~

~~The segmented armature motor according to claim 10, wherein the motor frame (40) further includes a pedestal (90) on an outer surface thereof so as to be able to stably support the motor frame (40).~~

~~—【Claim 13】—~~

~~The segmented armature motor according to claim 1, wherein permanent magnets (62) constituting the rotor (60) are configured so that N and S poles thereof are disposed is gradually widened in a rotating radial outward direction of the rotor.~~

~~—【Claim 14】—~~

~~The segmented armature motor according to claim 1, wherein permanent magnets (62) constituting the rotor (60) are configured so that the neighboring ones thereof are disposed so as to have repulsive poles.~~

Dated this 14th day of February 2013.