CLAIMS

1. A disc power generator, comprising a first housing and a second housing;
wherein the first housing and the second housing enclose a receiving space and the first housing has a first shaft hole and the second housing has a second shaft holes;
the disc power generator further comprises a first magnet set and a second magnet set fixedly provided in the receiving space, two magnetic poles of any one of the first and second magnets are arranged in a direction perpendicular to the plane where the first and second magnet set is located;
between the first magnet set and the second magnet set there is an armature, the armature comprises a board parallel to the plane where the first magnet set is located; at the middle part of the board there is a rotating shaft that is fixedly axially mounted;
wherein the board is provided with a fixed station connected to the board; wherein there is an axially arranged mounting hole running through the board; wherein the rotating shaft comprises a shaft core seat and a shaft core; wherein one end of the shaft core seat is axially provided with a first fixed flange corresponding to the mounting hole, while the other end is fixedly sheathed with a first bearing, and rotatably runs in the second shaft hole of the second housing; wherein one end of the shaft core is axially provided with a third fixed groove, while the other end rotatably runs in the first shaft hole of the first housing, and is axially provided with a fourth fixed groove to fix the shaft core on the output shaft of the motor; wherein on the board, multiple coils are fixedly mounted at the center of the board in a circumferential form.

2. The disc power generator of claim 1, wherein the side face of the fixed station is provided with multiple axially extending wavy teeth arranged at equal intervals in a circumferential form on a same plane with the axis of the fixed station as the center of a circle; wherein on the side face of the fixed station between each of the adjacent wavy teeth there is a holding surface formed for the coils to hold against; wherein on the board outside the fixed station there are multiple fixed flanges arranged on a same plane at equal intervals in a circumferential form with the center of the board as the center of the circle and corresponding to the wavy teeth; wherein the holding surface between each of the adjacent wavy teeth and the fixed flanges corresponding to each of the adjacent wavy teeth form a fixed cavity to fix the coils, so that the outer edge of the coils are respectively held against the holding surface of the fixed station and the sidewalls of the corresponding fixed flanges.

3. The disc power generator of claim 1 or 2, wherein the board is equipped with a bonding pad set, the bonding pad set comprising three bonding pads used for current output; wherein each of the coils has a first tap derived from the center part of the coil and a second tap derived from the side of the coil; wherein all of the coils fixed on the

board have the same winding direction, and are divided into a first coil assembly, a second coil assembly and a third coil assembly; wherein the first coil assembly, the second coil assembly and the third coil assembly comprise equal number of the coils, and the coils in the first coil assembly, the coils in the second coil assembly and the coils in the third coil assembly are alternately arranged in a circumferential form; wherein the first tap of the first coil in the first coil assembly, the first tap of the first coil in the second coil assembly and the first tap of the first coil in the third coil assembly are electrically connected together; wherein the second tap of the first coil in the first coil assembly is electrically connected to the first tap of the next coil in the first coil assembly, likewise, the second tap of each coil in the first coil assembly is electrically connected to the first tap of the next coil , and the second tap of the last coil in the first coil assembly is electrically connected to one of the bonding pads in the bonding pad set ; the second tap of the first coil in the second coil assembly is electrically connected to the first tap of the next coil in the second coil assembly, likewise, the second tap of each coil in the second coil assembly is electrically connected to the first tap of the next coil , and the second tap of the last coil in the second coil assembly is electrically connected to another of the bonding pad in the bonding pad set ; the second tap of the first coil in the third coil assembly is electrically connected to the first tap of the next coil in the third coil assembly, likewise, the second tap of each coil in the third coil assembly is electrically connected to the first tap of the next coil, and the second tap of the last coil in the third coil assembly is electrically connected to the third bonding pad in the bonding pad set.

4. The disc power generator of any one of claims 1-3, wherein the number of the first magnets in the first magnet set is even, and the number of the coils fixed on the board is more than the number of the first magnets in the first magnet set.

5. The disc power generator of any one of Claims 1-4, wherein the ratio of the number of the coils fixed on the board to the number of the first magnets in the first magnet set is 3:2.

6. The disc power generator of any one claims 1-5, wherein the board is made from a raw material with heat resistance, flame resistance and insulativity, and made through thermoplastic curing with urotropine as the curing agent.

7. The disc power generator of any one claims 1-6, wherein the raw material is phenolic resin (bakelite) material.