

Mo-gen – A permanent magnet generator

Design and working concepts of Mo-gen

¹N. Sibi, ²Dr. S. Prakash

¹Post graduate student, ²Professor / Faculty Head (Faculty of Mechanical Engineering)
Department of Mechanical & Production Engineering, Sathyabama University, Chennai-600119.

¹cb1987@ymail.com, ²prakash_s@yahoo.co.in

Abstract — In the past few years researchers are trying to create a new method for generating electricity. New devices and methods are being introduced for generating pollution free energy. This paper is about the design of one such device that produces pollution free energy and the concept behind its working.

Keywords — Permanent magnet generator, perpetual motion device.

I. INTRODUCTION

Mo-gen (A permanent magnet generator) is an electricity generator that works on the principle of permanent magnet motor [1]. The idea for the concept of permanent magnet motor was given by Nikola Tesla but the concept was patented by H. R. Johnson [2] in April 24 1979.

A permanent magnet motor is same as an electric motor, but the stator winding and rotor / armature windings (they act as electromagnets) are replaced by permanent magnet. The rotary motion in a permanent magnet motor is caused due to the repel property of the magnets arranged in the motor.

Mo-gen is a perpetual motion device [3] that runs on no external source of energy or fuel, its runs on with the energy present within the system.

II. DESIGN OF MO-GEN

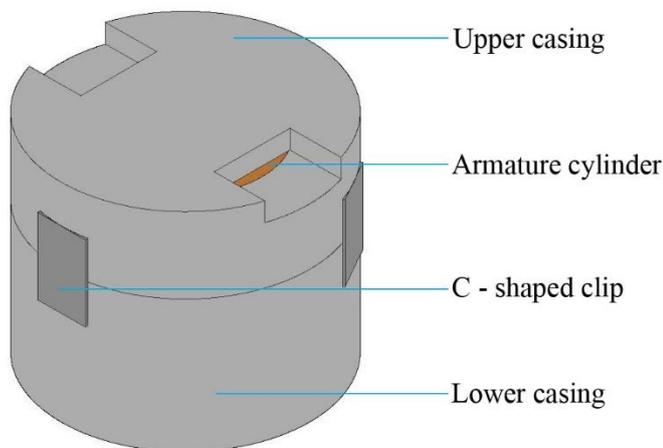


Fig-1: Isometric view of Mo-gen

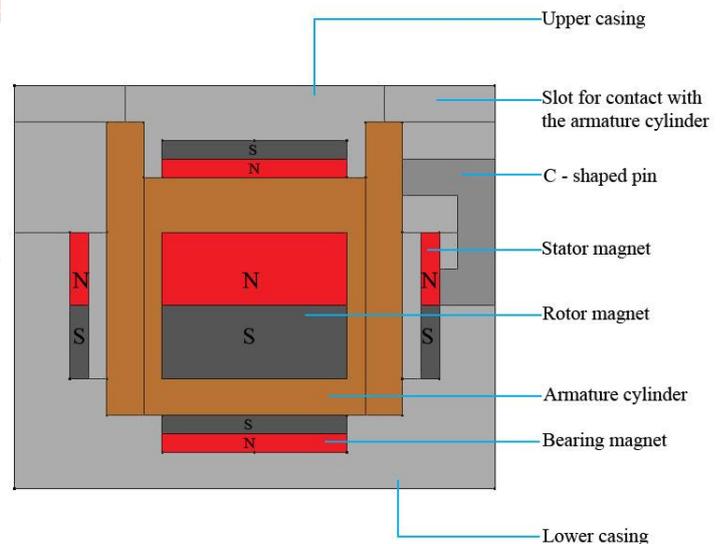


Fig-2: Sectional view of Mo-gen

The design of Mo-gen is based on the working principle of permanent magnet motor. A single star shaped (based on a pentagon shape) permanent magnet is levitated (Fig-2) between two disc shaped permanent magnet which constrains the vertical moment of the rotor. A single hollow cylinder shaped stator magnet (Fig-2) constrains the horizontal moment of the rotor. A hollow cylindrical shaped armature cylinder is placed between the rotor magnet and the stator magnet. The permanent magnets and the armature cylinder are assembled in a casing (Fig-2) which is locked using a C-shaped pin. Two slots are present in the upper part of the casing to provide contact with the armature cylinder (Fig-1).

The armature is in shape of a hollow cylinder and not designed to arrange coils. This is a new approach where the whole armature cylinder generates electricity due to the electromagnetic induction caused by the rotor permanent magnet.

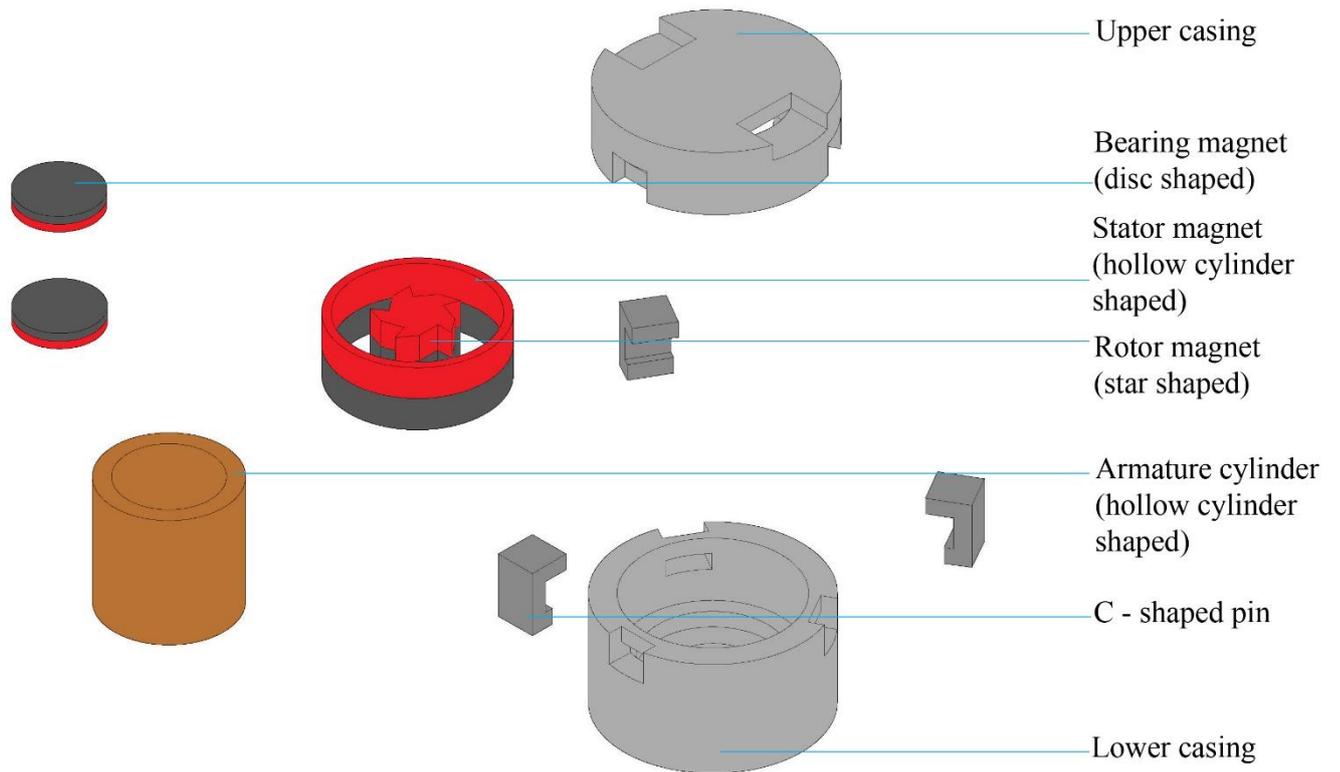


Fig-3: Exploded view of Mo-gen

III. WORKING CONCEPTS OF MO-GEN

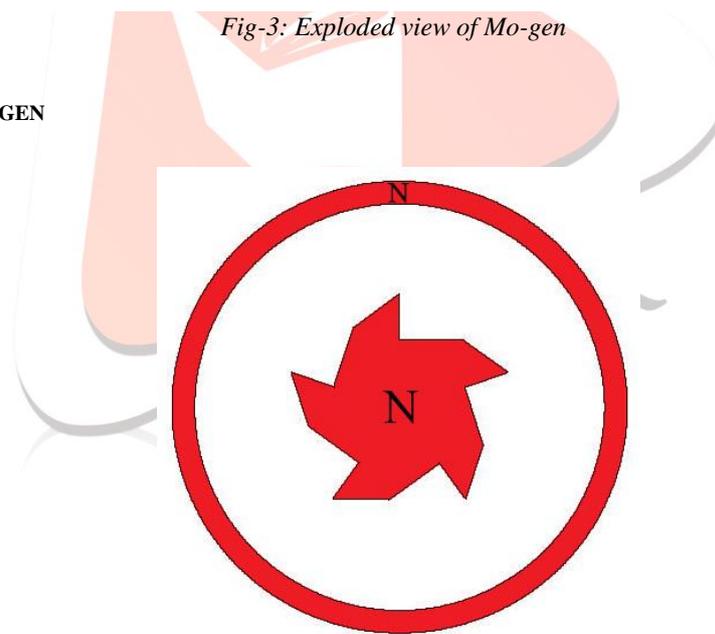


Fig-4: Top view of the stator magnet and the rotor magnet without rest of the components

The star shape of the rotor is based on the shape of a pentagon (Fig-4). The rotational motion of the rotor is caused due to its star shape and the hollow cylindrical shape of the stator magnet (Fig-4) and due to repel property of magnets (same polarity of two magnets repels each other when brought together). Hence the rotor will rotate in the clockwise direction.

An armature cylinder is placed between the rotor and the stator magnet (Fig-2) generates electricity due to electromagnetic induction [4] caused by the rotation of the rotor magnet. The star shape of the rotor magnet forms a varying magnetic field around the magnet with induces current in the armature cylinder while rotating.

IV. CONCLUSION

Mo-gen is a new concept for an electricity generator which is compact and consumes no fuel. As Mo-gen is a perpetual motion device it operates for a longer period of time generating electricity. There are only few permanent magnet generators created till now which includes searl effect generator [5]. Further study and experimentation will lead to even creating a better device to generate electricity using the concept of permanent magnet motor.

V. REFERENCES

- [1] <https://www.google.de/patents/US4877983>
- [2] <http://www.google.de/patents/US4151431>
- [3] http://en.wikipedia.org/wiki/Perpetual_motion
- [4] http://en.wikipedia.org/wiki/Electromagnetic_induction
- [5] [http://peswiki.com/index.php/Directory:Searl_Effect_Generator_\(SEG\)](http://peswiki.com/index.php/Directory:Searl_Effect_Generator_(SEG))

