

Research proposal
"Unipolar electrogenerator"

Subject of project: research on design of unipolar electric energy generator using cathode of rotating vacuum tube as source of electrons. In this design an axial magnetic field will provide Lorentz force as Electro Motive Force (E.M.F.) Power in useful load of this generator can be provided by electric current between cathode and anode due to this E.M.F.

Idea: We suppose output power can be much more that total expense of power for cathode heating and motor of the rotor.

The goal is to develop experimental setup and technology for electric energy generation.

The tasks are to design and test experimental unipolar generator, using vacuum tube as rotor. Measurements are planned to confirm that output power is depend of velocity RPM and magnetic field value B for constant input power (cathode heating and motor input).

Planned results are: Confirmation of proposal that output power in anode-cathode circuit can be more than input power necessary to heat the cathode and provide rotation of the tube.

Practical application: This technology can be used to be applied in designing works to produce fuel-less power generators of 100W - 10KW electric power.

Similar project was started in 2002 by Faraday Ltd. Company, Alexander V. Frolov is the author of the idea and design. We tested standard vacuum tube GU74 in this mode of operation, i.e. rotation of hot cathode was provided in axial magnet field. The field was provided by permanent magnets. We have got significant DC output power in external electric circuit between anode and cathode. Theoretically this output power is function of magnet field intensity, rotation velocity (RPM) and emission capacity (surface) of cathode. Input power is very small to heat cathode and provide rotation.

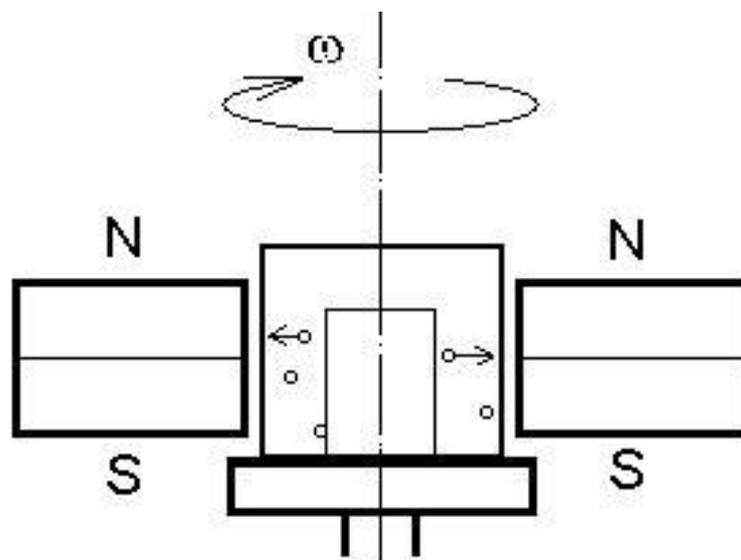


Fig.1 Rotation of vacuum tube in axial magnetic field



Technical problem is connections to electrodes during rotation, i.e. brushes for big power.

We are interested to organize new Scientific Research Work on this topic with Customer. Also it is necessary to patent it.

Contact with author: Mr. Alexander V. Frolov, alexfrolov2509@gmail.com or a2509@yahoo.com
Phone +7 980 7243309

Web <http://www.faraday.ru>