

Output to Input Ratio Higher than Unity

In conventional generators, the direction of the load current through the armature (Fig. 4A) is such that the interaction of its magnetic field with the main exciter field results in the generator rotor being rotated against the magnetic force, and for 100% efficiency, output equals input. As shown in Fig. 3B, the electron drifts 'sideways' in the rotor of the Space Power Generator (SPG) such that the plane of its magnetic field is at right angles to B, thus causing no interaction with B. The flow of electrons in the rotor of SPG due to external load current, thus, does not cause any drag on the rotor. The conventional principle of equality of electrical output with input will not be violated if the generation of continuous power due to the rotation of interatomic space is taken into account. (Further tests on SPG that are being conducted by the author at Tarapore Atomic Power Station will provide additional information for fuller understanding of this unique power generating system.)

Space-Energy Relation

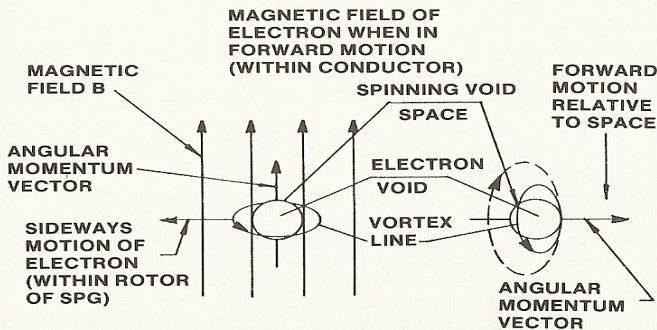
Consider the case when power is tapped from Surface A, and magnetic field is supposed to be, in the whole volume of the rotor, in the same direction. From (9) and further calculations for power generation as per (15), it can be shown that,

$$P = (1.8) \pi L N r^2 10^{-5} \text{ kW}, \quad (16)$$

where, P is power in kW.

It is seen from (16) that power produced is independent of magnetic field strength. The magnetic field B, however determines the voltage developed, as shown below. The force developed on electrons due to equivalent charge, q_r , is given by Lorentz' force.

$$F = q_r B(2\pi N r).$$



INTERACTION OF ELECTRON WITH EXTERNAL MAGNETIC FIELD

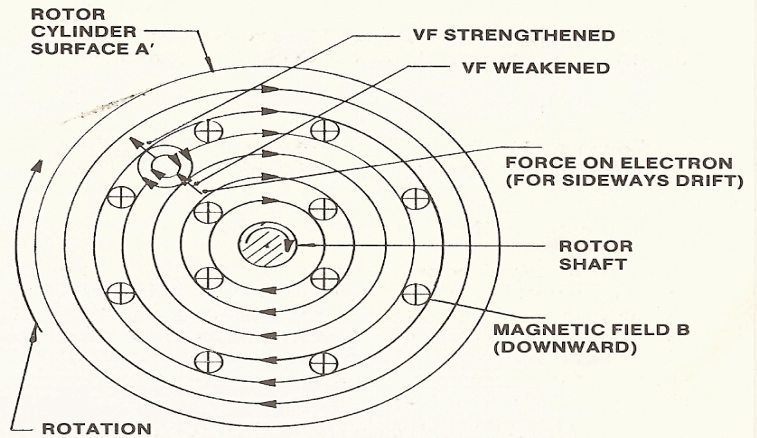
(FIG. 3A)

Energy required to create electric potential between the shaft and surface A will be,

$$\text{Energy} = q_r B(2\pi N r) \quad r/2, \quad (17)$$

and voltage, V, which is, Energy/ q_r , is given by

$$V = B(2\pi N) \quad r^2/2 \quad (18)$$



STRENGTHENING VF ATTRACTS ELECTRON TO OUTER PERIPHERY; WEAKENED VF PUSHES ELECTRON AWAY FROM SHAFT. OPPOSITE POLARITIES APPEAR ON SHAFT AND PERIPHERY.

FIG. 3B

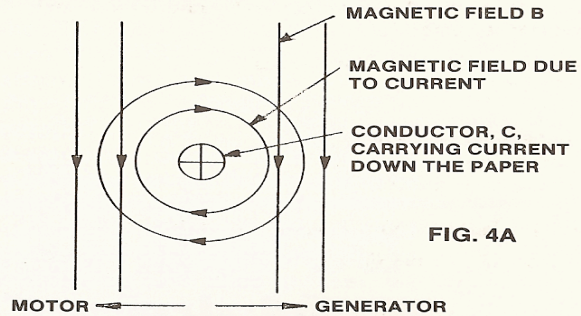


FIG. 4A

FOR GENERATOR ACTION, CONDUCTOR C HAS TO MOVE AGAINST HIGHER MAGNETIC FIELD.

CONCLUSIONS

The generation of electric charge by high speed rotation of absolute vacuum, in a magnetic conducting cylinder and sustaining the charge without any appreciable loss, provides a viable means of power production from the limitless source of space substratum. The higher output of space power generator over the input to its drive-motor pinpoints the fact that the absolute vacuum in a dynamic state, is the basic source of power. The new fundamental equations on electron's rest-mass and charge, which enable computation of rotational charge generated from the absolute vacuum, the non-material properties of vacuum, and void-centre structure of electron (rather than point-charge) are vindicated. The sphere of void at electron's centre should have a radius of about 1.5×10^{-11} cm. is the prediction that follows from the experimental test discussed in this paper.

The numerous experiments carried out by Bruce De Palma since 1978, as given in his reports sent regularly to author and author's own more recent experiments confirm the fact that electric power can be generated from space at efficiency greater than unity.