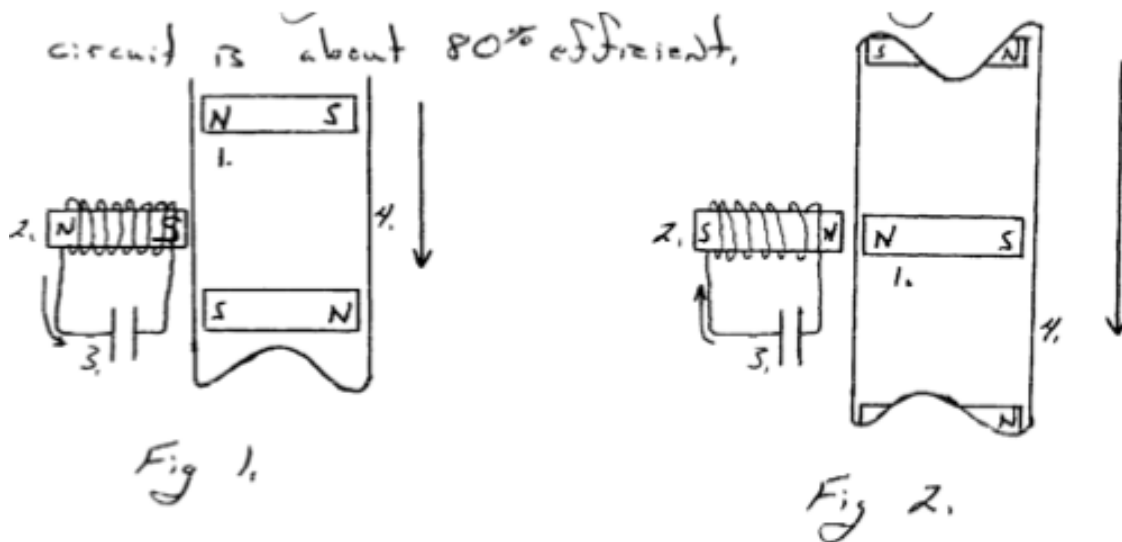


Paul Brown, Searl Disk Notes. Pages 93 to 97:

The 16 electromagnets housed in the craft body are the AC stator while the 32 permanent magnets in the free turning ring is the armature; together, this stator and armature comprise a basic permanent magnet motor to drive the ring and this circuit is about 80% efficient.



Figures 1 and 2 illustrate the interaction between the stator [electromagnet (2) and capacitor (3)] and the armature [ring (4) and magnet (1)].

Principle 1:

We will concentrate on one electromagnet (2) while understanding this represents the action of all 16 electromagnets. The electromagnet (2) is also an inductor coil and is wired in series with a capacitor (3). This inductance coil is comprised of a core (MS laminates or ferrite) and a coil winding. Assume the circuit of 2 and 3 contains no energy; then as in Figure 1; the motion of ring (4) brings the permanent magnet (1) into the proximity of the coil assembly (2) which induces an opposing magnetic pole in the core of electromagnet (2). The motion of the approaching magnet (1) varies the magnetic flux of the induction coil core which induces a voltage and current in the windings of the coil which transfers the energy to the capacitor (3). Simply stated – the kinetic energy of the approaching magnet is stored as potential energy in a capacitor via a magnetic transducer assembly.

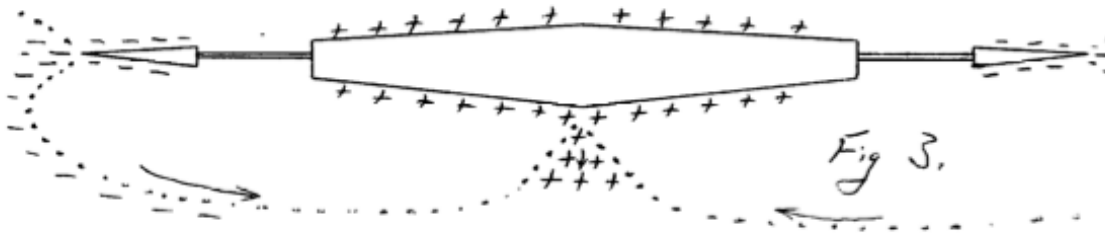
Now in Figure 2 we see the capacitor discharge, which causes current to flow in the opposite direction producing a magnetic pole of the same polarity as that of the inducing magnet. This action acts to repel the magnet (1). Or again simply stated; the potential energy of the capacitor is transformed into kinetic energy of the magnet via the magnet transducer. Without friction, the process is 95% efficient.

Principle 2:

The action of the rotating conductive ring with alternately oriented permanent magnets ionizes the air due to induced eddy currents from the alternating magnetic field.

Principle 3:

The earth's magnetic field is the stator while the rotating ring is the armature of a homopolar generator, which produces an electron current toward the rim. As shown in Figure 3, the homopolar effect produces a polarity with the negative charge stored at the rim of the craft and a positive charge on the craft central body.



The homopolar is in itself about 95% efficient; however, it is a well-known anomaly that homopolar generators require no net torque. The result is that the energy of the motorizing circuit (Principle 1) gets used twice so that the combined motor/generator circuit (Principals 1 and 3 together) operates at an efficiency of 170%!

Principle 4:

Referring to Figure 3, note the separation of charge between the craft main body and its outer ring across the rotating ring (thin cross section). This separation of charge constitutes a capacitor and this capacitive electric field is perpendicular to the rotating ring. Also, the electric field is static while the magnets of the moving ring provide a magnetic field of an alternating nature cutting through the electric field – giving rise to high potential.

Principle 5:

Referring to Figure 4, the alternating magnetic field impressed upon a shorted turn (the craft's conductive outer skin) induces an eddy current electric field of high intensity.

