## Us e Paral lel Path Tech nol og y to create Po siti ve D ra g Ge ner ato r Euler 07/05/20 08

There are many indirect application of Parallel Path Technology, what I meant by indirect is to use the strengthened magnetic field as a source of force/kinetic energy rather than to use it indirectly to power generator.

One of the major waste of energy is the creation of magnetic polarities that is repelling the incoming magnetic field, or resisting the change of magnetic field. That is the basis for electrical generation process so some see that as unavoidable.

Although it is unavoidable, one method listed in my patent claim in NDG is we can find way to compensate the lost of kinetic energy due to the resisting magnetic field emanating from the electromagnetic coil. Since Parallel Path Technology is a means to strengthening merging magnetic flux, then it is an ideal candidate for compensating the kinetic energy lost by Rotor(assume traditional generation process).

To compensate the lost of kinetic energy, what we need is just a place for the magnetic flux emanating from the electromagnetic coils to merge, and ensure it is the opposite polarity of the electromagnetic coils that is exposed to incoming magnetic flux. Since the electromagnetic coils has the effect of resisting the incoming magnetic flux, then the merge point of those magnetic flux from electromagnetic coil would attract instead of resisting the incoming magnetic flux in the Rotor. And because that the strength of merged magnetic flux in the location is always greater than the sum of individual magnetic flux if the effect of Parallel Path is allowed to happen. Therefore the net resultant force of the interaction would be added to the movement of Rotor, instead of retarding the movement of Rotor. Moreover, the greater the load, the stronger is the effect of Parallel Path, thus more electrical energy is produced given the same amount of kinetic energy.

## Process:

- 1. Permanent Magnet from Rotor approach the pair of electromagnet coils, notice that the pair of electromagnetic coils is designed to experience the same change of magnetic field regardless of the movement of Rotor.
- 2. Each electromagnetic coil in the pair produce an magnetic poles that is identical with the incoming Permanent Magnet as a reaction to incoming Magnetic field, as dictated by Lenz's Law. Since the Permanent Magnet and the electromagnetic coil are of the same magnetic polarity facing each other. Repulsion force generated to retard the approach of Permanent Magnet.
- **3.** Due to the magnetic repulsion of magnetic flux line, the magnetic flux generated as a by-product of electrical generation is entering the ferromagnetic merge point in the middle of the pair(s) of the electromagnetic coil.
- 4. By the design of this Generator, the end of the merge point of the magnetic flux from electromagnetic coil that is facing the approaching Permanent Magnet will always have the opposite magnetic polarity as the Permanent magnet. Thus, it produce an attraction force to the income Permanent magnet.
- 5. Due to the effect of Parallel Path, the resultant magnetic flux emanated from the merge point is the square of the sum of individual magnetic flux from each electromagnetic coil, and since it is

of the opposite polarity of the Permanent magnet. The attraction force due to the attraction between merge point and the Permanent magnet is GREATER than the repulsion between the electromagnetic coil, therefore the net resultant force is AIDING the movement of Rotor.

The (ideal) acceleration ratio= $n^2-n$ , where n is the number of electromagnetic coil that act as a pair.

## Comp onen ts:

A. Permanent Magne t, or any object that emanate magnetic flux of fixed magnetic polarity, for the purpose of generation of electricity by interaction with component B; and for the purpose of reducing the kinetic energy consumed in the relative movement between component A and component B in electrical generation process by interacting with component C.

**B. Electromagnet** Coi ls, for the purpose of electrical generation by interacting with component A, and for the purpose of reducing the kinetic energy consumed in the relative movement between component A and itself in electrical generation process by interacting with component C.

**C.** Fe rromagnet ic Bridge , for the purpose of reducing the kinetic energy consumed in the relative movement between component A and component B in electrical generation process by providing a pathway for magnetic currents emanating from component B to meet for the effect of Parallel Path.

Comp onen t B must have at least a pair or an y num ber of pair to work, and at least one Comp onen t C must be located in the mid dle of this set. The w hole set must ex perience ide ntical variati on of m ag netic field d ue to the relat ive movement be tween Compo nent A and Compone nt B.

## Techn icalit ies:

- 1. Component C may take away a portion of magnetic flux from the Component A if it is positioned too close to the trajectory of Component A. Since moving Component C further away from Component A would reduce the effect of compensation of kinetic energy, an alternative way is to have more than one Permanent Magnet placed in the trajectory of Component A. Nevertheless it would still reduce the effect of compensation of kinetic energy, to alleviate it we can try to pack more electromagnetic coils as a pair.
- **2.** Do we need to adjust the pattern of variation of the magnetic flux experienced by Component B for the sake of optimization?
- 3. Would the effect of Parallel Path affect the generation of electrical current in Component B?

One design is suggested below. Because that effect between component C and component B is diagonally, the compensating force is less than the ideal accelerating ratio. Depending on the actual specification of the electromagnetic coils and magnet, the effective accelerating ratio maybe 60% of original, thus equal to  $(2+2)^2*60\%-4$  or 5.6.

When N pole of the Magnet is approaching



When S pole of the Magnet is approaching

