ISSN: 2456 - 4664

International Journal of Advanced Trends in Engineering and Technology

Impact Factor 5.965, Special Issue, October - 2019

6th National Conference on Advancements in Mechanical, Environmental, Safety and Health Engineering (AMESHE) On 11th May 2019 Organized By

Department of Mechanical Engineering, Knowledge Institute of Technology, Salem, Tamilnadu



DESIGN AND FABRICATION OF FREE ENERGY GENERATOR S. Rajeshkanna*, A. Kamalakkannan*, S. Vignesh**, R. Ravanth**, M. E. Praveen** & S. Praveen Kumar**

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Trends in Engineering and Technology, Special Issue, October, Page Number 19-20, 2019.

Abstracts

The concept of free energy generator can be used for generating electricity without using any fossil fuel, and any other mean, which means to generate free electricity. In this method, a motor is coupled with an induction motor which is powered by an external source of energy for initiation of the process. Once the process has started, electricity generated is switched as a supply of the motor which is running the alternator which makes them mutually powered or self-powered. It is a self-powered system which generates electricity, or we can say it recycle electricity fed to it, for itself and outside the system continuously.

Key Words: Free Energy Generator, Electricity & Motor

Introduction:

Free energy means energy at no cost, like mechanic energy which drives wind mill, or light in solar cell which is transformed into DC electric current, i.e. wind power, water power, telluric power, and solar power. Free energy generator is a process to generate these types of energy. Free energy suppression is the notion that corporate energy interests deliberately suppress technologies that may provide energy at very little cost. Remaining so-far unexploited forces of nature which are well documented in the scientific literature include telluric currents, atmospheric electricity, earth batteries, and pressure system changes. The energy from fantastical forces considered perpetual motion. These devices utilize quantum vacuum perturbation, quantum vacuum energy, rotating magnets, as well as some purported methods to crack hydrogen. The term "Free Energy" generally means a method of drawing power from the local environment, without the need to burn a fuel. There are many different successful methods for doing this and these methods span many countries and many years. The amount of power which can be collected can be very high and the few kilowatts needed to power a household are most definitely within the reach of most of the devices mentioned. The 'bottom line' is that energy can definitely be drawn from the local environment in sufficient quantities to supply all of our needs. For whatever reason, conventional science appears determined not to accept this basic fact and denies it at every opportunity.

Electrical energy is energy derived from electric potential energy or kinetic energy. When used loosely, "electrical energy" refers to energy that has been converted from electric potential energy. This energy is supplied by the combination of electric current and electric potential that is delivered by an electrical circuit (e.g., provided by an electric power utility). At the point that this electric potential energy has been converted to another type of energy, it ceases to be electric potential energy. Thus, all electrical energy is potential energy before it is delivered to the end-use. Once converted from potential energy, electrical energy can always be called another type of energy (heat, light, motion, etc.). The fundamental principle of electricity generation was discovered during the 1820s and early 1830s by the British scientist Michael Faraday. His basic method is still used today: electricity is generated by the movement of a loop of wire, or disc of copper between the poles of a magnet. For electrical utilities, it is the first step in the delivery of electricity to consumers. The other processes, electricity transmission, distribution, and electrical power storage and recovery using pumped-storage methods are normally carried out by the electric power industry. Electricity is most often generated at a power station by electromechanical generators, primarily driven by heat engines fueled by chemical combustion or nuclear fission but also by other means such as the kinetic energy of flowing water and wind. There are many other technologies that can be and are used to generate electricity such as solar photovoltaic and geothermal power. 7 I (Amperes) = E (Volts)/R (Ohms) E = IR or R = E/I 4.2 Principle of a DC Generator

Principle of Electric Energy:

Electrical energy is energy derived from electric potential energy or kinetic energy. When used loosely, "electrical energy" refers to energy that has been converted from electric potential energy. This energy is supplied by the combination of electric current and electric potential that is delivered by an electrical circuit (e.g., provided by an electric power utility). At the point that this electric potential energy has been converted to another type of energy, it ceases to be electric potential energy. Thus, all electrical energy is potential energy before it is delivered to the end-use. Once converted from potential energy, electrical energy can always be called another type of energy (heat, light, motion, etc.). The fundamental principle of electricity generation was discovered during the 1820s and early 1830s by the British scientist Michael Faraday. His basic method is still used today: electricity is generated by the movement of a loop of wire, or disc of copper between the poles of a magnet. For electrical utilities, it is the first step in the delivery of electricity to consumers. The other processes, electricity transmission, distribution, and electrical power storage and recovery using pumped-storage methods are normally carried out by the electric power industry. Electricity is most often generated at a power station by electromechanical generators, primarily driven by heat engines fueled by chemical combustion or nuclear fission but also by other means such as the kinetic energy of flowing water and wind. There are many other technologies that can be and are used to generate electricity such as solar photovoltaic and geothermal power. 7 I (Amperes) = E (Volts)/R (Ohms) E = IR or R = E/I

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Department of Mechanical Engineering, Knowledge Institute of Technology, Salem, Tamilnadu Principle of a DC Generator:

According to Faraday's laws of electromagnetic induction, whenever a conductor is placed in a varying magnetic field (OR a conductor is moved in a magnetic field), an emf (electromotive force) gets induced in the conductor. The magnitude of induced emf can be calculated from the emf equation of dc generator. If the conductor is provided with a closed path, the induced current will circulate within the path. In a DC generator, field coils produce an electromagnetic field and the armature conductors are rotated into the field. Thus, an electromagnetically induced emf is generated in the armature conductors. The direction of induced the current is given the Fleming's right rule

According to Fleming's right hand rule, the direction of induced current changes whenever the direction of motion of the conductor changes. Let's consider an armature rotating clockwise and a conductor at the left is moving upward. When the armature completes a half rotation, the direction of motion of that particular conductor will be reversed to downward. Hence, the direction of current in every armature conductor will be figure; you will know how the direction of the induced current is alternating in an armature conductor. But with a split ring commutator, connections of the armature conductors also gets reversed when the current reversal occurs. And therefore, we get unidirectional current at the terminals. 4.3 Principle of a DC Motor An electric motor is an electrical machine which converts electrical energy into mechanical energy. The basic working principle of a DC motor is: "whenever a current carrying conductor is placed in a magnetic field, it experiences a mechanical force". The direction of this force is given by Fleming's left-hand rule and its magnitude is given by F = BIL. Where, B = 9 magnetic flux density, I = current and L = length of the conductor within the magnetic field. Fleming's left hand rule: If we stretch the first finger, second finger and thumb of our left hand to be perpendicular to each other, and the direction of magnetic field is represented by the first finger, direction of the current is represented by the second finger, then the thumb represents direction of the force experienced by the current carrying conductor. When armature windings are connected to a DC supply, an electric current sets up in the winding. Magnetic field may be provided by field winding (electromagnetism) or by using permanent magnets. In this case, current carrying armature conductors experience a force due to the magnetic field, according to the principle stated above. Commutator is made segmented to achieve unidirectional torque. Otherwise, the direction of force would have reversed every time when the direction of movement of conductor is reversed in the magnetic field.

Principle Back EMF:

According to fundamental laws of nature, no energy conversion is possible until there is something to oppose the conversion. In case of generators this opposition is provided by magnetic drag, but in case of dc motors there is back emf. When the armature of a motor is rotating, the conductors are also cutting the magnetic flux lines and hence according to the Faraday's law of electromagnetic induction, an emf induces in the armature conductors. The direction of this induced emf is such that it opposes the armature current (I). The circuit diagram below illustrates the direction of the back emf and armature current. Magnitude of the Back emf can be given by emf equation of a DC generator.

Result and Discussion:

This research is based on experiments on old notion of free energy generation and concludes that free energy cannot be generated. Rather than 100 percent free energy, some part of generation could be made free which will be an efficient system. The prototype system works as long as input source is available. When the input is turned off, the magnets on motor behave like a break on the rotor magnets and the system tends to stop immediately. The performance of our device was tested. The motor runs using the power from battery. The motor drives the 12V dynamo. The dynamo generates the 12V DC power. The output power of dynamo is connected to the inverter circuit. The inverter circuit converts the 12V to 520v AC power which the DC power obtained from the dynamo. Then the power from the inverter circuit is used for running the other components. After the power converts using the 12V transformer for running the motor when the power is cutoff from the battery circuit. The AC power from the circuit is less efficient. So lightly loaded components can only run.

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