A CONCEPTUAL RESEARCH ON FREE ENERGY MAGNETRIC GENERATOR

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Abstract
Energy has become and plays the most significant part of a human’s life. The term energy referred here is for electrical energy. Human is almost completely dependent on energy for his various purposes. Today there are several ways of generating electricity as per the requirement using several kinds of fuel like nuclear fuel, coal, gas, or hydro etc. But all these have their own dire consequences and detrimental effects on the environment, some even worst to have radiation threat if leaked. So as per the current scenario, there is a need to develop such a method which will generate electricity that will not be only eco-friendly but also cheap.

This paper deals with the conceptual design of recent research going on developing such a technique that will not only give eco-friendly but also a cheap form of electrical energy. The mechanism and technique incorporate the application of magnets (Neodymium magnet) and its repulsive property of magnetic force used for generation of continuous motion. The name “Magnetic Generator” is a collaboration of magnets and electricity. This generator will generate electricity with no byproduct remaining behind it and will cause no detrimental effects on the environment and will give electricity at the cheapest rate making it the best free energy generator. The paper contains well-detailed content of the principle of operation, construction of generator and its actual working.

Keywords: Free Energy, Ecofriendly Electricity, Neodymium Magnets, Repulsive property, Magnetic Generator.

1. Introduction
Free Energy is the energy which is generated without any additional capital investment except the installation cost of the plant i.e. which does not cost for its generation and is free once the plant is installed. For example, solar cells, wind tidal, geothermal etc. are the forms of free energy. Energy from these sources can be generated endlessly without putting any input which costs something i.e. the input is widely available in nature and is economically free to use.

1.1 Why free energy needed?
Since the invention of the electricity, it has always been generated by conventional ways only like thermal power plants, hydroelectric plants and nuclear power plants. But, these conventional ways have their own limitations and drawbacks, one of the major is they are hazardous and have detrimental effects on the environment like global warming, increased the percentage of carbon and other harmful gases and constituents released into the environment by the ash and byproducts leftover by burning of fuel. There are many other drawbacks like health problems and depletion of natural resources of fuel like coal, oil and gases which have brought us to a point where we need to think out of the box, to find out various other ways of generating electricity. Thus, this is the time we need to work on the alternate ways of generating electricity which will be eco-friendly, cheaper for its use, has no detrimental effects, require no economical input once the plant is installed and can generate electricity endlessly. Such energy we called as free energy.

1.2. What is free energy generator or magnetric generator?
The concept of generating electricity from magnets has been around us since a long time. Simple magnets are used in generators to generate electricity. It consists of a simple arrangement of conductor and magnets and works on faraday’s law of electromagnetic induction. But, who has thought that the same magnets can be rearranged in such a way, that a continuous motion can be obtained from it which further can be used to drive the generator. Yes, in this paper you are going to get introduced to a very new technique of generating electricity. This paper deals with the construction and working of a device, which is based on this technique. More precisely, this technique is nothing but the application of the repulsive property of the magnets, as the basic principle behind its working. The device uses the world’s most powerful magnets i.e. Neodymium
magnets. A neodymium magnet (also known as NdFeB, NIB or Neo magnet), the most widely used type of rare-earth magnet, is a permanent magnet made from an alloy of neodymium, iron and boron to form the Nd2Fe14B tetragonal crystalline structure. Neodymium magnets are the strongest type of permanent magnet commercially available.

We have named this device as "Magnetic Generator", because it is a collaboration of the main component used for generation and the output of the device i.e. magnets and the electricity.

This generator is first of its kind. It is cheaper as compared to the conventional sources of energy and overcomes the drawbacks related to the other free energy sources. Now further, you will see all the technicalities, construction, working, advantages and application of this generator.

2. Basic Components

2.1. Neodymium magnets:

A neodymium magnet (also known as NdFeB, NIB or Neo magnet), the most widely used type of rare-earth magnet, is a permanent magnet made from an alloy of neodymium, iron and boron to form the Nd2Fe14B tetragonal crystalline structure. Neodymium magnets are the strongest type of permanent magnet commercially available [1] [3].

2.2. Magnetic Wheel/Rim:

Magnetic wheel or rim is the basic and most important part of the generator. It consists of the Neodymium magnets specifically arranged in such a manner that their relative position will cause a continuous motion. It is made of non-ferrous material. The whole assembly is mounted on a splined shaft [2] [6] [4].

2.3. Splined shaft:

Splined shaft is used to hold the assembly. It allows the inner wheel to move in the direction parallel to the axis of the shaft. It holds the magnetic wheel, flywheel and gear.

2.4. Dual Mass Flywheel:

Dual mass flywheel is the newest kind of flywheel having some specific arrangement of spring and mass such that along with reducing the fluctuation it also increases the rpm hence, it is used [5] [7].
2.5. **Helical Gears:** Helical gear arrangements are used to transmit the power from splined shaft to the generator shaft with required increased torque.

2.6. **Generator:** It is a simple motor or generator used for generation of electricity, just like used in other power generation units.

2.7. **Retarding device / Brakes:** This unit helps to control the motion of the rotating wheel i.e. it helps to stop the wheel’s rotation when it is not needed.

2.8. **Base:** It is a flat surface which supports the whole assembly.

3. **Construction**

The basic model of the magnetic generator consists of the above-mentioned components. A set of three magnetic wheels is mounted on a splined shaft. The shaft is supported by three bearings to allow its smooth rotation. The spring mass flywheel and the helical gear are also mounted on the splined shaft. A set of gears or gear train is arranged in such a way that the power will be transmitted to the generator shaft with required increased torque. The outer periphery of the magnetic wheel is mounted on supports in such a manner that the axis of the outer rim, inner rim and the shaft should coincide. All this assembly in mounted on the base. The outer rim is attached to the brake assembly. The brake assembly can be operated by a lever. It slides or moves the outer rim of the magnetic wheel to break the magnetic contact between inner and outer rim resulting in reduction of rpm and ultimately coming to halt.

The outer and inner rims are made of non-ferrous material so as to avoid any kind of magnetic attraction between the rim and the magnets. The outer and inner rims are designed in some specific way so that when magnets are placed inside them can repel each other properly and are separated by a gap of few millimeters. The magnets in the inner rim are placed in such a manner such that the magnetic field or the line passing through the center of the magnets should act as a tangent to the imaginary circle passing through their center. Similarly, the magnets placed in outer rim are tilted by some specific angle so as to get a motion by repulsive force. The magnets in both the rims are placed in such a manner that, the same poles will face to each other. A set of such magnets is placed all over the rim. The following figure shows the arrangement of the magnetic wheel and the complete setup of the generator.
4. Working

The working of the generator starts from its magnetic wheel which is the heart of the generator. The outer rim of the wheel is stationary and is fixed and supported by the brake assembly mounted on the base. The arrangement of the magnets as mentioned in the construction is made is such a way that the similar faces of magnets in the outer rim and the inner rim should face each other to cause repulsion. It is clear from the figure 5 and figure 6, the north poles are faced towards each other to cause repulsion. In both the rims, the magnets are placed slightly tilted at some specific angle to give the direction of rotation. When the magnet in the inner rim comes in the strong magnetic field of the outer rim magnet, a force of repulsion acts on both the rims. The outer rim is fixed and stationary but the inner rim being free to move, this repulsion causes the inner rim which is mounted on the shaft to rotate at some particular speed. The shaft is supported by bearing support. The inner rim is fixed to the shaft. So as the inner rim will rotate the shaft will also rotate.

There will be a small fluctuation in speed of rotation due to the spacing between the magnets. This fluctuation is needed to be eliminated because it will cause fluctuation in power generated. To eliminate this fluctuation, flywheel with some modified design is mounted on the shaft so that it will also increase the speed of rotation of the shaft. The dual mass flywheel is made with an arrangement of spring and weight, which on rotation helps to increase the angular speed hence it increases the rpm of shaft. Further, a helical gear train is mounted on the shaft. Helical gears are used here because of its advantages over other gears. A gear train is attached to the assembly. The gear train has an arrangement of gears with different gear ratios. It is used to increase the torque to a required level to drive the generator. Finally, the power is transmitted to the shaft of the generator. As the shaft of generator rotates, the electricity gets generated which is further can either be stored or can be used directly. Also, the voltage can be increased by implementing a voltage booster.

Advantages

1) Works in all types of weather conditions: Generally the other free energy sources like wind and solar energy alternatives rely much on natural phenomena. But magnetic generator can continue to perform well without depending upon weather conditions.

2) Safer to use: Evidently, the user is concerned with the safety of power generators. Being simple in construction and user-friendly, the magnetic generator is safer to use.

3) Fits in a small space: Small in size it can fit even in a small, condensed place. Thus, this magnetic generator can be used anywhere and are best suited for household purposes.

4) Minimum maintenance cost: Once this magnetic generator is installed, it can operate efficiently without any problems for long periods of time. Additionally, there is no need to check them on a regular basis and extra cost for generator maintenance can be avoided.

5) Ability to reduce the power bill: The magnetic electrical generator can reduce power bill by about fifty percent. Thus, it is one of the best reasons for anybody to have a magnetic electrical generator installed at home.

6) Ease in construction: Majority of people find it easy to build a magnetic electrical generator by themselves. Before constructing, one needs to abide by and understand the step-by-step guide available on the internet. The whole process of construction would take about few hours, and resources required for construction can be availed from a hardware store.

7) Ecofriendly: Being purely operational on magnets, it does not use any kind of fuel hence releases no emissions or harmful gases or constituents in the environment, which makes it completely eco-friendly.

8) Area of use: It can be used anywhere because of its small size and no requirements working conditions.

Applications

1) It can be used as a separate power-house in homes which may help in reducing electricity bills.

2) It can be used as a source of power in remote areas, where electric lines aren’t working.

3) It can be used in space as an alternate source of power while sending satellites for distinct operations.

4) It can be used as a power house of remotely operated vehicles in under water operations.

5) It can be used in unmanned aerial vehicles operated on electric power, which will increase the flight time of the aircraft.

6) It can be used in automobile vehicles to power the electrical system, which will eliminate the need of replacing or charging the battery again and again.
5. Future Work and Conclusion

In this paper, by integrating the basics of a generator and a motor, we successfully have a newer concept of free energy generator which runs on almost no input & gives a valuable amount of electric energy which can be used for many purposes. This is a conceptual design of free energy generator. In future with some more modification and calculations, a working model will be introduced. The paper revolves around the construction, working & applications of free energy generator & its future enhancements. This design may prove to be a pioneer in the field of research of free energy and can lead to revolutionary changes in the energy field. Now it is possible to generate free electricity. This is how magnets have been with us ever since we started generating electricity using conventional sources of energy.

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