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Collaboration of Gravity Based Theories for Power Generation

Saurabh Vikas Chaudhari.

U.G. Student, Department of Mechanical Engineering, J.T.M.C.O. Engineering, Faizpur, Maharashtra, India

ABSTRACT: Present maximum percentage of power generation is depending upon conventional energy sources and fossil fuels which will get exhaust in next few decades. Conserving energy has become the biggest issue in present scenario due to the increasing demand of the electrical power due to the development and industrialization at high rate. To fulfill this power demand of the world without any harmful effect on environment is possible by using the power of gravity which is available all over the earth. The basic concept of gravity power generation mechanism is, when a body (mass) is released from higher altitude to lower one its potential energy is converted into kinetic energy. This kinetic energy is converted into circular motion and the accelerating pulses through electric motor are added during downward motion, to maintain the continuity of circular motion to generate electricity.

KEYWORDS: Gravitational energy, Accelerating pulse, Pushing wheel, Friction tooth.

I. INTRODUCTION

Due to high rate of industrialization in developing and developed countries the demand for electricity is increasing continuously day by day with high rate. Many types of electronics products are arrived in market which puts the load on available power sources. Most of the available power sources generate pollutants hazarding the environment. Hence the humans are looking for the better engineering solution for power generation which does not harms the environment and fulfill the power demand.

Today maximum percentage of power generation in world is depends upon fossil fuels which will get exhaust in next few decades. And the generation of power by wind power, water power, and solar power needs to pay more cost and also the power plants based on these inputs cannot install anywhere, they have many installation limits. Hydroelectric power plants and solar power plants need huge capital cost also solar power is available only for 10-11 hours in a day and dams cannot be construct on large scale as it affects the environment of lives present in river. The best place for solar thermal power plant is desert area but availability of water is major problem for steam generation and cooling. Only, the gravity is the free input fuel present everywhere on earth and will available till the end of earth. Gravitational energy is very easy to convert in mechanical motion for power generation. The capital required for installation of power generation unit is very less and also it can be install anywhere on earth. The use of gravitational energy for power generation is eco friendly and will helps to control the problems like global warming.

II. RELATED WORK

Sir Isaac Newton introduced the gravitational energy to the science community near 400 years ago. According to his phenomena when, any object having mass fall from the certain height towards earth surface its potential energy start converting into kinetic energy till the object touches the earth, due to gravitational force acting on it.

Recently, retired person Mr. Chas Campbell of Australia demonstrated electrical power gain with a flywheel system which he developed. But he fails to explain to the science community how the energy is gaining from the earth gravitational energy by using flywheel, when he applied examination request for patent grant.

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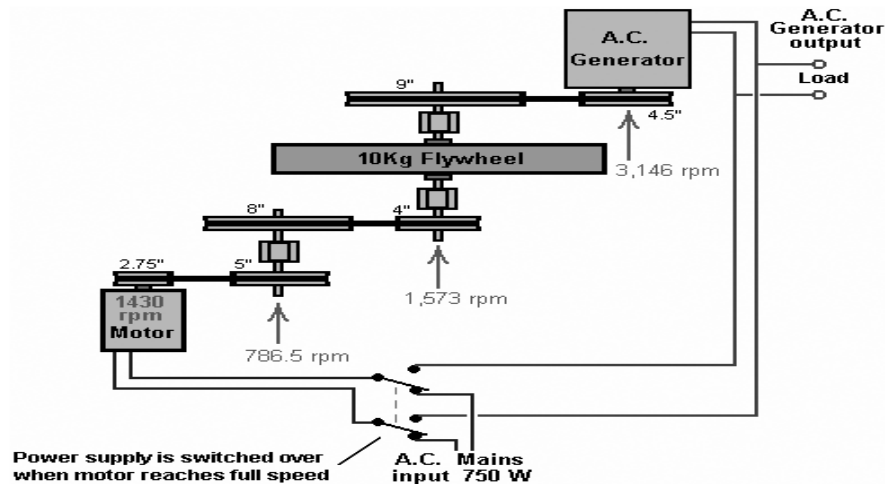


Fig. 1 Chas Campbell's power generation system

But the fact is that, the generating system of the Mr. Campbell's generates a considerable amount of excess energy drawn from the gravitational field. He has now confirmed the excess energy by getting the flywheel up to speed and then switching the drive motor input to the output generator. The result is a self-powered system capable of running extra loads.

In October 2009, Lawrence Tseung and his band of helpers demonstrate the pulse theory of energy addition based on gravity. The theory explains that "if an energy pulse is applied to a flywheel, then during the instant of that pulse, excess energy equal to $2mgr$ is fed into the flywheel, where "m" is the mass (weight) of the flywheel, "g" is the gravitational constant and "r" is the radius of the centre of mass of the flywheel".

This means that if the flywheel is driven smoothly at constant speed, then there is no energy gain. However, if the drive is not smooth, then excess energy is drawn from the gravitational field. That energy increases as the diameter of the flywheel increases. It also increases as the weight of the flywheel increases. It also increases if the flywheel weight is concentrated as far out towards the rim of the flywheel as is possible. It also increases, the faster the impulses are applied to the system.

On page 19 of the book "Free Energy Generation - Circuits and Schematics" John Bedini shows a diagram of a motor/generator which he has had running for three years continuously while keeping its own battery fully charged. There is a black and white picture of a very large construction version of this motor built by Jim Watson and which had an excess power output of many kilowatts, due to the very large size and weight of its flywheel. The excess energy is drawn from the Earth's gravity field, and so, two factors are involved. The first is the size, weight and speed of rotation of the flywheel itself and the second is the effectiveness of the drive connection between the drive motor and the flywheel.

III. SCOPE OF RESEARCH

The scope of this research is everywhere, where the electricity is demanded such as in electric vehicles as a power supply unit, in companies or factories as a separate power house, in houses for running home appliances, in ships for power generation, in airplanes etc.

In many rural areas there is not possible to install grid lines to supply power, this mechanism will fulfill their power demand. As the construction cost and the compact size of this power generation makes this power generation unit usable for the military applications.

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IV. METHODOLOGY

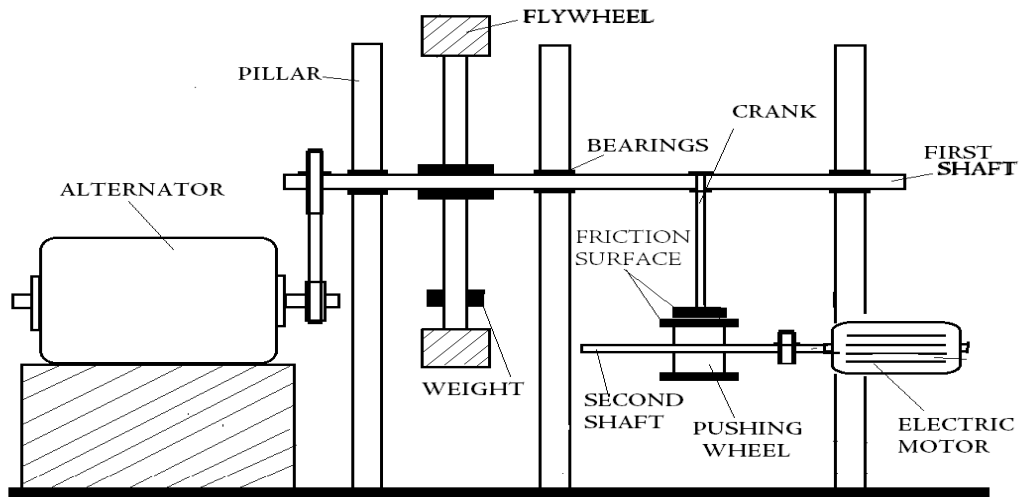


Fig.2 Basic arrangement of gravity based power generation mechanism.

The mechanism consist of rimmed disk flywheel, a set of shafts, crank with friction surface, electric motor, pushing wheel with continuous friction surface, set of bearings and pillars, weight fixed on flywheel surface and alternator with transmission drives. The crank and the flywheel is fixed on the same shaft. The weight is fixed on the flywheel surface according to torque requirement. The pushing wheel is driven by means of electric motor.

As illustrate in fig. 2, when the weight is at the top of the vertical axis during 1st 360 degree rotation the starting velocity of the first shaft is zero. The weight fixed on the flywheel fall in a downward direction and starts to generate the velocity due to gravitational force acting on it; the energy generated during its half downward 180 degree rotation is stored in the flywheel such that the weight is capable to complete its next half upward rotation without any external energy input. But at the top energy in the flywheel becomes zero. To make this mechanism continuous and interrupted the power pulse is added during downward motion of weight through friction. When the accelerating pulse is applied on the weight through pushing wheel, due to gravitational energy acting on it generates excess energy and stores in flywheel and hence at the end of the 360 degree rotation weight remains in velocity, which becomes starting velocity of the 2nd rotation. As the starting velocity is maximum the power required to provide accelerating pulse to keep the motion in continuous form is less and hence the power input is less due to gravitational force acting on it as compare to output power. Again in next rotation weight has maximum starting velocity compare to previous rotation and mechanism generates more power; the process of energy addition works continuously till the input is provided to the mechanism. The rotational motion of first shaft is transmitted to alternator through power transmission drives, where it gets converts into electrical energy.

$$\text{Length of crank or radius of wheel having friction segments} = \frac{\text{ELECTRIC MOTOR RPM}}{\text{FIRST SHAFT RPM}} \times \text{PUSHING WHEEL RADIUS}$$

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V. EXPERIMENTAL RESULTS

1. At the high rpm the weight produces huge centrifugal force due to which the generation unit starts to wobble. Large amount of energy get loss to overcome this centrifugal force; hence system is useful for low rpm generation units.
2. The generation unit with weight gains excess energy when the speed of the first shaft is less than 200 rpm since the centrifugal force is less at low rpm i.e. crank with weight is suitable for low rpm mechanism.
3. When the accelerating pulse is added to the flywheel through pushing wheel to friction crank, excess energy gain is observed.
4. As the number of accelerating pulses increases per rotation, the output of the alternator increases.
5. Alternator can gear to the first shaft as system is capable to generate high torque.

VI. POSSIBLE MODIFICATIONS

1. To lower the energy losses due to wobbling of mechanism due to generation of centrifugal force from high R.P.M. mechanism reduce the RPM of first shaft and use the speed multiplication power transmission drives between alternator and first shaft.
2. Replace the crank with intermittent friction tooth on its contacting surface, to balance centrifugal forces generating due to mass of crank and also maximum accelerating pulses can be provide to the weight during its downward direction.
3. Number of flywheels or wheels with intermittent friction tooth on its contacting surface can be increase on first shaft to satisfy the load demand or to provide more energy.

VII. CONCLUSION

“When the accelerating pulse or pulses added in the object having certain mass during its downward motion in the direction of the earth, it gains excessive energy more than, the energy added during its downward motion”. Energy conversion and stable energy output can obtain using such a mechanism by combining theories of Sir Isaac Newton and Mr. Lawrence Tseung based on gravitational energy.

The other main advantage of the gravitational power generation mechanism is that it can independently generate electricity anywhere on the earth without generating any hazardous pollutant in the surrounding.

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BIOGRAPHY



Saurabh Vikas Chaudhari studying in last year of mechanical engineering in J.T. Mahajan College Of Engineering, Faizpur. He is working on gravity based power generation systems and has applied (awaiting examination) for *Patent*. His main areas of research interest are designing machineries, electric car’s fuel mechanism, increasing efficiency of I.C. Engine based power generators.