Buoyancy Machine for the Generation of Electrical Power

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Abstract –

A Buoyancy machine having an horizontal rod immersed in a tank of water and disposed on upper and lower rotatable rollers in a parallel alignment tightly enough to frictionally engage and rotate the pulleys, there being transversely arranged and longitudinally spaced, relative to the rod, collapsible air ball on the outwardly facing side of the horizontal rod. When operating, the horizontal rod has one part continually moving upwardly and an opposite part moving downwardly. The air ball moving downwardly and expand on the upwardly moving part of the horizontal rod; and those on the opposite downwardly moving part open upwardly in a collapsed condition. Air is pumped to a horizontally disposed discharge pipe adjacent the lower end of the horizontal rod, the pipe having openings for discharge of air into the succeeding upper open valve to cause the air ball to be filled with air and expand the buckets so as to move buoyantly upwardly.

A Buoyancy force power generation apparatus for producing motive and electrical power includes system housing which is vertically standing cylindrical tower in which a liquid is stored there by forming a liquid section from its bottom and gas section over a liquid section.

This invention related to a power generation using Buoyancy force and more particularly, this invention related to a method and apparatus for generating motive and electric power using Buoyancy force of water and air, thereby substantially permanently generating clean energy. The forces of Buoyancy are created by motive power, to a drive shaft rotatably connected to an electrical power generator, thus continuously generating the electric power.

Introduction –

There is an ever increasing demand for energy in the word. The main resource of energy has been the fossil fuels, which have been used to generate electrically and it is the most convenient and desired type of energy. However due to the problems with fossil fuels such as pollution, green house effect, and the limited resources, there is a crucial need for other energy resources. Many researchers throughout the word have dedicated their time and research facilities to find new ways of harnessing energy from renewable sources but the progress and achievements has not been satisfactory yet.

Renewable sources of energy are the most promising candidates to be considered as the energy resources for future life on earth. As mentioned before there have been some efforts to find efficient ways for extracting energy in solar radiations and wind currents. However the electricity generated from these resources is not economic. Because the approaches applied in solar cells and wind turbines not satisfactorily efficient. Using biomass is another source of energy to generate power but source of this energy is not as widespread as wind or solar energy.

Here we are introducing new way to form a renewable energy model to produce electrical power in very low cost and which is very useful in today's as well as tomorrow's life in day by day use. We can called it as an Buoyancy Machine.

MODEL OF BUOYANCY MACHINE

A Buoyancy machine apparatus includes a water or liquid source such as a water tank and a buoyant force in communication with an electrical generator. The buoyant air ball is lifted from a lower level to a higher level. The system can store energy with nom loss In power over a long period of time.

Archimedes' principle (also spelled Archimedes's principle) states that the upward buoyant force that is exerted on a body immersed in a fluid, whether fully or partially, is equal to the weight of the fluid that the body displaces. Archimedes' principle is a law of physics fundamental to fluid mechanics.

i.e. Buoyant force = weight of the displaced fluid

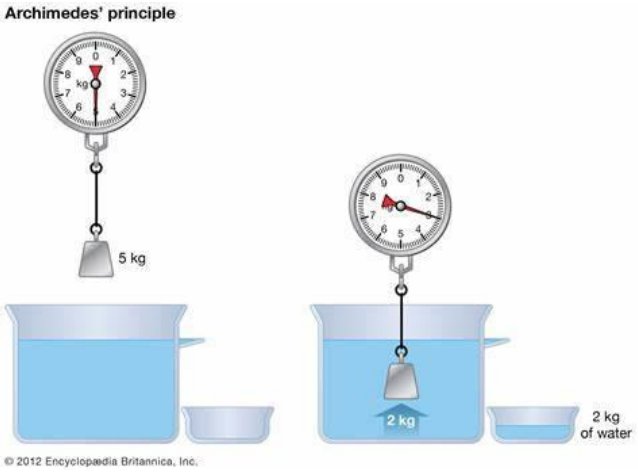

Fig1. Archimedes' principle

Model:

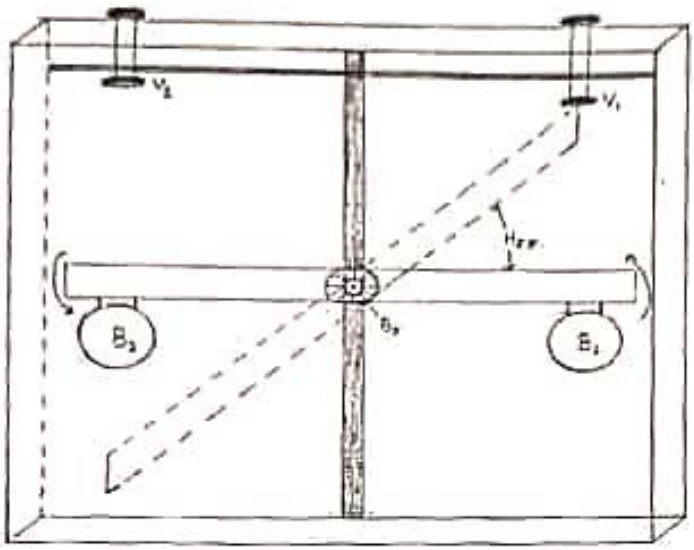

Fig2: Buoyancy Machine Schematic arrangement

This machine includes the following apparatus;

B_1 – The first air ball tube

B_2 – The second air ball tube

V_1 – The first valve

V_2 – The second valve

B_r - The bearing which is attached to the horizontal rod

Hz_r - The horizontal rod

Accordingly, the rod rotates 90° in the clockwise direction and the air ball tubes are positioned opposite each other in the horizontal rod tracks. In succession, the air valves of Ist side are closed and the air valves of other side are opened. According to this the wheel in gear box system is rotating clockwise direction. This converts kinetic energy into mechanical energy. That is, the generator converts mechanical energy into electricity.

A buoyancy machine apparatus that creates electrical power from the movement of the apparatus through a fluid as the apparatus cycle's negative buoyancy to positive buoyancy is

illustrated in the attached figures. In particular, a first embodiment is illustrated in FIG. 2. The apparatus is positioned relative to a collection of the fluid, such as a water in a water tank. Generator connected to an driving or agitating mechanism, via a shaft or axle. Having ordinary skill in the art, and typically includes a simple device that includes an armature to move a magnet near a wire to create a steady flow of electrons. That is, the generator converts mechanical energy into electricity to serve as a power source. The propellers or turbines are attached to a ballast system to rotate axles connected to the generator so that the generator will in turn create the desired electrical current.

Conclusion:

Accordingly, it is an object of the present invention to provide a practical apparatus for generating power utilizing gravitation force and buoyancy.

Another object of the present invention is to provide a power generating apparatus which is both simple in application to other devices such as generators and is low in manufacturing cost.

The principal object of the invention is to formulate and identify methods for achieving a high performance in air transportation and ingestion, for reducing the surface resistance and friction, and for optimizing the design of an efficient buoyancy engine, which converts the potential energy of buoyancy into kinetic energy for the purpose of acquiring free energy.

The most important object is environmental in providing an energy conserving and energy gaining power source for electric power generators (i) to meet future power requirements without consuming natural resources. Unlike wind power generators, the power output of the modified buoyancy engine is time invariant, and therefore much preferred in power grid applications.

The invention comprises a pair of balls spaced horizontally apart and carried by support members. A horizontal rod is disposed on the rollers so that one part of the horizontal rod moves upwardly and the opposite part moves downwardly when the apparatus is in operation. The apparatus is disposed in a body of water and there are a plurality of collapsible buckets or air traps secured to the belt and extending transversely of the belt and spaced longitudinally thereof. Each air trap comprises a pair of panels hinged together along adjacent transverse edges by means of a hinge; and at the ends the panels are closed by flexible walls of imperforate material such as a suitable plastic.

Result:

We develop the Buoyancy machine for the generation of electrical power. With the help of this machine we can generate the at least same electrical power when we provide the ball

tubes by the air compressor. The generation of electrical power depends upon the gear box mechanism i.e. if we increase the seed of r.p.m. the maximum power will be generated.

Observations:-

1) Buoyancy Machine is manufactured and instead of electric generator. We used the machine to lift the weights. The highest weight lifted by buoyancy machine is 75kg with frequency of 0.5Hz.

2) The frequency is very low because no gear box is used.

3) It is also observed that buoyancy machine has very good power lifting capacity.

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