Gravitational Motor

Using the Quantum Controller of Gravity

Fran De Aquino
Professor Emeritus of Physics, Maranhao State University, UEMA.
Titular Researcher (R) of National Institute for Space Research, INPE

The Gravitational Motor is a type of motor which converts Gravitational Energy directly into Rotational Kinetic Energy. Its fuel is therefore the Gravitational Energy (no needs gasoline, oil, etc). An example of Gravitational Motor is the turbines of the hydroelectric plants. However, they are not mobile i.e., they cannot be transported from one place to another as the combustion motors or the electric motors. Mobiles Gravitational Motor can be developed starting from the devices of gravity control, such as the Quantum Controller of Gravity (QCG) [1]. The form of the QCG originally proposed is spherical. Here, it is described a Gravitational Motor which uses a QCG with *spherical cylindrical* form. This Gravitational Motor can have very-high power, and it can be used in order to generate electrical energy at large scale or traction to move cars, ships, tankers, aircraft carrier, trains, etc.

Key words: Gravitation, Gravity, Gravitational Energy, Gravitational Motor, Quantum Controller of Gravity.

1. Introduction

In the last years I have proposed several types of Gravitational Motors based on some devices of gravity control* [2, 3, 4]. Here, I describe a Gravitational Motor which uses a new gravity control device: the *Quantum Controller of Gravity* (QCG) with *spherical cylindrical* form. The spherical cylinder, also called *spherinder*, is constructed as shown in Fig 1.

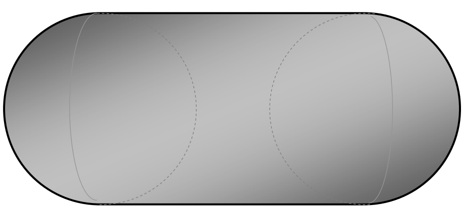

Fig.1- The spherical cylinder.

According to theory of the QCG, if the gravity below the QCG is g then above the QCG becomes $\chi^2 g$ (See Fig.2), where χ is the factor defined by the correlation $m_{g(\Delta x)}/m_{i0(\Delta x)}$ between the gravitational mass $m_{g(\Delta x)}$ and the inertial mass at rest, $m_{i0(\Delta x)}$, of the region with thickness Δx, in the outer shell of the QCG.

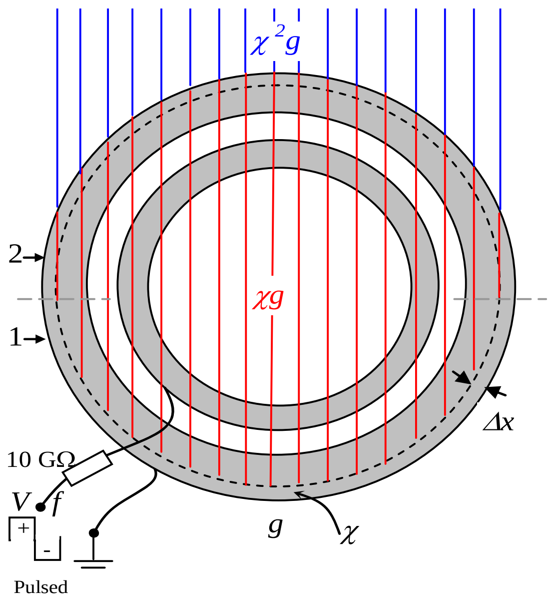

Fig.2 – The shell with thickness Δx works as a *Quantum Controller of Gravity* [1]

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* BR Patent number: PI0805046-5, 2008.

Now consider the Schematic Diagram of a Gravitational Motor using QCG with *spherical cylindrical* form, shown in Fig.3. By increasing the gravity acceleration above the QCG it is possible to move a fluid through a turbine and consequently to produce rotational kinetic energy (See Fig.3). It will be shown that this Gravitational Motor can be designed for have any power in the range of 0-200,000 HP. Thus, it can be used in order to generate electrical energy at large scale or traction to move cars, ships, tankers, aircraft carrier, trains, etc.

2. The Power of the Gravitational Motor Using a QCG

Since the gravity acceleration upon the liquid inside the Gravitational Motor (See Fig.3) is by $a=\chi^2 g$ then the velocity v of the liquid is given by $v=\sqrt{2ah}=\sqrt{2\chi^2 gh}$. Therefore, the liquid acquires a kinetic energy $K=\frac{1}{2}mv^2$, where m is the inertial mass of the liquid. Thus, we can write that the power P transported by the liquid is

$$P=\frac{K}{\Delta t}=\frac{1}{2}\left(\frac{m}{\Delta t}\right)v^2=\frac{1}{2}\rho Q v^2 \qquad (1)$$

where ρ $\left(kg/m^3\right)$ is the density of the liquid and Q $\left(m^3/s\right)$ is the volumetric flow rate, which is expressed by $Q=Av$, where A is the area of the cross-section, given by $A=xL$ (See Fig 3 (b)). Thus, Eq. (1) can be rewritten as follows

$$P=\frac{1}{2}\rho Q v^2=\frac{1}{2}\rho A v^3=\sqrt{2}\rho(xL)\chi^3 g^{\frac{3}{2}} h^{\frac{3}{2}} \qquad (2)$$

The power of the Gravitational Motor, P_{motor}, depends on the performance of the motor i.e., $P_{motor}=\eta P$, where η is the performance ratio. Thus, we can write that

$$P_{motor}=\sqrt{2}\eta\rho(xL)\chi^3 g^{\frac{3}{2}} h^{\frac{3}{2}} \qquad (3)$$

Assuming that $\eta=0.8$; $\rho=1000kg/m^3$ (*water* †); $x=0.10m$ ($\phi=x=0.10m$; $d=2x$ = 0.20m); $L=0.60m$; $\chi=11$; $g=9.8m/s^2$ and $h=0.10m$ $\left(H=0.61m; l=0.26m\right)$, then Eq. (3) yields

$$P_{motor}=87{,}654.34 watts \cong 117 HP \qquad (4)$$

Note that this power is of the order of the power of most motors of the *cars*.

By increasing *only* the dimensions of this Gravitational Motor, for example, if $x=0.20m$ ($\phi=x=0.20m$; $d=2x=0.40$m); $L=1.00m$; $h=0.20m$ $\left(H=1.21m; l=0.51m\right)$, the power of the motor becomes

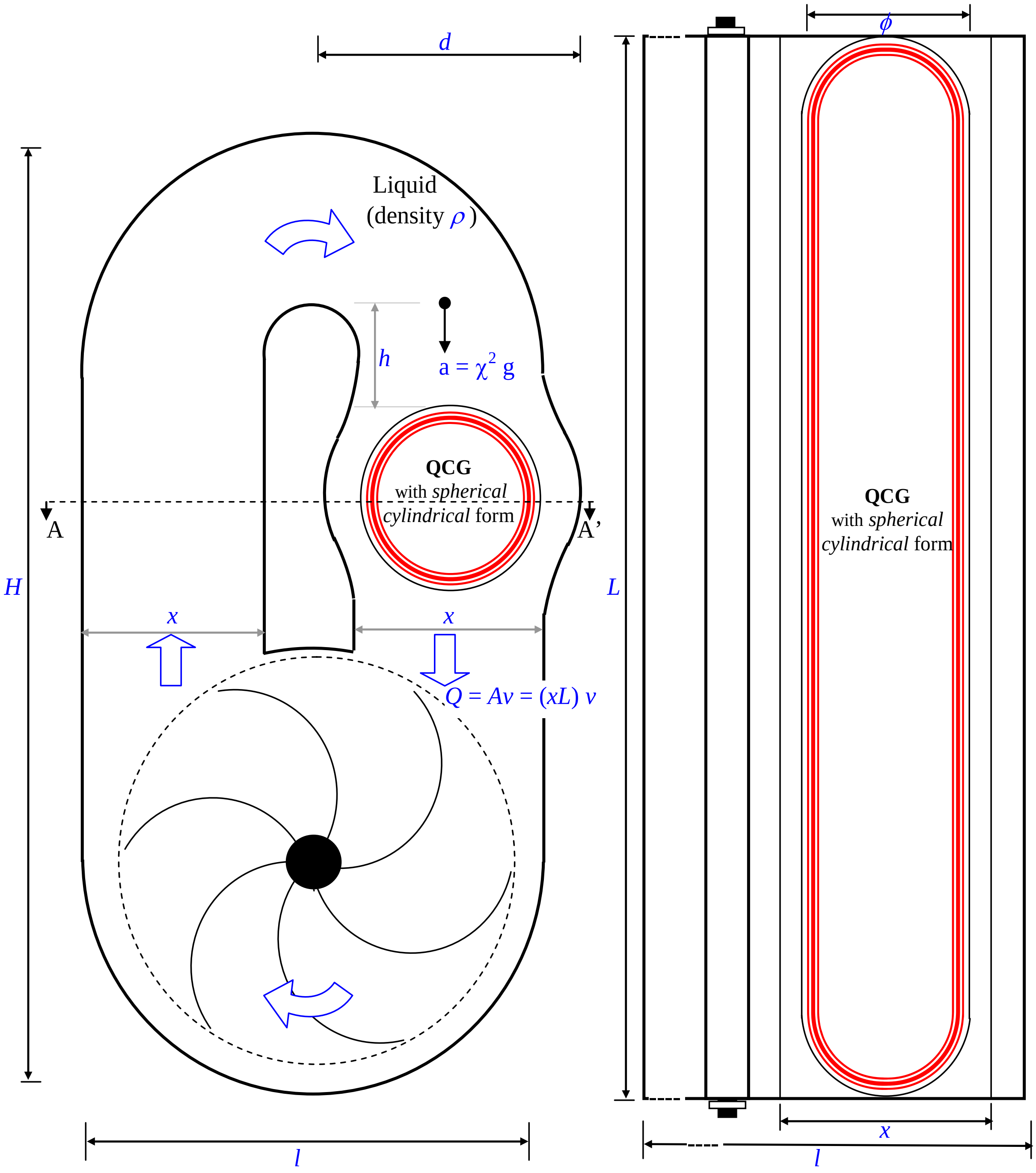
$$P_{motor}=826{,}413.0 watts \cong 1{,}108 HP \qquad (5)$$

In practice, the increasing of the dimensions of this motor is obviously limited. However, possibly they can be increased up to the following values: $x=0.60m$ ($\phi=x=0.60m$; $d=2x=1.20$m); $L=5m$; $h=0.60m$ $\left(H=3.61m; l=1.51m\right)$.Then, making $\chi=14.5$, we conclude that the power of this Gravitational Motor can reach the following value:

$$P_{motor}=1.5\times10^8 watts \cong 200{,}000 HP \qquad (6)$$

This power can be used to move tankers, aircraft carrier, trains, etc.

† Others liquids can also be used. Liquids with high-density (*Bromo*, $\rho=3{,}119kg/m^3$; *Mercury* $\rho=13{,}534kg/m^3$, etc.) can be used in specific cases.



(a) Vertical Cross-section

(b) AA' Cross-section

Fig.3 – Schematic Diagram of a Gravitational Motor using a Quantum Controller of Gravity (**QCG**) with *spherical cylindrical* form.

References

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