New Compact Generator (Results of Testing)

V. V. Roshchin and S. M. Godin

The authors go further in the research of possibility to receive free energy by means of rotating constant magnets (Searl's effect).

The aim of generator compact model (GCM) testing was studying of possibility to produce a small and maximum cheap model, which uses the ceramic magnets. Laboratory research of this model of generator was aimed on the discovery of self-generation effects and effects of weight change, which were already received on the full-size generator [1].

A general view of GCM is shown on the Fig. 1. The generator represented a mechanical system consisted of general construct as a cylinder made of stainless steel divided by its height on approximately two equal parts. The motor of direct current with collector was situated in the lower part, windings of stator and rotor were connected in series.

Fig.1.
General view R_{mx}=59mm

In the upper part of the construction on the axis of motor the rotor is situated as a cylindrical ceramic magnet with a central hole made on the base of cobalt-samarium mix. The magnet is magnetized vertically and inserted into the steel fixture, which preserves the magnet from destruction during the quick rotation. Small magnetic rollers also made of ceramic magnets and magnetized along the axis of rotation were placed around the rotor. All 12 rollers were placed into the aluminum cylinders, which preserve their brittle ceramics from mechanical impact during the work in emergency state. The main idea of such construction consists in the fact that in initial state the rollers were attracted by the magnet of rotor to the side face. Due to the repulsion of the rollers from each other, the distance between them appeared automatically. With this distance they uniformly distributed along the entire perimeter of the rotor. During acceleration of the rotor the rollers diverge from the rotor step by step and begin to run in the outside cylindrical fixture, which is placed around the rotor at the distance of 1,5 mm from the external surface of rollers in the initial states. The height of the rotor magnet is 24 mm, the diameter of the inside hole is 40 mm. All other geometrical size s and ratios are given on the Fig. 2.

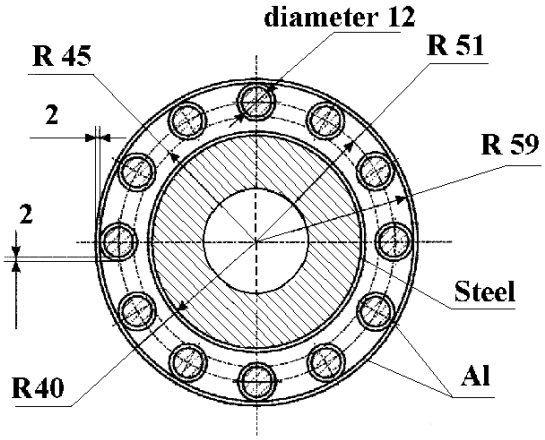

Fig.2

It was supposed that with the certain acceleration of rotation the rollers would begin to rotate inside the outside fixture with self-acceleration and would carry metal surface of rotor device. This mode will be easy to discover due to the possible decrease of the current consumed by the electric motor. Thus, the aim of GCM testing was an attempt to find the features of energy transformation of environment, which lies in the self-acceleration of the rotor device or other characteristic effects (concentric magnetic walls around the device and fall of temperature) discovered already. The program of device testing included registration of dependence of rotational speed of the rollers along the outside fixture from rotation speed of the motor.

Appearance of GCM is shown on the Fig.3, when this device is ready to test in laboratory conditions. GCM was placed on the massive grounded steel plate. The power supply made in the form of controlled transformer, isolating transformer, bridge diode rectifier and capacitive filter were placed to the right. Besides, the generator of reference frequency G3-112 and frequency meter C3-54 were placed here.

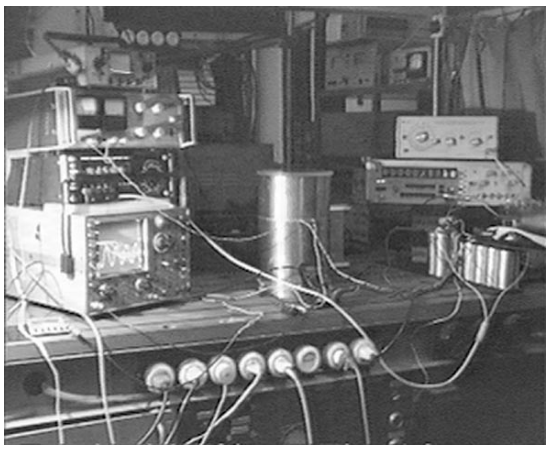

Fig.3.
Lab setup

The 2-channel oscilloscope C1-99, digital combined unit TSH300 applied for the measurement of consumption current and power supply TEC-88 (0-30 V, 0-2,5 A) applied for power supply of the optoelectronic sensor of device rotation were placed to the left. The measurement of rotation speed of the rollers was made with the induction-type sensor, which was placed at the height of the rollers, on the reverse side of the aluminum fixture. The rollers after they separated from the rotor, rolled along this fixture. During the passing of every roller by the induction-type sensor, the impulse of voltage with the amplitude of about 1 V was produced. This voltage was supplied to one of the inputs of 2-channel oscilloscope for the direct observation on the screen. A signal from the reference generator connected with the frequency meter was supplied to the second input of oscilloscope.

Synchronization of scanning of the oscilloscope was provided from the same reference signal. The frequency of the signal on the reference generator was set to provide the most stable immovable pattern on the both channels of the oscilloscope. An accurate measurement was made according to the data from frequency meter. Such method of measurement was chosen because the applied collector motor of direct current had permanent deviations of rotation rate due to the change of voltage in mains, heating of bearings, collector and other reasons. All this hampered the reception of an accurate value of average rotation rate directly from the readings of frequency meter in the case of direct connection of induction-type sensor to the input of frequency meter. In suggested method the integration was made visually by the movement of signal patterns on the screen of oscilloscope. The signal from the stable reference generator was provided to the input of frequency meter. It was necessary to divide the readings of frequency meter on 12 to receive the real value of rotation rate in rates per second (rate of running around the fixture) of the rollers.

Measurement of rotation rate of the rotor was made in analogous way, but as a sensor we used the self-made sensor on the base of optic pair IR emitter-receiver with an open optic channel. The sensor was assembled on the textolite baseplate and attached to the upper plexiglass head of GCM by means of usual plasticine. Using this sensor we could quickly and effectively adjust the necessary operating gap between the surface of optoelectronic couple and surface of special metal disk with 25 dark and 25 light sectors applied on it. Thus, during one rotation period rotor the photon-coupled sensor gave 25 implses of voltage, which were transferred to the oscilloscope for immediate observation. The appearance of photon-coupled sensor of rotations attached to the upper plexiglass head of the GCM unit is shown on the Fig.4.

On the Fig.5 you can see the oscillograms of signal from the photon-coupled sensor of rotation (upper beam) and harmonic signal from the reference generator in the moment of coincidence of frequencies with a one phase accuracy. The real rotation rate of the rotor was

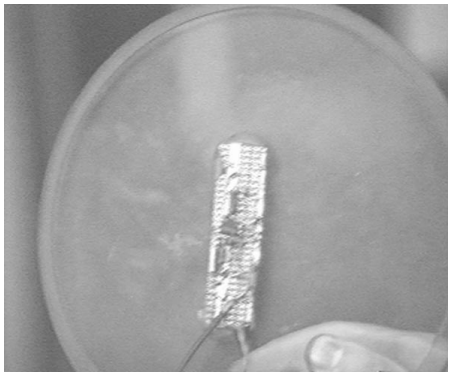

Fig.4.
Optron sensor

determined as a measured frequency (rate) of generator divided on 25 (number of dark and light sectors on the disk of rate controller).

To receive reliable information on the characteristics of electromechanical system "motor-permanent magnet of the rotor" there were made several bare measurements without installation of the rollers. Measurements were made with the placing of magnet north pole up and vice versa.

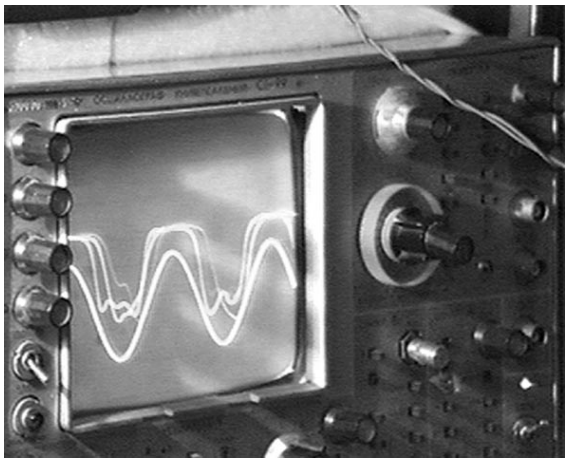

Fig.5.
Signal from the sensor

As we can see from the diagrams of dependence of the motor consumption current from the applied voltage of power supply, the strength of consumption current increases with the voltage of power supply and reaches its maximum at 0,31 A with the minimal possible rotation rate of the rotor. The strength of consumption current does not depend on the polarity of installation of the magnet in the limits of experiment accuracy. For the given motor there is an area of minimal consumption current, which lies in the diapason from 40 to 80 Wt.

We got similar curves of rotation speed for the cases of different location of magnet of the rotor, which means the independence of rotation speed from the polarity of the magnet of the rotor.

The results of measurements of rotation speeds of the rotor and rollers (given separately) are presented as Table1

Table 1

N- pole up							S - pole up				
#	U (V)	I mA	freg. rot	rps	freg. rol	rps	I mA	freg. rot.	rps	freg. rol.	rps
1	120	196	943	37.72	102.5	8.54	199	941	37.64	102	8.50
2	110	181	900	36	102.5	8.54	183	901	36.04	102	8.50
3	100	170	857	34.28	102.5	8.54	172	858	34.32	102	8.50
4	90	160	818	32.72	102.5	8.54	162	818	32.72	102	8.50
5	80	157	778	31.12	102.5	8.54	155	778	31.12	102	8.50
6	70	149	738	29.52	102.5	8.54	150	738	29.52	102	8.50
7	60	147	694	27.76	102.5	8.54	146	694	27.76	102	8.50
8	50	148	650	26	102.5	8.54	148	650	26	102	8.50
9	40	154	599	23.96	102.5	8.54	154	599	23.96	102	8.50
10	30	170	530	21.2	101	8.42	169	533	21.32	100.5	8.38
11	25	183	480	19.2	97	8.08	180	484	19.36	97	8.08
12	23	199	454	18.16	93	7.75	193	457	18.28	93.5	7.79
13	21	210	418	16.72	81	6.75	218	426	17.04	79.5	6.63
14	19	219	394	15.76	79	6.58	234	381	15.24	77	6.42
15	17	239	351	14.04	72.5	6.04	255	339	13.56	68.5	5.71
16	15	265	295	11.8	70.5	5.88	280	266	10.64	67	5.58
17	13	290	212	4.48	67	5.58	300	200	8	65	5.42
18	12	330	56	2.24	61.5	5.13	300	153	6.12	48	4.00

Here, like in the previous example, two cases are considered. They are the case, when the magnet was installed its north pole up and an opposite case. The poles of the rollers change accordingly. We should note that with the slow change of power supply voltage, we practically always observed the instability of the trajectories of the rollers and their tailing from the operating surface, which led to the adhesion of one or some pairs of the rollers together.

This fact distorted the pattern of measurements, and we had to introduce correction factors during the calculation of rotation speed of the rollers. These factors depend on the number of fallen down or adhered rollers in pairs. This table was made taking into account these correction factors and it is an average one according to the results of five tests. As we can see from the table, no self-acceleration of the rollers was found. After the speed reaches a particular value of 8,5 rps, the speed of the rollers stabilizes and does not increase in spite of the growth of rotation speed of the rotor magnet.

Also we can see from the Table 1 that the rollers always have a tendency to retard and after the full separation with the voltage of 20-23 V.

Concerning the polarity of magnet location we can say that it does not influence the rotation speed of the rotor and rollers in the limits of miscalculation in determination of speed and voltage in the given experiment. Some differences in speed are defined only by mechanical characteristics of the rollers and surface of the fixture, which was used for revolving around. We should say that the outside surfaces of the rollers and the surface were made of the same material (aluminum) that's why they have a tendency of attrition even during one experiment. (10 minutes). Due to this reason we couldn't get the full reiteration, but the accuracy of measurements was sufficient to establish the fact of full absence of the self-acceleration effects and some differences between polarities of installation the rotor magnet and rollers.

Unfortunately, we couldn't find any anomalies in the temperature distribution and distribution of magnetic field around the converter. "Magnetic and heat walls" discovered in experiments with a big converter were almost absent around the small device.

Conclusion

These experiments proved the point of view that during the device operation the nonlinearity of the wave processes, which take place in quantum medium (ether) plays the main role. It is evidently, that there is some critical value of parameters in the magnetic system of the converter (mass, induction of magnetic field), and only in the case of excess of these parameters the appearance of above-mentioned effects is possible.

References

1. V.Roshin, S.M.Godin An Experimental Investigation of Physical Effects In a Dynamic Magnetic System, New Energy Technologies. Issue #1, July-August 2001, pp.3-5.

Photo: Sergei M.Godin (left) and Alexander V. Frolov (right), St.Petersburg, August 2001

Alexander V. Frolov: I have to say about my personal opinion on this experimental work. It is a very strange project. I am not sure if these are 100% true experimental results due to absence of real prototype at the present time (Only the description of 7KWt system was published. It was built in 1992, according to S. M. Godin). From the other hand, the theory of this energy converter and its description by S. M. Godin and V. V. Roshchin is in good correlation with other theories on inner structure of physical vacuum. Faraday Lab Ltd will develop this research direction and we hope to present our own experimental results in future.

Some Practical Results From the Theory of Medium, where Matter Exists

Dr. Anatoli V. Rykov

Chief of the Seismometry & Engineering Seismology Lab, United Institute of Physics of the Earth named by Otto Yu. Schmidt
B.Gruzinskaya str.10, Moscow, 123810, Russia
E-mail: rykov@uipe-ras.scgis.ru *7-095-254-2420*

In this article the author develops a discussion about the theoretical basis of the Searl's effect. The descriptions of experiments made by Roschin and Godin are presented in this book.Small converter is also discussed.

Abstract

Medium, where matter exists is an objective reality of Nature. It has a structure which consists of electrical mass-less dipoles. This medium is responsible for gravitation, inertia and propagation of light. We can influence this medium and thus control gravitation and forces of inertia that can be used for the movement without inertia and transformation of elastic energy of this medium to the energy of matter.

Void is only void and nothing more. Void cannot have any physical properties. For example, vacuum has physical parameters, i.e. dielectric and magnetic penetrability. That's why vacuum cannot be void or empty space of the Universe. Let's consider the problem of medium (vacuum) in details. At first let's remove a blunder of physics presented by Coulomb's formula. It lies in the fact that permittivities of medium were put to the denominator of formulas for electric and magnetic forces. Let's introduce their inverse values:

$$\nu = \frac{1}{\mu} = 1.0000000028 \cdot 10^{7} \left[a^{2} kg^{-1} m^{-1} s^{2} \right].$$

It is a magnetic constant of vacuum equal to inverse value of magnetic permittivity.

$\xi = \frac{1}{\varepsilon} = 8.98755179 \cdot 10^{9} \left[a^{-2} m^{3} kg s^{-4} \right]$ is a dielectric constant of vacuum equal to inverse value of dielectric permittivity. Newton's and Coulomb's formulas get an identical view. Speed of light gets more logical idea $c = \sqrt{\xi \nu}$. While writing this formula it is obvious that numerical expression of speed of light is defined by the square root from the numerical value of dielectric constant of medium. Order of values of electrical and magnetic constants of medium defines its absolute value. According to Maxwell's formulas charges are the carries of electricity and there are no carries of magnetism in spite of ideas by Dirac and his followers in theoretical physics. According to Maxwell only electrical currents produce all magnetic phenomena. In medium Maxwell's displacement currents define them. Thus, with the propagation of light (ElectroMagnetic Waves) in medium the main carrier of energy is an elementary electrical charge. Movement of this charge creates the displacement current. Displacement current in its turn creates a magnetic intensity, which creates the decrement of currents in the magnetic "field" and thus limits speed of light.

Experimental physics presents necessary data for the studying of medium. We mean data on photoeffects in medium, on nuclei and nucleons [1]. Let's remind the values of energies of gamma-quanta: 1 MeV, 137 MeV, 1836 MeV, 3672 MeV ($2m_e c^2$, $137 \cdot 2m_e \cdot c^2$, $1836 \cdot 2m_e \cdot c^2$, $1836 \cdot 4m_e \cdot c^2$). This series of energy gives valuable