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THE MODIFIED ROSCHIN GODIN SEARL GENERATORS
(M-RG-Searl-G)

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ABSTRACT

Several mechanisms have been derived and built based on the External Magnetic Field Propulsion System (***ExMF-PS***), using solenoid rotating low magnetic field (***RLMF***), electricity generation among which, based on that Searl Effect Generator (***SEG***) is thought to represents an uncontrollable chain of ***ExMF*** production that interacts with the opposite ***LMF***, thus producing magnetic force. Modified Roschin Godin Searl Generator ***(M-RG-Searl-G)*** represents an ideal electricity generator utilizing ***ExMF-PS*** bases; as explained by this article. In the long run, the ***M-RG-Searl-G*** system represents an alternative source of renewable energy that can help resolve coming world energy crises, enhance human development and help in bringing the required positive progress.

1: INTRODUCTION

Searl Effect generator (***SEG***) is a system invented by Prof. John Searl in 1945, it was intended to generate electricity by initially applying external power supply to operate magnetic strips of rotors, during the first tests, the uncontrollable rotation of the ***SEG*** reached a state where it uplifted from the ground, disconnected from the initiated power source and flay disappearing upward into the space [1].

Both V. V. Roschin and S. M. Godin managed to develop ***SEG*** further, in their modified ***SEG the Magnetic-Gravity Effects*** [2], which during an experimental research shows the following characteristics:

- At critical mode (between 550-600 rpm), the system start supported itself through a self-generation.

- At clockwise rotation, anti gravitational force is attained at 550 rpm, decreasing the weigh of the platform by 30%.

- Counter-clockwise rotation produces force in the direction of the gravity at 600 rpm, increasing the weigh of the platform by 30%.

- High e.m.f. is produced at specific terminals.

- When operated at speed greater than 590 rpm, a whistling sound is heard.

- Vertical concentric magnetic "walls" are observed around the installation.

- Abnormal permanent magnetic field was detected around the converter within radius of 15 meters.

- The detected zones of increased intensity of magnetic flux of 0.05 T located concentrically from the centre of the installation coincided with the direction of the rollers' field vector.
- Blue-pink glowing luminescence is observed around the converter's rotor.
- On the background of luminescence glowing on rollers' surfaces, a number of more vigorous strips of white-yellow color around the rollers were observed.
- Ozone smell was detected.
- Anomalous decrease in temperature by 27.3% - 36.4% in the vicinity of the converter, along the magnetic wall.

The researchers concluded that, *"All the results we obtained are extremely unusual and require some theoretical explanation. Unfortunately, the interpretation of the results within the framework of the conventional physical theory cannot explain all the observed phenomena besides the change of the weight"* [2].

Based on the new approach in fundamental physics as introduced by *The Magnetic Interaction Hypothesis* (*MIH*) [3] and *The Spinning Magnetic Force* (*SMF*) [4] that leads to a process for producing *External Magnetic Field* (*ExMF*) which is shown in *The Universal Energies* (*UE*) document [5], further enhanced by the introduction of *The Elements of Magnetic Lines of Force* (*EMLF*) [6], allowed for introduction of *External Magnetic Field Propulsion Systems* (*ExMF-PS*) [7].

Within the *ExMF-PS*, several mechanisms were invented, electricity generation was a leading one within that context, the *SEG* is thought to represents an uncontrollable process of *ExMF* production, which lead to production of excessive *ExMF* Levitation force (F_{ExL}), led to *SEG* disappearance in upper atmosphere in all attempts by Prof. Searl [1], while restraining the *SEG* by supports as did Roschin and S. M. Godin, caused the F_{ExL} to produce anti gravitational or with gravity forces (ascending and descending forces), according to rotational direction.

This paper attempts to explain and further improved *SEG* (Fig. 1) based on the *ExMF-PS*, a prospective phenomenon, which when finally manufactured, my liberate humanity and environment from problems related to fossils fuels and pollution; it represents an essential attempts towards attaining Decentralized alternative renewable elicitry energy.
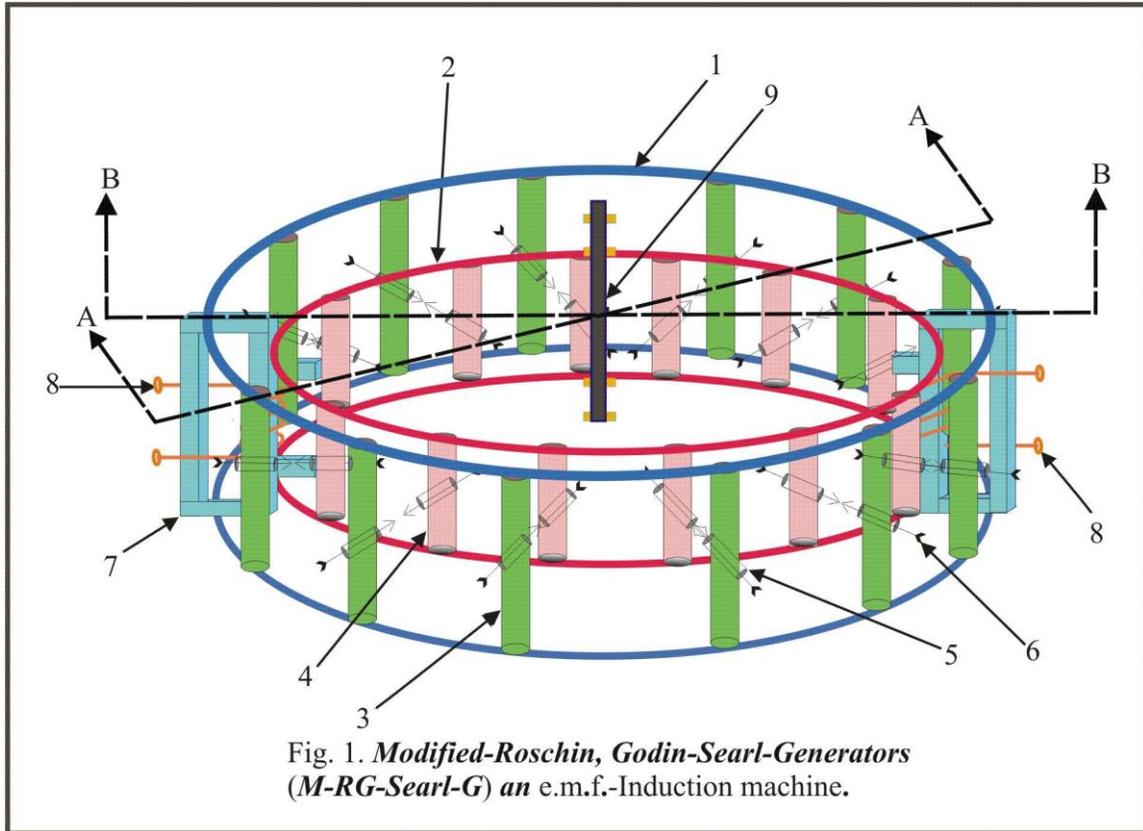
2: The SEG Nature of ExMF-PS
According to *ExMF-PS* [7], the phenomena exhibited during *SEG* [2] experiment is attributed to main three sequences of factors, consecutively occurred in following manner:
2:1 ExMF Production
As the rollers do have residual magnetization of 1.2 T [2], it represents *LMF*, the distance between their two lines of force is 9.13×10^{-5} m [6]. Thus while supplied by external power, the roller is set on motion, its *LMF* rotates, therefore electrons residuals on rollers' exterior, the stator, ambient electrons and those resulted from frictions interacted with the *RLMF*, they start gyrating around the *RLMF* [3] in an escalation numbers, producing *ExMF*, which in turns energizing the electrons, decreasing gyration radius [5], leading to chain of *ExMF* production, the intensity of which depends on electrons abandons and rotational speed, the *ExMF* (B_{ES})is given by [7]

$$B_{ES} = (N_{C1}\, \gamma_{PS}\, (B_{1\to n} + \frac{(80\ \%\ n_m)\, l\, q^3\, B_{1\to n}^2}{m^2\, v_c\, c})) + (N_{C2}\, \gamma_{PS}\, (B_{1\to n} + \frac{(15\ \%\ n_m)\, l\, q^3\, B_{1\to n}^2}{m^2\, v_c\, c}))$$

$$+ (N_{C3}\, \gamma_{PS}\, (B_{1\to n} + \frac{(5\ \%\ n_m)\, l\, q^3\, B_{1\to n}^2}{m^2\, v_c\, c}))\quad T \qquad \{1\}$$

Where, $B_{1\to n}$ is the previous magnetic field (started with **B_1**) in Tesla, c is speed of light in m.s^{-1}, *l* is the effective length of the magnetic lines of force (along which charged particles gyrates) in meter, q is the elementary charge in Coulomb, n_m is number of charged particles along one meter, m is the mass of charged particles in kg, v_c is velocity of captured charged particle in m.s^{-1}, (n_m) is the amount of charged particles captured along one meter of line of force by 1st 2nd and 3rd groups they are thought to be $n_{m1} = 80\%$, $n_{m2} = 25\%$ and $n_{m3} = 5\%$ of the total captured amount [6], γ_{ps} is the relative magnitudes of the primary and secondary **ExMF** in the final production of **ExMF** in Tesla [7], the produced **ExMF** or **(B_{ES})** is in Tesla.

Fig. 1. *Modified-Roschin, Godin-Searl-Generators* (*M-RG-Searl-G*) *an* e.m.f.-Induction machine.

2:2 The Operational Horizontal Forces
The Horizontal **ExMF** (**H-ExMF**) shown in Fig. 3: B, produced along the horizontal axis, of the **R-LMF**, emerged from the rotors, interacted with the opposite permanent magnetic fields fixed around the stator periphery, resulted in a **ExMF** Horizontal Operational Force (**F_{ExOH}**). The **F_{ExOH}** increased the rotation of the rotors; the force is given by [3]

$$F_{ExOH} = B_{ESH}\, B_S\, r_{m1}\, r_{m2}\, c\, \theta \qquad N \qquad \{2\}$$

Where, B_{ESH} is the **H-ExMF** produced on the rotor in Tesla, B_S is stator permanent magnetic field in Tesla, r_{m1} is the magnetic radius from the source rotor field to the interaction point, r_{m2} is the magnetic radius from the source stator field to the interaction point, c is the speed of light in m.s-1, θ is angle between the two fields, the Operational Magnetic Force F_{ExOH} is in Newton.
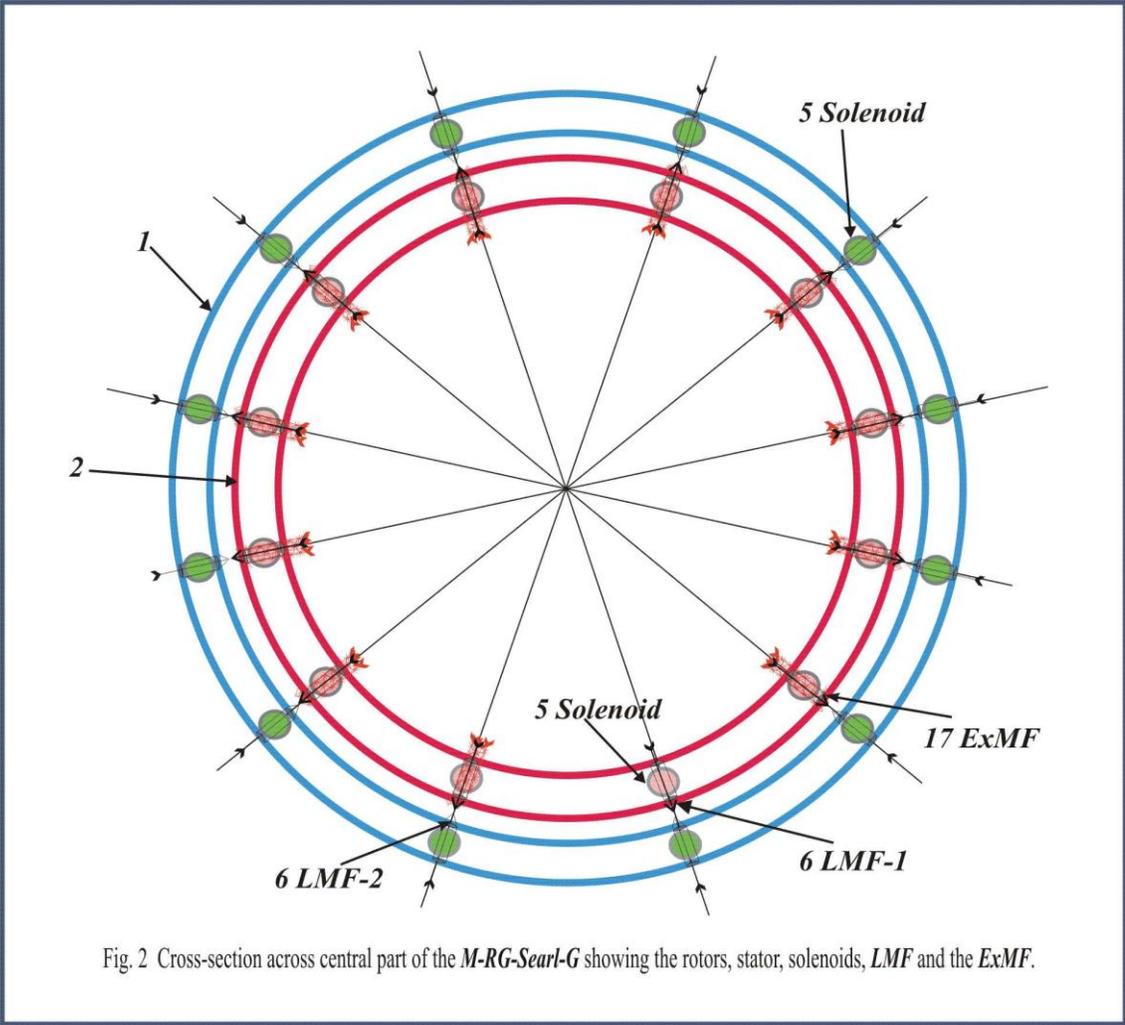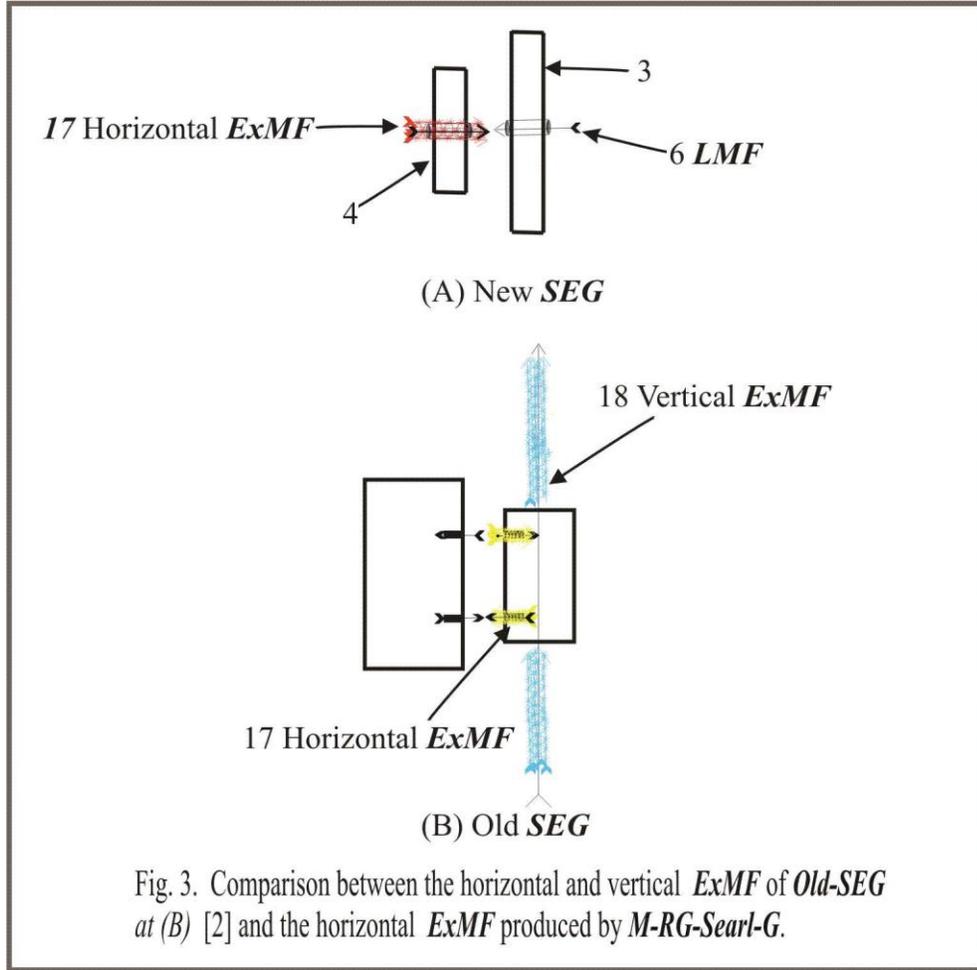

Fig. 2 Cross-section across central part of the **M-RG-Searl-G** showing the rotors, stator, solenoids, **LMF** and the **ExMF**.

When the produced **H-ExMF** given by Eq.1, becomes intense, F_{ExOH} given by Eq. 2, greatly increased, thus increasing the spinning. When spinning grow faster than the speed of the starting motor, a back current is produced in the electric motor, neutralizing initial starting current, thus a state of self-generation is attained, leading to an uncontrollable state of **H-ExMF** building up and increase in F_{ExOH}.

2:3 The Operational Vertical Forces
As shown in Fig. 3: B, the vertical **R-LMF** interacts with electrons producing Vertical-**ExMF (V-ExMF)**, hence at some critical **ExMF** production, determined by Eq.{1}, the produced intense **V-ExMF** interacts with the **SEG** upper structural material, when in clockwise rotation (or the lower cover for counterclockwise rotation), producing

Operational Vertical Forces (*F_{ExOV}*)

$Operational$ *Vertical Forces* (F_{ExOV}), this reduced gravity at clockwise rotation, or increasing gravity at counter clockwise rotation.

(A) New *SEG*

(B) Old *SEG*

Fig. 3. Comparison between the horizontal and vertical *ExMF* of *Old-SEG* at (B) [2] and the horizontal *ExMF* produced by *M-RG-Searl-G*.

If produced force exceeds certain limit, it becomes a levitation force [7] disconnecting and propelling *SEG* to the upper atmosphere in the case of Prof. Searl. While for the experimental firmly fixed *SEG* [2], the levitation force is suppressed. Since the initial weight of the tested *SEG* is G_i = 350 kg, then decreased by 35%, hence the decreased weight ΔG is 122.5 kg, where net measured weight G_n = 227.5, therefore the force is given by [7]

$$F_{\Delta G} = m_{\Delta G}\ g = (\ m_{Gn}\ g\ ) - ((\ \chi_x - \chi_a\ )\frac{V_D}{2\ \mu_o}\frac{B_{EI}^{\ 2}}{l})\qquad N \qquad\qquad \{3\}$$

Where, $m_{\Delta G}$ is the lost or gain in mass (or measured weight), m_{Gn} is the total mass, χ_x is the susceptibility of the material, χ_a is the susceptibility of the air, V_D is the volume of the material upon which *V-ExMF* falls in m^3, l is length of the produced *V-ExMF* (or the vertical field gradient), μ_o is permeability of the free space (4 π x 10^{-7} H m^{-1}) and the resultant force $F_{\Delta G}$ is in Newton.

Substituting B_{EI} in Eq. {3} with Eq.{1}, the magnitude of the attractive or repulsive Driving Force (*F_{ExD}*) is given by

$$F_{ExD} = (\rho V_D\, g) - (\chi_x - \chi_a)\, \gamma_{PS}\, l^2\, \frac{V_{Bi}}{2\mu_0}\, (\, N_{C1}\, (\, B_{1\to n} + \frac{(\,80\%\, n_m\,)\, q^3\, B_{1\to n}^{\,2}}{m^2\, v_c\, c}\,)) + (\, N_{C2}\, (\, B_{1\to n} +$$

$$\frac{(\,15\%\, n_m\,)\, q^3\, B_{1\to n}^{\,2}}{m^2\, v_c\, c}\,)) + (\, N_{C3}\, (\, B_{1\to n} + \frac{(\,5\%\ n_m\,)\, q^3\, B_{1\to n}^{\,2}}{m^2\, v_c\, c}\,)) = m_{\Delta G}\, g = 1200.5 \quad N \qquad \{4\}$$

2:4 Phenomena Related to Production of H-ExMF

As intense **H-ExMF** is produced, several related phenomena are expected to exhibits [7], some of which are:

a. **Vertical magnetic Field**

Since production of ExMF exterior of atom takes place, therefore anomulus magnetic field is expected to be detected around the **SEG**.

b. **Electromagnetic Radiation**

As stated in section 2:2 and 2:3, electrons gyrating around intense **H-ExMF**, has small radius, thus producing cyclotron radiation [8].

In the **SEG**, two types of radiations are produced, these are:

I- The blue-pink with toroidal form [2], is produced by **V-ExMF** along the vertical lines of force.

II- The strips of white-yellow color around the rollers [2] are produced by **H-ExMF** along the curved horizontal lines of force.

c. **Ozone smell**

This small is characteristics at aurora zones [9]; it is thought to result from heat produced from energization process and electrons interaction with rotating magnetic lines of force [7].

d. **Decrease in Temperature**

This is thought to be a characteristic related to the production of **ExMF**, it required further investigations, particularly when linked with aurora in Polar Regions and glaciers, the question is, did the shift in the geomagnetic poles (linked with Geomagnetic Phenomena) coincided with the glaciers build up period?

3- The Modified-Roschin, Godin-Searl-Generators (M-RG-Searl-G) or The Ideal Electric Generator
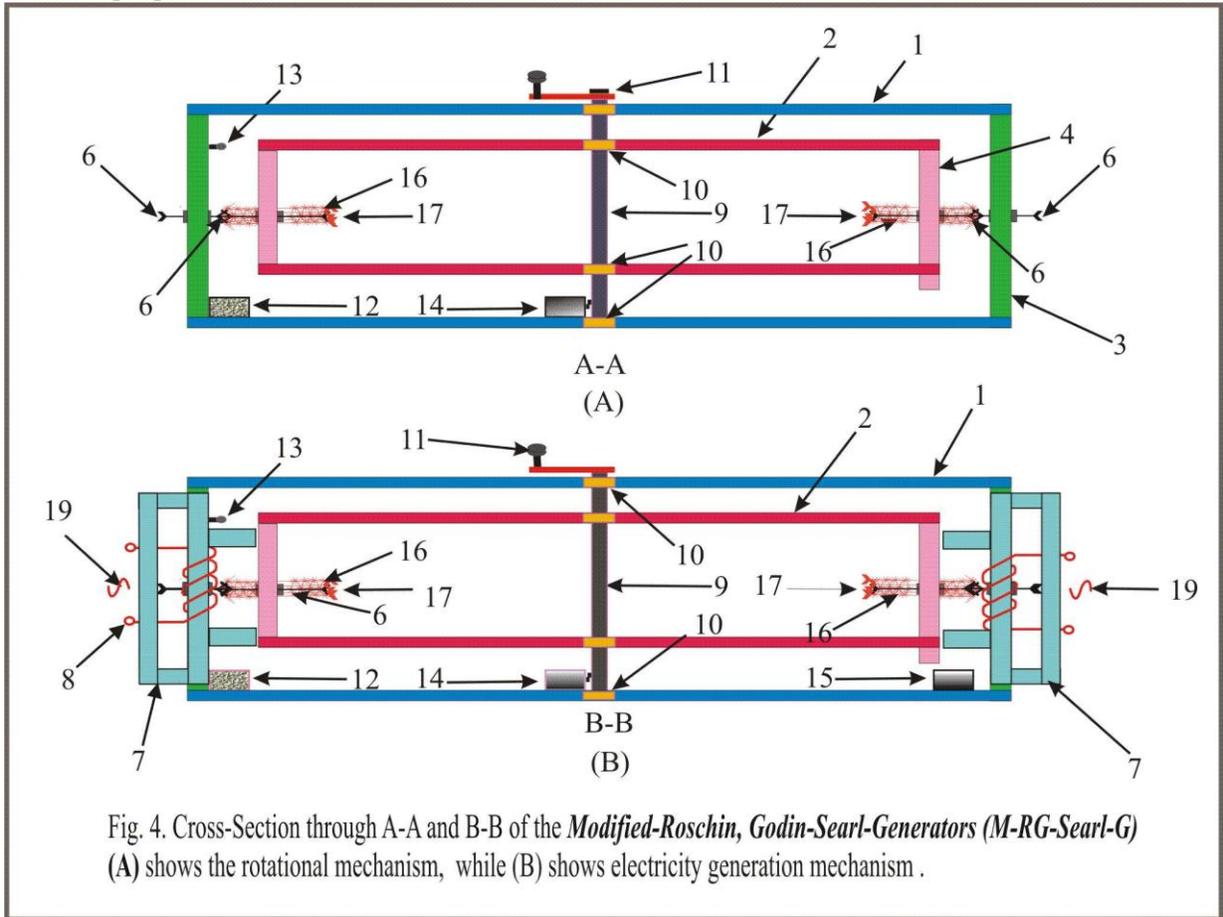
It is notice that, **ExMF** and electricity production for both **SEG** and **Magnetic-Gravity Effects**, required external power to initiate starting process. A modified version overcomes that and eliminate both vertical **ExMF** *(V-ExMF)* (Fig.3.B) and the excessive weight among others.

Fig.1.a, shows **M-RG-Searl-G** structure, it consist of external stator 1 and internal rotator 2, each part have rows of DC solenoids 5 fixed on supports 3 and 4 which also holds lower and upper parts. An induction coil 7 is fixed on the stationary stator 1, both 1 & 2 are linked with shaft 9 shown also in Fig. 4, through bearings 10, the system works with battery 12, it can either be started by rotator 11 or starter 14 shown in Fig. 4.

When the system is switched to the battery, ionizer 13 works on ultra-violet radiation, electrons are ionized from ambient molecules, the starter 14 rotates the rotor 2, thus rotating rotor's **LMF** 6 which in turn interacts with the ionized electrons [3, 4, 5, 6, 7] producing **H-ExMF** 17 [7], when number of gyrating electrons 16 increased, gyrating radius decreased, thus **H-ExMF** 17 intensity given by Eq.1 increased, thus **H-ExMF** 17 interacts magnetically [3] with stator's **LMF** 6 producing F_{ExOH} [7] given by Eq.{2}, this force gives required sustainable rotation.

Rotating **H-ExMF** 17 cuts induction coil 8 enwrap on iron core 7 producing e.m.f. 19 given by Eq.{5}, a control unit 15 is connected in such a way as to detect the **H-ExMF-17** (B_{ES}) intensity, as B_{ES} shown in Eq.{1} changed from a certain limit, control unit 15 reduced or increase rotor's **LMF** 6 shown by B_S in Eq.{1}, thus reducing produced magnetic force hence angular velocity.

Fig.3. shows the horizontal and vertical **ExMF** for both **SEG** and **M-RG-Searl-G,** the **H-ExMF-17** interacts with the rotor's **LMF 6** producing F_m and cyclotron white-yellow color electromagnetic radiation [10], while the **V-ExMF** is the one producing the lifting (or depressing) force F_{LV} [2] given by Eq.{3}, it also producing cyclotron blue-pink color electromagnetic radiation [10].

Fig. 4. Cross-Section through A-A and B-B of the *Modified-Roschin, Godin-Searl-Generators (M-RG-Searl-G)* **(A)** shows the rotational mechanism, while (B) shows electricity generation mechanism .

4- e.m.f. Induction

As explained above [7] and shown in Fig. 4-B, intense rotating **H-ExMF** induced e.m.f. on fixed wrapped conductors, intensity of which is related to **H-ExMF** magnitude, velocity and conductor's length (*l)*, the e.m.f. is given by

$$\xi = N \frac{\Delta \Phi}{\Delta t} = N \frac{\Delta (B_{EI} \times 10^8)}{\Delta t} = B_{EI} \, l \, v_m \qquad V \qquad \{5\}$$

Where, Φ is flux density in Weber, N is the number of turn, t is time in second, B_{ES} is in Tesla, 10^8 is number of lines of force (equivalent to one Tesla) that could produce one volt [7], *l* is the conductor length cut by rotating **H-ExMF**, v_m is the velocity of **H-ExMF** (or the speed of the motor) and the e.m.f. ξ is in volts (V).

Since B_{ES} is produced at required magnitudes, therefore ξ is proportional to **H-ExMF** (B_{ES}), hence electric current will flow if connected to load.

Acknowledgement

5: REFRENCE

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