THE CASE IN ELECTRO-MAGNETISM WHERE NEWTON'S THIRD LAW IS NOT VALID AND GETTING AN ENERGY SURPLUS IN AN ELECTRO GENERATOR

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ABSTRACT

The goal of this work is to point out to some facts in the electromagnetic field concerning validity of Newton's third law. Although it is a known fact in theory of magnetic field that Newton's law of action and reaction is not valid for Ampere Force Law for two small elements it is valid for closed current circuits. However, it is neglected fact that the same problem exist for two electric charges moving perpendicular to each other. The significance of avoiding Newton's third law is of utmost importance for construction of so called over-unity electro generators where the output energy of the machine is greater than mechanical energy invested on the input side of the machine.

In this work the author will try:

- To point to the case where Newton's law of action and reaction is not valid for two dotted electrical charges in movement,

- To connect the above case with getting energy surplus in Joe Cell,

- To prove that in the case where third Newton's law is not valid, more energy can be obtained on output side than energy invested on input side of an electro generator,

- To discuss the significance concerning ratio of Voltage against Amperage and length of wire, for existence of energy surplus in an electric generator,

- To point to a mechanical analogy of the above case with the two stage mechanical oscillator of Veljko Milkovic,

- To explain "special case" used by Gary Wesley and Bill Muller,

- To discuss issue with the first law of thermodynamics.

Key words: Newton, electro magnetism, generator, over-unity, energy surplus.

INTRODUCTION

Last year this author had been studying various cases of anomaly in Newton's laws as well as works of various authors which claimed that they had succeeded in making a so called over-unity machine, which was able to give more energy on output side than energy invested in input side. Some of these machines used combined gravitational and centrifugal force as their motive power, some used energy of Cosmic Aether, but most of them used super magnets for generation of electrical energy. In the last case, the authors gave various theories about the principle of work of their machines just to be able to patent their inventions. Most of the theories were not precise, some of them funny, but great number of them emphasized the need of timely control of the flux during the working of their generator.
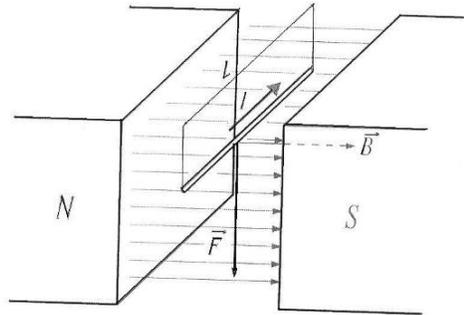
In order to understand these machines, the author has studied again his old university books from the university of electrical engineering, but with an open approach, concerning validity of Newton's laws. In an official university book from Belgrade [1] the author found a specific conclusion, concerning the non-validity of Newton's third law of action and reaction in Ampere's Force Law for two current elements. Of course that law was in accord with Newton's law for closed circuit of electric current. Author tried to find a position for two circuits where Newton's law was not valid, but wasn't able to find any. However, the author found the case where Newton's third law was not valid for two dotted electrical charges and latter expanded the idea for some other cases and also generalized the idea for any electric generator which converts mechanical energy into electric energy.

Electrical engineers will easily understand what has been written in this document. In order that these ideas become accessible to a wider range of readers, with some knowledge of mathematics and physics, the author will give some basic formulas for magnetic induction and force upon the current carrying element in the magnetic field, as well as Lorenz's force upon elementary electric charge.

THEORY OF ELECTROMAGNETIC FORCE AND INDUCTION

Electromagnetic Force

It has been confirmed by an experiment that on a conductor with electric current flowing through it, a magnetic force will act upon it, if it was immersed in the field of magnetic induction. Pictured below is a closed circuit with an electrical current *I* flowing through it and the lower section, in the shape of a stick with length *L*, is in the field of magnetic induction with magnitude *B*.

Picture 1

Intensity of the force *F* is proportional to the magnitude of current *I*, length of the conductor *L* and magnitude of magnetic induction *B*. It can be written as:

$$F = I \, L \, B \qquad\qquad (1)$$

The above formula is valid only if the conductor is perpendicular to the direction of magnetic field (induction). If the conductor has an angle *ß* with the field then,

$$F = I \, L \, B \, sin \, (ß) \qquad\qquad (2)$$

Direction of the force is perpendicular to the plane formed by conductor *L* and magnetic field *B*.

Mathematically formula (2) can be written in vector form and from the definition of vector product of two vectors its direction is precisely determined. Below is the vector form of the formula for magnetic force.
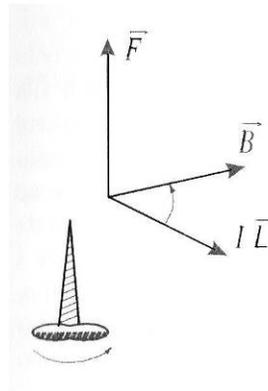
$$\vec{F} = I\vec{L} \times \vec{B} \qquad\qquad (3)$$

Formulas (2) and (3) are formulas for total force on the part of the conductor which lies in magnetic field. If the conductor in magnetic field is divided on small parts, then it can be said that total force is actually sum of the forces upon small parts. Elementary force which acts on one small part of the conductor *dL* is:

$$\vec{dF} = I\vec{dL} \times \vec{B} \qquad\qquad (4)$$

Vector product of two vectors

Vector product of two vectors is also a vector with magnitude equal to product of magnitudes of both vectors times the sine of the angle between them. Its direction is perpendicular to the plane in which lies both vectors and can be determined by right hand rule or right screw rule as on the picture 2.

Picture 2

If both vectors were parallel to each other then their product would be zero.

Scalar product of two vectors

Scalar product of two vectors is the number which is equal to the product of intensity of both vectors times cosine of the angle between them.

$$C = \vec{A} \cdot \vec{B} = A\ B\ cosine\ (\alpha)$$

If the angle between vectors was 90^0, than scalar product would be zero.

Lorentz's Force

      H. A. Lorentz is the creator of the theory which says that the total electromagnetic force which acts upon a conductor with electric current immersed in the magnetic field is the sum of elementary electromagnetic forces which acts upon movable electric charges in the conductor.

Because electric current is defined as the quantity of electric charges which pass through the conductor in the unit of time, it can be written as:

$$I = \frac{Q}{t} \qquad\qquad (5)$$

The time can be expressed as a quotient of the path passed and the velocity:

$$t = \frac{L}{v} \qquad\qquad (6)$$

Finally, formula for electric current can be written as:
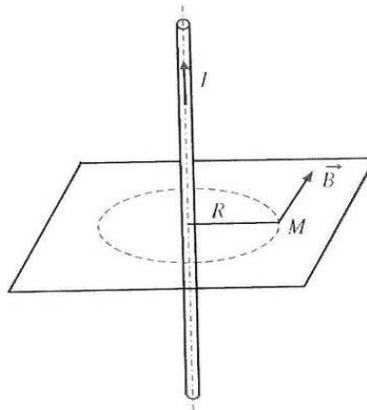
$$I = \frac{Qv}{L} \qquad (7)$$

Changing above formula into formula (3) for magnetic force, it becomes:

$$\vec{F} = Q\vec{v} \times \vec{B} \qquad (8)$$

If it was one electric charge as electron then Q would become value of elementary charge of that particle. Formula (8) is used only for magnetic force upon small electric charges. If electrostatic force also exists, than it should be added to the right side of the formula (8).

Biot-Savart Law

The above formulas were given for the force in the field of magnetic induction of the permanent magnet. French scientists Biot and Savart had examined the field of magnetic induction in the point, caused by an electric current in the conductor and found by an experiment that it was proportional to the magnitude of the current and inversely proportional to the proximity of the point to the conductor, picture 3.

Picture 3

Formula for intensity of magnetic induction is given with:

$$B = \frac{kI}{R} \qquad (9)$$

Variable k is constant of proportionality and depends of the units of measuring of other variables in the formula. For example if magnetic induction is 1 Tesla and magnitude of the current is 1 Ampere and distance of the point is 1 meter, then constant k is fixed for that system of units and is frequently written as:

$$k = \frac{\mu_0}{2\pi} \qquad (10)$$

where μ_o is new constant and is equal to $4\,\pi\,x10^{-7}\dfrac{H}{m}$.

Formula (9) discovered by an experiment is valid for total induction in a point close to the long straight conductor. To find the formula for circuit of any shape it was necessary to find formula for induction caused by small part of the conductor *dL*. That formula was found by Biot intuitively.

$$\overrightarrow{dB} = \frac{\mu_0}{4\pi}\frac{I\overrightarrow{dL}\times\vec{r}}{R^2} \tag{11}$$

where $\vec{r}$ is unit vector of displacement in the direction pointing from the wire element towards the point at which the field is being computed and is $\dfrac{\overrightarrow{R}}{R}$.

Total induction caused by any current contour is given by line integral of formula (11) around the contour with length *L*. Final formula is:

$$\vec{B} = \frac{\mu_0}{4\pi}\oint\frac{I\overrightarrow{dl}\times\vec{r}}{R^2} \tag{12}$$

Ampere's Force Law for Two Current Elements

This law Ampere found intuitively after many experiments because the force between two small elements of a current circuit can not be measured directly and circuit must be closed in order the current could flow through it. If current element $\overrightarrow{dL_2}$ stands in the field of magnetic induction $\overrightarrow{dB_1}$ caused by current element $\overrightarrow{dL_1}$ then formula for the force from first element against the second is:

$$\overrightarrow{dF}_{12} = I_2\overrightarrow{dL_2}\times\overrightarrow{dB_1} \tag{13}$$

Using formula (11) for magnetic induction $\overrightarrow{dB_1}$ and changing into (13) it is

$$\overrightarrow{dF}_{12} = \frac{\mu_0}{4\pi}I_2I_1\frac{\overrightarrow{dL_2}\times\left(\overrightarrow{dL_1}\times\vec{r}_{12}\right)}{R^2} \tag{14}$$

The force by which current element $\overrightarrow{dL_2}$ acts on element $\overrightarrow{dL_1}$ is analogously

$$\overrightarrow{dF}_{21} = \frac{\mu_0}{4\pi}I_1I_2\frac{\overrightarrow{dL_1}\times\left(\overrightarrow{dL_{21}}\times\vec{r}_{21}\right)}{R^2} \tag{15}$$

Intensity of vectors $\vec{r}_{12}$ and $\vec{r}_{21}$ is one, but their directions are opposite $\vec{r}_{12} = -\,\vec{r}_{21}$, and it also can be taken that length of element $dL_1 = dL_2$. It already has been said that intensity of vector product depends of angle between two vectors.

Because of that dependency it can be seen that force $\overrightarrow{dF}_{12} \neq \overrightarrow{dF}_{21}$. It also can be confirmed mathematically by using identity for double vector product:

$$\vec{A} \times \left(\vec{B} \times \vec{C} \right) = \vec{B} \left(\vec{A} \cdot \vec{C} \right) - \vec{C} \cdot \left(\vec{A} \cdot \vec{B} \right) \tag{16}$$

Instead of mathematical proof, it will be illustrated in a simple example below.

Picture 4

Current element $I_1 \overrightarrow{dx}$ caused induction equal to zero on the place where current element $I_2 \overrightarrow{dy}$ lays because the angle between element $I_1 \overrightarrow{dx}$ and vector $\vec{r}_{12}$ on X axis is 180^0 and sine (180) is zero. Because induction $\overrightarrow{dB}_1 = 0$, hence also force $\overrightarrow{dF}_{12} = 0$. The angle between current element $I_2 \overrightarrow{dy}$ and vector $\vec{r}_{21}$ (also on X axis) is 90^0 and sine (90) = 1, so vector product in formula (11) for $\overrightarrow{dB}_2$ has its maximum:

$$dB_2 = \frac{\mu_0}{4\pi} I_2 \frac{dy}{x^2}$$

$$dF_{21} = I_1 dx \cdot dB_2 = \frac{\mu_0}{4\pi} I_1 I_2 \frac{dx \cdot dy}{x^2} 2$$

Because $\overrightarrow{dF}_{12} \neq \overrightarrow{dF}_{21}$ it means that Newton's law of action and reaction is not valid for forces between current elements, as given by Ampere's law. However, current elements don't exist in nature, but current circuit must be closed in order for electricity to flow and for closed circuit is $\overrightarrow{dF}_{12} = \overrightarrow{dF}_{21}$. The author had tried to find an angle for two circuit where law of action and reaction would not be valid, but wasn't able to find any. However, author found case in the nature where Ampere's law can be applied directly like in formulas (14) and (15).

ELECTRO MAGNETIC FORCE BETWEEN TWO ELECTRIC CHARGES

Intensity of magnetic forces on two electric charges which move in the field of magnetic induction can be calculated using formula (8) for Lorentz's force. If there is no outside magnetic induction and there are two group of charges (or two particles) then magnetic induction from first charge must be calculated in the point where the second charge is moving. Formula for magnetic induction caused by first dotted charge can be found if formula (7) is changed into formula (11) or (12) because for a charge it is not important if formula for small current element is used or for complete circuit because there is no any circuit, only a point in the space, and there is no line integral around the circuit in formula (12). So:

$$\vec{B} = \frac{\mu_0}{4\pi} Q_1 \frac{\vec{v}_1 \times \vec{r}_{12}}{R^2} \tag{17}$$
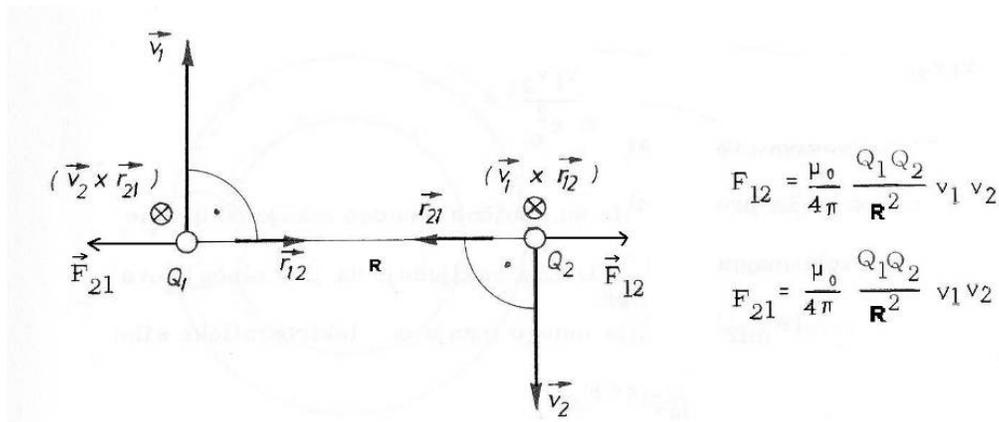
Changing (17) in (8) it comes as

$$\vec{F}_{12} = \frac{\mu_0}{4\pi} Q_1 Q_2 \frac{\vec{v}_2 \times \left(\vec{v}_1 \times \vec{r}_{12} \right)}{R^2} \tag{18}$$

Analogously

$$\vec{F}_{21} = \frac{\mu_0}{4\pi} Q_1 Q_2 \frac{\vec{v}_1 \times \left(\vec{v}_2 \times \vec{r}_{21} \right)}{R^2} \tag{19}$$

Above formulas are similar with Ampere's formulas for force between current elements (14) and (15). The difference is in using charge **Q** instead of the current **I** and in using vector of velocity **v** instead of oriented current element **dL**.

Here also third Newton's law of action and reaction is not valid. Newton's law is valid only for charges moving parallel. In the last case intensity of both forces is the same and forces are attractive If charges were moving in the same direction and repulsive if they were moving in opposite direction. Below is an example where Newton's law of action and reaction is valid.
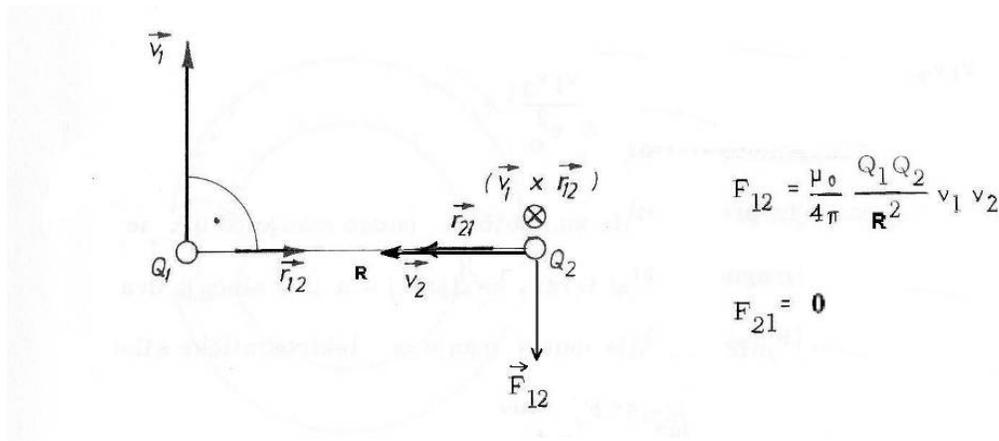

Picture 5

If however moving of the charges were perpendicular one on another like on picture 6, then the charge which was approaching or flying away doesn't have an influence on the first charge which is passing away, because magnetic induction in that direction would be zero. The charge which is passing by second charge has maximum influence on it because its magnetic induction is in maximum in direction of 90 ^{0} of its movement.

Picture 6

In above case intensities of the forces are:

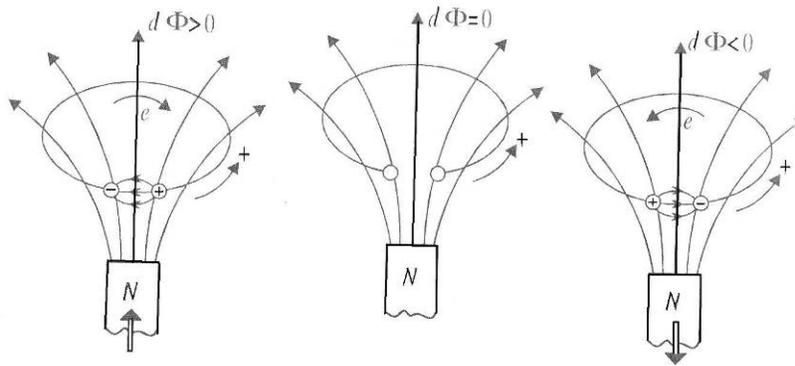$$F_{12} = \frac{\mu_0}{4\pi} Q_1 Q_2 \frac{v_1 v_2}{R^2}$$

$$F_{21} = 0$$

Importance of this case will be seen after analysis of Joe cell.

GENERATOR OF ELECTRIC CURRENT

Importance of Newton's Third Law for Work of an Electric Generator

It is well known that Faraday's law of induction says: *Induced electromotive force in any closed circuit is equal to the time rate of change of the magnetic flux through the circuit.* The change of the flux can be static due to change of the intensity of the magnetic induction or dynamic due to movement or deformation of the closed contour in the field of magnetic induction. Below is given an example of dynamic induction of electromotive force *e* (which is the voltage) caused by movement of the permanent magnet.
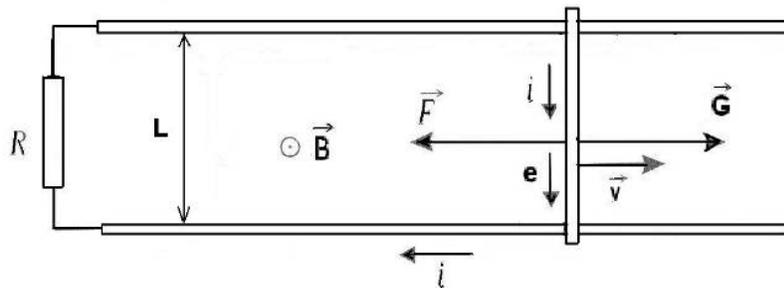
Picture 7

Mathematically, Faraday's law of induction is:

$$e = -\frac{d\Phi}{dt}$$

(20)

Minus sign in formula is because of Lenz's law which says that: *induced electromotive force has such direction that in closed circuit it generates current which by its fields is opposing the change of flux which induced it.*

Lenz's law has hidden third Newton's law of action and reaction. In the mechanics, every force which acts on a body causes a reaction which acts by the same intensity on the body which caused disturbance. The same is in closed current circuit which creates magnetic induction with such a direction that it is opposing its creator. That way, induced current causes drag against changes in its environment and original flux have to invest work in order to maintain itself. That is the way mechanical energy is converted into electricity in an electric generator. Below is a picture of a school example of a generator of direct current.

Picture 8

Generator consists of two parallel conducting tracks on distance *L* over whom is sliding conducting stick under influence of mechanical force $\vec{G}$. Tracks and stick are in homogeneous magnetic field of induction *B* which is perpendicular on the plane of tracks and stick. On the other side is resistor *R* which is there to consume electric energy and to close current circuit.

When stick moves in magnetic field, on its movable and fixed electric charges acts Lorentz's force (8). Because that force acts along the stick, electrons will move towards one end of the stick and positive charges will stay on other side. Between them will establish electric field $\vec{E}_{st}$ with electrostatic force:

$$\vec{F}_{st} = Q\vec{E}_{st} \tag{21}$$

Electrostatic force has opposite direction of Lorentz's force, and in stationary state these two forces will have the same intensity. Lorentz's force can be declared mathematically as if it was consequence of induced electric field $\vec{E}_{in}$ which is opposite of $\vec{E}_{st}$ and has magnitude:

$$\vec{F}_{st} = Q\vec{E}_{st} \tag{22}$$

Combining (8) and (22) intensity of induced electric field becomes

$$\vec{E}_{in} = \vec{v} \times \vec{B} \tag{23}$$

It is known that induced electromotive force between ends of open conductor is given with line integral

$$e = \int \vec{E}_{in} \cdot \overrightarrow{dL} \tag{24}$$

If conductor was straight with length L changing (23) in (24) it comes that:

$$e = \left(\vec{v} \times \vec{B}\right) \cdot \vec{L} \tag{25}$$

In the case on the picture, magnitude of electric current can be calculated as

$$I = \frac{e}{R} = \frac{vBL}{R} \tag{26}$$

The power which the generator passes to the resistor is given by formula below:

$$P = e \cdot i \tag{27}$$

The current induced in circuit creates magnetic force on stick given with (3). It is easy to see that vector product (3) has direction opposite of mechanical force $\vec{G}$. In stationary state these two forces will have the same intensity and opposite direction and the stick will move with constant velocity v.

It can be said that magnetic force has originated as reaction against mechanical force $\vec{G}$. It drags mechanical force to further accelerate the stick, and that way it

takes outside energy from mechanical force and convert it into electric energy consumed by resistor *R*.

The Possibility of Abrogation of Reaction Force in an Electro Generator

The question is whether it is possible to trick magnetic force of reaction and disable it to drag mechanical force partially or completely. That way electric energy could be generated without corresponding consuming of mechanical energy from force $\vec{G}$.

As said above, magnetic force of reaction is originated out of mutual influence of electric current and magnetic induction. Direction of that force is given mathematically by vector product in formula (3). To prevent drag of magnetic force $\vec{F}$ against outside mechanical force $\vec{G}$ which propels the generator, magnetic force has to be annulled or minimized.

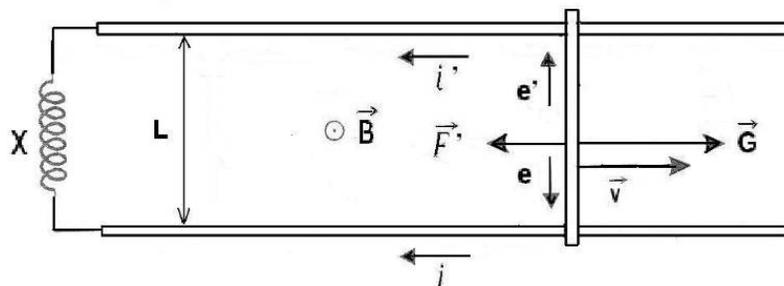Magnetic force $\vec{F}$ can be annulled or minimized in three ways:

- to annul or to minimize magnetic induction $\vec{B}$,
- to annul or to minimize inducted current *i*,
- to establish new force in direction of outside mechanic force.

Below is given an analyzis of all three possibilities.

- **Minimisation of magnetic induction**

Because magnetic induction is necessary to generate electromotive force *e* and not electric current *i*, if electric current could be delayed to start latter after induced electromotive force was in its maximum, then magnetic induction would not be necessary for generation of electromotive force and can be annulled. If consumer in electric circuit was coil then the current would start after the voltage reaches its maximum and the problem would be solved.
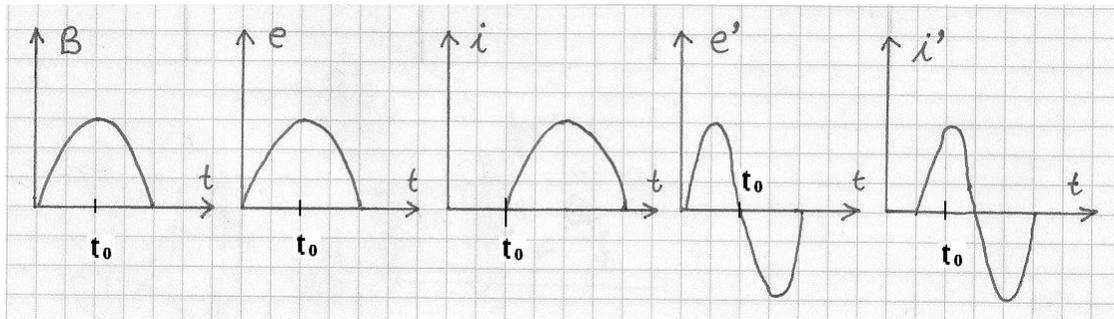
Below is a picture with generator where magnetic induction $\vec{B}$ is decreasing till zero after induction of electromotive forces *e* and the current *i* in the coil X.

Picture 9

Note that if magnetic induction would be annulled (and latter started again) this generator would not generate direct current but pulsed current because the change of magnetic induction would change magnitude of electromotive force *e*.

Note also that any change in magnetic induction would change magnetic flux statically and that would generate new electromotive force *e'* with corresponding current *i'*. By Lentz's rule new cycle of induction would try to prevent diminishing of the flux in the circuit and it means that statically induced electromotive force *e'* and latter the current *i'* would have opposite direction of dynamical ones like in the picture below.

Picture 10

Total electromotive force can be obtained by adding together *e'* and *e* in every point of the time. The same is with currents *i* and *i'*.

To get exact intensity of reactive magnetic force $\vec{F}'$, it is necessary to multiply total current with magnetic induction. Because both variables are changeable in time, magnetic force will also be changeable.

The important thing to see is that because current in the coil and voltage are not in phase, because the current starts from zero when voltage is in maximum, such a generator would generate reactive power known as reactive power which oscillates in the circuit and can not perform mechanical work nor be converted into heat. That means that such a generator is useless and this method is not practical.

- Minimization of inducted ellectric current

It is easy to notice that in above formulas (1) or (3) for magnetic force there is no voltage at all, but electric current *I* and length of wire *L*. Validity of that logic can be verfied by looking into a generator with open circuit. The voltage would still be generated on ends of circuit, but there would be no drag on rotor of the generator.

Because in formula (27) for the power of the generator participate both variables voltage and current, reactive magnetic force of the generator will be smaller if the generator, designed for definite power, has been constructed for

high voltage and low current. It is important to notice that voltage can not be increased by increasing length of wire *L*, because it also participate in formula (3) for magnetic force. Also, the magnitude of magnetic induction *B* can not be increased because it also participate in formula (3). <u>Looking into formula (25) for the voltage, the only way left to increase the voltage is by increasing the velocity of the stick or rotor.</u> Note also that this way generators of alternating current would have increased frequency too.

<u>This means that because of different drag force, generator with low current and high voltage gives more electric energy than generator of the same power with high current and low voltage, if they were supplied with the same input mechanical energy. Of course, the condition is that increase of the voltage of the first generator is done by increasing the velocity and decreaseng either the length of the wire or the intensity of magnetic induction.</u>

- **Establishing new force in direction of outside mechanic force**

Many inventors turned to use permanent magnets for construction of over-unity generators. The reason is the fact that they used some specific number of magnetic poles in special order, in order to get effect of attraction of the pole of the rotor at the moment it was approaching the pole of the stator, and then repulsion of it once it passed by the pole of the stator. This way the generator behaved as motor too and was less dependant on outside mechanical force.
Some of them used permanent magnets for both stator and rotor, but Garry Wesley and Bill Muller had discovered a special case of repulsion of the iron from the magnet, although it is well known fact that magnet is attracting the iron. There will be more discusion about that latter.

Mechanical Analogy of Over-Unity Generator

Any mechanical force or the pressure is analogous with the voltage and the movement or velocity of the body is analogous with electric current. The lever with a fulcrum is analogous with electric transformer. The pendulum with fixed pivot point is analogous with a generator with open circuit without current flow and the pendulum with movable pivot point is analogous with a generator with closed circuit where current exists.

Two-stage mechanical oscillator of Veljko Milkovic [2] is analogous with an electric generator connected to electric transformer. There the pendulum of the oscillator is seen as the stick or the rotor of the generator, and the force of the pendulum on its pivot point is seen as electromotive force. The movement of the lever of the oscillator is then analogous to the electric current which is a little late. The pendulum needs some time to create centrifugal force in order to move the lever. That lag is analogous to reactive resistance of coils in the generator. Electromagnetic induction would be analogous to the gravity combined with

centrifugal force, because centrifugal force changes the weight of the pendulum from zero to three times its own weight.

Because of return influence of the lever to the pendulum of the oscillator which is the cause of energy loss of the pendulum, the oscillator works better if the lever arm on the pendulum side is shorter than the other one. In that case the pendulum must be more heavy in order to be able to raise the lever, but because its pivot point would have minimal movement the swings of pendulum would last longer. In order to see the gain, energy invested for initial raising of more heavy pendulum should be disregarded and only measured new invested energy on input side. The same way should be disregarded initial energy invested to start turning heavy rotor of the generator. This way two stage oscillator is completely analogous with electric generator which has high voltage and low amperage.

Generator of Bill Muller

It is known that losses in a generator could be up to 50% because of losses in the iron (hysteresis loss) and losses in the copper (Eddy currents). A Canadian of German origin, that lived in Penticton, British Columbia, had made a dynamo with cores from amorphous polycrystalline ferrite material (patented in Canada) and that way decreased losses to the minimum. Generator of 450 horse power could be spun with one hand in open circuit without load. Normally, several horsepower would be required to turn the rotor.

Bill had discovered one "special case" between permanent magnet and iron. When the magnet material is of very hard steel alloys and three steel balls in the vicinity are attracted to the magnet and then as impact occur steel to steel, one or more of the steel balls will repel and one will remain attracted to the magnet. Bill concluded that the balls had been repelled without invested energy and in that case, had violated Newton's laws.

He made a generator with specific number of permanent super magnets (Neodymium) with specific disposition of the poles of the magnets and that way balanced attractive forces in order to prevent drag. Then he used his „special case" to use its repel force once the rotor was about to leave a pole of the stator. Accurate timing of the usage of his "special case" was of great importance.

Energy Conference Report, Jeane Manning 1990 confirmed a power output of 12% greater than the power input at a demonstration conducted at Stanford University under the auspices of the Society for Scientific Exploration. Taking into account that regular generators works with 50% losses, Muller dynamo had about 62% gain. Of course great part of it was due to small loses because of the usage of his patented ferrite mix for the core of the generator.
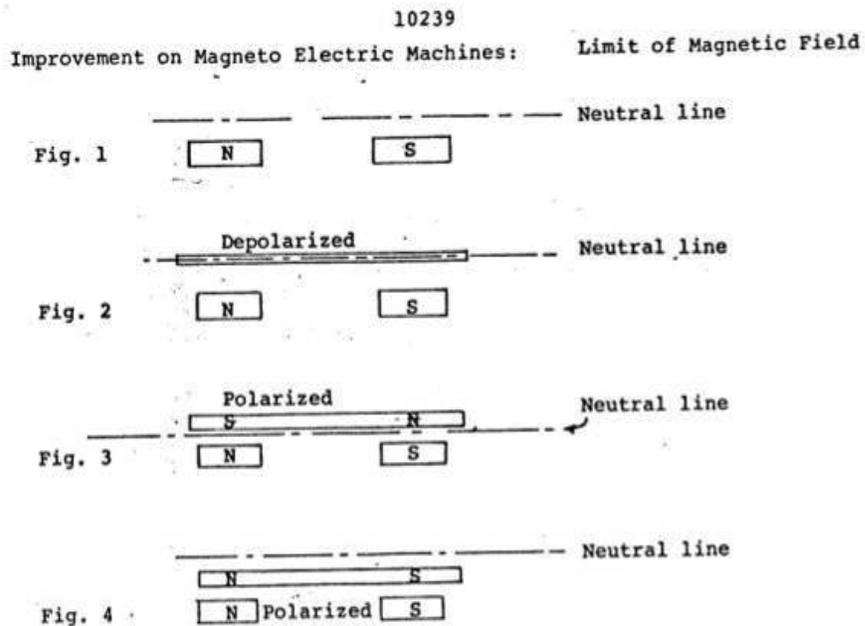
It is necessary to notice importance of the accurate time control of the „special case" for repulsion of iron from the magnet.

Those who would like to know more about Bill Muller can visit his internet site [3]. However, construction details of generator are not published.

In the next chapter his "special case" of repulsion of the iron and magnet will be explained.
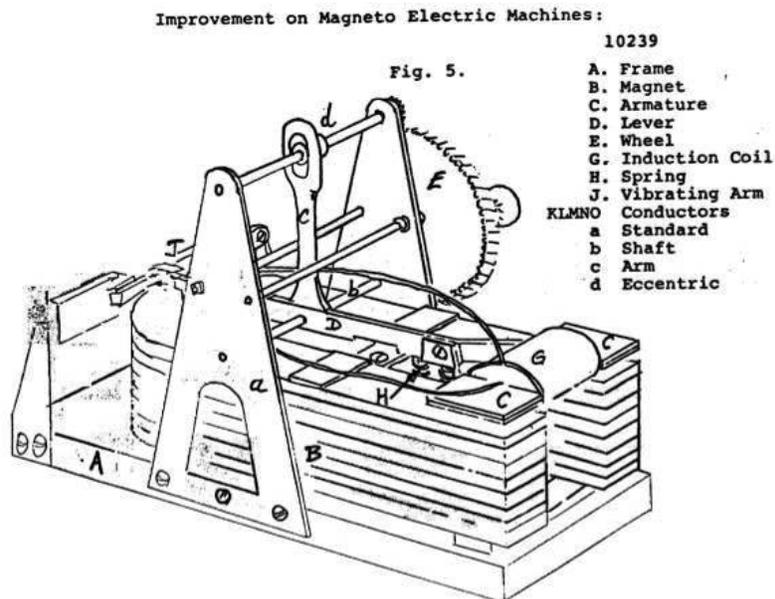
Vibratory Machine of Gary Wesley

American Gary Wesley patented, in 1879, an electromotor which used the principle of "neutral line" for permanent magnet. Below is a picture of neutral line for horseshoe magnet. When a thin piece of iron dwells in neutral line it will not take magnetism into itself. If it was moved above neutral line it will became magnetized that way that permanent magnet will induce opposite poles in the iron. If iron was moved bellow neutral line iron will also become magnetized but polarity of its poles will be the same as in the magnet. Iron below neutral line will behave as it was part of magnet itself, just a little bit separated from the main part of the magnet. Iron above neutral line behaves the same way if permanent magnet was cut on half. Both parts would behave as two normal magnets with opposite poles close to each other.

Picture 11

Gary had used neutral line and made a machine he called a motor which is actually generator. It had iron plate with wire coiled around it. The iron with coil has been separated from horseshoe magnet by paper. If the iron was vibrated around neutral line it would change its polarity and that change would inducts alternated electromotive force in the wire. Without a load generator would not stop to vibrate once it started. The iron would oscillate continuously because changing its pole would alternatively attract and repulse it towards the magnet.

Canadian Patent #10239, (July 16, 1879) , Wesley W. Gary

Picture 12

Gary claimed that with small input power his machine could generate significantly greater power on the output. If that was the true than his generator was one of the first over-unity machines powered by permanent magnet.

<u>It can be seen very easy that principle of "neutral line" is the same as "special case" of Bill Muller.</u>

GENERATORS WITH AUTOMATIC ABROGATION OF REACTIVE FORCE

These types of electric generators use principle of abrogation of Newton's third law because of perpendicular movement of electric charges.

Joe Cell

Australian called Joe has experimented with hydrogen production from water and its usage for his car. Although some of his ideas were wrong, Joe has discovered interesting effect of bubbling of the water in his cell which didn't stop

even after removal of the current from car battery. From the cell gas was coming out which would explode if fire come close to it. Explosion would stop bubbling of the water in the cell and the cell should be initiated again. Water in the cell was from the spring and occasionally with some additives to change its acidity. The strangest thing was that level of the water never went down regardless of the bubbling and the usage of the cell. Joe connected the cell to the engine of his car and was able to drive the vehicle with high spin of the engine. The work of the engine was unstable and sensitive on outside electricity; even wrongly charged people could affect its work. The engine worked better several days after connection to the cell and inventor come to conclusion that some time was necessary to prepare metal of the engine and it was easier to treat engines which had some parts made of aluminum.

Joe gave lectures about his invention and soon some people visited him which new everything about his work and his family and ask him to stop further investigation of free energy in his cell. Joe decided to stop it, but other people continued to make the cell and to use it. Two more people had to stop investigation because of threat. However, thank to internet and unselfish sharing of information many other people continued to use Joe cell.

Cell consists of minimum three cylinders where outside one and central one are connected to the car battery of 12 V. Inside the cell there is one or more help cylinders and all of them are submerged into spring water from the bottom side. It is not sure if the cell can start bubbling at all if the tap water was used. Metal for cylinders must be special steel with magnet free property. It must not become magnetized at all. Cylinders have to be separated from each other precisely to have symmetry. People interested in this cell can order parts from an Australian company by internet [4]. There is a manual with detailed instructions how to assemble the parts, initiate water, and for cell usage by Alex Schiffer [5]. Below in picture 13, can be seen cell parts, and on picture 14 bubbling water.
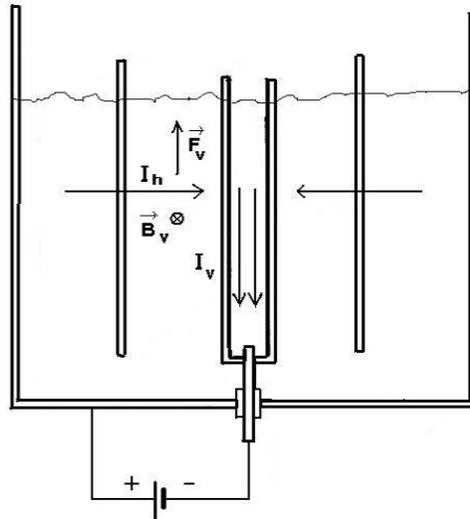

Picture 13   *Picture 14*

In this document there will not be discussion about cell usage nor accuracy of some theories about origin of gas and energy in the cell. Most

accepted explanation is that cell collects Orgon which is real energy source. Orgon is name for energy used by Wilhelm Reich who made accumulators for it and used them for human health and who made cloud busters for weather control. Synonyms for Orgon are: Cosmic Aether, Life Force, Prana, Chi, Od etc.

Interesting thing is the request for symmetry and special steel which can not be magnetized. Below is picture with Joe cell with three cylinders and direction of electric current during water preparation.

Picture 15

It can bee seen that current flows from outside cylinder through ionized water and middle cylinder till central cylinder. Outside cylinder is connected to positive pole of battery and central cylinder with negative pole. Current trough water has horizontal direction **Ih** and through outside and central cylinder vertical direction **Iv**. Current flows upward through outside cylinder and downward trough central cylinder. In example of two electric charges it has been proven that only vertical current can generate magnetic force and push ions upward towards water surface. Horizontal current can not magnetically influence current in cylinders. This means that current flows constantly in cylinders without any disturbances, but horizontal current is constantly pushed upwards by magnetic force $\vec{F}_v$ and concentrate on water surface. That is the cause of water separation on hydrogen and oxygen and bubbling on the surface. Because there is no disturbance of vertical current it means that battery is not extra taxed for chemical processes in water, whatever happened there.

Collecting or generating of Orgon (Aether) in the water can not be discussed here, but only the fact that electric and chemical processes does not cost battery extra energy. If such processes collect extra energy in the water that energy didn't come from the battery. The proof is also the fact that once water starts to bubble, the battery can be removed and it will not stop bubbling.

FIRST LAW OF THERMODYNAMICS AND SURPLUS OF ENERGY

Idea of existence of free energy in so called over-unity machines has been greatly criticized and mocking by official scientists. The reason was the first law of thermodynamics which says that *"energy in closed system can change from one form into another and can not be destroyed or created"*. Important thing which thermodynamics fanatics have missed is that idea of closed system has no sense at all. It is enough to remember cosmic rays which can penetrate earth soil several kilometers, various radio waves which penetrate the space and carry some energy like sun wind, gravitation force, and also the fact that cosmos alone is not completely cold but has temperature of 4^0 K.

Many constructors believe that permanent magnets can pull out energy of Cosmic Aether and give it to the generator. The reason for that is existence of micro currents in permanent magnet which are closed circuits with eternal flow of electricity trough it. This flow of micro currents is real perpetuum mobile, like eternal movement of electrons around the core of the atom. The same flow exists on macro level as circular movement of planets around the Sun. The idea of Aether was supported by Nikola Tesla and John Worrell Keely contemporary of Tesla and inventor of miraculous machines driven on Aether and which never went into commercial usage because of inventor secrecy and impossibility of other people to start his engines.

Einstein's idea of gravity as a kind of deformed space and new theory of Dr. Myron Evans [6] which has united all four known forces in the universe and which says that electromagnetic wave is twisted (torsion) space itself and that from gravity can be obtained electromagnetic wave and vice verse by using resonance, gives new impulse for investigation of free energy.

CONCLUSION

Author has tried to point some facts from electromagnetic which were neglected concerning validity of Newton's law of action and reaction with hope that it can help to understand principles for construction of over-unity generator. Many inventors of such generators were not sure how exactly it worked. That could be a reason why on official test some of them failed to prove energy surplus. Even if some of their samples had energy surplus a new model could fail because of accidental change of some parameter for which inventors were not aware.

The case of perpendicular movement of two electric charges was discussed as well as its importance for understanding water initiation of Joe cells.

The reason of energy surplus has been explain for a generator designed for specific power and with high voltage, where high voltage has to be induced by

high velocity of the rotor. Reaction force has been decreased owing to low amperage.

The importance of accurate timing of magnetic induction change has been explained for getting smaller reactive force for generators with permanent magnets.

Also, necessity of the usage of new materials for cutting losses in iron and copper like amorphous ferrite of Bill Muller has been recommended.

REFERENCES

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