

The self-symmetrizing mechanism within electromagnetic systems

Research Laboratory for Vacuum Energy

Marcus Albert Reid

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Introduction:

The conservation of energy within electromagnetic energy conversion systems is an interesting curiosity. It is a curiosity, because the energy is conserved, although electromagnetic systems are in relation to the quantum vacuum energetically open systems and the energy which is received from the output, derives from the quantum vacuum and not from the observable input energy. A permanent magnet for e.g. is able to generate a steady flow of a magnetic potential. The theory of quantum electrodynamics suggests, that a permanent magnet draws the energy for the generation of its potential directly from the quantum vacuum. Potentials are generally able to generate an observable energy, which means, that a charge can integrate energy from the quantum vacuum into the observable reality. So the reason why we observe a conservation of energy within electric systems, has nothing to do with the assumption, that energy is not generated out of the quantum vacuum or lost into the quantum vacuum domain. The first law of thermodynamics just states, that there is an equilibrium between the steady generation and annihilation of energy in relation to the quantum vacuum. So common electromagnetic systems are in relation to their energy exchange with the quantum vacuum, energy-symmetric.

The following text analyzes the question, why and through which mechanism an energetic symmetry is retained within a simple direct current motor and how this symmetry can basically be broken.

The potential flow

The potential flow from an electric charge is an abstract phenomenon of space-time. Within the seemingly empty space, permanently new virtual photons emerge out of the quantum vacuum. The orientation of the charges of the virtual photons is an entirely entropic process. But the charges of the virtual photons can be structured. An electric field exists in empty space time as a with light speed propagating polarization of virtual photons. So an electric field can be seen as a propagating virtual negentropisation of space-time. This polarization has the potential to generate an observable energy. In other words the electromagnetic interaction is transmitted through the moving polarization of the virtual photons and is generated through the locally appearing polarized virtual photons within and on a charge. A permanent magnet or an electromagnet is a dipole and represents a broken symmetry of the quantum vacuum. The dipole causes the polarization of the virtual photons and these can generate upon another charge a force and acceleration. Applied to an electric motor system this means, that the observable input energy has only an indirect connection with the output energy, because the mechanic force onto the permanent magnet on the axis of an electromagnetic motor system is caused through the local action of the polarized virtual photons onto the rotor. The polarization of the virtual photons in relation to the permanent magnet becomes asymmetrical. This asymmetry is the cause for the force. So if the energy from the output of an electric motor does not come from the input energy, the question arises, why is the energy conserved.

Classes of self-symmetrizing systems

(SS1)

A battery, an electromagnet and a solar cell constitute a certain class of self-symmetrizing systems. When a current flows within an accumulator, it's dipole will be destroyed bit by bit until the chemical reactants have symmetrized. So the dissipation becomes visible through the destruction of the input dipole. Within this class of self-symmetrizing systems, the energy is conserved due to a symmetry of the energy, which destroys the input dipole and the energy from the quantum vacuum, which supplies the load. The author has labeled this class of self-symmetrizing systems as a class 1 system or (SS1) system. The particular attribute of (SS1) systems is, that during the generation of work their dipole gets destroyed and therefore the potential "wind" disappears.

A more detailed explanation can be found in the text "Energy flow in a simple circuit and the interaction with the quantum vacuum" Website: www.vakuumentnergie.de

(SS2)

A different class of a self-symmetrizing system is for e.g. a common permanent magnet, which moves along a ferromagnetic piece of metal. If such a piece of metal moves towards a permanent magnet, then one can gain some observable energy during the approach, but one has to invest the same amount of energy (ideal system) if it shall be removed again. During the whole process the dipole of the permanent magnet does not get destroyed. So for an external observer, the conservation of energy is maintained through an energetic symmetry in relation to the course of movement between the permanent magnet and the piece of metal. This class is labeled as a (SS2) system. The particular attribute of (SS2) systems is, that during the generation of work, their dipole does not get destroyed and therefore the potential “wind” is preserved.

It should be kept in mind that from the view of the permanent magnet the “conservation of energy” is not valid. Firstly, the permanent magnet generates some energy during the approach of the piece of metal and then it actually produces some more energy, when the piece of metal get’s moved away. After all, the permanent magnet has to generate the same energy again to compensate for the external input energy, which is used to remove the metal. So to what extent the energy equation is symmetrized and conserved, is irrelevant from the view of the permanent magnet. A permanent magnet generates at any time a magnetic potential and represents therefore a permanent “virtual energy source”. The observable energy gain and anti-gain (loss) is just for the external observer energy-symmetric.

The electromagnetic system

A common electric motor with an electromagnet and a permanent magnet is an electric system, which combines a (SS1) and a (SS2) system. The (SS1) system describes the energetic management of the electromagnet and the (SS2) system relates to the permanent magnet.

(SS1) - system

The energy, which is input into the electromagnet, generates a dipole within the electromagnet. A dipole is a broken symmetry of the quantum vacuum. The dipole then triggers the polarization of the virtual photons. The virtual photons appear in a stationary fashion within space time and are connected to a so called “frame”. So what propagates with light speed through space, is just the polarization of the virtual photons. The intensity of the polarization decreases thereby with the distance squared. Subsequently the whole space around the electromagnet get’s polarized. Since the permanent magnet on the axis of the motor is within the field of interaction of the electromagnet, the quantum vacuum directly on and within the permanent magnet becomes asymmetrical.

These polarized, locally appearing virtual photons on and within the permanent magnet, cause a force and due to that a mechanical energy can be generated. This energy is then exactly compensated by the same amount of energy flowing in reverse due to the Load, providing, that no acceleration or deceleration occur in that moment. The reverse acting torque acts upon the permanent magnet, which causes a reverse moving polarization of the quantum vacuum. This means that the reverse acting vacuum asymmetry acts upon the electromagnet. The dipole of the electromagnet then gets destroyed through this reverse flowing polarisation. So when the motor shall continue to run, then the input operator has to input more observable energy, so the input dipole within the electromagnet can be recreated. This means, that both vacuum energy flows, from the input to the output and from the output to the input, symmetrize on their own and therefore the dipole generation energy and the dipole annihilation energy will always stay the same. This is why the vacuum energy flow processes are concealed for an external observer. For the same reason the energy will always be conserved within electric systems and due to that fact, physicists and engineers may ignore the energetic interaction between the electric system and the quantum vacuum. To talk about this in such a way is of course legitimate, but one has to be careful not to exclude right from the beginning the possibility of so called asymmetric electric systems.

(SS2) - system

The energetic management within the electric motor is, from the view of the permanent magnet (SS2), a different matter. Its dipole is not destroyed at any moment. What happens around the permanent magnet is from its view actually irrelevant, because the magnet is in any case and at any time a potential generating engine. Due to this fact, the permanent magnet can act as a generator of observable energy. One aspect, why the potential is not treated as an observable energy form, is because the energetic management around a permanent magnet self-symmetrizes finally due to a geometric symmetry within the path of motion and therefore the conservation of energy is always maintained. Nevertheless, the permanent magnet is an energy generating engine, because it's potential causes a force and motion onto another charge, which moves into the field of interaction. Thereby an observable energy is generated. So the potential is the direct preliminary stage of observable energy.

Whoever wants to understand the energy flows within an electric motor must note that the mechanical energy at the output is not the cause of the electric input energy. The mechanical output energy of the motor derives from the locally acting, polarized virtual photons onto the permanent magnet. So the output energy of the motor comes from the quantum vacuum. As mentioned above, firstly one does not see this correlation, because we have an energetic symmetry between the generation of energy from the quantum vacuum and annihilation of energy into the quantum vacuum domain.

It is of course legitimate to ignore the energetic interaction with the quantum vacuum, but then the false impression easily arises, that the energy is seemingly converted directly from electric to mechanical energy and that electromagnetic systems are energetically closed systems.

All electromagnetic systems are, in relation to the energy within the quantum vacuum, energetically open systems and just behave in relation to the observable input energy and output energy like closed systems.

The self-symmetrizing mechanism

In the above described electric motor, a (SS1) system gets combined with a (SS2) system in such a way, that the conservation of energy is maintained due to the symmetric behavior of the (SS1) and (SS2) system towards each other. So it doesn't matter how you combine a (SS1) with a (SS2) system within symmetric electric systems, the conservation of energy will always be retained.

Although the conservation of energy is basically not self evident. One has to be aware, that the energy which is input into an electric system, is not transferred to the output. The input operator energy is transferred to the quantum vacuum and the environment and is always lost in an observable sense. Due to a mechanism which the author has labeled "the self-symmetrizing mechanism" the exact same amount of energy is then transferred from the quantum vacuum to the output. So the energy on the axis of an electric motor is always generated from nothing (quantum vacuum) so to say, but this can only be done, if a broken symmetry has been created before, by using an observable energy.

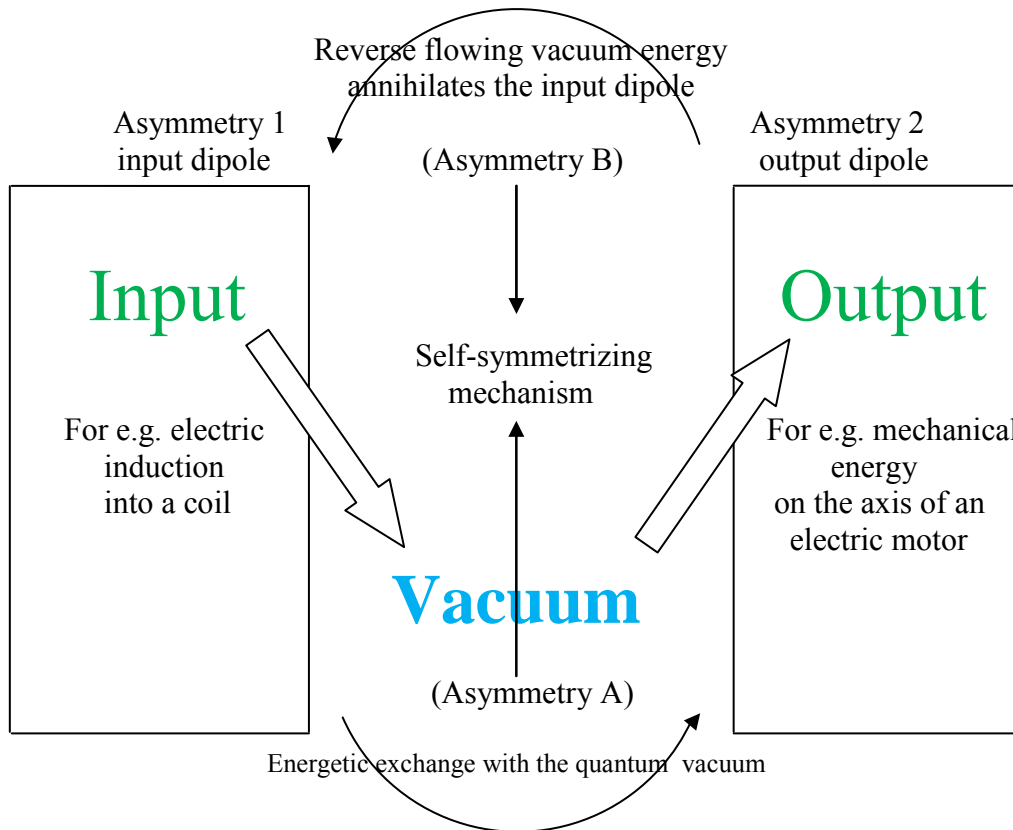
Asymmetric electromagnetic systems

Asymmetric electromagnetic systems are an additional class of electromagnetic systems. Due to their basic active principle an asymmetry occurs between the energy, which is generated at the output and the energy, which is lost in at the input. Therefore the question arises, how can one bring the output to produce more energy as was lost before at the input. The author believes that one possibility is to combine a (SS1) and a (SS2) system in such a way that the (SS2) system gets a double role. The (SS2) system is a system which generates a permanent flow of a potential without the need of an observable input energy. A permanent magnet and an electron are examples for (SS2) systems. These systems permanently draw energy from the quantum vacuum in a virtual form and thereby generate a steady flow of a potential.

The basic mechanism of asymmetric electromagnetic systems with a COP., of higher than 100%.

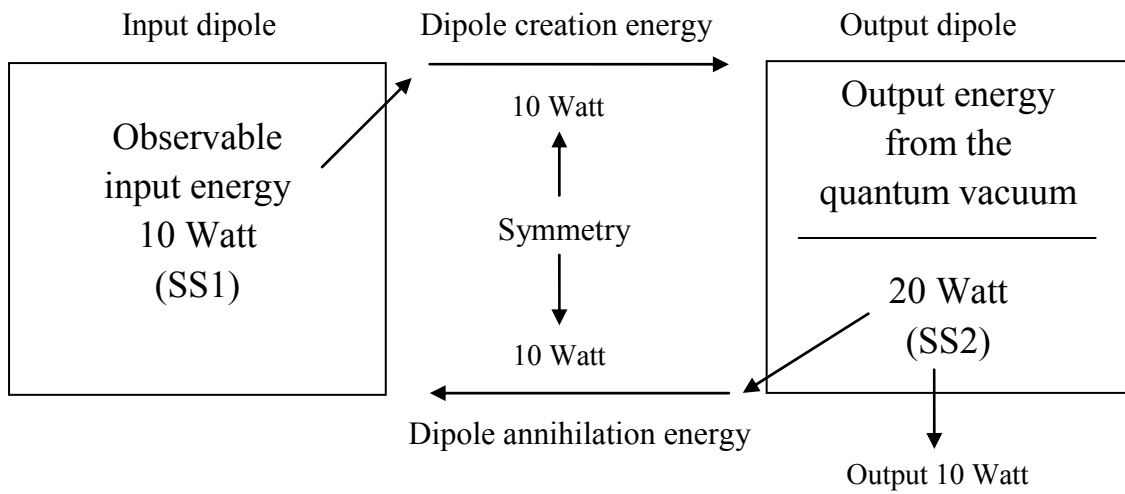
The propagation of potentials is usually symmetrical. This situation enforces in common ideal electromagnetic systems a COP. of 100%. To start an action of any kind in a system, one has to input an observable energy form. This observable energy is always lost, so that is why another energy form must be input to create the input dipole.

If one wants to manipulate the self-symmetrizing mechanism on a (SS1) versus a (SS2) system, a part of the potential flow from the (SS2) system must be directly back-fed to the input dipole (SS1) system (to generate the input dipole), because in this way the input dipole is not only generated by the observable input energy, but also by the energy from the quantum vacuum. By doing this, an asymmetry occurs between the energy which is input only in an observable form and the energy which comes from the load. But, at the same time we receive a symmetry between the total input energy (observable input energy plus the energy from the vacuum) and the energy which powers the load. To mix the observable input energy with the energy from the quantum vacuum represents, from the view of the author, a possible working principle for asymmetric electromagnetic systems which can exhibit a COP. of higher than 100%.

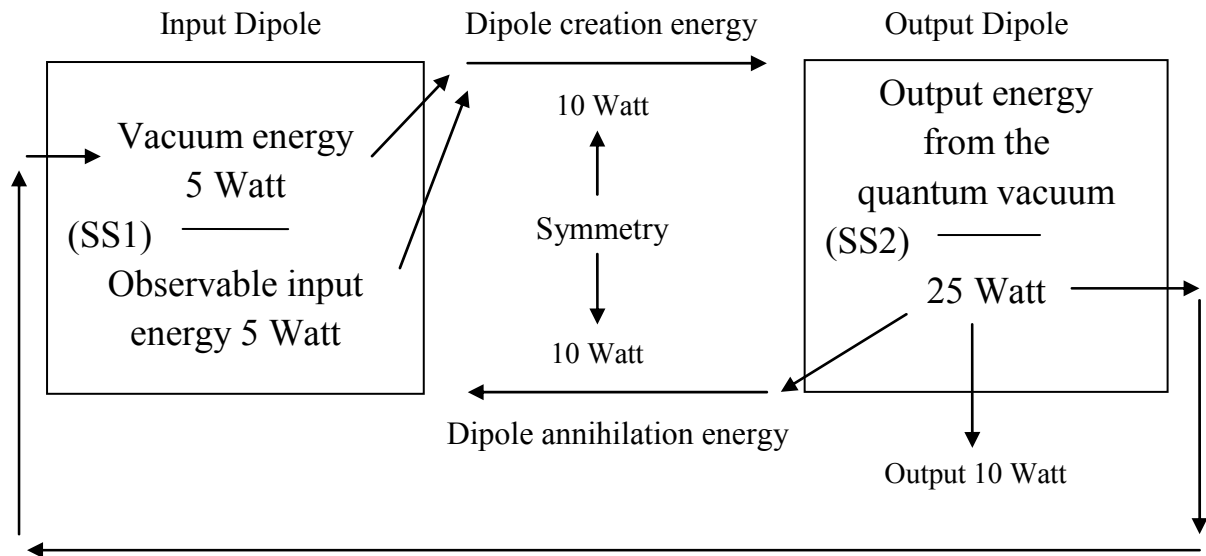


- A)** The observable input energy creates a dipole at the input (Asymmetry 1). This dipole, subsequently initiates the polarisation of the virtual photons and thereby generates electromagnetic fields and potentials.
- B)** But the input dipole (Asymmetry 1) gets symmetrized again due to the self-symmetrizing mechanism. This mechanism is the cause for the conservation of energy. The self-symmetrizing mechanism describes the “desire to symmetrize” between the energy from the quantum vacuum which supplies the load and the energy which destroys the input dipole. So if work shall be done, then the input dipole has to be held up through the steady induction of energy in an observable form. Only in accelerated systems exists a very small asymmetry between asymmetry (A) and (B).
- C)** The symmetry between the observable input energy und dipole annihilation energy can be broken, by not only inducing an observable energy form to create the input dipole, but in addition also by the energy from the quantum vacuum. Vacuum energy partly as input energy
- D)** The symmetry between the observable dipole creation energy is in relation to the dipole annihilation energy
 symmetric (COP. = 100%)
 or
 asymmetric (COP. \neq 100%)

Ideal symmetric system: COP. 100%



Ideal asymmetric system: COP. 200%



An experimental approach which according after the above (page 8) mentioned working principle for asymmetric electromagnetic systems, has already been developed by the Research Laboratory for Vacuum Energy. Since the end of the year 2007 we have been working on an experimental series, with which this concept shall be realized.