

The Impact of NOVEL Energy Technologies to the Future of Mankind

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Abstract

Bestselling author and covered speaker Gerald Celente stated some years ago: "We need a productive capacity - and the best way that we see it is with alternative energy – not wind, solar, geothermal, biofuel - but something much bigger". He was aware that new concepts are developed in mainstream and alternative physics which demonstrate that space energy can be tapped and converted in conventional energy via dynamic resonant fields in linearly oscillating or rotating devices. Nikola Tesla already recognized that the whole cosmos is filled with unlimited quantities of energy as modern physicists like Archibald Wheeler have calculated.

Several inventors like Tesla himself, Hans Coler et.al. have invented in the past century special devices which have used a new kind of energy conversion and tapped directly via resonance into the vacuum field of space. Modern scientists like Dr. Harald Puthoff, Prof. Lev Sapogin, Myron Evans have elaborated resp. extended physic models and could show that it is possible that under special resonance conditions it is possible that to harvest and accumulate energy from space in technical systems.

Contemporary inventors like Paramahansa Tewari from India or Muammer Yildiz from Turkey could practically demonstrate with specially designed magnetic motors resp. generators that such a new kind of energy generation in the kW range is possible and can also scaled up. Inventors like Prof. Dipl.-Ing. Raul Popescu, former Prof. in Theoretical Mechanics in Bukarest, could show that even mechanical energy can be harvested via parametrically controlled rotating systems. In the same way there are russian inventors like E.I. Linevich who have developed inertia engines which can accumulate energy from space itself resp. from gravity fields. A suited theoretical concept was developed by Prof. Ph.M. Kanarev from Krasnodarsk. Evidently it is possible to harvest, synchronize and convert molecular fluctuations and even nuclear vibrations into macroscopic kinetic energy.

A hopefully and already secretly in the market introduced technology was developed by the Russian scientist V.V. Marukhin, Dr. of technical sciences. He invented an oscillating hydraulic generator for energy conversion from the nuclear vibrational energy fields. It is a further development of the classical ram pump which operates autonomously in a closed cycle. The energy of the undamped high pressure fluid oscillations are converted via piezo-electric ceramic material into electrical power. Such kind of novel energy technologies are predestined to substitute in the future fossil and nuclear fuels and even contemporary alternative energy technologies.

Energy from space - a brief history

Nikola Tesla, famous inventor of the modern alternating current (AC) electrical supply system, wrote 1933 in the *New York American*, November 1st, as electrical engineer and futurist: *This new power for the driving of the world's machinery will be*

derived from the energy which operates the universe, the cosmic energy ... which is everywhere present in unlimited quantities¹.

Tesla recognized that here on earth an atmospheric and a terrestrial storage battery exists, just waiting to be tapped for the good of mankind². But he was even aware that the whole cosmos is filled with unlimited quantities of energy as modern physicists like Charles Misner, Kip Thorne and John Archibald Wheeler have recognized³.

Nikola Tesla was evidently able to transform such energies via special electrical circuits into usable current. According to Heinrich Jebens, former president of the German "Erfinderhaus" in Hamburg, Tesla invited him in November 1930 for a ride in a luxurious Pierce Arrow car which was converted into an electrical drive. This car was not equipped with the usual big battery arrangements but was energized via a sophisticated energy converter designed and built by the inventor⁴.

Another ride with this car Tesla offered in summer 1931 his far relative Petar Savo^{5,6}. In this same year the Time Magazine published an article to Tesla's 75th birthday and mentioned the following statement of the famous inventor: "...I am working to develop a new source of power. When I say a new source, I mean that I have turned for power to a source which no previous scientist has turned, to the best of my knowledge. The conception, the idea when it first burst upon me was a tremendous shock. It will throw light on many puzzling phenomena of the cosmos, and may prove also a great industrial value, particularly in creating a new and virtually unlimited market for steel. I can only say at this time it will come from an entirely new and unsuspected source, and will be for all practical purposes constant day and night, and at all times of the year. The apparatus for capturing the energy and transforming it will partake both of mechanical and electrical features, and will be of ideal simplicity⁷.

In the same decennium, early in 1933, there was Captain Hans Coler together with Fritz von Unruh who developed in Germany an autonomous working system called "Magnetstromapparat". Later they were assisted by Franz Haid of Siemens-Schuckert who built himself a model that worked in December 1933. Coler stated that the strength of the magnets did not decrease during use of the apparatus. He suggested that he was tapping a new sort of energy hitherto unknown (space energy).

In 1933 Coler and von Unruh made up a slightly larger model with an output of 70 watts. This was demonstrated to Dr. F. Modersohn, who obtained from Schumann and Kloss confirmation of their tests in 1926. Modersohn then consented to back the invention, and formed a company to continue the development.

The Magnetstromapparat consisted of six permanent magnets wound so that the circuit includes the magnet itself as well as the windings around the magnets. These six magnet-coils are arranged in a hexagon and connected in a circuit that includes two condensers, a switch and a pair of solenoid coils, one sliding inside the other.

Coler then in 1937 built for Modersohn's Company a larger version with an output of 6 kilowatts. He claimed it powered his house and laboratory for three years. This led in 1943 to support by the German Navy⁸. After WWII the British Intelligence of the Objectives Sub-Subcommittee started a research in the context of operation "Paperclip". The originally classified results⁹ have been released in the year 1956.

Theoretical aspects

The question how the vacuum energy which exists in the electromagnetic spectrum throughout the universe can be "mined" for practical use in a kind of "vacuum engineering" was evaluated by many contemporary scientists¹⁰. Harold E. Puthoff, Ph.D., EarthTeach International, Inc., and Bernard Haisch, German-born American astrophysicist with research in solar-stellar astrophysics and stochastic electrodynamics made some research in this field. Haisch proposed together with his partner Garret Moddel a technical system for extracting energy from the vacuum. The key of the solution is the task to effect the orbital electron energy levels by suppressing the

EM quantum vacuum energy at appropriate frequencies in Casimir cavities. By capturing and converting such energies the atoms are forced to be reenergized by the ambient EM vacuum. In this way ZPF-energy is extracted locally and replenished globally from and by the EM quantum vacuum¹¹.

Another approach to mine free energy from the surrounding quantum field was developed by Prof. Lev Sapogin for over 25 years. In his Unitary Quantum Theory UQT he provides a theoretical basis for the development of new sources of energy and for the explanation of the operation principles of the existing and functioning so-called over-unity devices¹². The UQT allows especially that in resonance systems the oscillating charges with excess energy and the correct initial phase can be grouped together. In this way UQT offers the possibility for energy accumulation by synchronized processes. Such processes as predicted from the new theory can be named as generation of excessive heat, excessive electrical energy in an anomalous gas discharge, excess generation of electrical energy when electric current passes through proton-conducting ceramics etc. The new theory makes it possible to calculate a theoretical mass spectrum of elementary particles. Sapogin discusses also the problems of standard Model, supersymmetry and string theory and shows that Standard Model has left unsettled a lot of fundamental problems solved by UQT¹³.

In the Einstein-Cartan-Evans-Theory, developed by Myron Evans, there are some extensions to the classical Maxwell-Heaviside theory. This additional field terms combine a second potential component A^b with a spin component of frequency ω . This spin component couples the fields to a torsion component of space-time and explains a lot of surprising phenomena. It can generate special resonance effects and can decouple energy from space-time energy fields¹⁴.

Novel magnetical or mechanical energy systems

Inspired by the description of space and matter in ancient Vedic texts, Paramahansa Tewari of India developed his theoretical model of “Space Vortex Electron”¹⁵. Tewari was noted Executive Director, Nuclear Power Corporation, Department of Atomic Energy, India, and the former Project Director of the Kaiga Atomic Power Project. In his paper on “Space Power Generation” he wrote: “In addition to the discovery of a novel technology for power generation, the following crucial changes in the scientific and philosophical outlook that would be brought about with the new phenomenon of space power generation are – 1) The fundamental state of universal energy is eternally latent in the dynamic space of the universe, 2) The cosmic matter is generated from the energy of space in repeated cycles of creation and annihilation and 3) Space is not an empty extension but rather the most fundamental entity which alone gives reality to the cosmic world¹⁶.”

Based on his fundamental work published 1995 with the title “Physic of Free Power Generation” (Beyond Matter)¹⁷ he successfully built and tested a so called Reactions-less Generator which produces more electrical energy compared with the energy needed to energize the driving motor. Evidently the armature reaction is nullified which can be explained from the principles of Tewari’s Space Vortex Theory. The RLG concept was duplicated by Kirloskar, a major Indian corporation skilled in generator manufacturing, which has reproduced the machine and verified its operational characteristics¹⁸. According to Toby Grotz, US-engineer and cooperator of Tewari, it could be proved on July 9th, 2016, that the energy needed to drive the motor was 1,724 kW while the driven generator produced 4,461 kW. This gives an efficiency of the motor-generator-system of 258%. An US-patent has been applied and investors are invited to back up the mass production of such systems¹⁹.

A full permanent magnet motor was developed and presented by the Turkish inventor Muammer Yildiz first on July 3, 2008, to the author, his wife and a crew of engineers in Stein near Nuernberg/Germany. Such a prototype motor contains about 2’000

small permanent magnets on several parallel arranged stators and rotors. When the motor was loaded with about 500 W the idle velocity was reduced from 2'700 rpm to about 1'400 rpm. The idle rpm was stabilized by a single short circuit winding. The inventor has applied his invention for patent²⁰. Two years later, a running motor was demonstrated at the Delft University of Technology^{21,22} on April 20, 2010. Dr. Jorge L. Duarte from the Electromechanics and Power Electronics Department of Electrical Engineering Eindhoven University of Technology of the Netherlands organized this tests and elaborated also some theoretical aspects about the energy coupling with the vacuum field^{23,24}. Some years later, in 2013, a running motor was demonstrated at the 41th International Exhibition of Inventions in Geneva²⁵. In order to introduce such a technology into the market there is still more basic research and investment needed.

Another way to force oscillating or rotating systems to take and convert energy from the surrounding milieu is to build mechanical generators and to change their moment of inertia in a controlled way. Such a system was developed by Prof. Dipl.-Ing. Raul Popescu, who taught theoretical mechanics at the University of Bukarest. He developed a concept for an autonomous rotating system whose moment of inertia was changed by radially movable pistons in a controlled way²⁶. Popescu's concept of such a suitable «Resonanz-Pulsations-Drehmotor» is fully explained in the patent application DE2317724A1. The generator delivers more energy out compared with the invested energy. But the energy balance is always observed, because additional energy is feeded from the microlevel via thermal fields, quanta fields etc. The stability of stationary oscillations or rotations can be mathematically described with the Liapunov function. This function has the remarkable property to reach a maximal or a minimal value for stable states. According to the «Thermodynamics of isolated particles» of physicist Louis de Broglie it can be shown that the fluctuations of the mass of particles can be interpreted as a constant energy exchange with the subquanta milieu²⁷. That means that each material particle stays in constant contact with the heat reservoir of the subquanta milieu.

A comparable invention was made in Russia by E.I. Linevich, who developed a supportless inertial engine²⁸. The device contains a gyroscope, an electric motor with an unbalance with a possibility of the free line-limbic movements, and a control system. The inertion engine (or «inertor») can be used in the same time not only as a power supply for different devices, but also as a source of energy of unlimited volume. The unbalanced oscillations period consists of four subcycles of equal continuity each with an acceleration and deceleration component. It could be shown that the work on the moving of the inertor in space is done by space itself or even by the universal gravitation. In some kind space's energy (vacuum energy) is transformed to bodies' kinetic energy²⁹. In a test done in January 2009 in Austria it could be shown that 0,5 kW power feeded into an electromotor could drive a generator with a power output of 6 kW when the motor was equipped with an inertor³⁰. To understand inertion engines it is recommended to study the work of Prof. Ph.M. Kanarev from Krasnodar. His new concept of «Mechanodynamics» is a part of theoretical mechanics and explains the relationship of the material points and bodies and the forces exerting influence on them. He formulated seven laws which allow to understand mechanical systems with efficiencies greater than unity. His theory of the behavior of impulse power systems makes it possible to calculate and solve problems which are beyond the strength of Newton's dynamics. It seems that molecular and even nuclear fluctuations of the material is used for conversion of additional energy into macroscopic kinetic energy³¹.

Further russian scientist, V.V. Marukhin, doctor of the technical sciences, together with V.V. Koutienkov invented an oscillating hydraulic generator for energy conversion from the nuclear vibrational energy fields. He designed a new kind of hydraulic ram pump which has no water loss and which can therefore operate with a fixed water reservoir. The system works autonomously when all geometrical and dynamic

parameters are strictly controlled. The internal oscillating valve can be compared with the flutter valve in pulse jet engines. But in jet engines we have an unidirectional gas flow while in the new undamped hydraulic-pneumatic design we have a bidirectional fluid oscillation. The fact that no waste water is produced allows that the up pumped water can be used to generate energy - via turbine and generator - and that the system can operate in a closed cycle. In the classical design of a hydraulic ram pump there is an inherent water loss from the waste valve. The waste water amount is normally tenfold to fifteen fold of the up pumped water. In the new Russian design we have only an internal oscillating valve between the high pressure and acceleration zone without any opening to the outside. From theoretical calculations follows that the maximal pressure is the double of the pressure in the inlet drive pipe and therefore the maximal accessible height H corresponds to $2h$ which is the double of the water reservoir height. The system can also be immersed into an open water reservoir. For autonomous operation it is required that the height (depth) is big enough to reach the start pressure. When the required pressure is reached the system starts autonomously.

In a further implementation of the hydraulic oscillating generator it was possible to omit any mechanical check valve and to incorporate the steel tubes of different diameter and length into a closed vessel. Such systems operate under high pressure (2'000...4'000 bar) and with high repetition rates (3'000 Hz). The mechanical energy of the vibrating hydraulic columns is converted into electricity via piezo-electric ceramic material. Custom designed «Hydraulic Oscillating Generators» generate up to 1 MW in a steel cylinder of 80 cm height, 20 cm diameter under operating pressure of 350 MPa with 3'000 cycles/second. The fast pressure oscillations are not audible. Their amplitudes are in the sub-mm range. The vibration process is adiabatic with no heat losses. The oscillations are started with a pressure «dirac pulse» generated in a special shock-valve. The theory of the «undamped fluid oscillator circuit» is published in several scientific journals³¹. In a summary of the Russian text it is written that the miniature electric generator is capable of producing clean electric power continuously for several years in all weathers and climates, using no fuel or solar energy³². A training video shows the development of the classical ram pump to the new ram pump design with internal check valve and finally to the valveless shrinked autonomous system operating under high pressure and frequency^{33,34}. The high voltage pulsating signal from the piezo-electric ceramic tube is rectified in a first step and converted via standard inverter with IGBT transistors into high or low AC voltage with 50 Hz or 60 Hz in a second step. As summarized in a scientific article it is evident that such new kind of hydraulic generators allow to produce any industrial quantity of ecologically clean electrical power of a big commercial capacity without any fuel or solar source during several years, irrespective to weather or climate. Such generator can be used as a power station for a flat or a house, as a power plant for an industrial object, as a source of energy for an electric vehicle, an airship, an aircraft, an underwater vehicle, a surface ship and a spaceship³⁵.

On January 30, 2014, V. V. Marukhin got the European patent EA019159 (B1). The realizable power is in the range between 65 kW and 65 MW. The maximal power depends from the size and internal pressure of the plants. He informed us that several dozens plants of different sizes and power are already licensed in Europe and in Russia. The name and location of the companies which use his technology already in the industry cannot be given up for comprehensible reasons. Our company has options to the license in several European countries. We are planning to buy a license still in 2016 and start with the production of the first plants in 2017.

This paper is also available via reference 36 and together with the related ppt-presentation in reference 37, both as pdf-file.

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