

# Basics of Magnetic Propulsion

Compiled by A. Schneider July 26, 2019

## 1. Flywheel storage of magnetic energy (Dennis Danzik, IEC)

Extracts from [www.borderlands.de/Links/Dennis-Danzik-Vita.pdf](http://www.borderlands.de/Links/Dennis-Danzik-Vita.pdf)

... The **Earth Engine** is **based on Magnetic Propulsion**, functions from the force developed by a paired magnetic field. **The magnetic field STARTS and ACCELERATES the flywheel on its own force**, once attenuated... **What I have developed ... was based on the Szilard paper of 1929**. Leo Szilard, through the work he left behind, has taught me a great deal. Here is a link to the paper that I made my life's work (outside of my career):

<http://www.sns.ias.edu/~tlusty/courses/InfoInBio/Papers/Szilard1929.pdf>

**Comment A. Schneider** : This webpage is no longer available but the following link is accessible: <http://www.eoht.info/page/On+the+Decrease+in+Entropy+in+a+Thermodynamic+System+by+the+Intervention+of+Intelligent+Beings>

Remarks by A. Schneider :

If we design a system which converts energy from microscopic scale (thermal or quanta fluctuations) into macroscopic kinetics (via coupling of elementary spin) then we have to discuss the issue of entropy (lowering). That's what Szilard elaborated in the last century and which was studied by Denis Denzik in detail.

The same topic is discussed by Prof. Dr. Claus Turtur in his theoretical concept of converting zero point field energy which exists everywhere in the universe. Energy which is gained from the quantum vacuum could be used to increase a state in a local potential and to lower at the same time the entropy in a material system. Correspondingly it can be hypothesized that the entropy of the local quantum vacuum is increased and the vacuum density is reduced. Space energy ultimately results from an entropy exchange between our classical system and the quantum vacuum.

References:

[http://www.buch-der-synergie.de/archiv/wandlungsprinzip\\_englisch.pdf](http://www.buch-der-synergie.de/archiv/wandlungsprinzip_englisch.pdf)

<https://www.youtube.com/watch?v=qPOnFnCPB9Q>

[https://www.bibliotecapleyades.net/ciencia/ciencia\\_zeropointenergy.htm](https://www.bibliotecapleyades.net/ciencia/ciencia_zeropointenergy.htm)

**Further extracts from the paper of Dennis Danzik (IEC):**

**My development is the control of entropy in the system.** The applied science of Magnetic Propulsion first diminishes the point of entropy and then uses that entropy to ACCELERATE the flywheel in what we call a "slingshot".

**Entropy in my system occurs at only one point in the rotation of the flywheel.** This has taken me years to calculate and refine. Let's say at 350 degrees as an example, entropy is at maximum (force in the opposite direction of the desired direction). **So from 0 to 358 the**

**flywheel is being pushed and accelerates continuously.** Now, obeying all physical laws, if I did not control entropy, the flywheel would slow and eventually stop.

**At 359 degrees I have developed a way to attenuate the magnetic field that is already “lopsided” or asymmetrical.** The flywheel then makes it past the reversing force and then enters the “slingshot” and then **the flywheel, using the opposing force greatly accelerates from 359 to about 15 degrees.**

There are only two fields opposing at a time. One from the attenuation section (what we call fuel), and the flywheel magnetic field (what we call receptors). There are **no electromagnets**, or any device coupling to the flywheel. It is a **zero contact device** that is also **magnetically levitated.**

Attenuation of the field is accomplished through the bending of the paired fields. **This is a major breakthrough.** We keep both the geometry (shape) and geography (where the magnetic fuel is placed)(the pattern).

On the laboratory device “**Crystal**” you can see the firing of the attenuation device every **360 degrees.** **It consumes about 20 watts on average per firing.** Crystal has a 100 watt alternator rectified to 24 volts. It is also magnetically driven...

**Remark by A. Schneider:** In <https://revolution-green.com/earth-engine-claimed-3-years-40-kw-mechanical-energy-production-magnets/> it is written :

**When the two opposing fuel sources (magnetic fields) driving the flywheel mass are in the correct position, the Engine fires a small electromagnetic charge measuring about 52-watts.**

**This charge allows the opposing fuel sources to “see” each other, and can produce significant force to spin the large flywheel mass.**

**Now, here are some very important facts :**

1. **Crystal is NOT a dynamic motor.** **Magnetic Propulsion is not dynamic (instant) in its power delivery. It is inertia.** It delivers power (which can then spin a generator) by accelerating a flywheel and storing that energy. **You cannot in any way hook a dynamic load to a Magnetic Propulsion Engine.** It will just stop, and it will stop quickly.

2. **Magnetic Propulsion Engines work by creating inertia in a very specialized flywheel** (some 257 parts) **that refuse to magnetize in the presence of a large and powerful magnetic field.** Once to speed (125 to 350 RPM) you have a great way to **harvest kinetic energy** by spinning an alternator. **The alternator is not allowed to exceed a specific load, based on its affect on inertia.** **This is also a closely held trade secret.** Think of it as a very large electrical “pump”.

3. **Magnetic Propulsion requires STORAGE. A battery or capacitor.** You can charge 24 hours a day, seven days a week.

4. **Magnetic Propulsion** requires a BATTERY or CAPACITOR for its parasitic **energy to run its attenuation section**. But this is **only about 20W** p/s at 60 RPM. So the battery is very small.

5. **Crystal's flywheel weighs** in at 622 LBS (2767 N) where our commercial Engine flywheels are just over 4,000 LBS (17793 N).

6. **Magnetic Propulsion** is not “over unity” or perpetual motion. It **receives its power from over 5,000 PSI of pressure from an accelerated magnetic field**. My developed magnetic fuel has “pull forces” (a common measure used in magnetism) of over 10,000 Pounds. **This type of force requires not only great safety procedures but has also led to great breakthroughs in the handling of these very powerful magnets.**

Further extract from: [www.borderlands.de/Links/Earth-Engine.pdf](http://www.borderlands.de/Links/Earth-Engine.pdf)

... **Mr. Danzik says he became convinced he could extract energy from powerful magnets** (mostly ordinary iron) **that are clustered in a way that magnifies their effect**. Such arrays are well known. For example, Tesla cars use electromagnetic motors with what are called “**Halbach**” arrays, which are about 30% stronger than typical neodymium magnets.

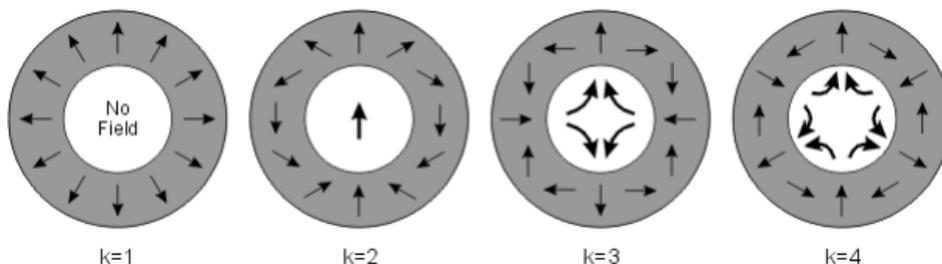
**The magnets IEC uses are** also highly one-sided, or “**anisotropic**,” which means **their field is stronger on one face than the other**—say, 85% North and 15% South.

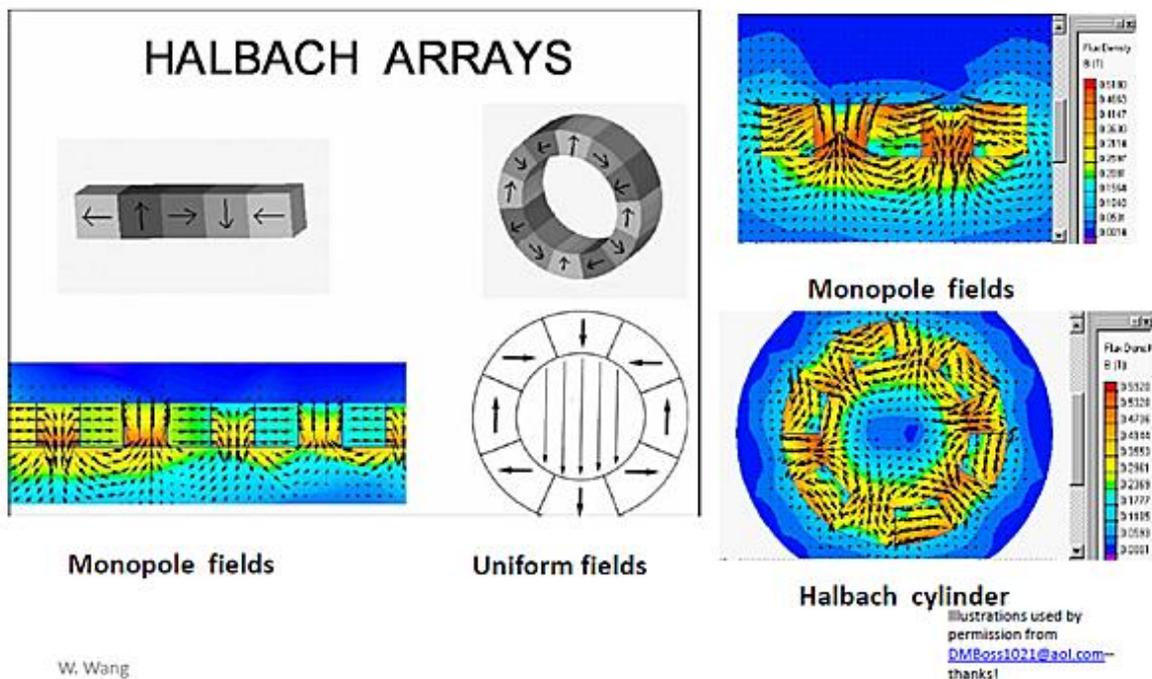
In the R32, magnets located in three black towers interact with ones placed in the two one-ton, counter-rotating flywheels. As the flywheel rotates, **small battery-powered motors move the tower magnets' orientation at moments of highest drag**. This **allows the magnets to accelerate as they approach** and not slow down as much when they pass.

## 2. Theory and Practice of Halbach Arrays which is the basic concept in Dennis Danzik's Magnetic Propulsion technology

Halbach cylinder <http://www.borderlands.de/Links/HalbachCylinder.pdf>

A **Halbach cylinder** is a magnetized cylinder composed of **ferromagnetic** material producing (in the idealised case) an intense magnetic field confined entirely within the cylinder with zero field outside. **The cylinders can also be magnetized such that the magnetic field is entirely outside the cylinder, with zero field inside**. Several magnetization distributions are shown below:



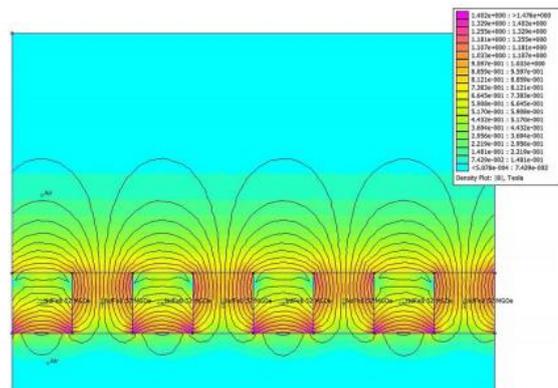


W. Wang

### Linear and circular configurations of Halbach Array

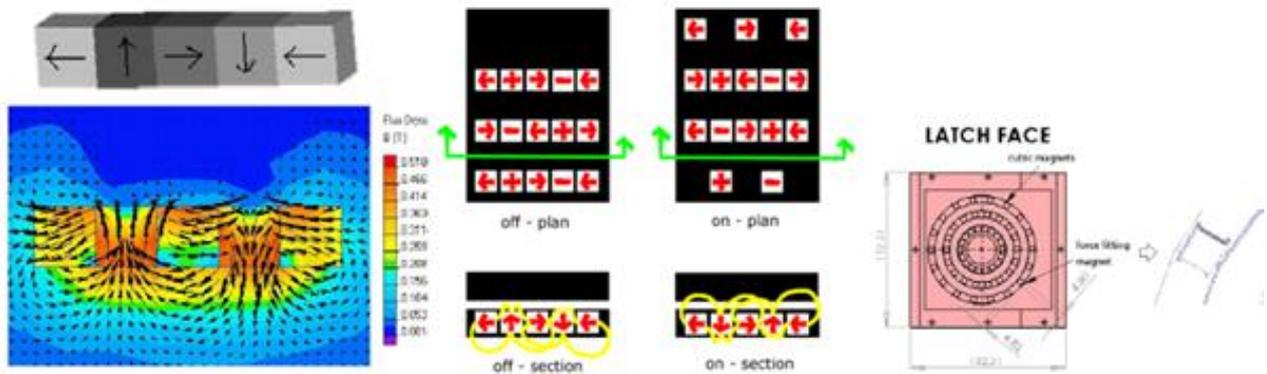
**Comment A. Schneider:** As Mr. Wang explains it seems that Halbach arrays can simulate in some way so-called **monopole magnetic fields** - at least in certain defined regions.

- **Monopole like magnetic field. Magnetic field on one side is increased and the other side is decreased.**
- This is achieved by having a spatially rotating pattern of magnetization.
- The effect was discovered by John C. Mallinson in 1973, and these "one-sided flux" structures were initially described by him as a "curiosity", although he recognized at the time the potential for significant improvements in magnetic tape technology.[2]
- In the 1980s, Lawrence Berkeley National Laboratory physicist Klaus Halbach, independently invented the Halbach array to focus accelerator particle beams.[3]



## Halbach array latch

- Electromagnets or permanent magnets?
- Shift the arrangement arrays for different augmentation of the overall magnetic field, allowing a magnetic ON/OFF state
- No power consumption
- Shape Memory Alloy to drive the rotation of array augmentation



## Latch system with 21...23 W power consumption for a 20° rotation

- Rotate 20°
- The total force ~2.05 lb (930g) (~ equal to the number on SMA manual.)
- Total power consumption is about 21.28W to 22.95W



SMA loops and anchors



Comments by A. Schneider:

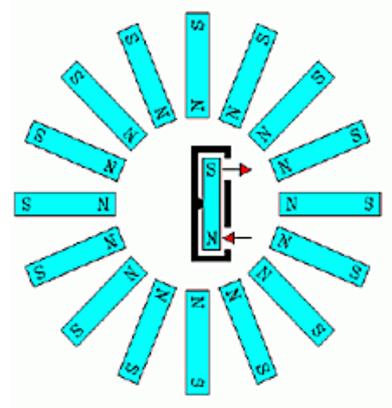
Dennis Danzik needs in his Magnetic Propulsion **only a power consumption of 20 W** while the rotor turns from **359° to about 15° degrees = 16°**

### Concept of a Magnet Motor based on Halbach Arrays

Concept of a Magnet Motor as proposed by Wei-Chih Wang, Department of Mechanical Engineering, University of Washington, in his paper (slide 53):

ME 230 Kinematics and Dynamics

[www.borderlands.de/Links/ExtraCreditProject.pdf](http://www.borderlands.de/Links/ExtraCreditProject.pdf)



Such kind of **monopol simulation** is also used by the Turkish inventor **Muammer Yildiz**, see:

<http://www.borderlands.de/Links/Muammer-Yildiz-Compilation>

<https://www.bilgiustam.com/manyetik-motor-nedir-turk-mucidimiz-muammer-yildizin-bsmh-isimli-icadi-neler-vadediyor/>

**Extract (translated):** ... After 20 years, he took the pension and resumed his work and completed the magnetic monopoly device for 2 years...

In a comment to a video of the Magnetic Motor of Muammer Yildiz you can read: «Muammer Yildiz's **magnetic monopole device**. First public demonstration will be on May, 2010 at Germany Source : (CHA) CihanMedia Services », see :

[https://www.youtube.com/watch?v=h\\_PW1WD-3E8](https://www.youtube.com/watch?v=h_PW1WD-3E8)

Links to the Yildiz motor: <http://www.borderlands.de/Links/Muammer-Yildiz-Compilation>

### 3. Harnessing Mechanical Energy From Strong Electromagnetic Forces Generated By The Spin Of Electrons according to the concept of Kenneth C. Kozeka

[http://www.borderlands.de/Links/Kedron\\_EDEN\\_Project.pdf](http://www.borderlands.de/Links/Kedron_EDEN_Project.pdf)

**Kenneth C. Kozeka**, Ph.D., from the KEDRON CORPORATION, discovered that it is possible to harness mechanical energy from strong magnetic forces by the spin of the electrons.

It has been discovered that cube-shaped and thin, **rectangular magnets** (magnetized through their thickness) **generate** significantly **more mechanical energy when they pull themselves together «sideways»** or horizontally (perpendicular to an axis between their poles) **compared to** the amount of **mechanical energy required to pull them «straight»** or vertically (parallel between their poles) **apart**.

The remaining or net-yield of mechanical energy obtained in this manner from a volume of neodymium magnets less than the size of a car battery can generate electricity for one or

more homes or generate an annual amount of mechanical energy equal to thousands of gallons of gasoline.

**There is no claim here of creating any amount of energy.** As stated by the *first law of thermodynamics*, **energy cannot be created or destroyed.**

Electromagnetic forces believed to be generated by **the spin of electrons is transferred into mechanical energy (work)** which can be used to turn a generator producing electricity.

grade	cycles/		net-yield	net-yield	net-yield
	second	RPM	ft-lbs	KWH	horsepwr
N50	4	240	928	1.26	1.69
	8	480	1856	2.52	3.37
	16	960	3712	5.03	6.75
<b>total volume of magnets</b>			10.8" cube		

**When N50-magnets are periodically moved** in this way in a 10.8" cube (cube with 27,4 cm edge length) **with a rate of 16 cycles per second (960 rpm)** it should be **possible to generate a power of some 5 kW** (by the exchange of magnetic spin energy).

**Kenneth C. Kozeka has written in 2017 a scientific paper to the topic:**  
**A Motor Driven by Permanent Magnets Alone; A Clean and Abundant Source of Electromagnetic Energy from Iron and Other Ferromagnetic Materials**

see : [http://www.borderlands.de/Links/Kozeka\\_NS\\_2017092016082146.pdf](http://www.borderlands.de/Links/Kozeka_NS_2017092016082146.pdf)

**Extract from Abstract: ... The discovery** described here **can be used to construct a motor driven** entirely **by permanent magnets.**

#### **4. Energy Conversion via Magnetic Monopoles**

CISION (PRWeb) JUNE 7, 2004

<https://www.prweb.com/releases/2004/06/prweb131743.htm>

**High Energy Magnetic Monopole Materials exist** (since 1979)

**Witness James D. Fauble comes forward after thirty years despite threats on his life.**

**Extract:** ... I am now offering ... news of the existence of certain materials that are thought impossible to exist but, which in fact DO exist. **The materials** of which I am referring, **were** (high energy magnetic monopole materials) **with resistive forces of at least 10 to 20 tons per square meter x 1/4" thickness.**

... I have seen the physical and documented proof and also the formulas to prove this. ... Thirty years ago I **had delivered this information** in person **to the energy commissioner of the state of Minnesota** in the late spring of **1979.**

... I would also like to add that I have seen **some evidence that** some of **these** high energy **monopole materials** are likely to **posses properties of invisibility**. I understand how this might sound but try looking up "High Energy Dirac Monopoles". I have done some Google searches on the Internet and have found some **information on Dirac Monopole materials confirming this possibility**.

Nevertheless, I feel that it is necessary that others know of the existence of these materials because of the **many implications for advancements in FE/OU and other new energy technologies**. Also there are likely other possible applications associated with these types of materials which **could greatly benefit mankind...**

... don't know what if any results may occur by getting this off my chest but **I believe I must do this at this time for many reasons**, some which will be obvious, others of which I do not want to discuss at this point.

God bless you and keep you all.  
James D. Fauble

**Video of Monopole Simulation:** <https://www.youtube.com/watch?v=6iEnQw2Wt7w>

**Patent applications:**

CN108599529 (A) – 2018-09-28

Li Dan : **Power generation device and magnetic monopole**

CN207781324 (U) – 2018-08-28

Ui Long, Tang Jiafei : **Monopole Arrangement machine**

CN201663026 (U) – 2010-12-01

Quanlin Zou : **Magnetic monopole** (simulated)

JPH06284758 (A) – 1994-10-07

Shinichi Seike: **SINGLE-POLE MAGNET AND CELL USING THIS MAGNET**

## **5 Regauging a Magnetic Scalar Potential**

Extracts from : <http://www.cheniere.org/techpapers/jap/masterprinciple.htm>

To "regauge" a magnetostatic scalar potential on a stator, **we must create a stator magnetic pole** in such a manner **that the magnetic field H from the suddenly injected pole strength cannot cause tangential translation acceleration of the rotor *in the regauging region itself***.

... In fact, **that is the active principle used by the magnetic Wankel engine**. On the other hand, **Kawai creates a tangential force field by a stator electromagnet** when it is just forward of the radial flux from a central ring magnet. This produces an accelerating tangential force field, which reduces as the rotor proceeds and the flux becomes aligned with the stator electromagnet.

... Hence the regauging "quenches" the back-drag field portion. This essentially **doubles the energy available** in the Kawai motor **to drive it**, by avoiding using half the collected EM energy in the circuit to **overcome the back mmf**.

...The **injected magnetostatic scalar potential** (pole) can readily be **made sufficiently strong** as to **create an accelerating force** between it and the potential (pole) next in rotation order. Thus **the rotor can actually be strongly boosted** through a region that would otherwise produce back-drag if regauging were not accomplished.

So, once the regauging jump of the magnetostatic scalar potential (MSP) is accomplished, **the tangential back drag** on the rotor in a permanent magnet motor arrangement **can be eliminated or materially reduced** — **or even reversed so as to aid the rotor's operation** — **with the expenditure of very little switching energy** in creating the "regauging jump."

...It is important to note that **the regauging "jump" region becomes an energy reset and refueling region**. It is just like refueling a gasoline-powered automobile — by refueling, one resets the stored energy (i.e., the potential) in a subsystem (the gasoline tank) to its initial value.<sup>[32]</sup>

So **asymmetrically regauging a stator sector** of an EM motor of the magnetic Wankel or Kawai kind or similar is precisely **a method of refueling or resetting the stored potential energy of the system**.

... It is already well known in foundations of quantum mechanics that **the potentials**, not the force fields, **are the primary causes of electromagnetic phenomena**. So **by regauging and "resetting" the potential** (the energy storage) in a system, one **really is refueling the "primary EM causative agents"** of that system.

#### References:

E.g., see Y. Aharonov and D. Bohm, "Significance of Electromagnetic Potentials in the Quantum Theory," Physical Review, Second Series, 115(3), 1959, p. 485-491 for a cogent discussion. For a thorough review with hundreds of references, see S. Olariu and I. Iovitzu Popescu, "The Quantum Effects of Electromagnetic Fluxes," Reviews of Modern Physics, 57(2), Apr. 1985, p. 339-436

Links to Magnetic Wankel Motor, see: <http://www.cheniere.org/misc/wankel.htm>

Links to Magnetic Kawai Motor, see: <http://rexresearch.com/kawai/1kawai.htm>

## 6 Permanent Magnet Spiral Motor for Magnetic Gradient Energy Utilization

**Extract** from Thomas F. Valone, Integrity Reserach Institute, Beltsville/MD, see: [www.borderlands.de/Links/SpiralMagneticMotor-ValoneSPESIF2010Final.pdf](http://www.borderlands.de/Links/SpiralMagneticMotor-ValoneSPESIF2010Final.pdf)

The Spiral Magnetic Motor invented by the Kure Tekkosho Co. (Ono Gunji, "Permanent Magnet Prime Mover," JP55144783) has remained an **Electrically-Stimulated Linear Induction Motor** (ESLIM) but also **utilizing** a little known physics principle called the permanent magnet "magnetic gradient force."

A separate paper is being co-authored on the **theoretical quantum mechanical basis of magnetism** in order to **include the contribution from zero point energy**, the Bohr magneton and the coupling of electron spin to the quantum vacuum.

**The orbital angular momentum of the electron contributes very little (less than 2%) to magnetism, while spin angular momentum is the primary source of microscopic magnetism** (Chikazumi, 1964).

The derivation of the **total energy of a magnetic system** given by the **sum of the magnetostatic energy and the anisotropy energy due to the rotation of spins** which is **gained from the angular momentum of the vacuum** is the basic thesis.

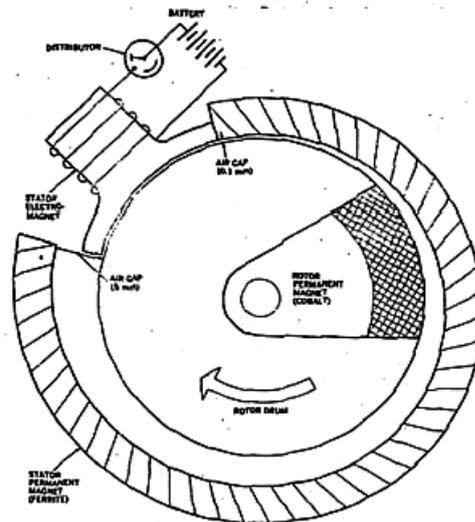
Thus, **the energy source of magnetic-powered devices will no longer be mysterious or elusive.**

**References, see also :**

**Valone, Thomas:** « **Is Permanent Magnetism Connected with Zero Point Energy** », see pp. 206 in his book : **Zero Point Energy : The Fuel of the Future**. Integrity Research Institute, 1<sup>st</sup> edition (2007), see : <https://www.integrityresearchinstitute.org/ZPFuel.html> and table of contents, see: <https://pdfs.semanticscholar.org/8722/cfb507611c4ace428b21825d6b2226903427.pdf>

or [www.borderlands.de/Links/Valone-Book-Extract.pdf](http://www.borderlands.de/Links/Valone-Book-Extract.pdf) with the complete chapter and conclusion of Tom Valone :

**Therefore, as entirely permanent magnet motors, generators and acutators become commercialized, it will no longer be a mystery as to where the energy is coming from. Furthermore, these magnet-powered devices cannot be mistaken for perpetuum mobiles.**



**FIGURE 1.** Kure Tekko "Magnetic Wankel" running in repulsive mode