

## **Patent NL1029488C1**

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**Method has evolving physical and chemical processes with three energy conversions from zero-point energy to permanent magnetic energy, to electro-chemical energy, to electrical direct current**

### **Abstract**

The method has evolving physical and chemical processes with three energy conversions from zero-point energy to permanent magnetic energy, to electro-chemical energy, to electrical direct current, with a resulting durably available electrical energy source. In a layout of the processes, the regenerative mode is seen next to the discharge mode, whilst in fact both modes are located adjacently at inter-atomic distance. In the conversion into electro-chemical energy at the location of the permanent magnetic field, the two electrodes, together with the intervening membrane, are permeated by an electro-chemical cell. The electrode pair and the intervening membrane are located in an electrolyte, which can be a liquid, a gel, or fine powder. The conversions occur in an energy cell, in separate sections, next to each other. The electrons can flow through connectors provided between the separate sections. The sections are positioned at inter-molecular or atomic spacing.

### **Description**

Conversion of Permanent Magnetic Energy, supplemented by "Zero Point" Energy, to Electrical Energy.

### **Introduction and Backgrounds.**

Various electrolytic processes have been developed over the last centuries, which can convert chemical energy into electrical energy. There is a "collective" name for such process executions, n.l. "Battery technologies".

Some process liners are characterized by electrolytes in water, e.g. lead / acid, or electrolytes in colloids, the so-called gel types; others, "dry" cell types, have membranes between the components, which participate in the relevant processes. Both categories can be further divided into two classes: non-reversible processes, e.g. "Alkaline" processes and reversible process technologies, e.g. NiO<sub>2</sub> / Cd and M-metal hydride, e.g. NiOOH / MgH.

Since the 17th century it has been known that unequal metals, which have close contact with each other, demonstrate a voltage potential. The cause of this is: the different values for the so-called z.g.n. "Work-function" of every metal (the "work-function" is the amount of energy required to exit a "free" electron from an atomic or molecular matrix).

In connection with this, the Volta and Pfaff Series, which show the electrical potentials of the metals, became generally known. E.g. Zn, Zinc is a strong electro-positive and Pd, Palladium is a strong electro-negative metal element. It is known that the voltage potentials between different metal temperatures are dependent; in general, higher temperatures, higher potential differences. The reversal of the z.g.n. "Peltier-Effect" shows that the heating or cooling of an intimate contact area between two non-similar metals generates an electric current, the direction of which is determined by either heat supply or discharge in the contact area of the metals. Practical energy generation applications have lagged behind in terms of i.v.m. the low energy densities that have been achieved so far with piles of different metals. With z.g.n. "Zamboni" stacks can create reasonable potential differences. It is important that De Ohm-se resistance also increases with the "size" / "height" of such non-simile metal stacks. If reasonably high temperature is present, there will be the possibility for electric energy generation on a small scale. In Russia / Siberia, in remote areas, generators were used until recently, consisting of a large number of thermocouples, which were connected in series. The thermocouples were heated with a flame. Such systems had / have a power of 50-150 watts, which was / is sufficient for a few light points or for the operation of a radio transmitter / receiver. Another area, which is now opening in 2004 - 2005, are the applications of so-called z.g.n. "Electrostatic Motors", including "linear motors". Extensive research is ongoing at a number of companies and was also done by Prof. dr. Oleg Jefimenko and Dr. D. K. Walker of the University of West Virginia, (A number of books with designs, by their hand, have been published). Non-similar metal stacks can show significant energy density increases through the use of so-called z.g.n. "Electrets." A well-known developer of this is Prof. dr. Mototaro Eguchi, in Japan. The function of "Elektrets" in "electrostatic applications" is very similar to the function of permanent magnets in magnetic systems. In the Other Invention of Inventor, under the title of: "ZPE Alternating Current Generator", two piles of non-similar metals are used. Permanent magnetic fields with different field directions for the respective stacks are arranged over these stacks. If these stacks are included in a 'parallel' electrical circuit, with the adjustable capacitor between them, then an 'oscillator circuit' has been created, which, if correctly adjusted, may experience resonance activation due to the Brownian Movement ( Internal energy) of the 'free' electrons, which are located in the electrical circuit. Such a System can extract "zero point energy" from the "aether" in the immediate vicinity, which is then converted into alternating current type (AC) electrical energy.

## **Introduction.**

The present invention provides for the coupling of the energy action which is produced by permanent magnetism, which is then energetically supplemented by 'zero point energy', (ZPE) and the energetic reaction of the atoms of the magnetizable elements, whose nuclei aligning and aligning, which results in the intra-matrix "aether" also aligning itself, and that in the form of vortex tubes, in which the forward resistance for free electrons in the field direction becomes practically zero. The foregoing takes place in energy cells, which consist of two parts, separated by a membrane. Magnetizable elements are located in both parts; they are part of electrodes; which must have a specific orientation and the maximum number of layers of non-similar metals is bound to the

height of the field strength. The permanent magnetic flux, which must be as high as possible, follows directional matrices and lies entirely in a closed permanent magnetic circuit that passes through all energy cells.

The vortex tubes in the "aether" run through the membrane. The helical (spiral-shaped) fluid current movement of the vortex tubes, which essentially form the constitution of the permanent magnetic field, causes 'free' electrons, which themselves already describe a spiral movement, through the membrane be able to move in the opposite direction than that which exists with 'discharging' of electrical energy in connected consumption circuits. Discharging "for consumption and" charging "of the energy cells takes place simultaneously.

The net energy yield is equal to the inflowing amount of zero point energy, multiplied by a return factor. There is some energy dissipation.

### **Description.**

It is important that a considerable percentage of the atoms in the electrodes in the energy cells, at least on one side of the membrane, but preferable on both sides 'magnetizable', ie that nuclei of said atoms with their 'spin' -as will orient parallel to the field lines of the 'primary' permanent magnetic field. The energy cell is entirely within the "primary" (between the Poles) permanent magnetic field. An energy cell has a housing with two chambers (or a plurality thereof, in series), which are separated by a membrane with certain permeability. Each chamber contains at least one electrode that participates in the process. The relative field strength, which "stands" over the two chambers of the energy cell, is the main factor in the operation of said process management, which we will call "regeneration" capability.

For optimum yield for the conversion of ZPE to electrical power: the dimensioning of the parts, the relative field strength and direction of the field are bound to a non-wide tolerance.

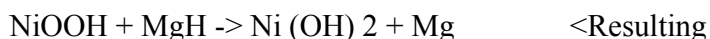
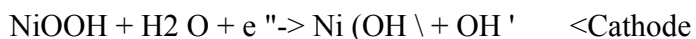
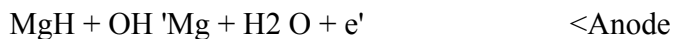
The energy conversions in the total process, in order, are:

- (1) From ZPE (due to deformation of magnetic field, where it performs work, ZPE can flow in; Law of Bemouilli for frictionless media),
- (2) to, permanent magnetic energy,
- (3) to, electrochemical energy,
- (4) to, electrical energy, in the form of direct current, (DC).

The energy conversions (3) and (4) are of battery-type action, while conversions (1) and (2) are of the "regenerative" type.

Although there are a number of options for metal combinations for the electrodes, e.g. with Cd and Zn, with which the overall process technology works, the inventor, in this patent application, description method, will limit itself to a favorite combination of electrodes to date: Mg (H) x and NiOOH.

Some other metal combinations may even have a better energy conversion yield, but have disadvantages in categories such as: magnetizability, costs, weight, lifespan, etc. A battery group that uses the aforementioned electrodes is known as nickel metal. -hydride'. For optimum yield, with particular attention to the 'regeneration' process, certain internal structural changes are advisable, as well as a change in the composition of the electrodes with respect to the current standard composition: Mg (H) x \ n a chamber and NiOOH in the other room. The housing of a cell consists of non-measurable and non-electron-conducting material. The electrodes whose main constituents are: Mg (H) x and NiOOH have substantial porosity, thereby allowing an electrolyte KOH (weak solution) to react within the electrodes. The membrane is selected so dense that only electrons can permeate. (some other systems require proton permeability) "Discharging" and "regeneration" in an energy cell happen simultaneously and at locations that are close to each other, even on an inter-atomic scale. "Regeneration" takes place without any electrochemical reactions, while "discharging" consists of electrochemical reactions, such as taking place in a battery. The Mg (H) x electrode (s) in each cell forms: the Anode and the NiOOH electrode (s) is: the Cathode. Viewed from 'discharge', that is energy consumption for consumption, the Anode is the 'min' pole and this indication is permanent, due to the fact that the total process does not require a charge (whereby the polarization normally reverses). The electrochemical reactions that take place in a cell during "discharge" are as follows:



These reactions show that in "discharge" the electrons pass through the membrane in the direction from Anode to Cathode. "Regeneration" occurs because of the pressure exerted by the helically flowing "aether" of the vortex tubes (which constitutes the permanent magnetic field) on the electrons, which also move in a spiraling manner. Due to the fact that both, both Ni and Mg (even over 2 axes) can be magnetized, ie that the rotational axes of their cores are oriented in a magnetic field, and that said cores lie matrix-wise behind each other at the same center lines that continue through the membrane, the "magnetic flux" of the "primary" permanent field is enhanced and "aether" outflow towards the sides of the energy cell is greatly reduced. Inventor, who, after doing intensive research in a few years, wrote a book about the physical phenomenon 'Magnetism', hereby declares that the helical (= spiral) movement, which is strongest in the 'eye barrier' of the vortex - tubes in the 'aether' ((inwards, decreases linearly and outwards, hyperbolically)) is capable of exerting force on electrons, which also move in a spiraling direction, within the vortex tube constitution, or in adjacent vortex tubes with

counter-rotation (Law of 'Thomson', concerning 'Circulation in Frictionless Fluidae'), in the direction of 'helicity'. This applies to "primary" fields, inside or outside matrices, as well as to the "fringe" (= backflow) fields. The term "field" is in reality: "a 3-dimensional spaced multiplicity of self-closed vortex tubes." Classical Physics still knows little about "Magnetism", reason why a litigation, as described here, has never been found before. Years ago the inventor found in his laboratory that the "helical" current in a magnetic field is directed from South to North.

Therefore, for the "regeneration" process to work, it is required that a South Pole in the circulating field is placed against the NiOOH electrode. This electrode, as well as the electrolyte, receive electrons back from "discharged", which went through an energy-consuming load and did work there. These received electrons are then taken into the "aether" vortex tubes that are adjacent to the helical currents, in which also said atomic nuclei rotate, and pushed back through the membrane against the existing counter-potential, if the field strength is high enough.

This describes a cycle process for the "free" electrons. In technical embodiments of this process, numbers of energy cells may be in series to increase the voltage, however, the energy cells must be "inter-spaced" with permanent magnets (preferably of the highest known strength, ( N-50), or better, which is now available) A number of further improvements to the 'regeneration' process can be incorporated.

These are: a) On the cathode side of the energy cell: the addition of Co and Fe; these can reinforce the polarization of the Ni atoms, since the Co and Fe 10 atomic nuclei align themselves with the same axis of rotation and fit into each other at the ends of rotation (See book "Magnetism" by the inventor). If atomic nuclei of these elements align, then in the 'ether', long cores are formed as it were with unanimous rotational speed. This constituted a higher "circulation" and with that a stronger permanent magnetic field. Inventor's book "Magnetism" describes these phenomena and shows the nuclear structures and how they "fit together". A similar case occurs with "AlNiCo"; aluminum cannot be made permanently magnetic .; however, the core of the aluminum atom with its axis of rotation allows the nuclei of nickel and cobalt to rotate about the same axis, the atomic nuclei of the latter two elements 'matching' with the aluminum atomic core , each on one side. In combination with nickel and cobalt, aluminum suddenly became quite strong permanent magnetic.

b) On the Anode side of the energy cell: the amount and density of the absorbed hydrogen are important. The more hydrogen, the more electrons are available. (See page 6, first reaction, Mg (H) x yields the hydrogen). The elements, La (in LaNi<sub>5</sub> \ Ti (in FeTi) and Ni (in Mg<sub>2</sub>Ni) in their molecular matrices complexes, can bring substantial improvements in the storage quantities and densities of hydrogen at the Anode. This is then cause for increased Amperage availability, which means a cell with higher energy, even when no electrical energy is taken from the energy cell, this process is in progress. The 'regeneration' 'mode' functions at all times.

M.a.w. if a certain energy was taken for a while and the cell reached a lower potential difference and the consumption is switched off, the 'regeneration' 'mode' brings the potential back upwards until the equilibrium is reached between the pressure force on the electrons because of the permanent magnetic 'flux' and the chemical backpressure of the 'discharged' / cattle use 'mode'.

In the meantime, there is still some slight circular action, which is noticeable, due to the fact that the cell always shows a slightly higher temperature compared to the environment. Furthermore, it has been found that the operation of the 'regeneration' mode has a strong temperature dependence: higher temperature brings faster 'regeneration', i.e. to a certain point, beyond which there will again be a decrease. Cause of this dependence: A greater "Brownian" movement of the "free" electrons means that more electrons have sufficient kinetic energy / momentum, together with the compressive force exerted by the permanent magnetic field, to form a matrix of atomic nuclei of the one "energy" -gap / minimum to jump over the 'energy threshold' to the next 'energy gap / minimum and that in the direction of the' flux 'of the field. Increasing the temperature results in a higher "regeneration" current to a point where the "Brownian" movement is so intense that "free" electrons have so much kinetic energy that the compressive force of the "flux" is very small compared to their average kinetic energy and they can jump back over 'energy thresholds'.

### Figure Description.

Figure 1 shows a "layout" of the process as a whole, with Fig. 1a, for clarity, the "regeneration" "mode" is drawn alongside the "discharge" "mode," while in reality both "modes" occur simultaneously, side by side at inter-atomic distance.

In FIG. 1a, section (AA ') is shown, which is taken in the longitudinal / height directions (X-Z); FIG. 1b, section (BB '), taken in (Y-Z) directions. (S -N) indicates the South-North direction of the permanent magnetic field. (1) identifies the housing which may be non-magnetizable or electron-conducting; certain plastics are OK.

(2) shows the two electrodes with their protruding terminals. In this process choice: MgHx + additions is the Anode; NiOOH + additions is the cathode.

(3) is the membrane that is selective for electrons. (4a) field lines of "primary" permanent magnetic field; (4b) indicates "fringe" field lines. (5) the polarization direction is on (if more than 1 permanent magnet is placed on one side).

(6) is the electrolyte, KOH / H<sub>2</sub>O (weak). (7) is the electron current direction in the "discharge" "mode". (8) is the direction electron flow in the "regeneration" "mode".

(9) is a switch connection to a consumption circuit. Shading: ZW-NO indicates Anode; shading: NW-ZO indicates the cathode. Double vertical lines indicate field lines and dots indicate where the electrolyte is.

Figure 2 shows a permanent magnetic field in a metal matrix with the spinning atomic nuclei and "vortex" tubes, which are inter-atomically spaced with "free" electron flow therein. In FIG. 2, an NU Co magnet field is shown as an example (75% Ni, 25% Co). In the Aether: "Vortex tubes": -A -, - B -, - D- and - E - are "right-turning." "Vortex tube" - C - has a "left-turning" helical flow. The Circulation of "vortex tube - C - is mathematically expressed

The trajectory of a "free" electron is indicated by the spiral with the "crosses". (S - N) is the direction of the permanent magnetic field, which is also identical with the helical velocity vector of 'vortex tube' - C -.

Figure 3 shows the layouts of some atomic nuclei which have the phenomenon: permanent magnetism (PM ). These are the core structures resulting from the development of Primary and Fluid-Mech. Physica. The round circles are He groups; the H 2 represents 2 protons herein; (PM) is, field directions. Mg core can rotate about 2 axes; the cores of Fe, Co and Ni have 1 axis of rotation. Kem build-up: Fe = 2Al; Co = Mg + P and Ni = Mg + S.

## Claims (26)

1. A Method and resulting Physical and Chemical Process steps, which via 3 energy conversions, from the so-called.n. 'zero point' energy (ZPE), to permanent magnetic energy, to electro-chemical energy, to electrical direct-voltage (DC) energy, resulting in a constantly available source of electrical energy and a System consisting of Equipment, in which said Method is applied.
2. A Method and System with process steps as in (1), wherein said permanent magnetic energy is converted into electro-chemical energy, e.g. placing said permanent magnetic field, so that it permeates the two electrodes, as well as the membrane between them, of an electro-chemical cell. 15
3. A Method and System with process steps as in (1) and (2), wherein said energy conversions take place simultaneously in one and the same housing, hereinafter referred to as "energy cell", said electrodes pairing with membrane between them, or a multiplicity thereof. 20
4. A method and system with process steps as in (1), (2) and (3), wherein said electrode pairs with said membrane in-between lie in a so-called.n. electrolyte, which is either of the liquid, or of the colloid (gel), or of the fine powder type.
5. A Method and System, with process steps as in (1) to (4), wherein said energy conversion from permanent magnetic energy to electro-chemical energy takes place interrupting, possibly pulsed, S or due to cyclic application and removal of the permanent magnetic field constituting said permanent magnetic energy, or due to the use of an electromagnetic field.

6. A Method and System, as in (9), wherein said electrode, on one side of said membrane, as primary compound component, contains NiOOH, or a hydroxide of Fe, or of Co, or of a hydroxide of any other Magnetizable element or complex of elements, which can become co-rotating, due to the addition of other elements, such as e.g. Al / Ni I Co.

13. A Method and System, with process steps as in (10), wherein said electrode, on the other side of said membrane, is composed of one or more metal hydrides.

14. A Method and System, as in (13), wherein the composition of said metal hydrides is based on one or more of the following elements: Mg, Cd, Zn, Sr, or Ba.

15. A Method and System, as in (9) and in (12), wherein said electrode on that side of said membrane (Cathode), which is primarily composed of a metal oxide that forms complexes with the hydroxide (OH) group, also contains certain amounts of other 'matching' elements, in order to improve the polarization / alignment with said permanent magnetic field, of one or more of the said metals in their metal oxide.

16. A Method and System, as in (9) and in (12), wherein if said electrode on one side of said membrane is primarily composed of NiOOH, it also contains small amounts of Co and / or Fe, in order to end the polarization of the Ni.

17. A Method and System, as in (13), wherein said electrode on the other side of said membrane (Anode) is primarily composed of an element or elements, whose matrix readily absorbs AT, as is the case with: Pd and with Mg.

A Method and System, as in (13) and (17), wherein said electrode on the other side of said membrane (Anode) is primarily composed of MgH and / or MgH<sub>2</sub>.

A Method and System, as in (13), (17) and (18), wherein certain amounts of La (in the form of LaNi<sub>5</sub>) and / or of Ti (in the form of FeTi) and / or 1 0294 88 -13- of Ni (in the form of Mg<sub>2</sub>Ni) have been added to said Mg H and / or Mg H<sub>2</sub>, to improve the density of H in said matrix (absorption) as well as the storage thereof. 5

A Method and System, such as (12), (15) and (16), wherein said electrolyte is KOH.

A Method and System, as in (22), wherein, if said energy cell is of the nickel metal hydride type, the South Pole of said permanent magnetic field abuts against the side of the Ni containing electrode.



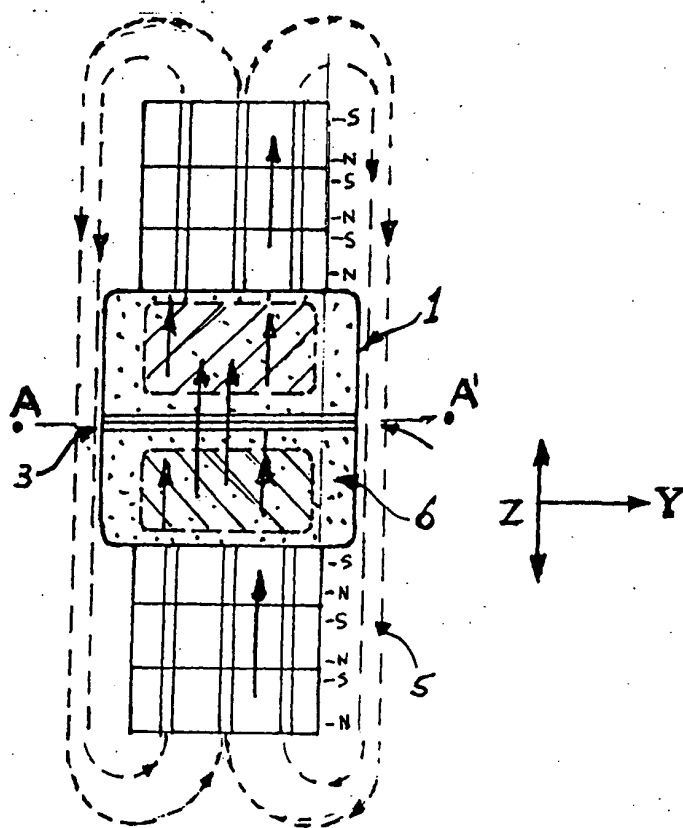
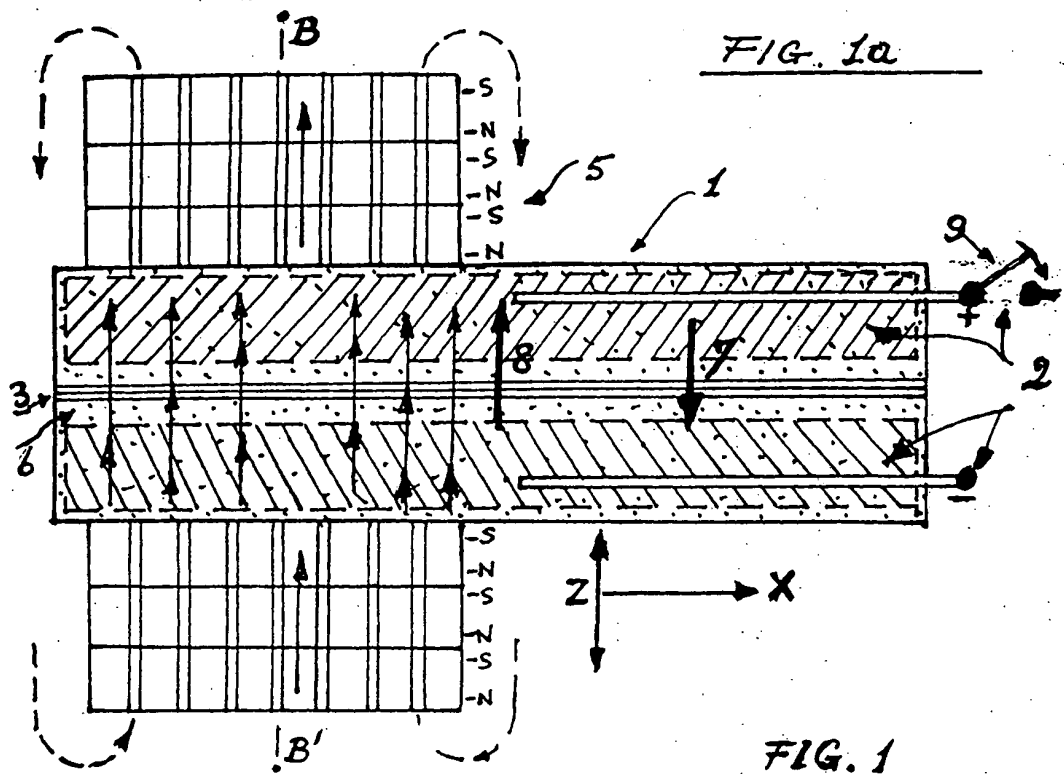


FIG. 2

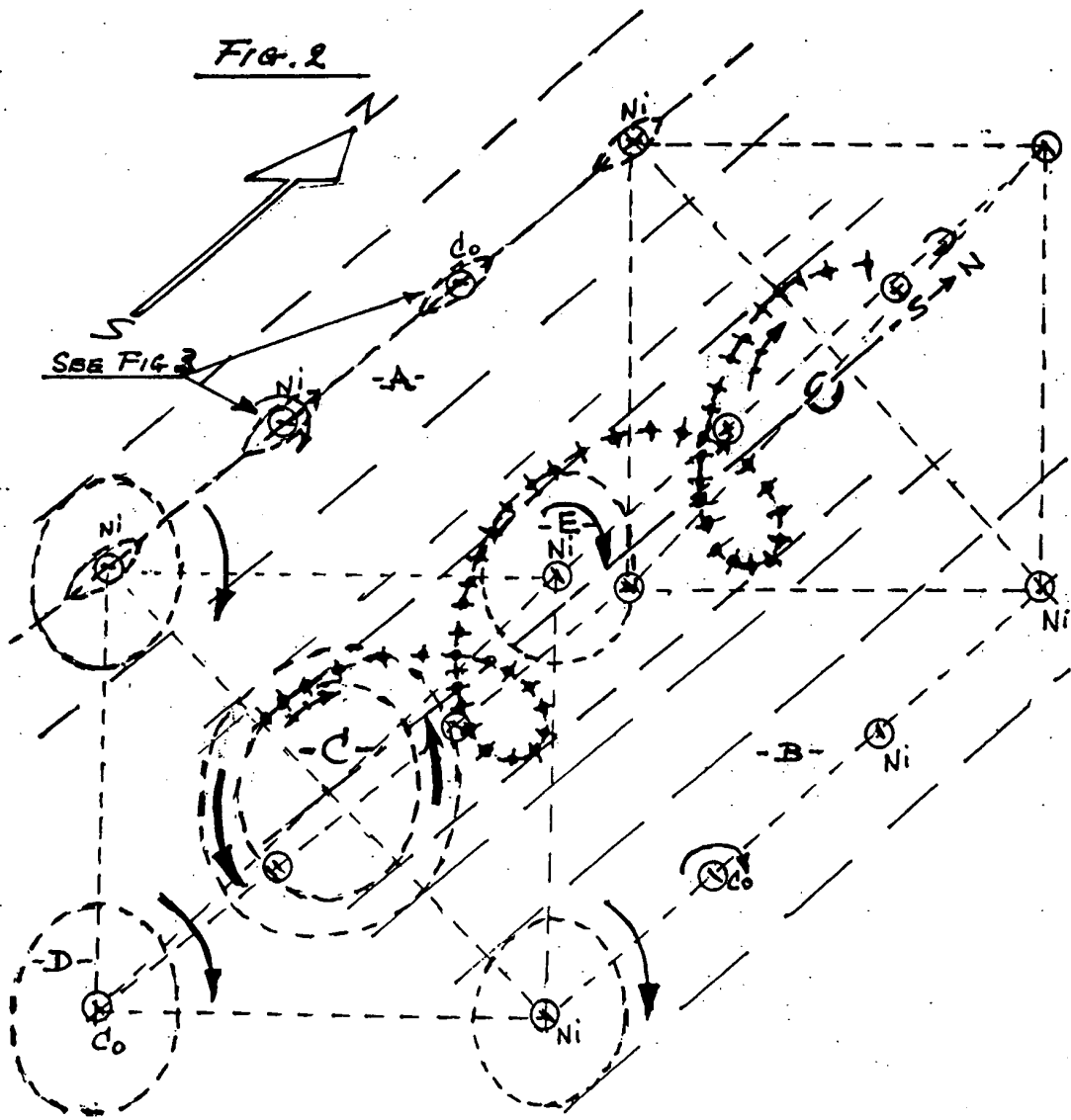


FIG. 3

