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(54) Titre: MACHINE IZUOGU (LA MACHINE ELECTRO-MAGNETO-DYNAMIQUE AUTONOME) (54) Title: THE IZUOGU MACHINE (THE SELF-SUSTAINING EMAGNETODYNAMIC MACHINE)

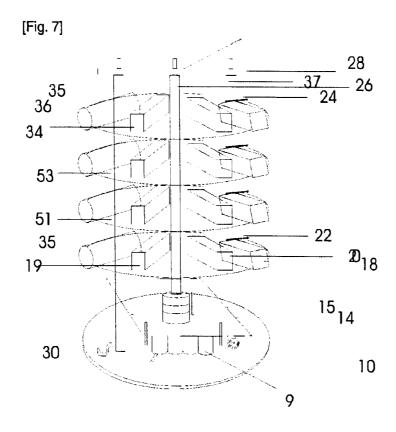


Fig. 7:DESIGN MODEL OF THE SELF SUSTAINING MACHINE

(57) Abrégé/Abstract:

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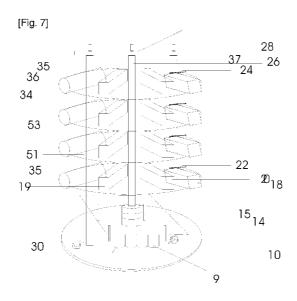


Fig. 7:DESIGN MODEL OF THE SELF SUSTAINING MACHINE

(57) Abstract: The self sustaining emagnetodynamics machine utilizes a theory that is different from the age old theory on which electric motors have been built for over five hundred years since the days of the great inventor and scientist, Michael Faraday.

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Description

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THE IZUOGU MACHINE (THE SELF-SUSTAINING EMAGNETODYNAMIC MACHINE)

- [1] BACKGROUND OF THE INVENTION
- [2] The present invention is in the technical field of PHYSICS
- [3] More particularly, the present invention is in the technical field of ENERGY
- [4] The prior art in such technical field includes:THE ELECTRIC OR BATTERY-OPERATED EMAGNETODYNAMICS MOTOR, THEORY OF MAGNETISM AND THE THEORY OF FORCE EXERTED ON A CURRENT-
- [5] CARRYING CONDUCTOR IN A MAGNETIC FIELD.
- [6] FORCE IS EXERTED ON A CURRENT-CARRYING CONDUCTOR IN A
 MAGNETIC FIELD.THIS THEORY HAS BEEN EXPLOITED IN BUILDING THE
 ELECTRIC MOTOR WHICH IS A MACHINE THAT CONVERTS ELECTRICAL
 ENERGY TO MECHANICAL ENERGY.THE EMAGNETODYNAMICS MOTOR
 WORKS ON A DIFFERENT THEORY, NAMELY THE LAWS OF EMAGNETODYNAMICS.
- [7] BRIEF SUMMARY OF THE INVENTION
- [8] The present invention is a MAGNET MOTOR. CALLED THE SELFSUSTAINING EMAGNETODYNAMICS MACHINETHAT UTILISES THE
 INVENTOR'S FIRST AND SECOND LAWS OF EMAGNETODYNAMICS AS
 WELL AS THE INVENTOR'S HORSE ORIENTATION THEORY OF
 MAGNETISM.
- [9] The first law states as follows:
- [10] A SUSPENDED COMPOSITE MAGNETIC POLE WILL ROTATE IN A CERTAIN DIRECTION IF PLACED IN THE VICINITY OF AN ARRAY OF LIKE POLES OF MAGNETS.
- [11] The second law states that:
- [12] THE DIRECTION OF ROTATION IS THAT OF THE COMPOSITE POLE SIMILAR TO THE ARRAY*
- [13] THE CRITICAL FEATURE OF THIS MACHINE IS THAT IT IS DISTINGUISHABLE FROM THE EARLIER INVENTION OF THE NON SELF-SUSTAINING EMAGNETODYNAMICS MACHINE IN THAT THE SELF SUSTAINING MACHINE GENERATES A FEEDBACK CURRENT WHICH PROVIDES RELEASE FROM THE BACKLASH STATORS AND THEREFORE THE MACHINE IS ABLE TO RUN WITHOUT ANY EXTERNAL SOURCE OF ENERGY. WHILE AN ELECTRIC MOTOR CONVERTS ELECTRICAL ENERGY

TO

- *(The inventor acknowledges the similarity between these laws and that of Faraday's discovery of the force exerted on a current-carrying conductor in a magnetic field. His knowledge of Faraday's work certainly inspired and guided him to establish similar laws for the movement of magnets without current-carrying conductors.)
- [15] MAGNETIC ENERGY AND THEN CONVERTS MAGNETIC ENERGY TO MECHANICAL ENERGY, THE SELF-SUSTAINING EMAGNETODYNAMICS MOTOR, LIKE ITS NON-SELF SUSTAINING COUNTERPART, CONVERTS AN INTERACTION OF MAGNETIC POLES <u>DIRECTLY</u> TO MECHANICAL ENERGY, WITHOUT GOING THROUGH THE INTERMEDIARY OF CURRENT-CARRYING CONDUCTORS.
- [16] BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING
- [17] FIG. 1 IS A PERSPECTIVE VIEW OF THE COMPOSITE MAGNETIC POLE.IT IS A CRESCENT SHAPED NORTH AND SOUTH POLES OF TWO PERMANENT MAGNETS HELD TOGETHER ON A BRASS OR COPPER,OR ANY NON-MAGNETIC PLATE BENT INTO THE CRESCENT SHAPE.It is mounted on a non magnetic pivoted spindle.
- [18] FIG 2 shows an array of north poles of similar magnets. (It could also have been South poles.) However, similar poles must be used for the system to function.
- [19] FIG 3 shows the disposition of the magnetic poles of the magnets used to form the array of magnetic poles referred to in fig 2.
- [20] FIG 4 shows the composite magnetic pole placed in the vicinity of the array of like poles.
- [21] FIG 5 is a composite magnetic pole, but this time made of a slab of SOFT IRON core.It is mounted on a non magnetic, pivoted spindle.
- [22] FIG 6 shows the angular disposition of the rotor vanes in each plane.
- [23] FIG 7 Shows a design model of the complete SELF SUSTAINING Emagnetodynamics motor, with four planes mounted.
- [24] FIG 8 shows the electrical connections for the machine shown in fig 7
- [25] FIG 9 shows the rotor vane with its stem
- [26] FIG 10 shows the permanent magnet that forms part of the composite polarity of the rotor. It is a 60x15x5mm powerful ECLIPSE MAGNET bought from NAAFCO SCIENTIFIC, London. It gives an angler deflection of 15 degrees on a magnetometer placed some 300mm away.
- [27] FIG 11 shows the release electromagnets, 40, 42.
- [28] FIG 12 shows an unmagnetised bar of iron
- [29] FIG 14 shows the same bar now inside a solenoid,

| [30] | FIG 13 shows stators and vane on one plane. |
|------|---|
| [31] | FIG 15 shows the clutch yoke for the machine, |
| [32] | FIG 16 shows the clutch fork for the clutch assembly, |
| [33] | FIG 17 shows the rotor for the machine, |
| [34] | FIG 18 shows the clutch assembly, |
| [35] | FIG 19 shows five horses pulling in different directions, |
| [36] | FIG 20 shows the five horses pulling in the same direction. |
| [37] | FIG 21 The machine with electromagnet stators giving mathematical and ex- |
| | perimental proof that it achieves an efficiency of OVER UNITY. |
| [38] | DETAILED DESCRIPTION OF THE INVENTION |
| [39] | FIG 7. |
| [40] | 9,11Ball bearings at bottom and top,respectively, |
| [41] | 10 Circular Brass plate which forms the base of the machine(Diameter |
| | 500mm, Thickness 10mm) |
| [42] | 12Ignition Key that switches on the machine(A typical motor |
| | car, e.g. Vauxwagen car, ignition key is adequate) |
| [43] | 14Group of feedback generators, serving also as KICKSTARTER |
| [44] | 15A rectangular Perspex plate(180x180x5mm) that holds the carbon |
| | brushes. |
| [45] | 16Slip ring commutators |
| [46] | 18,19,20Permanent magnet stators of plane 1. |
| [47] | 22,32Release electromagnets for plane 1 |
| [48] | 24,36Release electromagnets for plane 4 |
| [49] | 30Clutch pedal |
| [50] | 26Rotor shaft, brass, 30mm diameter |
| [51] | 28Rectangular plate of copper shackle. |
| [52] | FIG 8:THE ELECTRICAL CONNECTIONS. |
| [53] | 21Motor battery,12 volts d.c. |
| [54] | 23A resistance suitable to protect the feedback generator/kickstart motor |
| [55] | 25Kickstarter motor/feedback generator, 12 volt d.c., rich in current. |
| [56] | 27Distributor,copper, |
| [57] | 29slip ring copper commutator, |
| [58] | 31carbon brush |
| [59] | 33,35,37,39,41,43,45,47carbon brushes to energise release electromagnets. |
| [60] | FIG 9: |
| [61] | 38,40Rectangular permanent magnets that form the composite pole |
| [62] | 42The aluminium vane to hold the composite poles. |
| [63] | 50The vane stem made of brass, length, diameter 10 mm |
| | |

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| [64] | 52Vane stabilizer length 25 mm,diameter 5mm |
|------|---|
| [65] | FIG 11 |
| [66] | 54Aluminium former for release electromagnet, length 150 mm, internal |
| | diameter 37.2mm, external diameter 39mm, wound with 0.5mm diameter insulated |
| | copper wire having total resistance of 14 ohms. |
| [67] | 56Soft iron core for the electromagnet, length 160mm, diameter 37mm |
| [68] | FIG 12An unmagnetised bar of soft iron. |
| [69] | FIG 14Soft iron bar in a solenoid. |
| [70] | FIG 13:ONE PLANE, SHOWING ANGULAR DISPOSITION OF STATORS |
| [71] | 38,40 Rectangular permanent magnets that form the composite pole |
| [72] | 66,74Release electromagnets. |
| [73] | 68,70,72Permanent magnet stators. |
| [74] | 76Aluminium vane |
| [75] | FIG 15:CLUTCH YOKE |
| [76] | 82Internal hole ofdiameter |
| [77] | 84Circular armdiameter, andwide. |
| [78] | 86Clutch shank outside diameter |
| [79] | 88Outer tube ofouter diameter,mm long. |
| [80] | FIG 16:THE CLUTCH FORK |
| [81] | FIG 17:THE BRASS ROTOR,870 mm, overall length. |
| [82] | 26Smaller rotor stem, diameter 30mm, |
| [83] | 90slip ring commutator, carrying the distributor. |
| [84] | 92The idle copper separator |
| [85] | FIG 18:THE CLUTCH ASSEMBLY |
| [86] | 84,94As already described |
| [87] | 26Rotor shaft |
| [88] | 96Feedback generator, |
| [89] | 98Geared pully on generator, |
| [90] | 100Geared flywheel attached to rotor shaft |
| [91] | 97Clutch fiber attached to flywheel(made of leather material) |
| [92] | 99Clutch cable |
| [93] | FIG 19:FIVE HORSES PULLING IN DIFFERENT DIRECTIONS |
| [94] | FIG 20:FIVE HORSES PULLING IN THE SAME DIRECTION |
| [95] | (Illustration of the inventor's HORSE-ORIENTATION THEORY OF |
| | MAGNETISM) |
| [96] | Fig 21. The machine, showing proof of OVER UNITY efficiency, mathematically. |
| [97] | Referring now to the invention in more detail, in FIG. 1 to 21 there is shown the |
| | machine and its component parts In particular in Fig 7 is shown the actual complete |

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- design of a four plane, self-sustaining, Emagnetodynamics machine with all components in place.
- [98] Two rods of brass 35,37(diameter 25mm,height 900mm)threaded a length of 15mm on each end) are mounted vertically on a horizontal circular brass plate 10,the brass rods carrying aluminium sleeves 50 to stabilize the system. The rotor 26 is installed into the lower ball bearing 9.
- [99] The rotor 26 has a section on its lower portion(Length 70mm, diameter 60mm) which also holds the distributor 27 and slip ring 29
- [100] The Perspex 15 holding the carbon brushes 31,33,35,37,39,41,43,45,47 is now installed and secured by means of four copper bolts.
- The circular Perspex plates 49,51,53,55, is each carrying three permanent magnets as [101] 18,19,20 mounted on each plane, as well as the electromagnets 22,32. The five stators of a plane are placed round a circler hole of diameter 480mm cut at the centre of Perspex .The stators cover an angle of 180 degrees. This means an angle of 45 degrees between one stator and its adjacent one. The circuler distance, measured along the circumference of the circle between the centre of one stator and the adjacent stator, determines the circuler length of the distance between the north and south poles of the composite polarity of the rotor. This circular Perspex plates 49,51,53,55, are now held firmly by sliding down the aluminium sleeves to tighten. The aluminium vanes 76 carrying the two permanent magnets, in each plane, that form the composite poles, are now tightened into place and the top end of the rotor is slid into the upper ball bearing 11 in the copper support 28. Nuts are now tightened at the threaded ends of the brass supports 35,37 to make the system strong and rigid. A dc battery 21 is now connected to the release electromagnets via the ignition key 12,the motor 25 and the nine brushes. The d.c motor 25 is connected in parallels with the release electromagnets and is protected from the heavy current surge by a heavy duty resistor, 23.
- [102] Section 2:
- The system is ready to run. As the ignition key 12 is turned, current from the battery 21 turns on the d.c motor 25, which turns the rotor in a clockwise direction (which must coincide with the direction in which the second law of Emagnetodynamics says the rotor will move). The motor 25 is able to turn the rotor 26 by means of wheel and pinion arrangement (The rotor 26 carries a cogged wheel 144 mm in diameter, while the motor carries a cogged wheel, 10mm in diameter, much like a kickstarter in an internal combustion engine). The battery 21 simultaneously energises the Distributor 27, and motor 25. The distributor 27 makes electrical contact with the brushes 33,35,37,39,41,43,45, thereby energizing the Release electromagnets much like a distributor in a conventional internal combustion engine would fire the four PLUGS. The first release electromagnet 22 in plane 1, is timed to develop a North Pole strength

which must equal, or nearly so, the pole strength of the stator permanent Magnets. This must happen at the INSTANT that the magnetic axis of the leading composite pole of the rotor has just crossd the magnetic axis of the Electromagnet, 22. The rotor 26 moves on and at the point where the magnetic axis of the leading rotor composite pole is about to cross the magnetic axis of the last rotor permanent magnet 19, the distributor 27 makes contact with the second brush 35, thereby energizing the last stator electromagnet 32, and thereby freeing the trailing composite pole of the rotor, a South Pole which would have been otherwise attracted, and held back by the North pole of the last stator permanent magnet 19. This would have impaired the rotation of the rotor and stalled the machine. Being a four plane machine, torque exerted on the rotor by other stators in other planes, enables the rotor cover the idle distance and this brings it once more under the influence of the first stator electromagnet 22, whose iron core draws the leading north pole of the composite rotor pole under its influence and the process is repeated. The rotor is thus able to continue its rotation.

- [104] Notice that the four vanes all attached to the rotor but traversing different stators in different planes, are not disposed at an angle of 90 degrees each.
- What we find,in fig 6B is that the first vane,V1 is leading the second vane V2 by an angle of 90 degrees.V2 leads V3 by an angle of 135 degrees,while V3 leads V4 by an angle of 67.5 degrees. The simple angler disposition of rotor vanes in a four plane machine would have been to divide 360 degrees by four so each vane will lead the following vane by 90 degrees. We have not adopted this simplistic approach in the design because it would have meant the distributor will energize more than one electromagnet at the same time. Since the electromagnets draw enormous current from the feedback generator, the latter may not cope with this great drain on its scarce energy, and the system may stall. To avoid this fatal situation, the vanes are disposed as shown in fig 6. For a six plane machine the disposition of vanes will again be different and so on. The whole idea in the design is to avoid a situation where more than one release electromagnet is energized at the same instant.
- [106] Were we building a five, or six or twenty plane machine, the angular disposition must be determined separately for each case, just as a designer of an internal combustion engine designing a four, five or six CYLINDER engines, must for each engine decide the angular disposition of the projections on the CAM SHAFT which in turn determine the FIRING SEQUENCE OF PLUGS IN THE compression chamber.
- [107] From the foregoing, we can see that though we call this machine a magnet motor, IN REALITY, AND FROM A DESIGN STANDPOINT, IT HAS FAR MORE IN COMMON WITH THE INTERNAL COMBUSTION ENGINE, THAN IT HAS WITH A CONVENTIONAL ELECTRIC MOTOR.
- [108] Section 3:

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[109] Referring to the Fig 7, for the rotor 26 to rotate, it is necessary to ensure that the circular length of the vane approximately equals the circular distance between one stator magnetic axis and the next one.

- [110] This is a critical condition for the system to work. It is equally essential that the pole strength of all stator permanent magnets are equal or else the first and second laws of Emagnetodynamics would not have been complied with and the machine will not function.
- The Emagnetodynamics machine is essentially a magnet motor. It is therefore necessary to ensure that only non magnetic metals are used to build all the parts of the machine or else critical magnetic field strength required at certain points will be weakened or impaired. All bolts, nuts, etc are made of copper or brass or aluminium to avoid magnetic INTERFERENCES AND DISTORTIONS which would critically undermine the set up.
- Is statically Its like the plug of an internal combustion engine must be ignited at a particular TIMING, the release electromagnets must be 'ignited'/energized at the proper TIMING in order to secure releases of the rotor 26 at the backlash points and keep the motor running. To ensure this PRECISION TIMING, the positions of the carbon brushes, are made adjustable, much like the TIMING CHAIN, of an internal combustion engine. The brushes are mounted on bases that themselves move on circular grooves made on the rectangular Perspex, 15. When the appropriate timing position has been determined, the brush base is screwed unto the Perspex base by means of a brass bolt and brass nut.
- [113] Section 4:
- [114] Refer to fig 7 of the invention, the rotor 26 is made of copper and is 870mm high with holes made along its stem at various heights to take vane stems; these coincide with the heights of the four planes.
- [115] While the rotor 26 has big stem with a diameter of 60 mm, and length 70mm, the rest of the body has a diameter of 30mm. The slip rings 90,94(width 10mm and thickness 0.5mm) are made of copper, which is both a good electrical conductor and non -rusting material. These are desirable properties to ensure there is always good electrical contact between the slip ring commutators and the brushes. The BRUSH CONTACT RESISTANCE must not be more than 0.2 Ohms. Of course the slip ring commutators are effectively insulated from any electrical contact with the rotor, using paper insulation as is done for a conventional electric motor commutator.
- The permanent magnet stators, being the main source of torque exerted on the rotor 26 must be very powerful or else the resulting machine will be weak. In fact, the permanent magnet stators used by the inventor to build the working model of the non self sustaining emagnetodynamics machine each had magnetic pole strength that gave an angler deflection of 25 degrees on a magnetometer placed one meter away. The

magnets were Alcomax magnets, but of course, since buying these magnets some twenty five years ago, more powerful magnets have been invented in the form of NEODYMIUM magnets.

- An Emagnetodynamics machine having only one plane is like an internal combustion engine having only one cylinder, as against the traditional four cylinders, four stroke engine or a conventional electric motor running on only one coil. The practical Emagnetodynamics motor must have many planes. at the very least, four planes in order to produce enough torque on the rotor 26 resulting in a powerful machine. The more the number of planes, the more powerful the resulting machine and it is desirable to build machines with as many as 10 to 20 planes even though MAGNETIC SHIELDING becomes of critical importance in order to shield the magnetic fields created by one plane from influencing the fluxes in an adjacent
- [118] Plane.
- [119] Reference fig 21 of the invention.S1,S2,S3,S4 are electromagnet stators of a one plane machine.While S1,S2,S3 are all connected in parallels and energized together,S4 which is the release electromagnet is energized separately in a different circuit.It is found that for the system to rotate,some 120V must be fed to the three stators while 72 V must be fed to the release stator,S4.The current flowing in the first circuit as measured by ammeter A1 is 45A,while A2 read 6A.
- [120] If the power developed by this machine, rotating at 300 rpm is calculated it will be as follows:
- [121] 1. **240V** source is the main power input to the motor.
- The control or auxiliary input to the motor supplies relatively negligible power when K_2 is closed from the motor position at mmf axis of S_2 to mmf axis of S_4 .
- [123] 1. Power output of the motor is Rotor Torque times Rotor Speed in radians per second.
- [124] $P_{\perp} = T \times \omega = T \times (300 \times 2 \pi) / 60 = 10\pi T$ watts.
- [125] 1. Assuming lossless machine, Input Power = Output Power,
- [126] Power from S_1 , S_2 , $S_3 = 45 \times 240 \text{W} = 10800 \text{W}$.
- [127] Assuming that K_2 is on for θ radians per revolution (from S_2 axis to Silaxis), or 120 deg.
- [128] power from $S_1 = 72 \times \theta/2\pi \times 6 \text{ W} \approx 68.750 \text{ W.}=144.4 \text{ W}$
- [129] (a) Percentage of power attributed to S_1 , S_2 and $S_3 = 10800 \times 100/(10800 + 68.750).=98.7%$
- [130] (b) Percentage of control power attributed to $S_4 = 68.750 \times 100/(10800 + 68.750).=1.3\%$
- [131] FROM THIS RESULT IT IS CLEAR THAT IF A SMALL FEEDBACK

GENERATOR IS LINKED TO THE ROTOR SPINDLE,IT WILL SUPPLY THE 1.3% POWER REQUIRED TO WORK THE RELEASE ELECTROMAGNET AND IF WE REPLACE THE ELECTROMAGNETS,S1,S2,S3,WITH PERMANENT MAGNETS,WE HAVE A MACHINE WHOSE EFFICIENCY IS WELL OVER UNITY.

- [132] Section 5:
- [133] A different version of the self sustaining Emagnetodynamics machine can be built by adding a current booster in the circuit of the feedback generator. The output of the feedback generator is then fed into a PULSE CIRCUIT, such as shown in fig 21. A pulse circuit is simply a circuit in which electrical energy is stored in a capacitor and discharged very fast. A large current flows for a very brief period. Since the release of rotor required at backlash points boils down to ACTION AT A POINT, lasting only a few milliseconds, the current pulse so produced is enough to free rotor at backlash points.
- [134] DECEIT OF ENERGY: It can also be argued that the selfsustaining emagne-todynamics machine exploits the principle of deceit of energy. This is explained this way:
- In the conventional electric motor, full current must flow through the coils at any and every instant for the motor to function. This means HEAVY ENERGY must be constantly supplied to the electric motor. For the emagnetodynamics machine, it is not so. We do not need heavy energy at every instant. We need heavy energy only at the point where we need to secure the release of rotor vanes from the decelerating effects of backlash. For a machine rotating at a speed of 600 rpm, for example, we need heavy current for how long?
- [136] A machine running at 600rpm is doing 10 rps. The diameter of slip ring commutator is 60mm and the width of distributor is 20mm. So this distributor makes contact with a carbon brush for 0.01 seconds. This is one hundredth of a second, which is very short indeed. This is the PULSE DURATION. Besides, for the rest of the time that one revolution lasts, the permanent magnet stators, supply the torque needed for motion. The energy stored in the permanent magnets is converted to mechanical energy.
- [137] The Television also uses the concept of DECEIT OF THE EYE. Small spots from an object hitting the retina, stay on for a few seconds. If this happens fast enough, different spots appear continuous and the eye 'sees' the whole picture as one.
- [138] One can say that the emagnetodynamics machine sees the pulse of energy appearing at the backlash points as one continuos chain by virtue of energy gaps covered by the permanent magnet stators.
- [139] Section 6:
- [140] The advantages of the self sustaining Emagnetodynamics motor, over and above the

conventional electric motor is obvious. It means this motor can replace electric motors wherever electric motors are being used presently. This includes but are not limited to electric cars, trains, trolleys, electric fans, etc. Miniaturised emagnetodynamics machines, if they can be built, will also replace electric motors in clocks, grinding machines, toys, etc. It could also be possible to install small emagnetodynamics machines to supply current to television sets and radios, so we can have these important gadgets that do not require electricity or battery to operate. Indeed the emagnetodynamics machine possesses the capacity to radically change the way we live. The energy saving for mankind will also be enormous. In a world where energy is scarce and costs so much, apart from its capability to disturb world peace, a machine that needs no external energy input to function will be of great interest and industrial value.

- The theory of Emagnetodynamics and the successful design of the Emagnetodynamics motor, which took thirty one years to accomplish, opens a new field of learning in science and engineering. This is a field that needs to be more deeply explored by scientists and engineers around the world. The inventor has found the field very interesting and exciting indeed.
- [142] More research work in this area will include, but not limited to, finding out the detailed characteristics of the Emagnetodynamics machine and just how they compare with those of the conventional electric motor and internal combustion engine.
- [143] To build compact and sturdy Emagnetodynamics machines, new and more efficient process of magnetic screening will have to be invented, along with more powerful and sturdy permanent magnets. That does include the invention of current-rich d.c. generators to work the Emagnetodynamic machine.
- [144] Section 7:
- [145] In broad embodiment, the invention is a motor that works on the principle of interaction of permanent magnets, or even electromagnets, utilizing the laws of Emagnetodynamics as against the force exerted on a current-carrying conductor in a magnetic field.
- [146] The theory of Emagnetodynamics is also a product of the inventor's research with magnets which lasted thirty one years.
- Another version of the machine uses no vanes. The soft iron slabs are pasted on the rotor as angular dispersions. The rotor itself is made larger in diameter to accommodate this change in design. This version also has only two split ring commutators, much like the conventional electric motor. The planes could be up to 30 or more and this leads to a more sturdy and simple powerful machine that does over 2000 rpm.

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Claims

[1] CLAIMS

I claim:

- 1.A self sustaining machine that uses its own feedback current to operate, runs like an electric motor but not using the force exerted on a current carrying conductor in a magnetic field, but runs by the interaction of magnetic poles between the stator and rotor and powered by magnets and electromagnets, the main parts comprising a set of permanent magnets placed in a circular pattern, and forming the STATORS of the machine, and a composite magnetic pole attached to a spindle, forming the ROTOR, and a DISTRIBUTOR pressing against brushes for releasing the rotor vanes (on each respective plane) from backlashes arising from repulsions/attractions of the rotor composite polarity.

 2. The permanent magnets forming the stators of Claim 1, are manufactured in such a way that one half of the magnet is North pole and the other half is South pole.
- 3. The electromagnets in claim 1 form the RELEASE STATOR POLE of the machine and are made to develop pole strength approximately equal to the pole strength of each of the stator permanent magnets, and being timed to get temporarily magnetized at an appropriate time when the rotor would have been otherwise held back by a repulsion/attraction by the first stator permanent magnet,
- 4. The spindles and vanes holding the composite magnetic poles of claim 1 are all made of non magnetic materials, such as brass or copper so as not to distort the magnetic field created by the stator magnets,
- 5. The said inventor's first law of Emagnetodynamics being utilized by the apparatus of claim 1, stating that A SUSPENDED COMPOSITE MAGNETIC POLE WILL MOVE IN A CERTAIN DIRECTION IF PLACED IN THE VICINITY OF AN ARRAY OF LIKE POLES OF MAGNETS.
- 6. The said inventor's second law of Emagnetodynamics being utilized by the apparatus of claim 1, stating that THE DIRECTION OF ROTATION OF THE COMPOSITE MAGNETIC POLE IS THAT OF THE COMPOSITE POLARITY SIMILAR TO THE ARRAY,
- 7. The said composite pole of claim 1 can infact be replaced by a soft iron disc which is bent in the same crescent shape for the reason that soft iron loses and gains magnetism very fast, and thus the soft iron rotor acts as a MIRROR IMAGE of the stator permanent magnets,
- 8. The brushes and commutators of claim 1 being made of copper or other non

magnetic but non rusting metals,

- 9. The rotor of claim 1 is so configured that the vane on which the composite poles are affixed, lies on a horizontal plane and rigidly fixed to the rotor which is either made of brass, copper or any other rigid by non magnetic matter.
- 10. The vanes attached to the rotor of claim 1 can be configured in such a way that there are more than one vane, lying in different planes, but all attached to the same rotor, to increase the mechanical power deliverable by the machine much like the CRANK SHAFT of an internal combustion engine.
- 11. The stator magnets in the apparatus of claim 1 can be configured to lie in different planes of the machine to increase mechanical power deliverable by the machine,
- 12. Electical power is delivered to the first or last electromagnet, in claim 1, and also to a small d.c. motor attached to the rotor, at the start of the machine through a switch, similar to the ignition key of a motor car,
- 13. The said d.c.motor in claim12, mechanically linked to the rotor of claim 1, is used to turn the rotor, at the 'start' of the Emagnetodynamics motor, in a 'KICK-START' process,
- 14. The stator magnets of claim 11, and lying in different planes of the machine, are screened magnetically from each other so that their magnetic fields do not distort each other in operation.
- 15. The dispositions of the stator and rotor of claim 1 can be reversed and the laws of Emagnetodynamics still apply to produce motion.
- 16. The stators of claim 1 which are permanent magnets, can be replaced with electromagnets without impairing the operation of the system.
- 17. Prior art include the conventional electric motor. But these use neither distributors, kickstarters nor employ the laws of Emagnetodynamics, as does a multi planed emagnetodynamics motor, which is more a HYBRID between the electric motor and the internal combustion engine.
- 18.A system for utilizing the theory of EMAGNETODYNAMICS which translates, in simplest terms, to the movement of magnets without the presence of current or current-carrying conductors.

The self sustaining Emagnetodynamics machine is the first machine known to man, to get permanent magnets release their atomic energy for mechanical work. The theory of Emagnetodynamics is also a product of the inventor's research with magnets which lasted thirty one years.

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[Fig. 1]

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FIG.1: A COMPOSITE MAGNETIC POLE

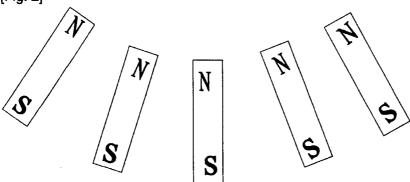


FIG.2: AN ARRAY OF NORTH POLES

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[Fig. 3]

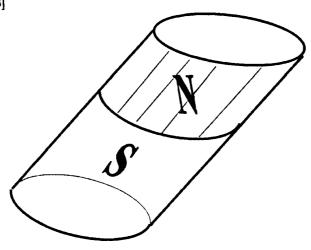


FIG.3:DISPOSITION OF MAGNETIC POLES [Fig. 4]

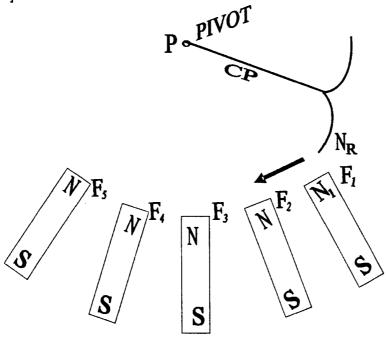


FIG.4:COMPOSITE POLE IN THE VICINITY OF ARRAY

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[Fig. 5]

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FIG.5: COMPOSITE MAGNETIC POLE MADE OF SOFT IRON SLAB [Fig. 6]

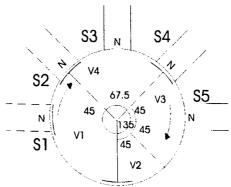


Fig. 6: ANGULAR DISPOSITION OF ROTOR VANES IN 4 PLANE MACHINE

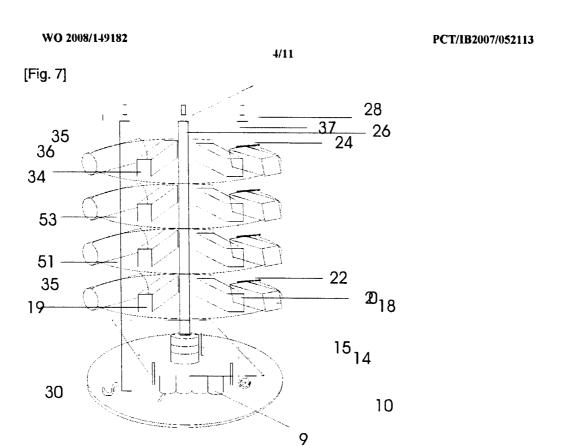


Fig. 7:DESIGN MODEL OF THE SELF SUSTAINING MACHINE

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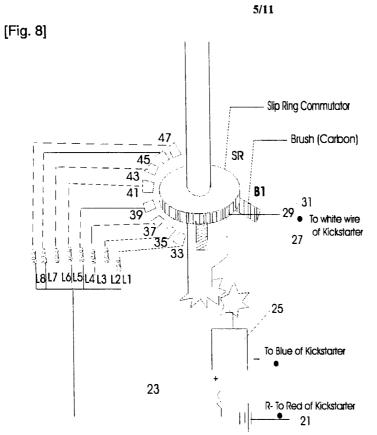


Fig. 8:Electrical connections for the machine [Fig. 9]

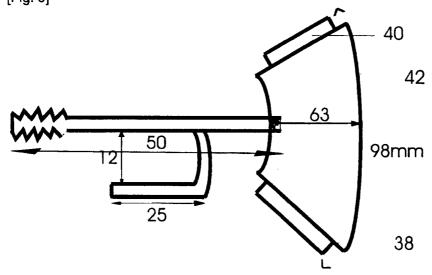


Fig. 9: ROTOR VANE WITH STEM

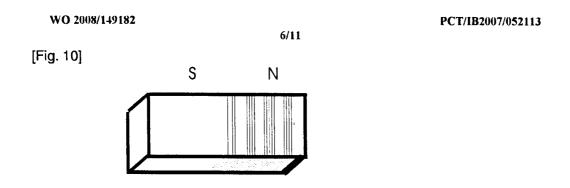


Fig. 10: Permanent Magnet for the composite Pole [Fig. 11]

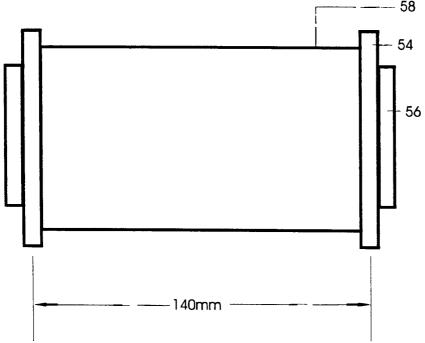
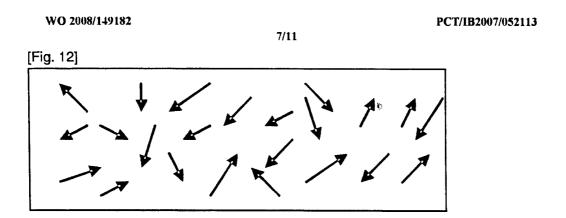


FIG. 11: THE RELEASE ELECTROMAGNET





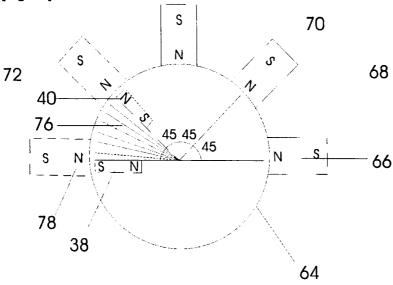
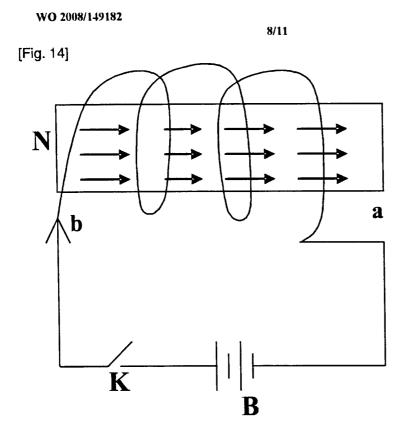


Fig13: STATORS AND VANE ON ONE PLANE

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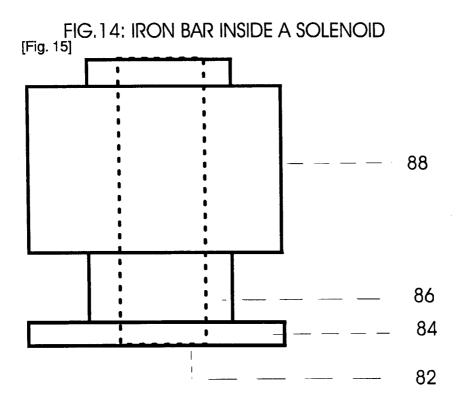


FIG. 15: THE CLUTCH YOKE FOR THE MACHINE

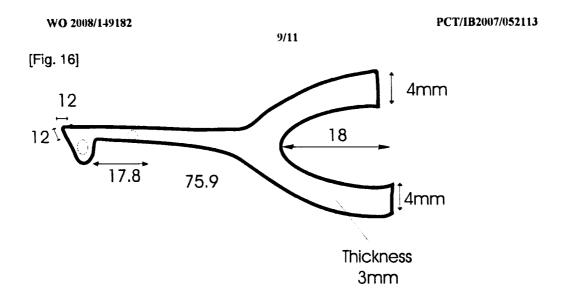
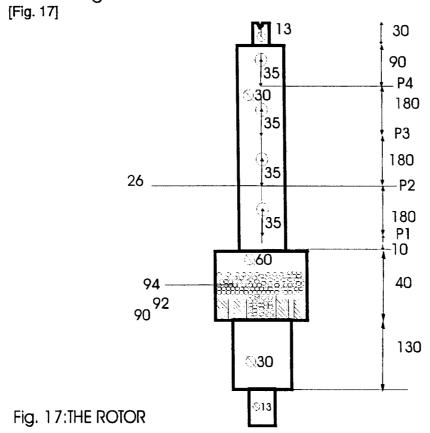


Fig. 16: THE CLUTCH FORK



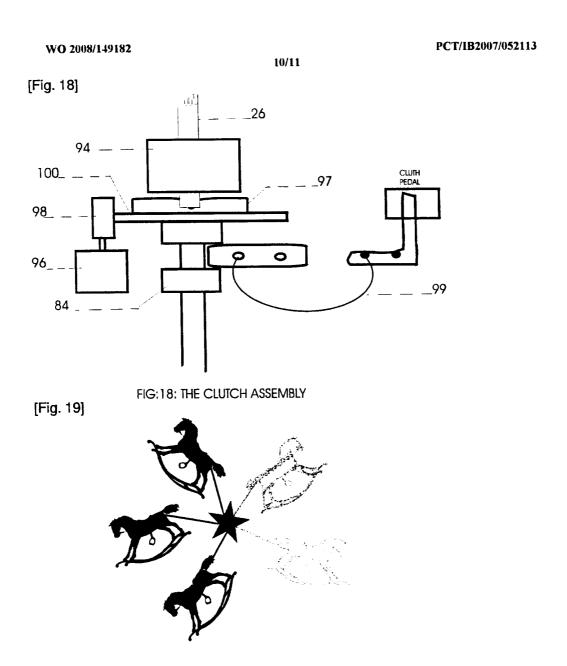


FIG. 19: FIVE HORSES PULLING IN DIFFERENT DIRECTIONS

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[Fig. 20]

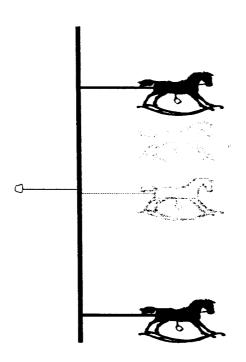


FIG. 20: FIVE HORSES PULLING IN THE SAME DIRECTION [Fig. 21]

EXPERIMENTAL PROOF THAT ENERGY IS CONTAINED IN PERMANENT MAGNETS

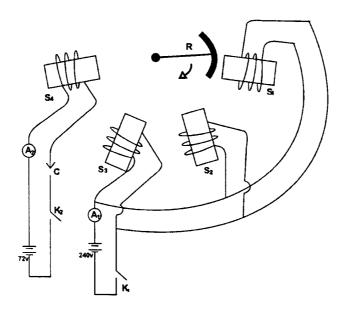


Fig.21:THE NEW MACHINE

C = Split - Ring Commutator Switch When K, & K, are switched on A, reads 45A A, reads 6A

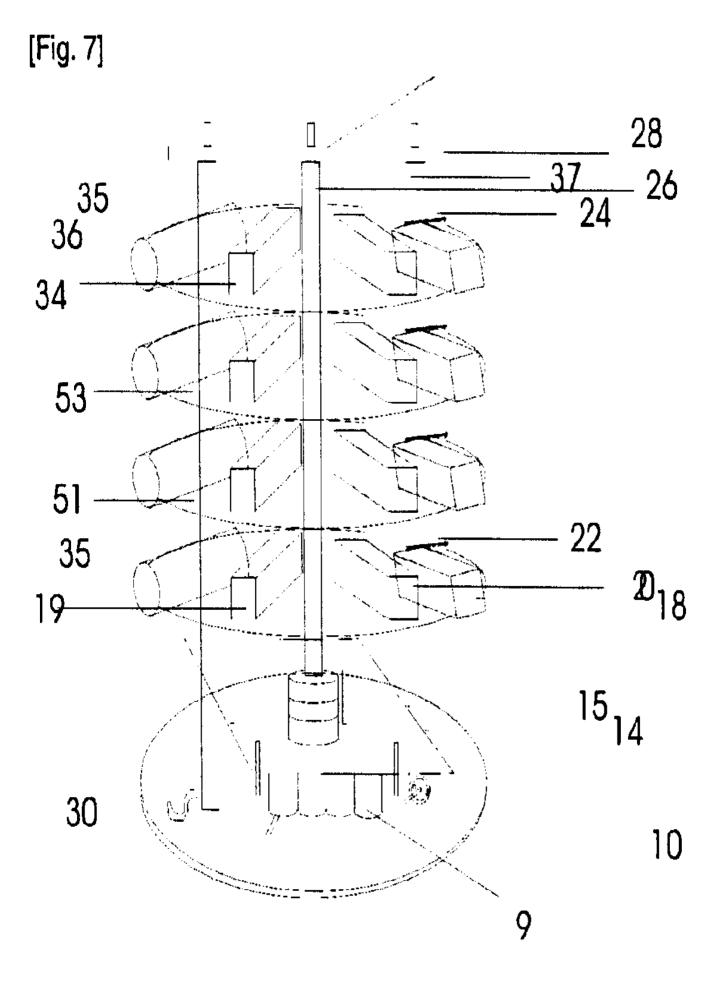


Fig. 7: DESIGN MODEL OF THE SELF SUSTAINING MACHINE