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Homemade Searl Effect Generator

Introduction

There has been a great interest in examining non-linear effects in the system of rotating magnetic fields. Such effects have been observed in the device called Searl's generator or Searl Effect Generator. A SEG consists of a series of three concentric rings and rollers that circulate around the rings. All parts of SEG are based on the Law of the Squares. The rollers revolve around the concentric rings, but they do not touch them. There's a primary north-pole and primary south pole on the rollers and a primary north-pole and primary south-pole on the concentric rings. Obviously, the northpole of the roller is attracted to the south-pole of the concentric rings and vice versa.

The rollers have a layered structure similar to the concentric rings. The external layer is titanium, then iron, nylon and the last internal layer was made from neodymium. John R.R. Searl has supposed that electrons are given off from the central element (neodymium) and travel out through other elements. Dr. Searl contends that if nylon had not been used, the SEG would act like a laser and one pulse would go out and it would stop, build up, and another pulse would go out. The nylon acts as a control gate that yields an even flow of electrons throughout the SEG.

It was shown that in the process of magnetization of the plate and rollers, the combination of constant and variable magnetic fields for creating a special wave (sine wave) pattern on a plate surface and rollers surface was used. The basic effects consist of the rollers self-running around the ring plate with a concurrent reduction of weight and an increasing occurrence of propulsion. These effects come about because of a special geometry of experimental setup. It was shown that the operation of the device in the critical regime is accompanied by biological and real physical phenomena.

Other information where similar effects are be mentioned can be found in the books, *Unconventional Flying Objects* and the *Homopolar Handbook* which includes papers on magnetized dielectrics. In this paper we present the experimental device the results we have obtained.

Description of the Experimental Installation

The basic difficulty arises in choosing the materials and maintaining the necessary pattern imprinting on the plate and roller surfaces. To simplify the technology we decided to use a onering design with one-ring plate (stator) and one set of rollers (rotor). It is obvious, that it was necessary to strengthen the roller rotor near the bearings and balance the rollers well. In the suggested design, air bearings were used which provided the minimum losses due to friction. From the available description it was not clear how to build and magnetize a stator with a onemeter diameter. In order to make the stator, separate magnetized segments of rare earth magnets with a residual induction of 1T were used. The segments were magnetized in a usual way by discharging a 2 capacitor-battery system through a coil. Afterwards, the segments were assembled and glued together in a special iron armature, which reduced magnetic energy. To manufacture the stator, 110 kg of neodymium magnets were used and 115 kg of neodymium were used to manufacture the rotor. Highfrequency field magnetization was not applied. It was decided to replace an imprinting technology described in with cross-magnetic inserts having a flux vector directed at 90 degrees to the primary magnetization vector of the stator and rollers.

For the cross inserts, modified rare earth magnets with a residual magnetization of 1,2 T and coercive force a little bit greater than in a base material were used. In Fig.1 and Fig.2 the joint arrangement of stator 1 and rotor, made up of rollers 2, and a way of their mutual gearing or sprocketing by means of cross magnetic inserts 19, are shown. Between the stator and roller surfaces the air gap δ of 1-mm is maintained.

No layered structure was used except a continuous copper foil of 0.8 mm thickness, which wrapped up the stator and rollers. This foil has direct electrical contact to magnets of the stator and rollers. Distance between inserts in the rollers is equal to distance between inserts on the stator. In other words, t1 = t2 in Fig.2.



Fig.1. Variant of one-ring converter.

Fig.2. Sprocket effect of magnetic stator and roller inserts.

The ratio of parameters of the stator 1 and the rotor 2 in Fig.2 is chosen so that the relation of stator diameter D to the roller diameter d is an integer equal to or greater than 12. Choosing such ratio allowed us to achieve a "magnetic spin wave resonant mode" between elements of a working body of the device since the circumferences also maintained the same integer ratio.

The elements of magnetic system were assembled in a uniform design on an aluminum platform. In Fig. 3 the general view of the platform with the one-ring converter is displayed. This platform was supplied with springs and shock absorbers with limited ability to move vertically on three supports. The system has a maximum value of displacement of about 10 mm and was

measured by the induction displacement meter, 14. Thus, the instantaneous change of the platform weight was defined during them experiment in real time. Gross weight of the platform with magnetic system in the initial condition was 350 kg.

The stator, 1, was mounted motionlessly, and the rollers, 2, were assembled on a mobile common separator, 3, also regarded as the rotor, connected with the basic shaft, 4, of the device. The rotary 3 moment was transferred through this shaft. The base of the shaft was connected through a friction clutch, 5, to a starting motor, 6, which accelerated the converter up to a mode of self-sustained rotation. The electrodynamics generator, 7, was connected to the basic shaft as a main loading of the converter. Adjacent to the rotor, electromagnetic inductors, 8, with open cores, 9, were located.



Fig.3. The general view of the one-ring converter and platform.

The magnetic rollers, 2, crossed the open cores of inductors and closed the magnetic flux circuit through electromagnetic inductors, 8, inducing an electromotive force emf in them, which acted directly on an active load, 10 (a set of inductive coils and incandescent lamps with a total power load of 1 kW). The electromagnetic inductor coils, 8, were equipped with an electrical drive, 11, on supports, 12. Driven coils for smooth stabilization of the rotor's rpm were used but the speed of the rotor could be adjusted by changing the main loading, 10.

To study the influence of high voltage on the characteristics of the converter, a system for radial electrical polarization was mounted. On the periphery of the rotor ring, electrodes, 13, were set between the electromagnetic inductors, 8, having an air gap of 10 mm with the rollers, 2. The electrodes are connected to a high-voltage source; the positive potential was connected to the stator, and the negative to the polarization electrodes. The polarizing voltage was adjusted in a range of 0-20 kV. In the experiments, a constant value of 20 kV was used.

In case of emergency braking, a friction disk from the ordinary car braking system was mounted on a basic shaft of the rotor. The electrodynamics generator, 7, was connected to an ordinary passive resistive load through a set of switches ensuring step connection of the load from 1 kW to 10 kW through a set of ten ordinary electric water heaters.

The converter undergoing testing had in its inner core the oil friction generator of thermal energy, 15, intended for tapping a superfluous power (more than 10 kW) into the thermo-exchange contour. But since the real output power of the converter in experiment has not exceeded 7 kW, the oil friction thermal generator was not used. The electromagnetic inductors were connected to an additional load, 4 which was set of incandescent lamps with total power 1 kW and facilitated complete stabilization of the rotor revolutions.

Experimental results

The magnetic-gravity converter was built in a laboratory room on three concrete supports at a ground level. The ceiling height the lab room was 3-meters, the common working area of the laboratory was about 100 sq. meters. Besides the presence of the iron-concrete ceiling, in the immediate proximity from the magnetic system there was a generator and electric motor, which contained some tens of kilograms of iron and could potentially deform the field's pattern.

The device was initially started by the electric motor that accelerated the rotation of the rotor. The revolutions were smoothly increased up to the moment the ammeter included in a circuit of the electric motor started to show zero or a negative value of consumed current. The negative value indicated a presence of back current. This back current was detected at approximately 550 rpm. The displacement meter, 14, starts to detect the change in weight of the whole installation at 200 rpm. Afterwards, the electric motor is completely disconnected by the electromagnetic clutch and the ordinary electrodynamics generator is connected to the switchable resistive load. The rotor of the converter continues to selfaccelerate and approach the critical mode of 550 rpm where the weight of the device quickly changes.



Fig. 4. -G, +G changes in weight of the platform vs. rpm

In addition to the dependence on the speed of rotation, the weight differential depends on the generated power through the load and on the applied polarizing voltage as well. As seen in Fig.4, at the maximum output power equal to 6-7 kW, the change of weight ΔG of the whole platform (total weight is about 350 kg), reaches 35 % of the weight in an initial condition **Gi**. Applying a load of more than 7 kW results in a gradual decrease in rotation speed and an exit from the mode of self-generation, with the rotor coming to a complete stop subsequently.

The net weight **Gn** of the platform can be controlled by applying high voltage to polarization ring electrodes located at a distance of 10 mm from external surfaces of the rollers. Under the high 20 kV voltage (electrodes having negative polarity) the increase of tapped power of the basic generator to more than 6 kW does not influence ΔG if the rotation speed is kept above 400 rpm. "Tightening" of this effect is observed as well as the effect of hysteresis on ΔG (a kind of "residual induction"). The experimental diagrams given on Fig.4 illustrate the +G and –G modes of the converter operations vs. rotor rpm.



Fig.5 Diagrams of a rotor accelerating and loading of the converter.

The effect of a local change of the platform weight is reversible, relative to the direction of rotor turning, and has the same hysteresis. A clockwise rotation causes the critical mode to occur in the area of 550 rpm and the propulsion force against the direction of gravitation vector is created. Correspondingly, a counter-clockwise rotation causes the critical mode to occur the in area of 600 rpm and a force in the direction of gravitation vector is created. The difference in approach to a critical mode of 50 - 60 rpm was observed. It is necessary to mention that the most interesting region are situated above the critical area of 550 rpm, but due to of a number of circumstances the implementation of such research was not possible. It is necessary to note, that probably there are also other resonant modes appropriate to higher rpm of a rotor and to the significant levels of useful loading and weight changing. Proceeding from the theoretical assumptions, the dependence of tapped mechanical energy from the parameters of magnetic system of the converter and rpm of a rotor has a nonlinear character and the received effects are not optimum. From this point of view, the revealing of the maximal output power, of the maximal change of weight and resource of the converter represents the large practical and scientific interest. In tested sample of the converter the using of higher rpm was inadmissible because of unsufficient mechanical durability of the magnetic system, which was built from separate pieces.

In Fig.5 the dependence of weight of a platform and its output power, removed into resistive loading from rpm of a rotor of the converter is explained in detail. The diagrams are constructed for a case of HV polarization ON (top diagram) and HV polarization OFF (bottom diagram). The time from the start moment of the engine up to a mode of self-generation of the converter, at the rotation of a rotor clockwise, approximately is equal 1.5 minutes. (The power of starting engine was about of 2 KW with a reduction on the shaft of the converter is equal 1/10). At achievement of a critical mode (550 rpm.), the change of gross weight of a platform already achieves +/-30% from **Gi**. In the point of transition to a resonant mode, the revolutions with the



large acceleration has increases up to 590 rpm and weight has changes up to +/-35% from **Gi**. In this time an unpleasant high frequency whistling sound became audible. This place of the diagram begins at once after a critical point (inclination of a curve a1). At achievement of 590 rpm, the first stage of resistive loading in 1 kW is

connected to the electrodynamics generator. The whistling sound at once stops, the revolutions are sharply reduced and ΔG also is changing.

As soon as the revolutions begin to grow again, the second switchable load is connected and rotor's rpm are stabilized at a level of 590-595 rpm. ΔG continues to change. The increasing of switchable loading occurs by steps in 1 kW up to total power of 6 kW. All intervals in time are equal approximately of 10-30 sec. Afterwards, the short-term increasing of revolutions and then the full stabilization of a mode during of 12-15 min were observed.

More than 50 launches of this converter with absolute repeatability within three months were carried out. It is necessary to note, that revolutions will grow with acceleration reflected on the Fig.5 by corners $\alpha 1...\alpha 5$, if the generator is not switched to the next step of loading, the rpm will continue increasing. Twice as much loading was required to return to a previous rpm mode.

The above discussion concerns a mode with high voltage polarization of 20 kV "plus" on a "grounded" stator. Without the 20 kV polarization voltage (lower curve) the diagram is approximately the same, but indicates the more hard character of loading and faster change of weight of a platform due to decreasing of rpm.

Other interesting effects include the work of the converter in a dark room when corona discharges are observed around the converter's rotor as a blue-pink glowing luminescence and a characteristic ozone smell. In Fig.6 the cloud of ionization covers the area of a stator and a rotor and has accordingly a toroidal form.

Fig.6. Corona discharges around the converter.

On the background of luminescence glowing on rollers' surfaces, we distinguished a «wave picture.» A number of more vigorous strips of discharges around the rollers were observed. These discharges wereof a white-yellow color but the characteristic sound for arc discharges was not audible. Erosive damage induced by arc discharges were not present on any surfaces of the stator or the rollers . One more effect previously not mentioned was observed i.e. thevertical concentric magnetic "walls" around the installation. We noticed and measured the abnormal permanent magnetic field around the converter within the radius of 15 meters. For the magnetic field measurement the Russian magnetometer F4354/1 was used. Magnetometer used the Hall-effect sensor in the copper shielding. The zones of an increased intensity of a magnetic flux 0.05 T located concentrically from the center of the installation were detected. The direction of the magnetic field vector in these walls coincided with the direction of the rollers' field vector. The structure of these zones reminded us of circles on water from a thrown stone. Between these zones, this portable magnetometer did not register abnormal magnetic fields. The layers of an

increased intensity are distributed practically without losses up to a distance of about 15 meters from the center of the converter and quickly decrease at the border of this zone. The thickness of each layer is about 5 - 6 cm. The border of each layer has sharp shape, the distance between layers is about 50 - 80 cm where the upper limit is seen when moving from the center of the converter. A stable picture of this field was observed as well as at a height of 6 m above the installation (on the second floor above the lab). Above the second floor, measurements were not carried out. The similar picture was observed and outside of a room of laboratory, directly in the street, on the ground. The concentric walls are strictly vertical and no had appreciable distortions. In Fig.7 the schematic arrangement of the converter in a room of laboratory and arrangement of concentric magnetic fields are shown.



Fig.7.

Schematic placing of the converter and pattern of magnetic fields in the lab's room.

An anomalous decrease temperature in the vicinity of the converter was also found. While the common temperature background in laboratory was $+ 22 \Box C (\Box 2 \Box C)$ a fall of temperature equal to 6- 8 $\Box C$ was noticed. The same phenomenon was observed in concentric vertical magnetic walls as well as. The measurements of temperature inside the magnetic walls were carried out by an ordinary alcohol thermometer with an inertia of indication about 1.5 min. In the magnetic walls the temperature changes can even be distinctly observed by hand. When placed into this magnetic wall the hand feels very cold at once. A similar picture was observed at the height above installation, i.e. on the second floor of the laboratory as well as despite the ferroconcrete blocking of the ceiling and also on open air outside of the laboratory.





Concentric magnetic walls and the accompanying thermal effects begin to show themselves by an appreciable image beginning approximately from of 200 rpm., and linearly grow with increasing of revolutions up to a critical mode. The measurements above 600 rpm were not made because of fear of destruction of magnetic system. In Fig.8 the curve of intensity of a magnetic field in MT and change of temperature in Celsius degrees due to rpm changing is represented.

Discussion

All the results we obtained are extremely unusual and require some theoretical explanation. Unfortunately, the interpretation of results within the framework of the conventional physical theory cannot explain all the observed phenomena besides the change of weight. It is possible to interpret the change of weight either as a local change of gravitational force or as an antigravity force repelling its own field. Direct experiment, confirming the presence of a draft force was not performed, but in any case both interpretations of the weight change do not correspond to the modern physics paradigm. A reconsideration of the standard theory of gravitation is possible if we take into consideration space-timem curvature. For example, the Kerr metric usually represents the field exterior to an axially symmetric rotating body and distinguishes between positive and negative spin directions as well as forward and backward time directions [8]. An examination of the physical vacuum as a source of these phenomena may also lend itself to better interpretation since the Maxwell stress-energy tensor in the vicinity of the converter undergoes a complex evolution.

From the modern physics position, electrification and luminescence of the converter's magnetic system in the near zone is not completely clear. The phenomenon of the magnetic and thermal "walls" may be connected with Alphen's magnetic-sound waves raised in near zone in magnetized plasma induced by a variable magnetic field of a rotating rotor [9]. The energy exchange between ambient air molecules and the converter may be occurring. At the present

time we can not give an exact description of the interactions mechanism and transformation of energy, but without a relativistic we are completely unable to give a physically substantial theory of these phenomena.

In conclusion, we emphasize that issues of the biological influence effects and especially of the variations of real time stream effects, which must be taking place in an operative zone of the converter, were not considered at all. These issues are extremely important and absolutely unexplored; though there are some mentions of J.R.R.Searl about healing action of the SEG's radiation. Our own experience allows us to make only cautious assumption that the short-term stay (dozen minutes) in a working zone of the converter with the fixed output power of 6 kW remains without observed consequences for those exposed. The present paper is only a beginning.

Some Research.

Searl Magnetic Limited is empowered to investigate Searl claims in relation to the Searl Effect Generator, in reference to the materials, which he used and intend to continue to use.

This information unfortunately goes back to the 1948 to 1968 period, when Searl was forced to stop work on the technology by those who became greedy, demanding 70% of Searl's money, which he was spending on this work.

Copper emitter, that is Cu 29, it is a malleable reddish metallic element occurring as the free metal, copper glance, and copper pyrites; as used in such alloys as brass and bronze.





Equilibrium diagram of Cu 29 and Erbium Er 68.

Top picture = complete SEG structure.

Lower Picture = A segment of a Roller set machined and assembled by Fernando Morris in California, USA.

In that, picture the Cu 29 emitter layer is the outer layer of the segment and has a precise function in the operation of the Searl Effect Generator (**S-E-G**) which is vital to its function that is normal not accepted practice by magnetic companies, they try to avoid such forces occurring; but we use them to our advantage.

Copper Cu 29, in itself is an interesting element; it plays an important part in actual life forms, which I shall deal with in the medical section of the company.

On the question of company rights, any register company can form special units under different titles such as appears in Searl Technology Limited company, and Searl Magnetic Limited is also a registered company and can likewise have special units attached to it and control by it.

This document relates to the materials section of Searl Magnetic Limited, which searches for materials to test such in relation to the Searl Effect Generator requirements, either to improve results or to improve the cost of the finish product.

The tooling used is also costly, materials vary the cutter wear; therefore it is considered as part of the economic side of the Searl Effect Generator (S.E.G) for mass production requirements.



Equilibrium diagram of Cu 29 and Europium Eu 63.



Both of these photos have problems which are Common to those who think they can make it. Photo 1 = flaw in the magnetic layer generating rings of magnetic lines useless and waist of over £3k.

Photo 2 = Got his sums wrong, the magnetic layer was far too thin for the job.

Yet both parties who undertook this work failed to listen to what I was telling them, yes they all had ears the problem is they do not listen to what you say, suggesting that they can switch off their hearing system whenever they think they can do it without me.

In both pictures, it was Cu 29 used as the emitter function in function.

The Searl Technology requires teamwork, and I guess Sir Richard Branson and many others see this issue as missing; therefore, the risks are far too high for them to invest in it.

Teamwork means someone is responsible to keep daily records, that should be filed at a centre as proof who undertook that work and what progress was made each day, which sadly to state that is not the case here, another missing issue that turns off investment.

Understand that mass publicity is vital for finding the kind of funds needed for such work that is not happening. Due to that fact, other means to obtain funding must be used which is commonly term good IT.

Thus, the need for a business section on my website, so true details and facts are shown upon the planned structure of the whole company and their functions; hope this will encourage real investors to join us and make it happen in the world of reality – you know that is true.



Equilibrium diagram Copper Cu 29 and Iron Fe 26.









Equilibrium diagram Copper Cu 29 and Gallium Ga 31.



Equilibrium diagram Copper Cu 29 and Gadolinium Gd 64.



This is how the re-start of the S.E.G. was undertaken by John Thomas in New York U.S.A. with the support of Fernando Morris in California, U.S.A.

For the benefits of all my readers, early work had been stop by evil minds during 1968, though I did what I could from my own pocket.

That ended in 1981 when I had to move on and find another place to live.

Then in 1983, Luis Jarillo found me and invested money to get me to restart the work, but had to find a home in London, this Luis found for me and I moved.

Unfortunate the cost of products was now far more costly then the past, and it looked impossible to get things to move.

I undertook much travelling around planet Earth lecturing; on some events, John Thomas assisted me and on one lecture, his son Jason joins in.

Slowly I brought equipment again for the job in hand, which came mainly from my work and pension money. Then on Monday August 25^{th}

Although it has taken time with just my pension money to get moving again, the impossible to get things to reboot happened; it is accepted now that we do have our sights on the marketplace and are moving towards our goal.



Equilibrium diagram Copper Cu 29 and Germanium Ge 32.



Here we look at work done in 1968 in the research to find a way for mass production of such a device, and it is both times consuming and costly, but looks possible to achieve.

Within this document as like in all the others documents exposes my knowledge and understanding of the subject under review, all of which is vital for the tasks that lies ahead to be achieved.

There is a vast difference between an inventor and a company, Prof. Searl is a company that means he has a team working with him.

Yes, agree he conceives the concept and present ways to construct and test results, his team works with him to construct such concepts and develop them to mass production status.

These documents will expose the fact that I have the expertise across most of the domains of science and technology, has the hands on experience as an advantage in his planning of the products and the company divisions needs to manage such massive projects.

If the subject is not your normal line of employment; then it is only natural that you will find it difficult to follow and understand the descriptions within these documents you are studying.

I try hard to explain words to which you may not be able to understand, as the subject is not your line of employment in the effort to help you understand the meaning of the term being used by me.

That old saying that you can please some people part of the time, but not all people all of the time, how true that is, nevertheless that makes it sad because we claim to be educated; as such we all should be able to understand what is being stated. Sadly, it shows clearly on YouTube that education is clearly lacking, which can only slow down the progress that meant to be.



Equilibrium diagram Copper Cu 29 and Hafnium Hf 72





Equilibrium diagram Copper Cu29 and Mercury Hg 80.

Searl Technology is all about teamwork and devotion to creation something that is claim by experts as impossible and brings it into everyday use on the marketplace: as an option to the technology that is in use today, which is generating pollution. Thailand has been the place where all the study and research work has taken place since the re-start.

Equipment brought and installed.

The first and only magnetiser for this technology is under development as a research and development project.

Many visitors have passed through its doors with many promises of funding.



Equilibrium diagram Copper Cu 29 and Indium In 49.

If you are wondering what this report relates to, which shown here then I please to say that it is to show the different copper structures that can be used in the Searl Effect Generator as an emitter function.

Copper is just one of the metals suitable as an emitter function in the Searl Effect Generator.

There are other metals which can be used, therefore Copper is not alone as an option.

Cost of copper will play a part in choice.

Equilibrium diagram Copper Cu 29 and Iridium Ir 77.

Equilibrium diagram Copper Cu 29 and Lanthanum La 57.

Equilibrium diagram Copper Cu 29 and Lithium Li 3.

Progress will continue only funds hold up the work, as systematic investigations have proven positive.

Equilibrium diagram Copper Cu 29 and Magnesium Mg 12.

The Periodic Chart of the Atoms is designed to give the physicist, chemist, and student like me a vivid grasp of the unity of atoms.

The atom is today the outstanding topic of interest to **SEARL MAGNETIC LIMITED** science research studies in the task of re-developing the Searl Effect Generator (**S-E-G**).

When its magic is realized, the atom will become as fascinating for popular study and experiment as the camera, motor and radio.

Indeed, the individuality of the atom and its varied properties already form subjects of surpassing interest to Prof. Searl mind in 1946.

Light giving phosphorus, magnetic iron, odorous bromine, light-sensitive selenium, the super hardness of crystal carbon, the softness of lead, the toughness of tantalum, the explosive radium, the inert helium, the active oxygen; calcium the bone maker, nitrogen, the keystone of unstable molecules of food, drug, and high explosives.

Copper, the speedway for electrons, chlorine the scavenger; iodine controlling body growth; energetic uranium; chromium the colour maker; and scores of others having equally interesting individuality and unique behaviour.

Searl Effect Generator (S-E-G) is possible, no different to you as you are not possible but you are still here.

Equilibrium diagram Copper Cu 29 and Manganese Mn 25.

Top photo shows work done by Morris on machining the Copper Cu 29 emitter layer at his HQ in California USA.

Lower picture is a theory of magnetizing such parts in 1999.

Apart from the intrinsic interest of **SEARL MAGNETIC LIMITED** in this new knowledge of the atom, the importance of such knowledge is seen in the vision of Prof. Searl of a new power given to the chemist of **SEARL MAGNETIC LIMITED** of tomorrow to create forms of matter and energy having any desired properties.

Occasionally, a mind trained in the classics is confronted with the task of handling problems of a scientific nature and finds the change surprisingly attractive and absorbingly interesting.

Such a mind is Prof. Searl, which may sound strange to you, as he had no formal education by the expert's standards claims.

Yet he did have dreams, which educated him beyond that of any university could have done; as it opened his mind to reality in a way common education fails to achieve.

Prof. Searl, the designer of the Searl Effect Generator (S-E-G) has been employed within many fields of science and technology, which backup his concepts, research and development by his hands on experience in the workplace.

He writes from his heart, not from other people's claims, what he hears and sees, as to how he uses that information that he gathers on his way through life.

Some will not like what they read due to education brainwashing actions.

For them, I feel deeply sad that they cannot appreciate the real world that exists or could exist with their help.

Equilibrium diagram Copper Cu 29 and Neodymium Nd 60.

After being put out in the field to graze, as no longer required in this work during 1968, I paddled along the best I could and during 1979, I became aware that the Periodic table had been modified and termed Periodic chart – surely, it makes no difference what you call it – it is still about the elements.

The changing language of Chemistry and the additional influence of research by physicists who, as a body, have at least as much inherent interest in the periodic law and chart, have significantly altered the form and substance of the basic data presented in this document.

Widely accepted and functionally eclectic terms, formulae, and graphic conceptions have changed dramatically in the ten years since I started writing books instead of newsletters have occurred.

To my understanding, in 1969 details of the Periodic chart boasted 33 significant and discreet pieces of information presented for each element.

Supplemented data was (and still is) provided in the various tables listed within these documents.

My understanding is that during 1979 depicts fewer bits of information in keeping with modern expression and currently accepted concepts.

In this document, the chart will contain 21 pieces of data, which are more reliable to my way of thinking.

Equilibrium diagram Copper Cu 29 and Oxygen O 8.

This choice of 21 pieces of data is based upon the result of extensive physical research in the last 30 years.

These pieces of information will be listed in this series of documents.

Other classes of data, including Young's Modulus, Thermal Conductivity, and Electrical Conductivity are very important issues in the Searl Effect Generator (*S*-*E*-*G*) and the Inverse-Gravity-Vehicle (*I*-*G*-*V*) and shall be incorporated in tables in these documents.

Chemistry is the science of material substances and the transformations through which they are formed or change into other substances.

More than four million varieties of substances: have been reported in the chemical literature and recorded in the registry system maintained by Chemical Abstracts Service.

Since 1979, the number continues to increase.

Many of these substances originally found in naturally occurring materials, but the great majority of them discovered by laboratory synthesis from other known substances.

Central to the comprehension of this vast array of distinct substances and associated information about their properties are the chemical elements.

Slightly over a hundred scientifically known and confirmed elements, all existing substances are composed of these base elements including the Searl Effect Generator (*S*-*E*-*G*) and Inverse-Gravity-Vehicle (*I*-*G*-*V*) and even you.

The reference to you; will be dealt with in the Medical section of the company.

Equilibrium diagram Copper Cu 29 and Phosphorus P 15.

The grand scientific principle of classifying elements known as the Periodic Law and the Periodic Chart of the elements is a modern representation of that law and the latest available facts relating to each element.

The idea of elemental chemical substances (i.e., those not compounded of others) was suggested.

This was in direct contrast to the alchemists long accepted elementary principles – earth, air, fire, and water.

There were sharp criticisms of excessive claims of the alchemists, such as the possibility of converting common metals into gold, and they asserted, as a guiding principle, that any substance should be regarded provisionally elemental until it had been shown to be otherwise,

Unfortunate, they lack sufficient information, however, to venture an opinion as to which substances then known were likely candidates for elemental status.

The information crucial to distinguishing between elementary substances and compounds was knowledge of the role played by invisible constituents of the atmosphere in such prominent chemical actions as calcinations and combustion.

I understand that Joseph Priestley's discovery of oxygen gas in 1774, followed by as I recall by A. L. Lavoisier's elegant and convincing demonstrations of how oxygen from the atmosphere entered into combustions and other oxidations, which no doubt enabled Lavoisier and his scientific associates to publish, in 1786, a table listing 33 known or strongly suggested chemical elements.

When dates are quoted of the past upon references relation to a discovery made it is often an assumption and another problem is that others may have discovered it before that person but not able to record it.

Equilibrium diagram Copper Cu 29 and Nickel Ni 28

Among these elements were ten substances familiar for centuries, though their elementary character had not hitherto been recognized or proposed.

As I understand it, the work of Lavoisier revolutionized the progress of chemical research; thus we can thank him for playing a part in the development of the Searl Effect Generator (*S*-*E*-*G*) without his effort the concept of the *S*-*E*-*G* would had been impossible to achieved.

By 1869, amidst other major developments of early nineteenth-century chemistry, 30 additional chemical elements identified.

Some of these discovered through a powerful new means of investigation, the spectroscope, as I recall invented by G. R. Kirchhoff and Robert Bunsen in 1859.

There are just another two people: who played a part in the development of the S-E-G.

Spectroscopic methods are both highly sensitive and specific.

Equilibrium diagram Copper Cu 29 and Lead Pb 82.

No two distinct substances, including the elementary ones, yield spectra identical in all respects.

Later research would show how the spectra of the chemical elements are intimately related to details of their atomic structures.

To my understanding that traditionally, the chemical elements have been named at will by their discoverers.

As a consequence, element names convey no significant scientific information.

The chemical symbols to my understanding was introduced in 1813 by J. J. Berzelius, which typically consist of the capitalised initial letter of the name, followed where necessary to avoid ambiguity by a second prominent letter from that name.

Those elementary substances known since ancient times had acquired different names in different modern languages.

Their internationally accepted symbols derived from their Latin names, such as Fe for iron from ferrum.

The symbols for the elements potassium (K), sodium (Na), and tungsten (W) were derived from their German names – Kalium, Natrium, and Wolfram, that being the adopted scientific language of the Swedish-born Berzelius.

All of the elements discovered since Berzelius time have received names that were newly coined by their discoverers and have passed essentially without change into international use.

All companies of value have this concept that it is good to present some facts upon their operations history and S.I.S.R.C. has no problem in presenting the facts leading up to its intended operations, functions and intended products.

Equilibrium diagram Copper Cu 29 and Palladium Pd 46.

ATOMS and MOLECULES:

My understanding is that John Dalton is credited as the founder of the modern atomic theory of matter.

To my knowledge, that in 1803, he proposed that each element corresponded to a characteristic kind of discrete particle – or atom, the unit by which it entered into combination with atoms of other elements to form compounds.

The data at his command were regularities observed in the relative masses of elements participating in compound formation.

To my knowledge, Dalton utilized such information to derive relative masses for the atoms of different elements, which he published in the form of a printed table of atomic weights relative to that of Hydrogen, the lightest known atom.

How strange, what his method was is no different to that of mine in respect to both the Searl Effect Generator (S.E.G) and Inverse-Gravity-Vehicle (I.G.V); I wonder why so-called experts have problem to understand my logic and approach to R&D, it has to be due to brainwashing they have received.

Equilibrium diagram Copper Cu 29 and Praseodymium Pr 59.




Tomorrow's world being planned today. It is about atoms – elements- and you. Since these atoms were below the limit of visibility, they assumed it to be tiny, and therefore present in large numbers in samples ordinarily handled in the laboratory.

We now know that atoms have linear dimensions ranging from about $1 \ge 10^{-10}$ m for the smallest to about $6 \ge 10^{-10}$ m for the largest.

For the benefit of all those who have written to me to say that, you have no mathematic education, can I help you to understand these issues within my books.

I have always attempt to please all, and likewise here the above statement is a scientific notation; and it shortens this $1 \ge 0.0000000001$ likewise $6 \ge 0.0000000001$.

That was simple, nevertheless in my time, maths was not a great subject and like many more of you, I had no idea about maths. In the end, I taught myself.

A cube of Copper Cu 29 one centimetre on edge, weighing about nine grams, contains about 8.5×10^{22} atoms.

Wow, what am I stating here in plain language - I am stating 8.5 x 10,000,000,000,000,000,000 atoms; just think of how many atoms you are made of, each one of you will be made of a different number of atoms.

Likewise, in the Searl Effect Generator (*S.E.G*), within the emitter layer of the same diameter the number of atoms will vary a few, but due to such weight, this difference will not be notice or create any problems in its functions.



Equilibrium diagram Cu 29 and Platinum Pt 78.

I understand that Dalton was not successful in explaining another attribute of his atoms necessary to the determination of their relative masses.

Because he lacked reliable guides to determine how many atoms of one element combined with a given number of another, like relative valences.

As I understand it that a solution to this riddle was proposed in 1811 by Amadeo Avogadro.

Citing regularities that had been observed in the volumes by which gases participate in chemical reactions,

Avogadro proposed that each distinct substance in the gaseous state consisted of characteristic discrete particles called molecules – in modern terminology, and that a specified volume of any gas measured at a uniform temperature and pressure contained the same number of molecules.

One could deduce relative masses of the molecules –molecular weights – for different gases from the ratios of their gas densities.

Avogadro's observations led him to conclude that several of the chemical elements themselves, as gasses, consisted of molecules containing more than a single atom, among them the common elementary gases hydrogen (H_2), oxygen (O_2), and nitrogen (N_2).



Equilibrium diagram Cu 29 and Plutonium Pu 94.

Those experts: who so kindly tell those who are not experts that the Searl Effect Generator (S.E.G) is impossible, should have thought about that issue wisely and kept their opinions to themselves until proven.

You see that many other polyatomic molecules of the elements are now known, for example, P_4 of phosphorus – also P_2 at elevated temperature, and that is not all, and there is C_3 and C_2 as well as C in carbon vapour – at elevated temperatures.

Then there is S $_{8}$ of sulphur, and O $_{3}$ of ozone.

Therefore, you experts have no knowledge at all what happens to the elements magnetised in the manner to which Searl Magnetic Limited magnetise them.

As occurrence of the chemical elements in such a variety of molecular forms complicates the problem of correlating properties of the atoms with physical observations on the elementary substances, because some of the methods of observation give information about the molecular, as distinct from the atomic, constitution of the element.

It would be nice if experts did not act as they do way back in time when they stated you could not ride on stay up on two wheels, funny thousands of people ride on two wheels, and even I have done the same - I rest my case.



Equilibrium diagram Copper Cu 29 and Rhodium Rh 45.



Equilibrium diagram Copper Cu 29 and Sulphur S 16.



Equilibrium diagram Copper Cu 29 and Sulphur S 16.



OHMS LAW





Equilibrium diagram Copper Cu 29 and Antimony Sb 51.

Understand that Avogadro's extension of Dalton's original atomic theory; was not widely understood or accepted by his contemporaries, which are the same today with relation to the Searl Effect.

Instead, confusion grew as conflicting valences and corresponding atomic weights were assigned to the elements by chemists for principles and analogies applicable to determining formulas for the growing number of new chemicals generated by their research.

In 1860, a conference of leading chemists was convened at Karisruhe in Germany to discuss the situation.

Many attended the conference with the conviction that the atomic theory had outlived its usefulness and should be abandoned.

However, for the persistence of Avogadro's former student, Stanislao Cannizzaro, the meeting might have been adjourned without consensus.

Cannizzaro, a professor at the University of Genoa, had outlined a course in theoretical chemistry in which Avogadro's molecular theory played a key role.

A most important feature of this outline was a self-consistent table of atomic weights free of the contradictions that had disturbed other investigators.

Cannizzaro handed out copies of his pamphlet.

The clarity and thoroughness of his exposition left a strong impression on his colleagues, and the value of the atomic-molecular theory was never, thereafter, seriously in doubt.



Equilibrium diagram Copper Cu 29 and Selenium Se 34.

The stage was thus set for a discovery of major scientific importance for the creation of the Searl Effect Generator (*S.E.G*) – the *PERIODIC LAW*.

PERIODIC CLASSIFICATION OF THE ELEMENTS:

In 1869, Dmitri Ivanovich Mendeleff a Russian scientist showed that if the 63 then known chemical elements are arranged by order of their atomic weights, a periodic repetition of their properties was observed, the first stage towards creating the Searl effect generator (*S.E.G*).

To my knowledge, this is his own words in the Principles of Chemistry D. Mendeleff stated that *if all elements be arranged in the order of atomic weights a periodic repetition of properties is observed.*

The law of periodicity expresses this: the properties of the elements, as well as the forms and properties of their compounds, are in periodic dependence or, expressing ourselves algebraically, form a periodic function of the atomic weights of the elements and thus the first stages of the creation and construction of the Searl Effect Generator (*S.E.G*) was completed.

The history of this discovery given in Mendeleff's own words in a footnote reads in part as follows:

The periodic law and the periodic system of the elements appeared in the same form as here given in the first edition of this work, began in 1868 and finished in 1871, took that long to get the first stages of the Searl Effect Generator (*S.E.G*) concept developed.

In laying out the accumulated information respecting the elements, I had occasion to reflect on their metrical relations.

At the beginning of 1869, I distributed among many chemists a tract entitled "An Experimental System of the Elements, based on their Atomic Weights and Chemical Analogies."

Thank you Mendeleff, for your help made it possible for Searl Magnetics Limited to design future products.



Equilibrium diagram Copper Cu 29 and Silicon Si 14.

At the March meeting of the Russian Chemical Society, I communicated a paper "On the Correlation of the Properties and Atomic Weights of the Elements."

The substance of this paper is embraced in the following conclusions:

- 1. The elements, if arranged according to their atomic weights, exhibit an evident periodicity of properties.
- 2. Elements which are similar as regards their chemical properties have atomic weights which are either of nearly the same value, such as platinum Pt 78, iridium Ir 77, and osmium Os 76, or which increase regularly, such as potassium K 19, rubidium Rb 37,

and caesium which confuses me as to precisely what element he is actually referring too here.

- 3. The arrangement of the elements or of groups of elements in the order of their atomic weights corresponds with their so-call valencies.
- 4. The elements, which are most widely diffused in nature, have small atomic weights, and all the elements of small atomic weight are characterized by their sharply defined properties.

They are therefore typical elements.

- 5. The magnitude of the atomic weight determines the character of an element.
- 6. The discovery of many yet unknown elements may be expected.

For instance, elements analogous to aluminium Al 13 and silicon Si 14, whose atomic weights would be between 65 and 75.



Equilibrium diagram Copper Cu and Samarium Sm 62.

- 7 The atomic weight of an element may sometimes be amended by aid of a knowledge of those of the contiguous elements.
- Thus, the combining weight of tellurium Te 52 must lie between 123 and 126, and cannot be 128.
- 8 Certain characteristic properties of the elements can be foretold from their atomic weights.

The entire periodic law is included in these lines.

In the series of subsequent papers -1870 - 1872, for example, in the *Transactions of the Russian Chemical*

Society, of the Moscow meeting of Naturalists of the St. Petersburg Academy, and Liebig's Annalen on the same subject.

We only find applications of the same principles, which were afterwards confirmed by the labours of Roscoe, Carnelley, Thorpe, and others in England, of Rammelsberg – respecting cerium Ce 58 and uranium U 92, L. Meyer – respecting the specific volumes of the elements.

Clearly, the *S.E.G* has taken many centuries to develop, not just a few years by one man, but by many men.



Equilibrium diagram Copper Cu 29 and Tin Sn 50.

Zimmermann – respecting uranium U 92.

More especially of C. Winkler – who discovered germanium Ge 32, and showed its identity with ekasilicon, and others in Germany; of Lecoq de Boisbaudran in France – the discovery = ekaaluminium, of Cleve – respecting the atomic weights of the cerium metals.

Nillson – discoverer of scandium = ekaboron, and Nillson and Petterson – determination of the vapour density of beryllium chloride in Sweden, and of Brauner – who investigated ceriumCe 58, and determined the combining weight of tellurium Te 52 = 125, in Austria.

"I consider it necessary to state, that in arranging the periodic system of the elements I made use of the previous researches of:

Dumas, Gladstone, Pettenkofer, Kremers, and Lenssen on the atomic weights of related elements, who indirectly have played their part in the development of the Searl Effect Generator (S.E.G) for without their help the S.E.G, would have been impossible to create.

However, I was not acquainted with the works preceding mine of De Chancourtois – vis tellurique, or the spiral of the elements according to their properties and equivalents – in France.

Alternatively, that of J. Newlands – Law of Octaves – for instance, H, F, Cl, Co, Br, Pd, I, Pt forms the first octave, and O, S, Fe, Se, Rh, Te, Au, Th the last – in England, although certain germs of the periodic law are to be seen in these works,

Every one of those named here technically have played a major part in the Searl Effect Generator (*S.E.G*) concept for without their input the *S.E.G* could not be conceived therefore not possible to produce.



Equilibrium diagrams Copper Cu 29 and Strontium Sr 38.

With regard to the work of Prof. Lothar Meyer respecting the periodic law, it is evident, judging from the method of investigation, and of his statement – Liebig's Annalen Supt. Band 7, 1870, 354, at the very commencement of which he cites my paper of 1869 above mentioned, that he took the periodic law in the same form as it was given by me.

In conclusion, to this historical statement I consider it well to observe that no law of nature, however general, has been established at once.

Its establishment is always preceded by many presentiments, but the acknowledgment of the law does not take place when it is recognized in all its significance, but only when it has been confirmed by experiment, which the scientific man must look to as the only proof of the correctness of the conjectures and opinions.

I therefore, for my part, consider Roscoe, De Boisbaudran, Nillsson, Winkler, Brauner, Carnelley, Thorpe, and others who verified the adaptability of the periodic law to chemical reality, as the true founders of the periodic law, the further development of which still awaits fresh workers.

All these researchers unknowing proved and laid the foundation by which the Searl Effect generator (S.E.G) could be conceived.

All that was needed now was to wait for inventors to arrive that would conceived, research and develop the machinery, test equipment and tooling by which the Searl effect Generator could be mass produce, and such would be arriving in the years that would come and go.

Rome was not built in one day, or will the Searl Effect Generator (S.E.G) will be either.



Equilibrium diagram Copper Cu and Tellurium Te 52.

Recalling that only 63 species of chemical atoms were known in 1870, that large errors existed in the earliest determinations of some atomic weights, and that atomic numbers were later found to be more fundamental than atomic weights, it is remarkable that the Periodic Law was discovered so early.

It promptly proved its power in the prediction of new elements and correction of atomic weights.

It was extended just before 1900 by the discovery of a completely new family of elements, the inert – noble – gases, and it was greatly refined after 1913 by the discovery of isotopes and the substitution of physical atomic numbers for chemical atomic weights.

It has played an important role in systematizing knowledge concerning atoms and in arriving at the present picture of atomic structure.

The Periodic Law was a major step towards the conception of the Searl Effect Generator (S.E.G) and in fact, the Inverse-Gravity-Vehicle (I-G-V) likewise benefited from that law.

The technology is not at fault - the major problem for success to become reality is teamwork and support. Which is missing at this stage; if such were available, the technology should been in mass production and not still waiting for the research and development to be completed.



Equilibrium diagram Copper Cu 29 and Thorium Th 90.

No law of nature, however general, has been established at once; its establishment is always preceded by many presentiments, but the acknowledgment of the law does not take place when it is recognised in all its significance, but only when it is confirmed by experiment which the scientific man must look to as the correctness of his conjectures and opinions.



For many years, scientists had hoped that all atomic weights would finally prove to be integral multiples of some common unit, possibly hydrogen H 1.

As the accuracy of relative atomic weight determinations increased, it was seen that many of them were close to whole numbers, but others were definitely fractional.

After the discovery of isotopes in 1913 it became clear that elements in general, at least those with fractional atomic weights, consist of two or more components, each having a whole number atomic weight; the observed chemical atomic weight represents an average according to relative abundance of all the components of the element existing in nature.

The different components of any element are called isotopes.

All isotopes of an element occupy the same position in the Periodic chart; they all have the same atomic number, but have different atomic weights.

Investigations of Roentgen – X-ray spectra in 1913 showed conclusively that atomic number is a more fundamental quantity than atomic weight.



Equilibrium diagram Copper Cu 29 and Titanium Ti 22.

FACT: The discovery of radioactivity in 1896, of artificial transmutation in 1919, and the interpretation of spectroscopic hyperfine structure since 1927, has led to some understanding of atomic nuclei.

In addition, note that all this was achieved before I pop up on planet Earth, clearly being put in place for my arrival to add to the confusion, which they were under the impression they had solved.

Strange how experts talk as if the Searl effect Generate (*S.E.G*) operates on some strange power that has not been detected by them thus impossible to function.

In reality it is just a common linear motor operating on a magnetic bearing, nothing strange at all, just common system used in many products of today, the only differences is this unit is very cheap to operate and is non-polluting in operation, and do not have the common problem of costly yearly maintenance.

It can be design to power your home, your car, bus, lorry, commercial businesses, and industry and rail systems.

As the Searl Effect generator does not burn combustion fuels, its function is clean leaving no pollution in our atmosphere it is therefore rather silent in operation; ideal for low noise footprint areas use, or hospitals, nursing homes, passenger shipping, in fact even space it will serve, as it does not depend upon air to keep cool.



Equilibrium diagram Copper Cu 29 and Thallium Tl 81.







The Periodic Law of Mendeleeff may be restated in the following form:

All physical and chemical properties associated with the external or electronic structure of atoms exhibit periodicities that are functions of the atomic number.

This is true of ionization potentials, valencies, atomic diameters or volumes, spectral multiplicities and energy states of individual atoms; and also, in general, of crystal forms, densities, melting points, specific heats and other properties of atoms in bulk.

I hope to be able to run out tables to show these values, which are all important in designing the Searl Effect generator (S.E.G).

I hope that so far, things have been easy for you to follow, but this may not be so as I dig deeper into this technology.

Mendeleeff was indeed in his time a great man of vision as he demonstrated the Periodic Law most usefully and convincingly through a table in which he listed the elements in successive horizontal rows.

Each corresponding to one complete period of variation in properties, whereupon the elements standing in each vertical column clearly belonged to a family, sharing in particular a common principal valence.

Most readers of this article may not be able to appreciate what the amount of work, which he had to undertake to be able to create such information, which this research and development depends upon.



Equilibrium diagram Copper Cu 29 and Uranium U 92.



Mendeleeff also had the logical foresight to leave occasional blank spaces where the properties of the next known element in sequence seemed to place it in a later column.

He suggested that these unoccupied spaces signified elements as yet undiscovered, and he confidently applied the Periodic Law to predict chemical and physical properties, as well as likely sources, of the missing elements.

The discoveries of gallium Gn 31, Scandium Sc 21, and germanium Ge 32, among other new elements, confirmed his brilliant predictions.

What I cannot understand that here is a great man in his time equal to Einstein of today, yet few really know of him and what he achieved that made science what it is today and laid the base for the Searl effect generator (*S.E.G*); was it because he was a Russian and not a German?

The entire family of noble gases, whose existence was unsuspected before 1894, could later be accommodated by the insertion of a new column, appropriately located in the table according to the Periodic Law.

Mendeleeff had found it necessary to invert the order of several pairs of elements in order to place them in their proper families.

Thus, he set tellurium Te 52 ahead of Iodine I 53 despite the higher atomic weight reported for tellurium Te 52.

He predicted – incorrectly – that the atomic weight of tellurium Te52 was in error and would prove to be higher than that of iodine I 53.



Yes, agree predictions upon any subject can turn out wrong in due time; that in science not a disgrace, any prediction that proves true is in reality amazing achievement to be able to see what others cannot see.

Equilibrium diagram Copper Cu 29 and Vanadium V 23.

This and other similar discrepancies were removed when, in 1913, H. G. J. Moseley discovered a completely reliable experimental method of assigning serial atomic numbers to the elements according to their X-ray spectra.

NOTE: That I have today all this equipment to undertake this work, whereby poor Mendeleeff never had such equipment by which he could make precise predictions, he had to gamble and without that gamble that he took the Searl effect generator (*S.E.G*) could not been possible.

Periodicity strictly follows the order of atomic number, which is precisely what my dream one is saying to me, and in reality that is precise.

The theoretical significance of this is explained by the modern theory of atomic structure, wherein the atomic weight is affected by irrelevant variations in the distributions of isotopes.

The existence of isotopes, elements almost identical in chemical behaviour but differing in atomic weight, was first clearly established by Frederick Soddy in 1910 in the course of tracing the sequences of products formed by the radioactive decay of uranium U 92, thorium Th 90, and others of the newly discovered radioactive elements.

The radioactive properties of isotopes – unlike the chemical properties – are readily distinguished by the type of radiation emitted, its energy, and the half-life of the decay process.

We now recognise that radioactivity is a property of the atomic nucleus, whereas chemical properties are associated with the number and configuration of the extra-nuclear electrons.

Proving, yet again that the Law of the Squares is precise in its predictions in reference to structures and functions.

I have no problem at all with Mendeleeff achievements, as I understand his position at that time.



Equilibrium diagram Copper Cu 29 and Yttrium Y 39.

Isotopes of a given element have the same nuclear charge and corresponding number and configuration of electrons, but differ in nuclear mass.

What is even more amazing is that shortly after Soddy's discovery, F. W. Aston, in 1913, succeeding in partially separating two isotopes of neon Ne 10 by differential diffusion through a pipe-clay tube.

You experts tell the world that the Searl effect Generator (S.E.G) is impossible – shame on you claiming to be experts where you are exposing yourselves as being lacking in basic understanding of chemistry.

Why am I teaching you basics when it is your responsibility to teach me but fail to do so.

The less massive isotope diffused at a slightly higher rate through the barrier.

In 1919, he confirmed this result by designing an improved positive-ion electromagnetic deflection apparatus now known as a mass spectrometer, which as a matter of interest is an instrument, which I yet have to buy.

Modern versions of this instrument are capable not only of distinguishing isotopes but also of determining their relative atomic masses with high precision, which is also vital for our magnetic research and development program.

By now, I trust that you now understand that these so-call experts are not experts but simply idiots.



Equilibrium diagram Copper Cu 29 and Ytterbium Yb 70.

Aston discovered that a majority of the elements have two or more isotopes and, furthermore, that the isotopic atomic weights were close to integers.

These integers, called mass numbers, are now explained as sums of the numbers of protons and neutrons, the – relatively – massive elementary particles constituting the isotopic nucleus.

Poor old Mendeleeff and his contemporaries also had difficulty in dealing with the series of elements immediately following lanthanum – the so-called rare earth elements now known as lanthanides.

Three lanthanides were known before 1869, but, as others were discovered, there appeared to be no clue to the total number to be expected and how they fitted into the Periodic table.

We now know that they constitute a sub-period within a so-called long period, the sixth period of the Table.

Moseley's law resolved this difficulty by assigning atomic numbers 57 and 72 to the thirteen members of the series known by 1913 and identifying one gap at element 61.

The missing element proved to be one of which all of the isotopes are unstable towards radioactive decay.

Element 61, named promethium, was first isolated in 1945 from among the fission products of uranium U 92.

Again, we witness that the so call impossible in reality becomes possible: by like kind people as Searl.



Equilibrium diagram Copper Cu 29 and Zinc Zn 30.



The S.E.G is a R&D project to develop one type suitable for mass production mode.

The fourteen elements following actinium Ac 89 include many man-made transuranium elements discovered since 1940.

These elements constitute a quite similar sub-period, the actinides, within the seventh period of the Table.

SEARL EFFECT GENERATOR (S.E.G) relies upon the periodicity and atomic structure:

For more than fifty years after its discovery, the Periodic Law stood as an empirical generalization.

It appear to be essentially sound and was clearly useful, but it lacked a theoretical foundation.

This is not surprising, in view of the few facts then known about atomic properties or structure.

Unexpected major discoveries during the decade 1895 - 1905, that being before I was conceived – X-rays –W. K. Roentgen, 1895 played a vital role in the *S.E.G.* concept,

The electron – J. J. Thomson, 1897, also played an important part of the *S.E.G* concept.

Radioactive chemical elements – Pierre and Marie Curie, 1898 – also played a role in the *S.E.G.* concept.

The quantum theory of radiation – M. Planck, 1900 - also played a role in the S.E.G. concept.

The special theory of relativity and the quantum theory of the photoelectric effect – A. Einstein, 1905 – who has played a role in the *S.E.G.* concept. That is not the end of the list: covering centuries and hundreds of research workers who through their efforts have laid the foundation for the success of creating the *S.E.G.*



Equilibrium diagram Copper Cu 29 and Zirconium Zr 40.



Initiated revolutionary developments in physics and chemistry leading to a comprehensive theory of atomic structure described by quantum mechanics – W. Heisenberg, 1925; E. Scnrodinger, 1926; P. A. M. Dirac, 1927 all in their way played a part in the *S.E.G.* concept and development.

To remind you that Searl Magnetic Limited duties are to conceive, research, construct and test magnetic devices that will meet the objectives of the products planned to be massed produced.

Secondly, to search elements and combination of elements in the choice of price tag that will create a mass production model to be produced that fits the economic requirements.

Diagrams and Pictures :



















