Guidelines to Bucking Coils.

Lenz's Law Free Power Extraction.

By Chris Sykes (hyiq.org)(EMJunkie)
Version 2.7 – 26.02.16

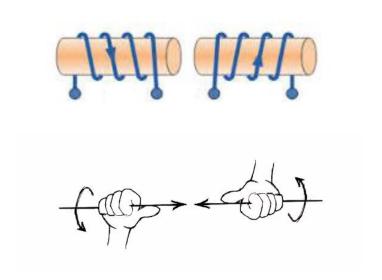
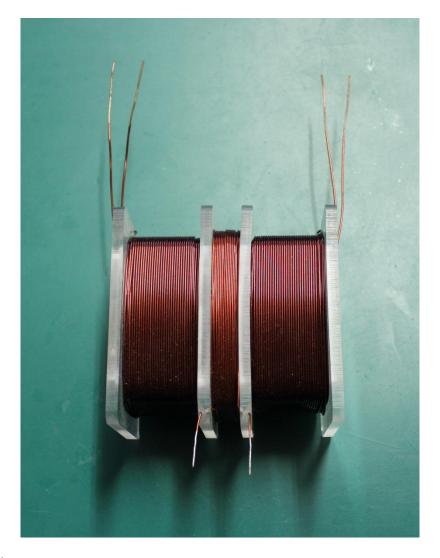


Fig 1: Typical Bucking Power Output Coil, one configuration.

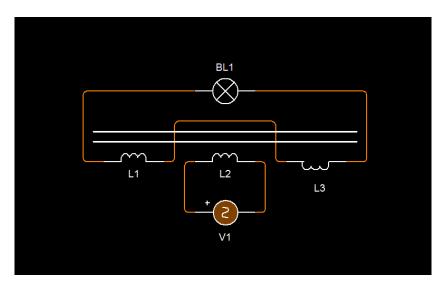
Requirements:

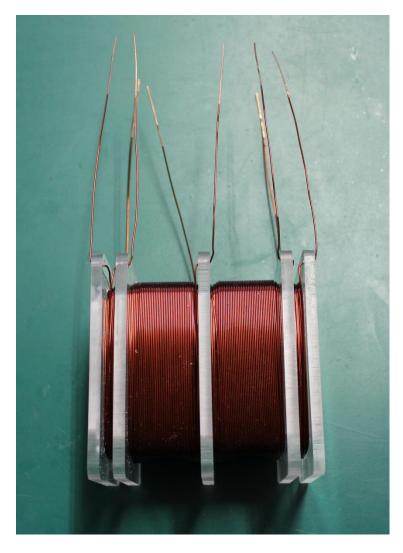
- 1. At least two (2) Coils (Partnered Output Coils) must be used for each single Power Output Coil.
- 2. Each of the two power coils is best to have different direction of winding, relative to the Right Hand Rule applied to the Core.
- 3. The Magnetic Field MUST be thought of in a quite different way to the conventional thinking. More explained on this below.
- 4. Step Up techniques must be used, Power $P = V \times I$ or $\frac{V^2}{R}$ Where R is the Resistance of the wire, I is the Current and V is the Voltage. $I = \sqrt{\frac{P}{R}}$ So this means that the Resistance of the power Coil must also be taken into account, according to normal theory. Here, not so.
- 5. One input or Excitation coil per Power Coil.
- 6. Input or Excitation Coil is best to occupy only one half of the Power Coils Geometry.
- 7. The Bloch Walls of the Input/Excitation Coils is best not to overlap or exist in the same space as an artificial moving Bloch Wall.

What does not Work:

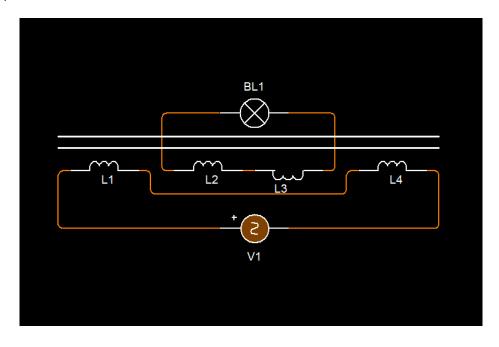


Circuit Equivalent:



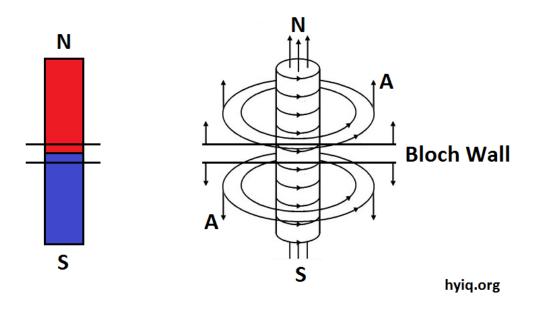


Circuit Equivalent:



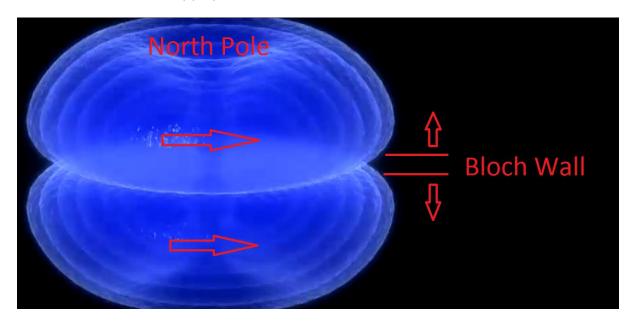
The above does not work primarily because the Magnetic Field as we understand it, is incomplete.

An illustration of a Permanent Magnet as compared to an Inductor with B-Field charging from t=0 to t=1 (Field Maximum)



The A Vector Potential and the Magnetic Field – A, and Phi.

Below Picture for illustratory purposes:



Note: Arrows pointing to the Right indicate the Right Hand Rule as applied to the magnetic Field. Arrows Up and Down indicate the Bloch Wall Growing as a result of Time moving away from t=0. This will reverse as Field Maximum has been reached and Field decays as a result of I^2R Factors.

I am going to take you on a ride in my Quantum Automobile! Plenty of room for all!

Imagine the typical Solenoid, or Coil of Wire, Imagine the dynamic changes that occurs to each area at specific times throughout its operation. We are going to assume a 50Hz 50% Duty Cycle, typical AC Sine wave. We are going to park our Quantum Auto in the middle of the Core, absolute centre, where the Bloch wall will grow and decay with progression of the I^2R factors resulting in the Magnetic Field that changes in strength over time.

An observation can be made and the result is quite astounding!

Observations:

At t=0 we see nothing but particles and depending on the core material we may see residual Magnetic effects. Currently we are not too concerned about the residual magnetic Effects. As time moves from Zero we see an amazing effect!

Looking up we can see a growing Toroidal Shaped Electric Field with Spin in the Clock Wise Direction moving away from us from our Observation Point.

Looking down we can see a growing Toroidal Shaped Electric Field with Spin in the Counter Clock Wise Direction moving away from us from our Observation Point.

Each Growing in intensity and at the same time moving away from us as the distance of the Bloch Wall grows in time.

Now we move our Quantum Auto, and move it out to the perimeter looking sideways at the same Coil. What do we see now?

The point of this Exercise!

At this stage it is obvious that we have a difference in effects from our observation point. From outside we see two Toroidal electric fields that permeate all space growing and moving away from each other with, **Equivalent Spin Direction**, or what appears to be the same direction! From the Stand Point when we parked our Quantum Auto at the Centre of the Bloch Wall, we saw the opposite, **Non Equivalent Spin Directions** on each Toroidal Electric Field and each Toroidal Field moving away from each other.

The point here is that Placement of coils is important, what a Coil sees as a result of its placement can change the entire operation of the device. Not only the placement but also the direction of turns is important if it is placed on the same core as the input coil. Turn Direction is the difference between a Dead Short in the device and not shorting the device and accessing another effect that some may not have seen before.

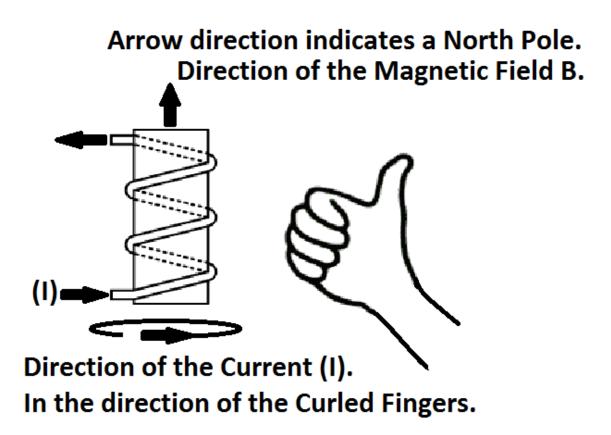
Experimental Results:

I just want to say, the above is all from experimental results. It's not all conventional and to some, it is absolute blasphemy! But it's tried tested and true.

We must understand the Magnetic Field as is shown above.

Firstly, understanding the A Vector Potential and its partner Phi, is critical. A, is the Electric Component of the Magnetic Field and, Phi, is the Magnetic Component. The Right Hand Rule can be applied to the Field and an induced Current and Voltage can be predicted.

The Right Hand Rule



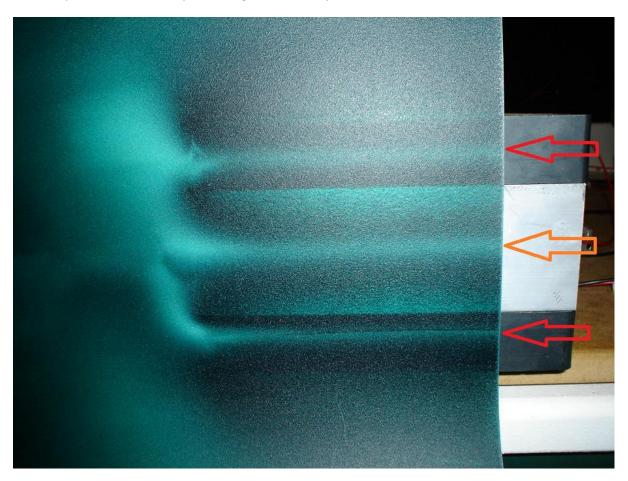
In Magnetics it is well known that the Current and the Magnetic Field follow the Right Hand Rule and the Voltage is in the reverse.

The Bloch Wall

It is very important to understand the Bloch Wall! Naturally Occurring and Naturally Induced.

I encourage experiments with the Bloch Wall. I have a small iron lamination with a hole in one end and I have cut it in half and made it into an arrow shape on the end, it's tied to a small piece of wire and I wave the Iron Lamination over the Bloch Wall. The Lamination will Jump over the Bloch Wall with extreme reluctance. It's as if there is an invisible wall of force that the Iron Lamination can only reluctantly pass.

An example of both Naturally occurring and Naturally Induced Bloch Wall's is shown below:





Red Arrows: Naturally Occurring Bloch Wall

Orange Arrows: Naturally Induced Bloch Wall

Another experiment: Take 10 or so Permanent Magnets of the same size. Check for the Bloch Wall on one Permanent Magnet, its size and location... Then add another Permanent Magnet on top, in attraction mode. Then measure again the Size and Location of the Bloch Wall. Repeat by adding Magnets...

A similar experiment can be made by using a Variable DC Power Source and a high Inductance Coil, slowly turning up the Voltage Source. In this experiment, you will see the Bloch Wall grow, and also increase in intensity. However, its location won't move as is described above.

Induction and the Transforming Effect

It's a very confusing subject. Science tells us Energy cannot be created or destroyed. But yet, at the same time we have Electricity Devices called "Electric Generators"! "Electric Generators" "Generate" Electrical Power and supply it to our Homes and Businesses and so on.

"Generate" Definition: "the production or creation of something."

The definition of Generation Implies creating Energy from nothing, which Science tells us we cannot do. So is this subject already mystical Voodoo Science?

"Generator" Definition:

- A person or thing that generates something.
- A routine that constructs other routines or subroutines using given parameters, for specific applications.
- A point, line, or surface regarded as moving and so notionally forming a line, surface, or solid.
- A dynamo or similar machine for converting mechanical energy into electricity.

Here in lies a very serious problem! It's not bought up anywhere as far as I can tell. This definition does **NOT** explain how Mechanical Rotational Energy is converted into Electrical Energy on the Output Terminals. Energy in the form of Mechanical Rotation simply is not the actual causality of the Energy on the Output Terminals!

E.G: I could spend all day rotating a Shaft and get not a single microwatt of Electrical Energy out of the shaft, only with the correct configuration of Conductors and Iron Stators and Rotors will I get output Power! So Mechanical Energy is **NOT** the Source of the Energy Generation!

It is the silliest assumption I have ever heard in my entire life! I can't believe this is still an assumption that Science is still trying to lay out on people as the primary source of Conversion! See: Lenz's Law for more information.

Mechanical Rotational Energy is only a partial requirement of Conventional Electrical Generators, because of Lenz's Law.

Lenz's Law creates "Resistance" to Mechanical Energy in the "Generator" and more Mechanical Force is required to overcome this "Resistance". See the Lenz's Law section for more information.

The ideal configuration is, for, exactly one half of the Conductors in the Generator must experience an Electromagnetic Change opposite to the other half of the Conductors over Time.

The equations are:

$$emf = \frac{dPhi}{dt} = Induction \ via \ Flux \ Linking$$
 $emf = Bvl = Induction \ via \ Flux \ Cutting$

Where:

- dPhi = a quantity of the Electromagnetic Field.
- dt = a quantity of time.
- B = Electromagnetic quantity.
- v = Velocity
- *l* = typically the Area of the Element sometimes is the length of the element in the case of a rotating loop for example.

See: "George I. Cohn - Electromagnetic Induction" for more information.

Put simply, a combination of the Conductors and the Electromagnetic Fields in "Electric Generators" separate Charge Carriers, positive one way, and Negative the other way, making one Terminal become Positively Charged and the other Negatively Charged. This will change depending on the polarity of the Induction Cycle inside the "Electric Generator". This is simply a Sine Wave output.

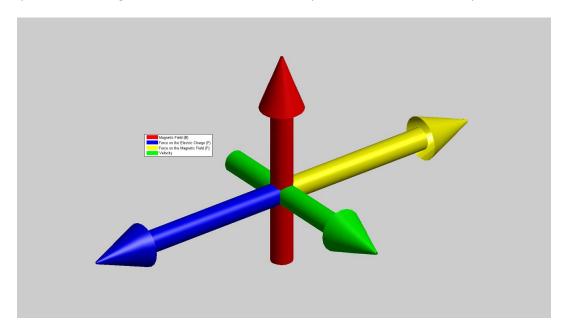
Chemical Charge Separation in Battery's and other devices like Solar Cell's work the same way.

An Electric Transformer also works the same way.

Induction is the Separation of Charge Carriers.

How is Charge Separated

In "Generators" and Transformers, it is Magnetic Force, the Lorentz Force, which is responsible for the Separation of Charge Carriers. I have done a few experiments to test and verify this.



Red Arrow = Magnetic Field B.

Blue Arrow = Force on the Electric Charge

Yellow Arrow = Force on the Magnetic Field

Green Arrow = Velocity = Speed * Distance Travelled! Of either the Conductor or the Magnetic Field.

Lenz's law is the **Result** of drawing Current from the already Separated Charge, **not the cause!** A Moving Charge constitutes a Magnetic Field! Charges have to be available to move in the first place!

I can't stress enough, how important it is to understand these principals and how they all fit together!

References:

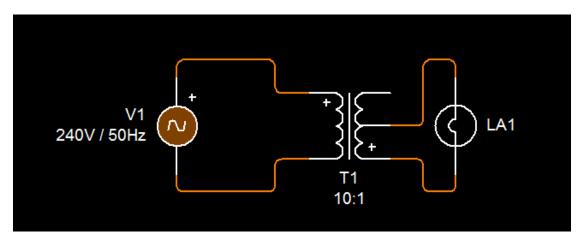
URL: https://www.youtube.com/watch?v=kckxzBUxTHg - Covering the Lorentz Force!

URL: https://www.youtube.com/watch?v=P3Enr6_d3yU - Proving Induction Principals!

URL: https://www.youtube.com/watch?v=lcGWO_x8tpM - Highly Recommended!

Step Up/Down

Below is a simple diagram of a standard Step Down Transformer with a Globe (LA1):



Without going into Transformer Theory and equations, Transformers (an Ideal Transformer) will work on Turns Ratio. Step Up and Step Down work on a ratio of each turn to each volt. A simple example follows:

Input:

240Volts – 240 Turns. 1 Volt per-Turn.

Output:

24 Volts – 24 Turns. 1 Volt per-Turn.

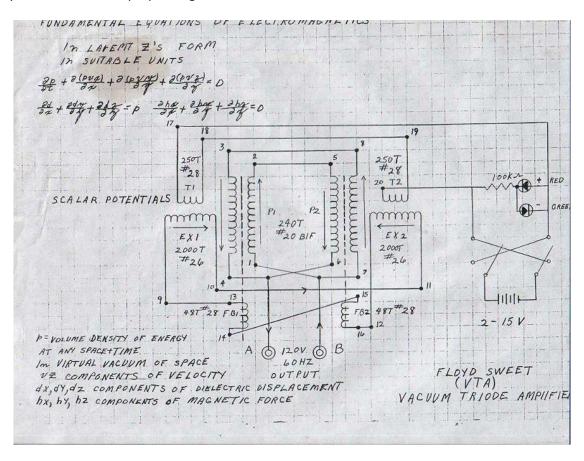
This gives a Ratio of 10: 1, and is a Step Down Transformer. Power is also proportional, and as Voltage is stepped down, normally Current will increase. So in an Ideal Transformer no losses, Input Power = Output Power = $(240\text{Volts} * 1 \text{ Amp}) \rightarrow (24\text{Volts} * 10 \text{Amps})$. Of course this is in an Ideal Transformer with no Losses or other issues to contend with.

A lot of other factors come into Transformer Design like Wire Resistance and also Current Carrying Capabilities of the Wire and so on.

The point I am getting to, is that these devices, use some Transformer Principals, but not others.

Ideally, these devices work with a Step Up configuration. 1:3 is a common Ratio. That's one turn on the input to 3 turns on the output. Current, as you may think, is not stepped down as a result of the Voltage being stepped up.

Floyd Sweet used a Step Up configuration of 1: 5



FB1: 48 Turns → P1: 240 turns = 1:5 Ratio.

This now famous Schematic is more clearly understood if we apply the concepts in this paper to Magnetics and to the VTA. By definition, the VTA IS a Triode, by definition it Gates the Vacuum, and as a result of the properties described in this paper it does amplify.

I have studied Floyd Sweet and his VTA for some fifteen years. It took me around ten years to get an idea on what it was about and five or so years to experiment on.

I was given the original Lab Notes from the first Generation VTA, revision one and revision two, by an Anonymous source. In the Lab Notes the pages were labelled randomly and it appeared as if some pages were missing. I did not know for sure, but that's what it looked like.

Please <u>Click Here</u> to see the original Lab Notes transcribed.

"On rare occasions, Sweet saw this effect, called self-oscillation, occur in electric transformers"

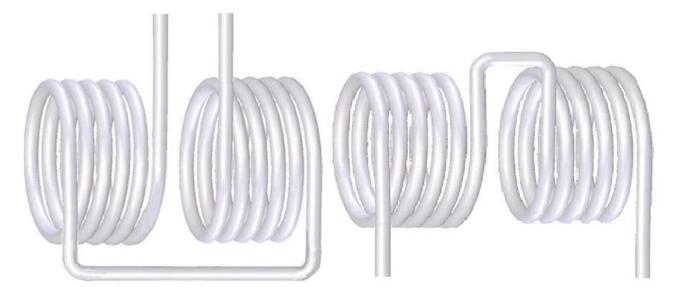
Ref: "Jeane Manning: A New Physics for a New Energy Source / Free Energy - Making the Impossible Possible"

and

"Sweet was also a transformer designer and expert, and he remarked that he had also observed specialized self-oscillation in certain transformers."

Ref: Energy From The Vacuum by Tom Bearden

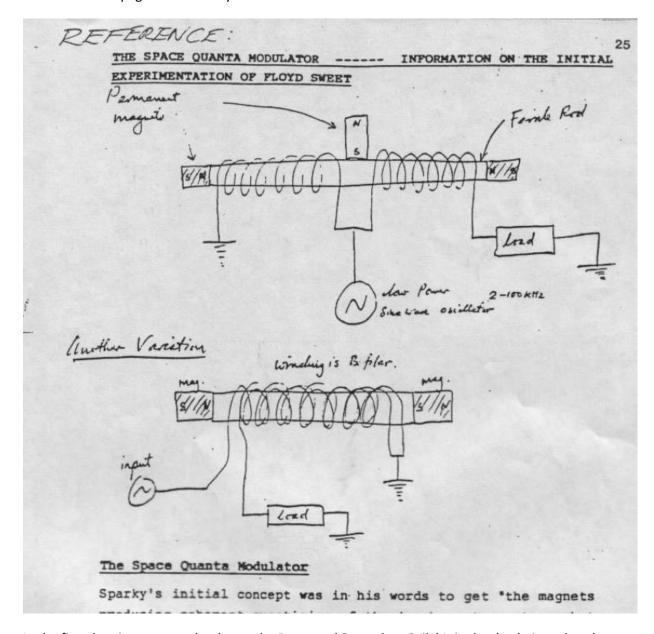
Sometimes the most obvious things can be the hardest to find. It's like the Car Keys that were on the bench all along and it took two hours to find them, and, you had already looked there several times! Then, once one finds something like this, it is easy to question its authenticity until a good understanding is achieved.



Please keep the above picture in mind for the next section as it will become evident as to its significance soon.

On the Internet, I had found a page that was supposed to be linked to Floyd Sweet but I was never able to verify its authenticity. Now I know that this page is either directly linked to Floyd Sweet or at least to the Technology that he worked on.

Here I show the page in its entirety:



In the first drawing, we can clearly see the Partnered Secondary Coils! It is clearly obvious that there is a link here to the type of coils used as to the operation of the VTA as we know it to be after many years of research and experimentation.

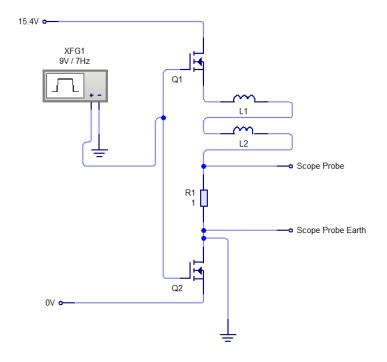
To date, the VTA is the most elegant device I have researched. Its size to output ratio is unbeatable for all other devices.

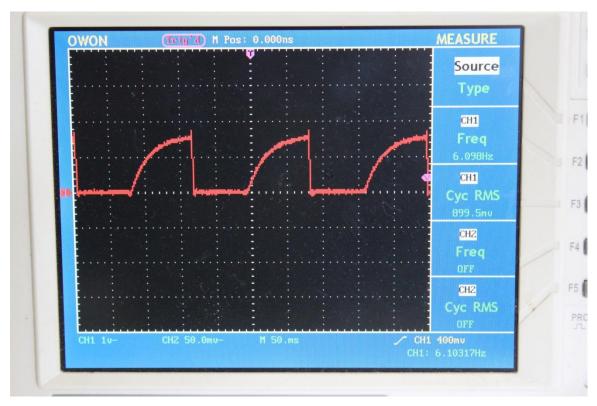
The Generation Six VTA was in the order of 5000 Watts for a device that was not much bigger than the old fashioned Shoe Box.

The Flow of Current in a Wire when there is No Magnetic Field

Experiment 1

The Circuit:



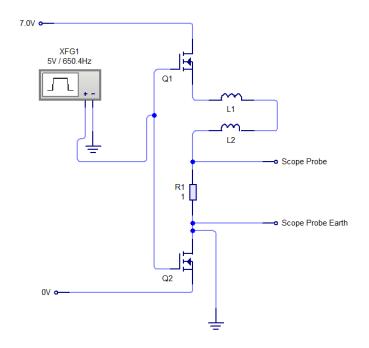


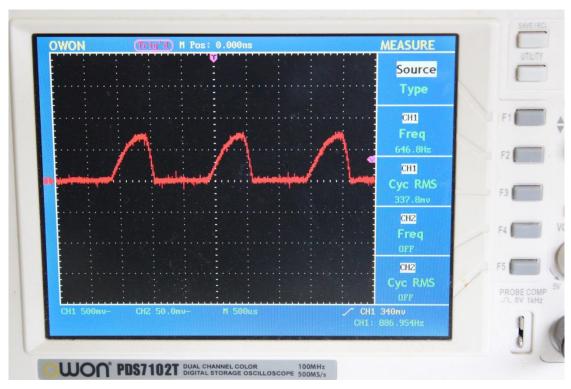
Circuit Description:

Each Filar is 55.6mH individually, 55.6mH parallel and 0.231H Series connected. DC Coil Resistance is 3.8 Ohms each Filar and 1.9 Ohms parallel and 7.8 Ohms Series.

Experiment 2

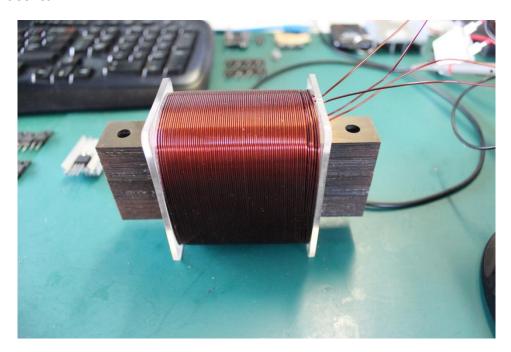
The Circuit:

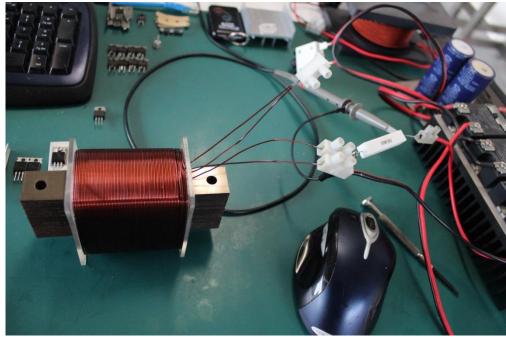




Circuit Description:

The Coil is BiFilar Wound Non Inductive Mode. Inductance Measurement on coil shows there is a residual Inductance of 0.24mH. DC Coil Resistance is 3.8 Ohms each Filar and 1.9 Ohms parallel and 7.8 Ohms Series.





This is an expected behaviour for the Current in the Coil when the Inductance Changes.

Here we have shown that for the same Resistance, (7.8 Ohms Series), that the Current Flow in the Conductor can move at a **MUCH** Faster rate even though the Resistance of the Conductor has **NOT** Changed! This proves that the Magnetic Field Slows the Charge Flow Rates dramatically. The Speed of the Flow Rate, 650 Micro Seconds (μs) compared to 75 milliseconds (m s) for charge time with the Magnetic Field.

What is the significance of this?

Floyd Sweet said:

"Thus the duty factor of the copper changes. I^2R Losses diminish and more charges drawn from the now coherent space field flow at a faster rate as current to the load. This means as more current is required by varying loads more feedback magnetomotive forces free more electrons from binding forces complimented by potential magnetic forces of the orientated, coherent space field. Thus a conductor that formerly had a temperature rise above ambient labelled as a factor of 10 would now operate at a temperature of 1.0. Thus the same gauge wire would carry 10 times more current at the same temperature."

Also:

"As polarity may be maintained constant, that polarity of acceleration should be chosen so charges move at faster rates, lowering copper duty factor, and at the same time opening the gates wider so more coherent field entities may enter for the conversion process."

It is the Magnetic Field itself that creates drag; it creates Friction on Electric Charge itself. It can be seen as heat in Conventional Electric Generators.

What is Bi-Filar?

According to Wikipedia: "http://en.wikipedia.org/wiki/Bifilar_coil"

"A **bifilar** coil is an electromagnetic coil that contains two closely spaced, parallel windings. In engineering, the word **bifilar** describes wire which is made of two filaments or strands. It is commonly used to denote special types of winding wire for transformers."

This means that the term Bi-Filar should **NOT** be used for these types of Coil Arrangements, because, by definition, it's not correct!!!

However, as is commonly done, terms are loosely thrown around. Unfortunately, this creates confusion.

Tom Bearden

Tom Bearden is, and always was, mostly right. The problem is that, his idea on the Conditioning of the Magnets is simply wrong. As I have seen to date, confusion sets in and it's hard to get it all right.

I would like to quote from Tom Bearden:

"(6) Investigative experiments to explore bucking EM force fields which neatly zero sum would have almost immediately revealed highly anomalous behaviour of materials and circuits. [Such simple investigations of zero-vector EM force field summation do not seem to appear in the Western literature at all, so far as can yet be established.]***

***with the single exception of the Aharonov-Bohm effect, which has finally been proved after 27 years of controversy, and Hooper's work which was obscurely published.

Something very much like that, together with quantum mechanical ideas, would have had to be applied to explain the operation of the Moray device. Note that every one of the suppositions above was available to any thorough Soviet search—and the Soviet scientists certainly made the search, more massively and thoroughly than has ever been done before or since. Since the evidence is overwhelming that the Soviet scientists developed electrogravitation and scalar EM weapons, it seems logical that their search succeeded along these lines or similarly."

Ref: http://www.cheniere.org/books/analysis/history.htm

"Now to some specific issues: Yes, my insight did keep growing. At first I took the results of experiments such as by Hooper, with opposing "ordinary waves". The effects of the core for the coils were a puzzle, but it seemed that sometimes the "opposing normal waves" would give some G effects, and more often they would not. What I did not realize for some time was that the longitudinal wave can be regarded as a superposed wave/antiwave, via a single SWZ wavepair. This agreed with Whittaker, and also now offered a sudden inspiration as to when we got the G effect and when not.

We were dealing with four waves, not two, in the opposing ordinary waves. We had two opposing normal waves and two opposing antiwaves, with the wave/antiwave coupling. Two ordinary waves 180 degrees out of phase would certainly cancel (spatially) their amplitudes (as is well-known in RAM materials and structures) but would not cancel their energies. The two antiwaves would do likewise, spatially. The point then became, so what would happen in the time domain? Here we got a shocker. The two antiwaves would cancel each other's amplitude SPATIALLY, and would add energies. But looking at the action (energy x time) aspect, their energies exist in negative time!

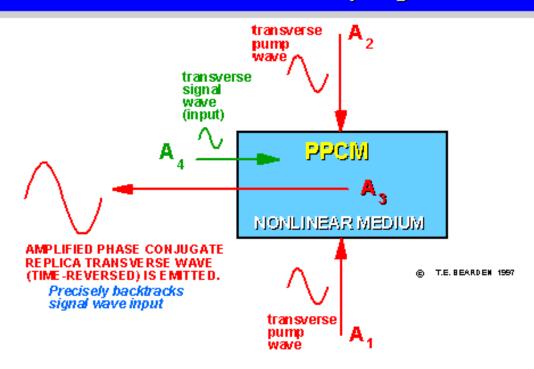
Well, this meant that the antiwave ACTION would come out negative, and would then cancel the added positive wave ACTION because ? Ewt + ? Eaw(-t) = 0. Therefore the sum of the whole mess was zero! Bummer! We wound up with everything just vanishing, wherein all the action (angular momentum) seemed to vanish. Well, this showed that the notion of simply having waves 180 degrees out of phase of itself would not give gravity effects. So that's why mostly the Hooper approach didn't seem to do much. But if one added nonlinear materials to the core, then one broke the linear cancellation. Once in a while, if one got it just right, one could get some spooky gravitational effects. So that was a real clue."

"I'd also like to point out the patents and work of Hooper. Hooper seems to be the only physicist who ever methodically investigated EM stresses, structuring of those stresses, and the gravitational implications of those stresses in the laboratory."

Ref: http://www.cheniere.org/misc/interview1991.htm

Tom Bearden has shown diagrammatically what he was talking about above. Simply, two (2) Electromagnetic Waves, each opposing each other. A Wave and its Anti Wave, A1 and A2.

Transverse EM Wave Pumping of PCM



 $Ref: \underline{\text{http://www.cheniere.org/techpapers/sweet\%20bearden\%201991/sweet\%20bearden\%201991.htm}}\\$

I quote from Tom Bearden's Web Site:

"About seven years ago, the author was privileged to see and examine an invention of Mr. Floyd Sweet, that produced about 6 watts of electrical power from the vacuum itself.

This remarkable device, which the author dubbed a vacuum triode, in a single unit utilized most of the scalar EM concepts the author had so painfully and slowly formulated over the years.

Sweet, a brilliant inventor with a remarkable knowledge of magnetics, had utilized barium ferrite magnets and **special coils** to produce a solid-state device that successfully tapped the vacuum energy."

Please take note: "<u>special coils</u>"!!! Please note, for the purpose of this document, I have set the text "special coils" to bold and Underlined.

I also would like to quote from the same page; "As is well-known, a stress can be decomposed into opposing sets of forces."

If the reader has not seen the video: "Radionics at a Distance", please invest and watch this video. Portions of this video are by far the best work of Tom Bearden.

In conjunction with the Whittaker Papers, as Tom Bearden has always stated, Wave and its Anti-Wave must be paired.

Scalar Wave

This term Scalar and how so many loosely use it, as if its magical, is very frustrating for me. Again it's a definition that's so loosely thrown around that not even 2 out of a million people could get the same answer!!! Let alone it being the right answer! Its slang terms for a Wave/Anti Wave pair.

Definition:

A Wave Pair (Wave / Anti-Wave) that Sum to Vector Zero. Stress Wave. A Wave that stands in Place.

Very simple, no complexity to this.

However, the Term Scalar was used in history to mean: "(of a quantity) having only magnitude, not direction." As with all wave's, the Magnitude must change with Time if one is to define the Wave in the Cartesian Coordinate System. Simply, x, y and z relative to Time t.

Lenz's Law

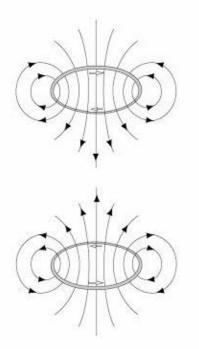
Lenz's Law directly is responsible for the "Conservation of energy", a long history is behind this, and without a doubt is a very interesting subject to study! What is Lenz's Law? Lenz's Law states:

"A law stating that the direction of an induced current is always such as to oppose the change in the circuit or the magnetic field that produces it."

Perhaps the most famous Physicist of all time, Sir Richard Feynman said: "So you see that the real energy change is the negative of the Mechanical Work and that's why I keep writing this as E Artificial. Because the true energy of the world is the negative of E Artificial in this case is μ . E I just want point out that difference in time, but that's just interesting."

Ref: V2 Ch15 Vector Potential – 16:32 - Audio Lecture.

So let's investigate Lenz's Law in some depth. Much of which is not in many Text Books simply because it's not properly understood!



Loop A is the Bottom Loop and Loop B is the Top Loop. Loop A is our Primary Coil in our imaginary Transformer. Loop B is our Secondary Coil.

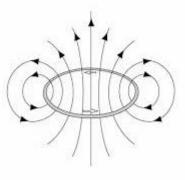
If Loop B, our Secondary, is not connected to our Load, then Lenz's Law is not in effect, because no Current is flowing in Loop B, our Secondary.

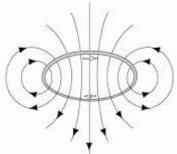
If Current is Flowing in our Secondary, the Current Flow is in the opposing direction to the Primary, this Creates a Magnetic Field in the opposing direction.

Lenz's Law, is primarily **Magnetic** in Nature. It is the direct result of Current Flow in the Secondary Coil.

This means, if we were able to turn off the Magnetic, but at the same time keep the Electric components, there would be no Reflected Power on the primary.

In the above diagram, notice the Charge Carriers, moving in the opposing direction to each other.





The Sine changes in the Induction Cycle in our Transformer and the Magnetic Field in our Secondary Changes Direction as a result. For this part of the cycle, the Magnetic Field is in reverse to the fore mentioned example.

The direction of moving Charge Carriers also change direction. This is simply, a Sine Wave output on the Transformer Terminals.

Important: Here we can see that when the Transformer is loaded, there is a **NET ZERO** Magnetic Field. This means the Ampere Turns on the primary are equal but opposite to the Ampere Turns on the secondary, or close to it. This is Tom Bearden's Whittaker Wave/Anti Wave. Where the Vector of each Magnetic Field sum's to **ZERO**!!! Please read on as this is not Tom Bearden's intended use!

Our Transformer's Primary Coil sees Reflected Power (Lenz's law), this Reflected Power must be compensated for, because this reflected power $=-\frac{dPhi}{dt}$, emphasising the Negative Sign, and as a

result the input Current must increase to support the Magnetic Field and push the Transformer through the BH Curve.

For more information on the flow of Charge Carriers, see the Right Hand Rule. This Rule is without a doubt one of the most important rules in all of history.

So now we have some idea on Lenz's Law. What can we do to try to eliminate or reduce this Secondary Induced Magnetic Field? Well surely by now the answers should be clear!

This is simply, Tom Bearden's Wave / Anti-Wave, (Primary Electromagnetic Field) / (Secondary Electromagnetic Field)! The difference is that this is not what Tom Bearden was meaning when introducing this topic and is not the intended result of the uses of the Wave / Anti-Wave!!! In-fact this is why Tom Bearden says **don't destroy the Di-Pole!** At least the Primary Source Di-Pole.

Do all the destroying you like on the Secondary Di-Pole! In-fact the Secondary Di-Pole is exactly where we need to work!!!

"A consequence of the law of conservation of energy is that a perpetual motion machine of the first kind cannot exist. That is to say, no system without an external energy supply can deliver an unlimited amount of energy to its surroundings." Ref: http://en.wikipedia.org/wiki/Conservation_of_energy

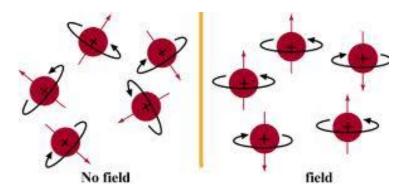
The Crazy thing is, the Atom is and always has been for all of eternity, without a Battery, and is still in continuous motion. So does NATURE agree with the statements contained in the "Conservation of energy"? The Atom is not an <u>isolated system</u>, however, and for that fact, a Generator is not either.

Simply put, if Lenz's Law could be by passed, then every Generator on the planet could be a perpetual motion machine of the first kind!

Isn't it silly how a "Law of Nature" can determine so much of history? Yes, the Conventional way of thinking, does limit us to Lenz's Law Restrictions in our Generators, but it's only because we have not been smart enough to allow this to change in history. As a result, we are still bound today by a law that is not valid under certain conditions.

Question: Why is a Magnetic Field not detectable in every piece of matter in the universe?

Answer: Because it's neighbour, and its neighbour and all the neighbours around them all **CANCEL** each other out. Does this sound familiar? Only when an Alignment process (Magnetisation) occurs, does all the Atoms Align, Spin Up and Spin Down, and there then exhibits a Magnetic Field in Matter!!!



Also, Noise Cancelation, it works the same way. An Anti-Wave cancels with a Vector Sum of Zero the wave in the opposite direction which can be considered the initial Wave. Wave/Anti-Wave pair.

Remember, in this technology, this process can **ONLY** work, if Current is flowing in the Partnered Output Coils.

Interestingly, the World's most efficient Generators are 98–99% efficient; this means that 100% of Rotational Shaft Energy, with a 1-2% loss in friction/heating and other losses, and the other 98–99% are the effects of Lenz Law creating Drag on the moving Rotor to generate Electrical Energy.

A very simple Experiment.

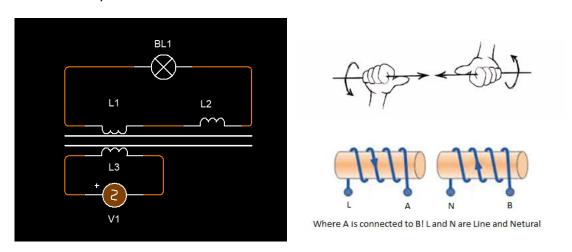
- 1: Take a CRT Tube TV, turn it on and try to get a solid Colour on the screen.
- 2: Place one small permanent Magnet on the surface of the tube, securely.
- 3: Push another small Permanent Magnet, Poles Opposing, into the other small Permanent Magnet.

Results

The Magnetic Field will be squeezed Nearly to Zero - NO MAGNETIC FIELD!!!

So what does Work:

Partnered Output Coils. Two coils working together. One input winding configured as described above and below to excite the Output Bucking Coils. Like was mentioned above and in more detail below, the area where the Bloch Wall moves in time must not align. This means as one set of Partnered Output Coils are brought together in Bucking mode the Bloch Wall of each Coil is stationary and a naturally induced Bloch Wall is induced between each of the two Bucking Output Coils. This naturally induced Bloch Wall moves in time with the Field.



Where L1 and L2 are Partnered Output Coils the same as or similar to the shown Coil configuration:

Note: Importantly, for this device to work, Current must be flowing in the Partnered Output Coils!

As a result of knowing and understanding some simple basic principles and most importantly understanding them correctly, moves us into a new world of possibilities. After all, who wants to be

that person that abides by the stupid rules that someone set over 100 years ago when there is no longer any need to? Not me!

These fore mentioned principals exist already in science; Noise Cancelation uses the very same rules and is dependent on these rules working for Noise Cancelation to be possible. Noise Cancelation is well known and well understood today.

So, thus my question, why is it, that no one has thought to use the same principals in Power Generation? Essentially it is the same thing, an Electromagnetic Field growing and decaying in intensity $(\frac{dPhi}{dt})$ is the same thing in terms of Wave Cancelation or Noise Cancelation.

This was my first device that shows the effects (2010-11): See Links Table below.



And this was my second device:



I seem to get a better result if the Input is resonated for example, LC Tank. I believe this is due to feed-back and or feed-forward in the coils. There seems to be a time constant in the Magnetic Fields of the Partnered Secondary Coils that appear to play a factor in the Operating Frequency.

Other Devices that have used this configuration

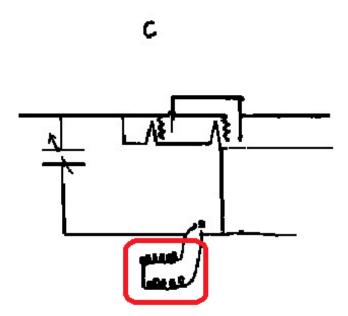
There are many other devices that have shown this configuration of Output Coils. I will try to cover the best devices I have been able to find.

As I have learned over my years of research, this technology is not new. Many people have come across or re-discovered from their own experiments and used this technology to access electrical energy without conventional restrictions and use it for useful purposes.

This technology is not meant to be owned or controlled like Paul Raymond Jensen said.

Thomas Henry Moray

Ref: Thomas Henry Moray The Sea of Energy ~ Excerpts of technical factoids & illustrations of the Moray Radiant Energy Receiver.



"The tuning in consisted of stroking the end of a magnet across two metal projections protruding from what I referred to above as being a magnet. After tuning in for slightly more than 10 minutes the key was put on the operating post and the light appeared immediately... "

Ref: Thomas Henry Moray – <u>Click Here</u>

Stanley Meyer's famous VIC Circuit - Water Fuel Cell

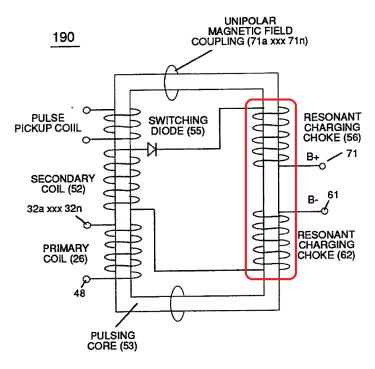


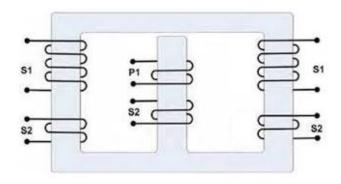
FIGURE 3-23: PULSING CORE CONFIGURATION

Ref: Stan Meyer Tech Brief P. 83

Stan said; just add more turns on the Charging Chokes, so he was fully aware of this technology: <u>Click</u>

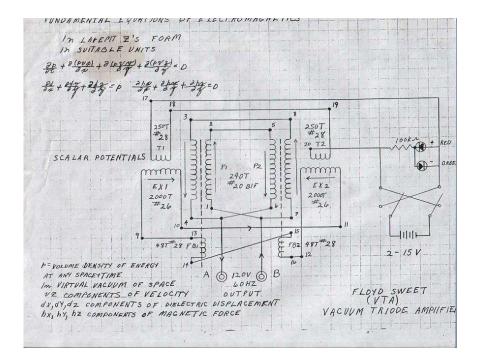
<u>Here</u> See Minute: 38:16

Paul Raymond Jensen – The UDT Transformer.

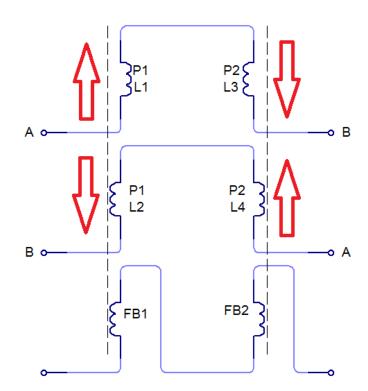


Please read Paul Raymond Jensen's description of how his device works: Click Here.

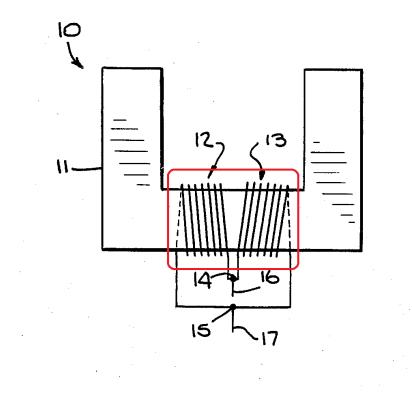
Floyd Sparky Sweet - VTA



Which with a partial re-draw is this:

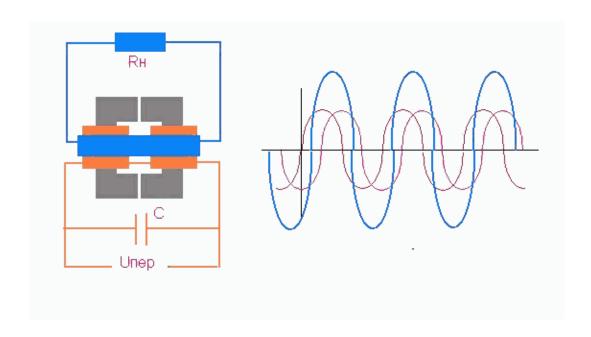


Earl Koenig – Electrical Circuit for Inductance Conductors, Transformers and Motors.

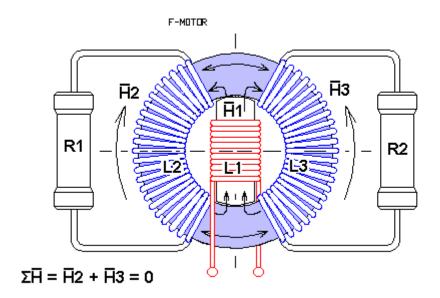


Ref: US Patent: US4806834

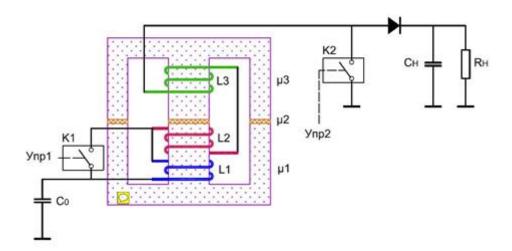
Gennady Markov - Bidirectional Current Transformer



Alexander Frolov- A Toroidal Over-Unity Generator

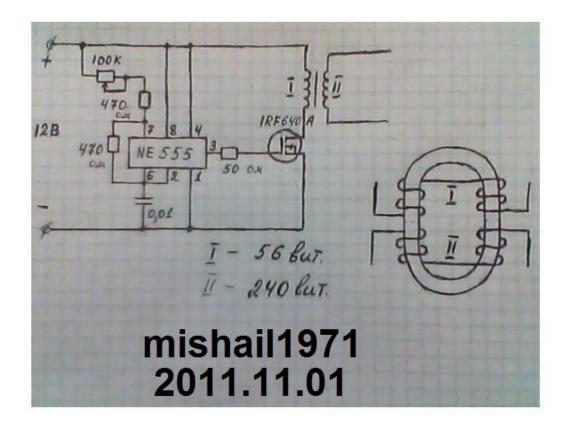


Andrey Melnichenko – Ferromagnetic Free Energy Generation

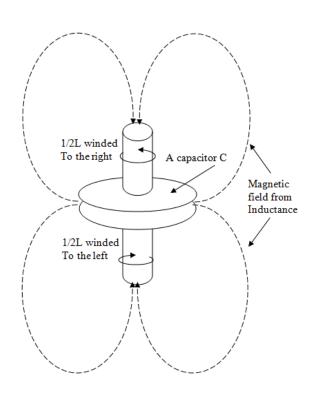


In the above device, one can see that the direction of turns is not reversed but results are still possible. Effectively the Magnetic Fields of each half of the device still oppose as a result of the Wiring Difference. For this reason, Andrey needs a rather large gap in his Cores so a short Circuit is not created in his device as a result of the A Vector Spins on the Core and the dynamic movement of them.

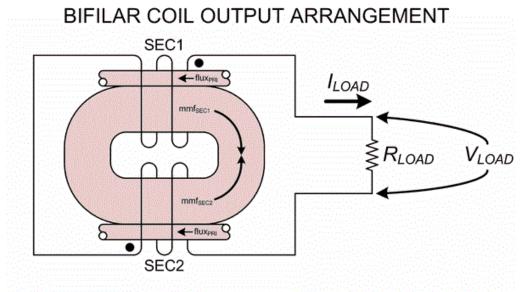
Mishail1971 - Free Energy Transformer



Vladimir Utkin



Bill Alek - SmartPAK.

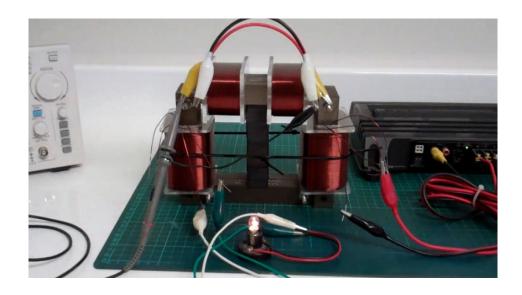


PRODUCES OPPOSING MAGNETOMOTIVE FORCE EFFICIENCY >> 100%

Loose Coupling

All my experiments to date point to loosely coupled devices working better than tightly coupled devices. However in saying this, some of the fore-mentioned devices are tightly coupled. My best results have been from Loosely Coupled devices.

For example; in the below device, I built, the Core Laminations were loosely coupled in the video.

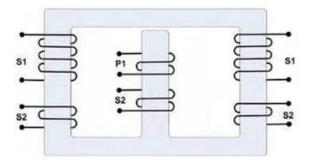


I re-built this device and tightly coupled the Laminations, like a transformer, laying one over the other, lining the holes up and filling the space with another Lamination that was opposite to this on the other side. I was not able to make the device work the same.



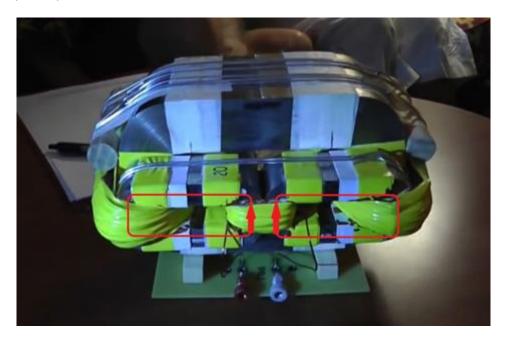
In the above device, I had a split core. The core was gapped by small plastic spacers. Much like as is shown in the Andrey Melnichenko device above but much smaller.

Loose Coupling basically means, that the input is gapped ever so slightly, or that there is no direct path of Magnetic Coupling from input to output. For example, a Transformer is tightly coupled but some transformers can have a loosely coupled secondary path. An example of this is Paul Raymond Jensen UDT Transformer:

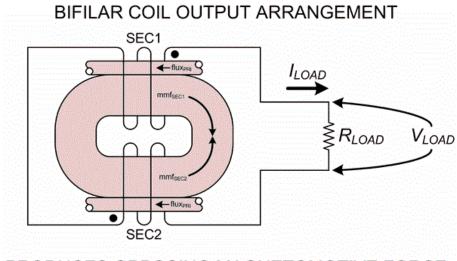


You can see that the primary P1 is on the middle leg, the middle leg is gapped at the top by a small factor. This gives the device a Loose Coupling from Input to the output (S1) and feedback coils (S2).

Loose Coupling in Bill Alek's device is in the form of secondary set of cores on the output. Marked in Red is the primary Cores and the Arrows indicate the Flux Direction at t = random.



The bigger Core is the secondary core and this is where the Opposing Fields or as Bill likes to put it, "Opposing MMF" lies, like in the following diagram.



PRODUCES OPPOSING MAGNETOMOTIVE FORCE EFFICIENCY >> 100%

A requirement is, current MUST be flowing for this to work. If current is not flowing, the device will not work as is described. This is true for all the devices that use this technology.

Success/Failure

I have spent many hundreds of hours, possibly more like many thousands of hours working on this technology, and today, I still do not have all the answers. For some reason, it is very hard to grasp fully, confusion very easily sets in and next thing one knows, you're not even working on this technology any more. I have never experienced anything quite like this type of confusion before.

For every one device that works, expect 10 devices that don't. But, don't give up, keep trying.

I have tried to the best of my ability to lay out here the basics. To explain how I see this technology working. In saying this, I may be wrong and it may work a totally different way. But I base all my information on experiment and to date, I have never seen an experiment that has been done several times show incorrect information.

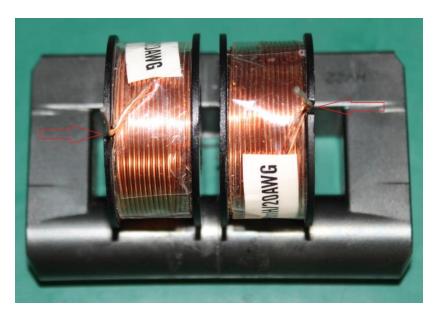
I think, to really make sense of this technology, one has to think in terms of Lenz's Law and how it can be by-passed. Or if one wants to look at this from another angle, like Paul Raymond Jensen said:

"An alternate explanation for the current gain in the UDT is to consider each secondary winding as acting as the primary winding for the other secondary winding when an output current is drawn because the two secondary windings generate geometrically opposing fields."

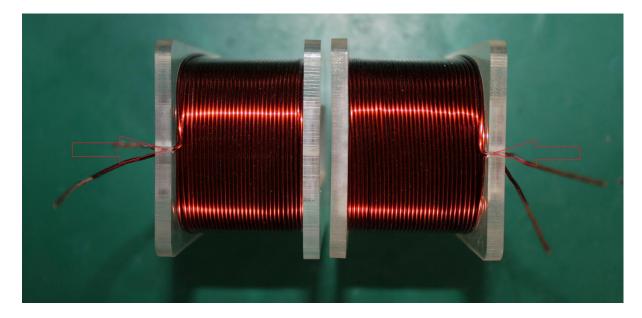
Coil Winding and the Direction of the Turns

IMPORTANT: This configuration is preferred for beginners! However, simply just taking a few standard Coils off the shelf may give you some promising results under certain configurations but **BEWARE**: The actual winding direction of one of the Partnered Secondary Coils is best to be physically wound in the opposing direction to the first.

Simply flipping over one of the coils is **NOT** the same thing. Here are two Identical Coils, one flipped over from the first:



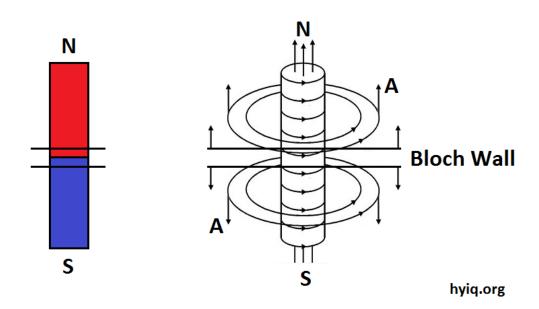
Clearly you can see here that the winding direction is not reversed. However, results can still be achieved in this configuration. In the next picture I show true Winding direction Change:



Thus, the winding direction is now truly in reverse to the other. This is really important to understand as this can create a lot of confusion in its own right. Many people will ask, what, why are you saying this, its total rubbish and not valid for any real reason!!!

I say, if only that person understood real Magnetics and real physics. Apply these ideas to this diagram:

An illustration of a Permanent Magnet as compared to an Inductor with B-Field charging from t=0 to t=1 (Field Maximum)



Answers are clearly evident once one brings the time domain into account. Each Partnered Secondary Coil could be thought of as sitting in the space of each half of the above depicted core. North and South marked with N and an S, Bloch Wall in the middle and each part of the field (A Vector Potential) moving, one half up and the other half down.

Again, it is critical that current be flowing in the Partnered Secondary Coils for this device to work.

Floyd Sweet said:

"If the directions of the two signals are such that opposite H-fields cancel and E-fields add, an apparently steady E-Field will be created. The energy density of the fields remain as calculated above, but the value of the E-field will double from $\frac{E}{2}$ to E."

And Inversely

"Similarly, if two signals flow through each other in such a way as to give the appearance of a steady magnetic field as a result of their E-field cancelling it is easily shown using the above equations to cancel out H and C".

Where do I Start?

I apologise to everyone here, I thought I had provided enough information in my videos and in my documents to start with. I made an assumption and a silly one at that. I am sorry! So, where and what would I recommend?

First: Start at the Start! Very Important!

Second: Low Cost Function Generator (Sine Wave) \$14.99



URL: Click Here

Third: Small Low Cost Power Amplifier: \$12.67



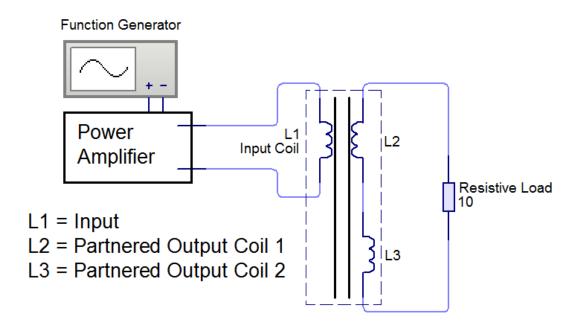
URL: Click Here

Fourth: Coils, either you can wind your own or buy some: (2 at least) \$15.50 each



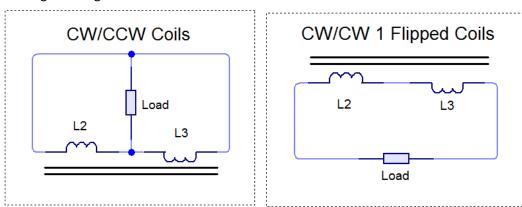
URL: Click Here

Fifth: Follow the following Circuits:



To Start at the Start means to look at your device and feel what's its doing! It's the Magnetic Field that does the separation of Charges in this device! It is also responsible for encouraging excess Charge Carrier Separation! This means we need a reasonable Magnetic Field in each Coil!

Output Configuration guide:



The Magnetic Field of a coil is calculated: **Magnetic Field (B) = Permeability (\mu)** x **Turns Density (n)** x **Current (I)**

To get a reasonable Magnetic Field, one will need a good amount of turns and a reasonable Current. To increase the Current in the Output Circuit, one needs a Low Resistance, I have shown 10 Ohms but this can be decreased or increased as needed.

It is the Magnetic Fields of each Coil that Interact with one another that is Important to make this work!

The Magnetic Fields must be able to build, aloud time to build to a reasonable level! Don't Choke them Off!

I was lucky enough to have some C Cores from an old CRT TV that I managed to salvage! Click Here

Sixth: Simple Experiments!

Frequency is important. Do experiments to see what your Device likes and does not Like! Aim for the maximum Output!

Most all of my devices have been best to run around 20Hz – 600Hz Approximately!

Remember: If you have No or Little Output then there is something wrong!

Seven: Ask for Help! See the Forum Link Below!

Please Note: The above are all recommendations! You must decide if these devices are what you need! If you wish to purchase items that will surface for later use then please feel free to look at other Items!

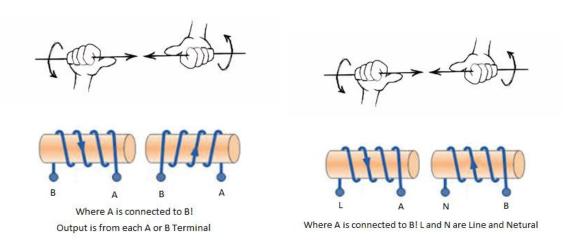
If you already have some or all of these items in another form or make/model, then feel free to use them! Don't go and purchase items if you can make do or if you already have them! Use what you already have if you can.

Key concepts to this Technology

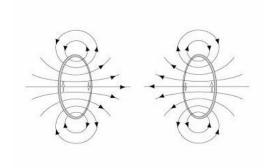
The most important key to this technology is simply, there <u>MUST</u> be **TWO** distinctly separate Coils, or **Partnered Output Coils!** This part is critical. The second part is simply that, each Output Coil **MUST** act in opposition to its Partnered Secondary!

For this technology to work the Magnetic Field Component must cancel and the Electric Field Component must add!

One Partnered Output Coil is a Generator (Charge Separation) for the other Partnered Output Coil.



Like was shown above, in the Lenz's Law section, Magnetic Fields of each conductor oppose each other. This is because the Charge Carriers in the conductors each move in opposite directions. The same as how an Electric Generator and also how a Transformer works.



The only difference is, we have our Secondary Output Coils Generating currents simply by carrying their own currents which is the goal in the first place. This is Feedback!!!

Magnetic Gating

This section is a work in progress. However, in saying this, I think it is very important. We know that Stanley Meyer and also Floyd Sweet used Diodes in their devices. Also other devices Like Andrey Melnichenko's device use a Diode to switch on the Partnered Output Coils under one Polarity.

Important: The Bore (Space inside the Coil) of one of the Partnered Output Coils will **OPPOSE** the Magnetic Field, Gating this space into an off Position for any Change in Magnetic Field.

Stan Meyer's Diode marked in Red:

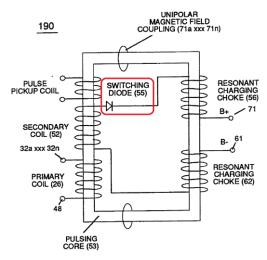
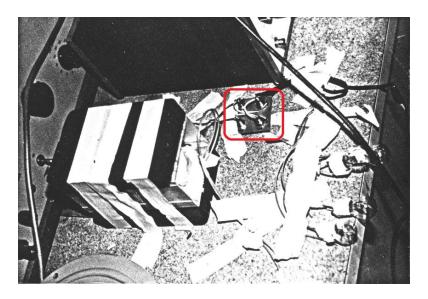
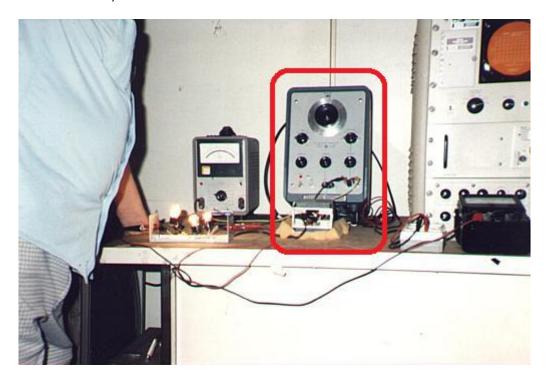


FIGURE 3-23: PULSING CORE CONFIGURATION

Floyd Sweet's "Stud Screw Diodes" Marked in Red:



Also very important to note, Floyd Sweet used a HP 211A Square Wave Generator in his Generation two VTA. Shown below, also marked in Red:



So Stan and Floyd (*only in VTA Generation Two*) both used Square Wave Input and also both used at least one diode. Is this just a coincidence or is there a very good reason for this?

I think, by studying Stanley Meyer's diagram and a few simple experiments answers become clear.

If the Diodes, or A Diode is not in place, then there is an issue where the input coil is Choked off and the Magnetic Field of the Primary Coil, as a result of this Choking Effect, cannot push the Core up to the knee in the BH Curve. However, this Technology does not move through Hysteresis (BH Curve).

This is really important to understand. It best operates in and around the knee of t BH Curve.

NOTE: This section only appears to be valid under some configurations!

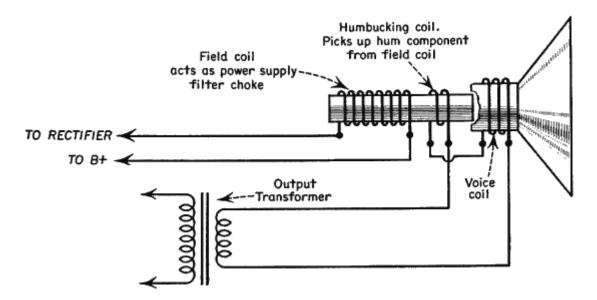
Again Results can still be achieved without this realisation. However, much better results can be achieved if the Magnetic Field from the Primary Coil is NOT interfered with as it is charging. Please see the previous section "The Flow of Current in a Wire when there is No Magnetic Field" where I show the Charge Times and how this can be affected by the Magnetic Field.

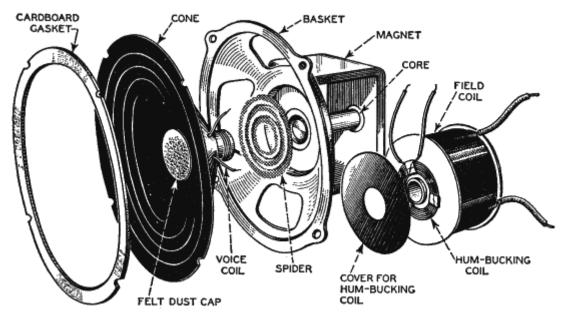
So, how does this work then? Well, once the Magnetic Field has reached its maximum, which is a result of Voltage applied to the Inductance, the Wire's Resistance and Voltage (Ohms Law), then just like in the Bedini works, the Magnetic Field Collapses when the DC input it switched off.

The Polarity changes and the Collapsing Field switches on the Diode and then the Partnered Output Coils are used to do their Magic. And again, it's not Magic, it's very simple science if one thinks about it the right way. Concepts already well explained by distinguished people in science.

History of Bucking Coils

Through History, Bucking Coils have been most popularly been employed in the Audio field. The Humbucking Coil is possibly the oldest use of Bucking Coils that I have seen. Here are some basic examples: Ref: radiomuseum.org







Old Bell Ringers are also another old source of this type of technology. Old Bell Ringers may be possibly older than the Humbucking Coil. Here are some pictures:

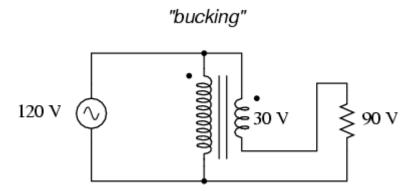


It is interesting to note, Lester Hendershot used one of these in his device: "The Hendershot Generator".

Also similar to the Old Bell Ringers are the Tattoo Gun:



Another source of the Bucking Coils is used in a Buck Transformer:



IMPORTANT: In the above examples, it is quite obvious, that just because the term "Bucking" is used, that these devices do not necessarily work as we require. Like I said before, expect 1 in 10 devices to work until a proper grasp of this Technology is developed. Once the right conditions are met, (*all of which are described in this paper*), then this Technology **DOES WORK!!!**

The Magnetic Fields in the Partnered Output Coils

To be clear, and to be correct, in all of this paper and all other places where we read about two Electromagnetic Waves, 180 degrees out of phase, cancelling, due to their "Vector's" summing to Zero, does not mean there is no longer any Magnetic Field Component!

It simply means, that the Magnetic Field Components are confined to the space that the Electromagnetic Wave Pairs exist, or in our case, the space in which our Partnered Output Coils exist. There is still the A Vector Potential and the Magnetic Component, Phi, and there is still a Time Constant in the Charging of these Partnered Output Coils.

One of the simple experiments I have done, is to have one Bobbin, with dual Coil Placements, wound with the Partnered Output Coil Configuration and spin up a Rotor with Permanent Magnets past the Partnered Output Coils.

Result: No or next to no Lenz's Law and at the same time, Electricity is Generated or a better way to look at what is going on is Charge Separation.

For a total "Cancellation" to occur, each Wire, in Each Partnered Output Coil must exist in exactly the same space as the other. Of Course, this is impossible. So Total "Cancellation" is also impossible.

Also, the properties of the Wires must also be exactly the same. Slight imperfections in part, or parts of each wire will also reduce total "Cancellation".

When does an Input Coil become an Output Coil?

I have to admit right up front, I believe I still don't quite fully understand this section, but I feel it needs to be mentioned.

Walt Rosenthal said: "The VTA "likes" to always see a minimum load of 25 watts." There is a very good reason for this statement.

With this technology, unlike conventional Transformer Technology, there are Feed Forwards and Feed Backs going on all the time. The Coils work **TOGETHER** in such a fashion to assist in operations. More so, when properly running with the right load. Not to say this Technology is Load dependant, because to date I have not seen any real issues with the type of load. But I mean that the load must be selected such that the operations of the coils allow for enough Feed Back and Feed Forward.

Example:

Our three coils, Primary input Coil, and Partnered Secondary Output Coils (Two Coils working together) once in operation, the current from the Partnered Output Coils can feed back via confined Magnetic Fields, which as we know, the time rate of change of Magnetic Fields creates Charge Carrier Separation in a conductor in its approximation, as a result, the Input Coils Impedance is increased dramatically. This brings back the input current and as a result the input power is dramatically lowered.

One could imagine this as a conventional Transformer with a Primary and a Secondary. Our Primary is driven with typical Mains power. We load the transformer. Our Load just so happens to be another Power Source. This power Source is adjustable Power and Frequency so we can get a phase Lock on the input. Then we turn up the secondary and at a point, the input power is reduced simply because we have a source of power returning back to our Transformer with the right Phase and Power levels to increase the impedance of the Input Coil.

This will in-turn lower the Input power.

So we can now see why the Load is important. Enough Current must be flowing in the Partnered Output coils to operate. Once operating correctly, the input power is reduced. This is a simple case of applying Ohms Law,

 $\frac{V^2}{R}$

Where:

V = VoltageR = Resistance

The product of this equation is Power: P

Current: I * V: Voltage normally = Power unless there is a Phase Angle difference between the two, Current is what creates the Magnetic Field. With no Flow of Charge Carriers, there can be no Magnetic Field. With No Magnetic Field there can be No Charge Separation.

Again I stress, the Magnetic Field is the A Vector Potential, and Phi, the Magnetic Flux. So we can have a Vector Cancelation, but these components still exist in the Coils Immediate Space.

The Magnetic Field

It should be realised that **ANY** system that uses <u>Electric</u> or <u>Magnetic</u> Fields are <u>Open Systems</u>.

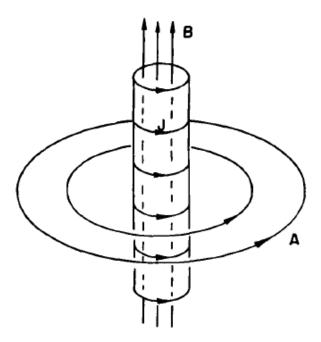


Fig. 15-6. The magnetic field and vector potential of a long solenoid.

Nature, Equilibrium, will always try to bring any system out of equilibrium, back into equilibrium, or else the Universe would fly to pieces, nothing would exist for long. Thus, it is Nature that gives us things like the Magnetic Field, to bring moving Charge Carriers back to a state of Equilibrium.

When I started researching Free Energy and Anti-Gravity, I was lucky enough to see a direct connection to the Magnetic Components and Free Energy, that there was a direct link. It appeared as if Free Energy came from the Magnetic Component and not the Electric Component, that some where there laid a totally new source of totally different type of Energy not many had seen before and that it was amazingly powerful. Well, I found out that only some of this is correct.

It took me a long time to see that there was no new form of Energy. That it is an adaptation of the already known energy we have today, but just that some of its characteristics are different because of the conditions that it is transformed under are different.

Let's look at an example:

Conventionally, just as there is a Time Constant to Charge a Conductor, there is a Time Constant to Generate, or a better description, to Separate Charge Carriers in a Conductor. All the same rules apply, Impedance, Inductance, Resistance (which sort of falls under the Impedance field) and Time. Take a big Coil, big Magnet, a light as a Load, and swipe it past the Coil such to "Light" the light. It takes time to separate the charges and as a result this time can be seen in the "Lighting" of the load. It takes time to "Light" the light due to the Impedance of the Coil.

Inversely,

In this technology, once applied correctly, as is shown above in the section "The Flow of Current in a Wire when there is No Magnetic Field", because we have reduced the external influences of the Magnetic Field, we can now see these above mentioned factors are reduced so low that they are negligible to the system. As a result, the human eye will see the Light, "Light" nearly immediately due to the Coils Impedance being reduced right down.

The Control of Magnetic Fields opens doors to new possibilities in Science that has not been fully realised to date. The use of Magnetic Fields to do amazing things is only now starting to be realised in simple devices.

Arguments can be made, "Chicken or the Egg" but once one realises that this is a mute argument and actually an invalid argument then one is able to move into the future of new possibilities in science.

Experiment:

Take a conventional Automotive Alternator.

Install on a Rig along with an Electric Motor.

Drive the Automotive Alternator with the Electric Motor

Only input is mechanical in the form of Rotation to the Alternator Shaft!

Question: Is it possible to get an Output with No Extra Input to the Alternator?

Answer: Yes

Result: By connecting the Field Coil on the Alternator in such a way, either in a short circuit, or connected in series with the output Coils, enough Feed Back is produced to get an Electrical Output on the Output Terminals.

Not Free Energy, but this shows that Feed Back Techniques can excite the Coils and Magnetic Fields can Manifest in the Device with no further Input! **The Magnetic Field can be made to Support Itself!**

ONLY because of **Lenz Law**, **Resistive Mechanical Force** is applied on the Shaft in Opposition to the applied Input from the Electric Motor!

Lenz's Law is Only a Result of the Electrical Output, NOT the Cause!!!

In-creasing the Output Potential

It is possible in some configurations, to increase the output potential simply by adding Uniform magnetic Fields. Either one or two. To is better to increase the uniformity of the Field.

More Work and Investigation

Frequency Response for the best output is hard to determine. There appears to be many factors responsible for the best frequency of operation. There is a lot I am still investigating here. I don't have all the answers yet.

Summary

The Free Energy Future is here <u>NOW</u>! Learn it, use it, share it! After all, it's been here for a <u>LONG</u> time, the problem is, the world is consumed by greed, selfishness, arrogance and out right Parasitic individuals for which there is no cure. Good People need to take the steering wheel of life with both hands, with a grasp like its life and death, and get back on track before it all ends in a train wreck!

Knowledge and Applying Knowledge is Freedom!!!

Definition Table:

Term:	Definition:
Partnered Output Coils	A set of two (2) Coils that are configured to work together
Scalar Wave	A Wave Pair (Wave / Anti-Wave) that Sum to Vector Zero. Stress Wave. A Wave that stands in Place.
Reflected Power	Power that is reflected back on the source, the negative of the source.
SWZ	Stoney/Whittaker/Ziolkowski (SWZ) methodology

Credit

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You deserve credit also for reading this document and taking part in this revolution, the Awakening.

Links

Term:	Definition:
Doc Updates	http://www.hyiq.org/Downloads/Guidelines%20to%20Bucking%20Coils.pdf
My first Device	https://www.youtube.com/watch?v=iJsVSMQqCOM
Second Device	https://www.youtube.com/watch?v=ZhQgch4L5XY&list=UU-B9gZZShrbxp9YTWgRPsKw
AuroraTek demo	https://www.youtube.com/watch?v=ddj85px00lM_ – thanks Russ
AuroraTek demo	https://www.youtube.com/watch?v=tXno_7xXSZs - Sterling's interview
Forum Help:	http://overunity.com/15395/partnered-output-coils-free-energy
	and NOT: http://www.overunityresearch.com/index.php?topic=2760

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