

Chas Campbell Devices

Gravity Wheel and Electricity Magnifier

A Mechanical Cosmic Energy Machine

As Explained by the Lee-Tseung Lead Out Theory

By: Lawrence Tseung

Version 1.2 on September 12, 2007

The World Energy Crisis is over. Oil is no longer a strategic resource. There is no need to go to war over it.

Modern Wealth is the quality and quantity of Meaningful Economic Activities. Such Activities can be infinite.

Ignorance and poverty will be history.

Ref: <http://www.overunity.com/index.php/topic,2487.msg48484.html#msg48484>

In V1.2, I added explanations and improvements for both the Gravity Wheel and the Electricity Magnifier. This makes the total picture more complete.

Added the discussion between static calculations (when there is no motion) and when there is motion.

This condensed document describes the entire family of Cosmic Energy Inventions. This background is required before one can fully understand the theory and the mechanics of the Chas Campbell Gravity Wheel.

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Please also read the draft press release in:

<http://www.overunity.com/index.php/topic,2482.msg37417.html#msg37417>

and the New Order thread etc. in

<http://www.forum.go-here.nl>

1. Boat in Calm Water and Good Sunshine Scenario

The Patent Offices and the Scientific Community used the Law of Conservation of Energy as a roadblock for perpetual motion machines (PPM) for centuries. The Law of Conservation of Energy (CoE) essentially says that Energy cannot be created or destroyed. It can only change from one form to another. If the source of energy of an invention cannot be identified, the invention is likely to be classified as the impossible PPM.

The Boat in Calm Water and Good Sunshine Scenario is simple. If a scientist does not know how to use solar energy, he might wrongly apply the Law of Conservation of Energy and advocate the use of muscle energy to move the boat. If he knows how to use solar energy, he can relax and let the solar panel powered engine move the boat. The Law of Conservation of Energy is never violated.

All objects are immersed in gravitational fields. Newton's Universal Gravitational Law says that two masses attract each other with a force equal to the product of their masses and inversely proportional to the square of the distance. The Earth rotates around the Sun according to this Law. All objects, including our bodies, obey this law. We attract and are attracted by the Sun, the Moon, the Distant Stars and Each Other. Movement of such objects will have energy exchanges (Work = Force x Displacement). If an invention uses such gravitational energy, it does not violate the Law of Conservation of Energy. In the Lee-Tseung PCT Patent Application (PCT/IB2005/000138), we used the term Lead Out. This source of gravitational energy is non-polluting, available anywhere and almost inexhaustible.

An even more powerful source is the Electron Motion Energy. Electrons are present in all atoms. They are usually thought of as negatively charged particles rotating around the nucleus. The rotation gives rise to magnetic fields. The changing of orbits gives rise to electromagnetic waves. Their clustering gives rise to electrostatic fields. Their movement along conductors gives rise to electricity that we depend on daily. Sunlight is just a form of electromagnetic wave. Radio waves, TV waves are other forms of electromagnetic waves. We are immersed in such waves. If an invention uses such immersed Electron Motion Energy, it does not violate the Law of Conservation of Energy.

The Lee-Tseung theory predicts that both gravitational and electron motion energy can be Lead Out via Pulse Force at resonance on oscillating, vibrating, rotating or flux

change systems. The detailed mathematical proof is via the analysis of the simple pendulum during the application of a pulse force. The pulse force increases the tension of the string and Leads Out gravitation energy. For a horizontal pulse force, two parts of pulse energy can Lead Out approximately one part of gravitational energy. This gives a Coefficient of Performance (CoP or Output Energy/Input Energy) of 1.5 during the application of the Pulse. Some forum members did not appreciate the qualifying statement of “during the application” and thought that the Pulsed Pendulum was a CoP =1.5 system as a whole.

This misunderstanding is corrected here:

- (1) Let the time at which Pulse Force is applied be T pulse
- (2) Let the time of oscillation of the pendulum be T oscillation
- (3) Let T pulse be 1/100 of T oscillation. This represents the real case of pushing a swing and then let go. Most of the swinging time has NO pulse force.
- (4) Let the system during the NO pulse force period be very efficient. Assume the CoP is 1.0.
- (5) The overall CoP for such a system is not 1.5 and should be calculated as follows:

$$\begin{aligned} & 1.0 + (1.5 - 1)*1/100 \text{ (Spreading the higher efficiency over the total time)} \\ & = 1.0 + 0.005 \\ & = 1.005 \end{aligned}$$

- (6) In the real world, the pendulum has CoP less than 1 during the NO pulse force period. Thus the net result of the real pulsed pendulum is less than 1.
- (7) In order to get the real pulsed pendulum to exceed 1, we have to do one or more of the following:
 - Increase the number of pulses per unit time
 - Increase the pulse period
 - One practical way is to change the pulsed oscillation of the pendulum to the pulsed rotation of a cylinder.
 - With a pulse- rotating cylinder, we can increase the number of pulse points; increase the rotational speed; increase the mass at the rim; and increase the diameter of the cylinder to Lead Out the larger amount of gravitational energy.

The gravitational energy is not created but Lead Out. The Patent Offices, the Scientists and many Inventors have not understood this Lead Out energy source in the past. Use of this Lead Out energy does not violate the Law of Conservation of Energy.

The experiment by Ms. Forever Yuen on a magnetic pendulum clearly demonstrated that if we can Lead Out gravitational energy, we can also Lead Out magnetic energy (a form of electron motion energy). The frequency of oscillation of a magnetic pendulum by itself (away from other magnets) is say 100 cycles per minute. If a magnet is placed below, attracting it, the frequency increases. If a magnet is placed below, repelling it, the frequency decreases. This experiment can be replicated easily worldwide.

Ms. Wini Woo pointed out that the equivalent gravitational constant could be increased, equal to zero or even negative. Zero implies floating in space. Negative implies rising away from Earth. This gives rise to the Flying Saucer China Patent Application by Woo, Fong and Tseung. A rotating ball inside a sphere is held by magnetic forces. If the magnetic force is removed, the ball will fly away in a tangential direction carrying the sphere with it. This invention is termed Magneto Propulsion Unit by Tseung.

Many Over Unity Developers use rotating objects in magnetic fields. Many already observed the anti-gravity or Flying Saucer Effect. Thus, solving the energy crisis via the Cosmic Energy Machines also solves the propulsion to outer space problem. Nothing needs to be ejected out. Electron Motion Energy has a few advantages over Gravitational Energy including:

- Repulsion is available
- Direction and Strength can be controlled
- Magnetic or Electric Flux can be turned on or off

We have classified the development of the Cosmic Energy Machines into 5 generations in this paper for better understanding.

2. The Development History of the Cosmic Energy Inventions

My (Lawrence Tseung) development started from an experiment on Fluid Mechanics in May 2004 at the Tai Po office of Mr. Peter Chan. Mr. Henry Ku and I were performing an experiment to compare the characteristics of water under push and pull conditions. Some air accidentally leaked into the apparatus. Water and air bubbles spurted out from the testing tubes for over 20 minutes. It was obvious to us that such an effect could not be attributed to the difference in density (water compared with water + air column) alone. We then started the research on the characteristics of air and water column mixtures.

Mr. Peter Chan introduced us to his friend Mr. Kwan who wrote a book on Perpetual Motion Machines. In the book, Mr. Kwan described a pump as a proof. I read the book cover to cover 7 times and concluded that the most valuable statement in the whole book was: "The resulting water contained much oxygen and is suitable for fish farming." The pump was not a Perpetual Motion Machine but a device that used the Energy from Still Air similar to the Ku experiment mentioned above.

I worked out the formula to explain the process. Air is not a fuel but an energy carrier. The energy carried by air into a system can be different from the energy carried out by air from the system. The formula is

$$\text{Energy carried In by air} = \text{Pressure In} \times \text{Volume In}$$

$$\text{Energy carried Out by air} = \text{Pressure Out} \times \text{Volume Out}$$

The difference can be used to generate electricity.

I then used two simple beach pumps and some one-way valves to demonstrate the theory. My friends, the Cheungs, set up the demonstration system at Tai Po. Mr. Lee Cheung Kin, a retired engineer with missile training from China saw the demonstration and agreed with the theory. Mr. Lee also mentioned a car from Dr. Liang Xingren that required no fuel and obtained a video and the marketing literature. In the marketing literature, Dr. Liang used a mixture of Chinese philosophy of Yin-Yang and Western Ideas to explain why the car required no fuel.

Mr. Lee and I laughed at the explanation and decided to seek new explanations. The next morning, Mr. Lee woke me up at 7:30am from the Hotel and asked me to rush over. Mr. Lee showed me a pendulum toy and his theory. (That early theory was later corrected.). Mr. Lee also introduced Professor Woo, a retired scientist who helped to develop the first Chinese Atomic Bomb. Professor Woo met Dr. Liang personally and

was confident that the car did work. We then seek the help of the Hong Kong Invention Association and had the first Press Announcement on Dec 20, 2004 at Tai Po.

The night before the Press Announcement, a Chinese Foreign Trade Official, Mr. Au Yang, showed a CD from another Inventor, Mr. Sung Tim Fat. Mr. Sung provided an early version of his Invention to Dr. Liang. The invention was an electricity generator that required no fuel. Mr. Sung thought that the energy came from the permanent magnets. He could not explain why that creation or replenishing the magnets used x units of energy. The machine could then generate much more than x units of energy.

It was clear to me that the above inventors did not have a correct theory. I continued to work on the theory. The theory was expanded from Oscillation Systems to Rotational Systems; from Gravitational to Magnetic Fields; from Rotations to Vibrations; from Vibrations to Flux Changes etc. The latest is the fifth generation.

Another major theoretical breakthrough is on the understanding of magnetism. I can now explain why that a permanent magnet can help to generate much more energy than that to create it. Magnetic field is caused by the motion of electrons. The permanent magnet is not the source of energy. It induces changes in the motion of the electrons – changing their orbits and hence energy levels. There can be energy exchanges with the surroundings. The energy comes from rearrangement of the orbits of the electrons and exchanges with the surrounding such as light, heat, etc. There is also evidence that magnetic fields can affect the half-life of some radioactive elements. This means nuclear forces may even be possible.

This eventually led to the famous ‘boat in calm water and good sunshine’ scenario that was mentioned in the first chapter of this paper.

I asked a 13 year old student, Miss Wini Woo to help me with the PowerPoint file. Miss Woo did a great job and also informed me that she could produce a flying machine using the theory of equivalent gravitational constant described.

Mr. Raymond Ting joined us in January 2006. Within a few weeks, he completed many demonstration experiments on the Woo flying machine. To his credit, he also designed simple experiments on the pendulum systems that conclusively demonstrated that pulse forces could “lead out” gravitational energy.

3. The Indirect use of Gravitational Energy (Still Air etc.)

The first demonstrable use of Energy from Still Air from me was in June 2004. I applied for the PCT patent in July 2004. The theory is as follows:

1. Air can be bought into the System carrying in energy E_{in}
2. Air can be carried from the System carrying out energy E_{out}
3. Energy E_{in} can be greater than Energy E_{out}
4. The difference is Energy supplied by Air
5. The carried out Air can expand and absorb energy back from the atmosphere causing global cooling (reversing the effect of global warming).

The practical demonstration of the invention is shown in figure 3.1

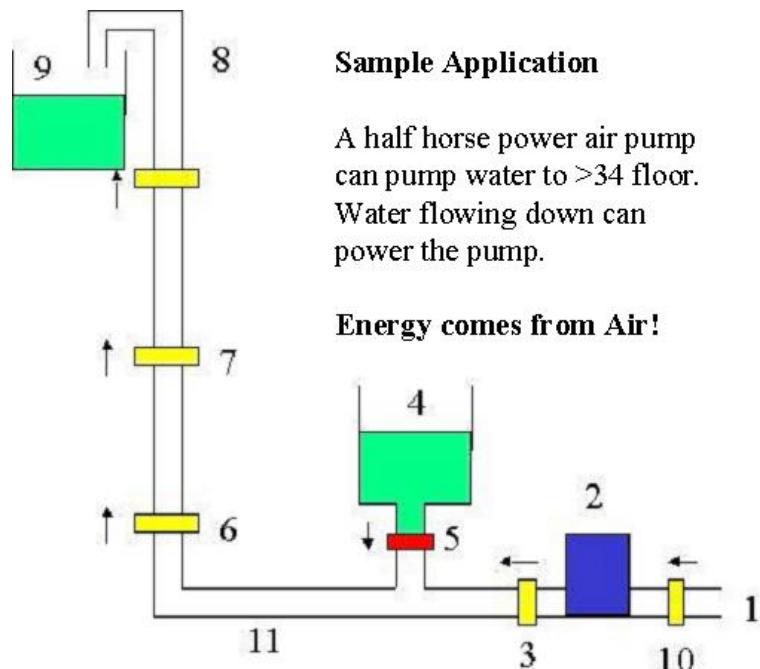


Figure 3.1 Sample Application of Energy from Still Air

In Figure 3.1, 2 shows a HK\$300 electric air pump; 4 is the lower water tank; 9 is the upper water tank; 3,5,6,7,8,10 are one-way valves. The water and air mixture is sent to the upper water tank 9. The mixture is separated. The total energy input is that from the air pump + energy from air E_{in} . Many engineers and scientists previously ignored E_{in} . Professor Woo and many members of the Chinese Academy of Science accepted this correction.

4.0 The Direct use of Gravitational and Electron Motion Energy

Previously, scientists did not realize that they could continuously extract Energy from Gravity. In particular, they did not realize that the swing or the pendulum system could be pulsed to lead out Gravitational Energy. The mathematics is based on the Parallelogram of Forces studied in Physics by every secondary school student.

The basic steps in Extracting Energy from Gravity are:

1. Push the Pendulum with pulse forces at the right time (more scientifically, at resonance)
2. The Pendulum System will “lead out” gravitational energy due to such pulse forces.
3. Many commercial swinging toys already use such pulse force mechanisms. Many of these toys use Integrated Circuit or Intelligent Chip techniques.
4. If the swinging arm of such a toy were replaced by a copper wire and the copper wire were placed in between the two poles of a permanent magnet, the swinging motion will generate electricity.
5. The swinging motion would slow down as the kinetic energy was converted into electrical energy. However, the pulse force and the “lead out” additional gravitational force would accelerate it again.

The pendulum system with pulse force mechanism can thus “lead out” gravitational energy and become the most primitive form of Energy from Gravity Machines. The experiments designed by Mr. Raymond Ting illustrated this concept conclusively. Figures 4.1 and 4.2 show the details.

v

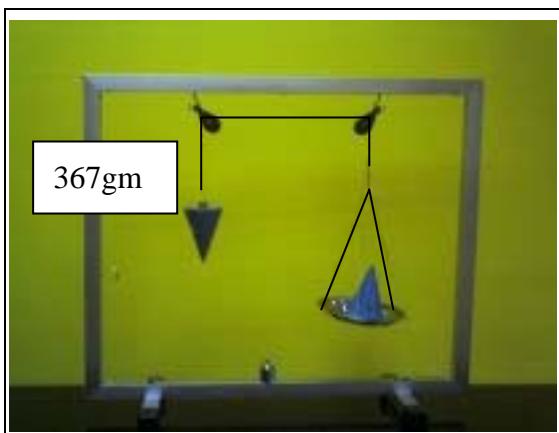


Figure 4.1 shows a pendulum system. The pendulum is first balanced by a weight of 367 units. There was no motion. A “Pulse Force” of 50 units was then added. The pendulum went up with an increase in Potential Energy of $367 \times H$. However, the Energy supplied by the 50units “Pulse Force” was only $50 \times H$.
(One Time Lead Out of more Energy)

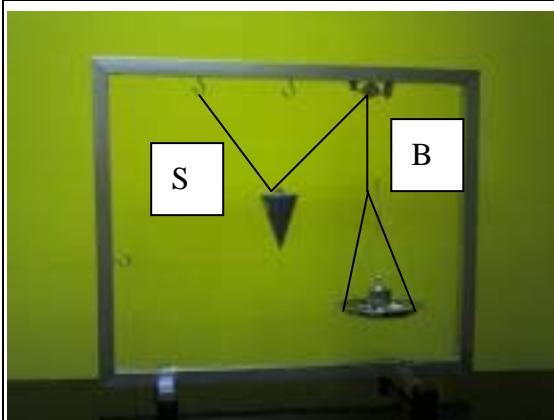


Figure 4.2 shows a nearly balanced position.

The pendulum was pulled close to the middle position. In this position, half of the force is from the tension of the String S and half is from the Pulse Force B.

The tension of the String can be attributed to Gravity. This shows:

Continuous Lead Out of Gravitational Energy by the Pulse Force B

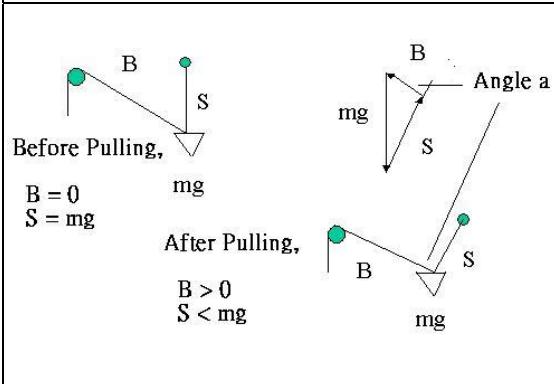


Figure 4.2a Parallelogram of Forces.

This is the most important theoretical diagram. It uses the Parallelogram of Forces taught in all secondary schools around the World. I simply applied it to the Pendulum after learning it 50 years ago!

In Figure 4.2a, the force and energy imparted by the Pulse Force B and the String S are analyzed by decomposing them into the vertical and horizontal components.

$$B \text{ Force(horizontal)} = S \text{ Force(horizontal)} \text{ but in opposite direction}$$

$$B \text{ Force(vertical)} + S \text{ Force(vertical)} = mg$$

$$B \text{ Energy(horizontal)} = B \text{ Force(horizontal)} \times \text{horizontal displacement}$$

$$S \text{ Energy(horizontal)} = S \text{ Force(horizontal)} \times 0$$

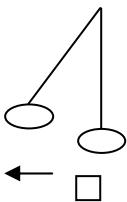
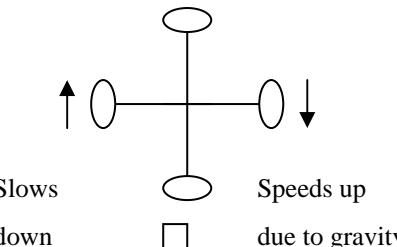
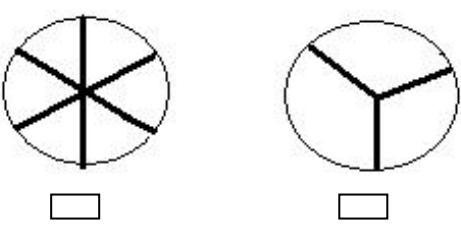
(displacement not in direction of force but energy is stored – ready to be used on swinging back)

$$B \text{ Energy(vertical)} = B \text{ Force(vertical)} \times \text{vertical displacement} \quad (* \text{ height raised})$$

$$S \text{ Energy(vertical)} = S \text{ Force(vertical)} \times \text{vertical displacement} \quad (* \text{ height raised})$$

Since S Force(vertical) can be much higher than B Force(vertical), a small Pulse Force can Lead Out a large quantity of Gravitational Energy. Thus the theory can be proved mathematically and verified experimentally. Please read slides 5-8 in <http://www.energyfromair.com/beijing/Taiwan2a.htm> for details.

Once we understand that the Pendulum System with Pulse Force can Lead Out gravitational energy, we can easily extend that to rotational systems. The following Figures 4.3 to 4.6 illustrate this very well.

 <p>Pulse Force</p>	<p>Figure 4.3 shows the pendulum system with a Pulse Force.</p> <p>From the previous Figures 4.1, 4.2 and the descriptions, we know that the pendulum system with Pulse Force can Lead Out gravitational energy.</p>
	<p>Figure 4.4 shows the swing of the pendulum extended to 360 degrees.</p> <p>Instead of the oscillation motion, we now have a circular motion. However, the same theory of Extracting Energy from Gravity via Pulse Force is still valid. The Pulse Force needs to be stronger.</p>
	<p>Figure 4.5 shows replacing the string with a rod type setup.</p> <p>The oscillation is now around the center of the rod. The same theory of Extracting Gravitational Energy via Pulse Force is still valid.</p>
	<p>Figure 4.6 shows a complete wheel replacing the simple pendulum.</p> <p>A complete wheel with spoke setup can totally replace the pendulum system to extract Gravitational Energy with Pulse Force. This setup is much more efficient as the wheel can rotate at a high speed.</p>

The use of the Wheel or Cylinder type setup is much more efficient than the simple pendulum. The energy that can be extracted per revolution is $2mgr$ where m is the mass of the wheel (if all the mass were at the rim), g is the gravitational constant and r is the radius of the Wheel. Note that gravitational energy is Lead Out during the application of the Pulse Force. The moment the Pulse Force is cut, the Lead Out stops.

4.1 First Generation (Extract Energy via cutting Earth's Magnetic Field)

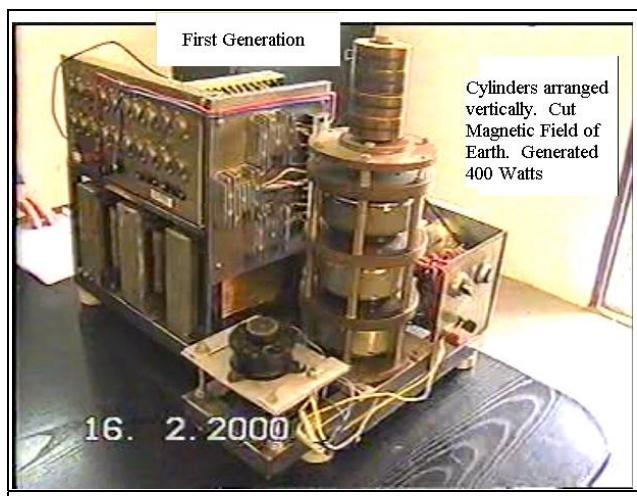
The First Generation Cosmic Energy Electricity Generator was the machine from Mr. Sung Tim Fat. It consisted of 3 cylinders spinning with the axle in the vertical direction. Each cylinder has magnetic and magnetic shielding material. The rotation essentially cut the horizontal component of the magnetic field of the Earth. The first cylinder generated enough energy to supply the pulse force to drive the second cylinder. The second cylinder generated enough energy to supply the pulse force to drive the third cylinder. The third cylinder generated 400 watts – enough to supply the pulse force to drive the first cylinder and more.

The file AVSEQ02.DAT shows both the first and the second generation electricity generators in a demonstration in 2000. A separate starting motor was used. The first generation was relatively bulky. See the China Patent Office Website at <http://www.sipo.gov.cn/sipo/default.htm> Patent Number 99126283.2 for details.

Development of the First Generation was abandoned. It was essentially rotation of magnets (both permanent and electromagnets) in a magnetic field. We now know that it is similar in principle to the Minato Wheel, the Bedini, and the Joseph Newman systems.

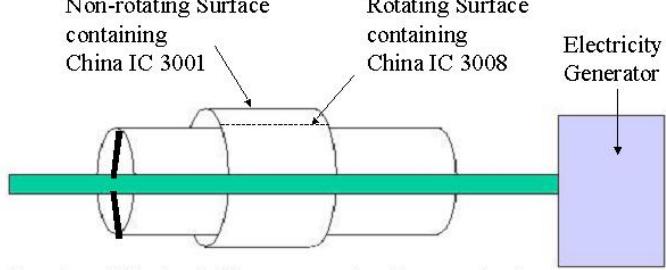
4.2 Second Generation (Extract Energy via Gravity)

The Second Generation Cosmic Energy Electricity Generator was also a machine from Mr. Sung Tim Fat. It essentially was the First Generation set up in the horizontal direction. The axis of rotation was horizontal. This effectively uses both the vertical component of the magnetic field of the Earth and the gravitational field of the Earth. The output was 20,000 watts. Figures 4.7 and 4.8 show the differences between the First and Second Generation.

 A photograph of the First Generation generator. It features a tall, cylindrical magnet assembly mounted on a base. A control panel with various knobs and wires is visible to the left. A timestamp at the bottom left reads "16. 2. 2000". A text overlay on the right side of the image reads: "First Generation", "Cylinders arranged vertically. Cut Magnetic Field of Earth. Generated 400 Watts".	<p>Figure 4.7 shows the First Generation</p> <p>Mr. Sung produced the video in February 2000. The video showed that the Generator could support a lamp, a fan and an electrical drill.</p>
 A photograph of the Second Generation generator. Two men are standing next to it: a reporter on the left and Mr. Sung, the inventor, on the right. The generator has a large, horizontal cylindrical magnet. A timestamp at the bottom left reads "11:56 16. 2. 2000". A text overlay on the left side of the image reads: "Reporter", "Second Generation Cylinder placed horizontally. Uses both magnetic and Gravitational force.", ">20,000 Watts". Another text overlay on the right side reads: "Mr. Sung Inventor".	<p>Figure 4.8 shows the Second Generation</p> <p>The Second Generation could generate 20,000 watts. Unfortunately, Mr. Sung went out of funds and borrowed from the Black Market. The consequence was that he ended up in heavy debt and had to hide from the moneylenders.</p>

4.3 Third Generation (Use of Intelligent Chips)

The Third Generation was from Dr. Liang Xingren. Dr. Liang got the Generator from Mr. Sung and improved it. He used Intelligent Chips and Integrated Circuits (ICs) to provide the pulse force. The car could provide 188 horsepower and was demonstrated in 2003. Figures 4.9 and 4.10 show the details.

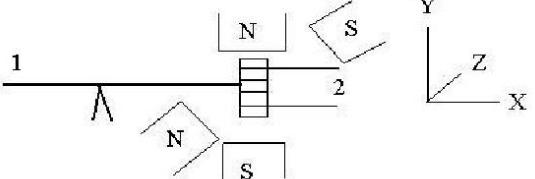
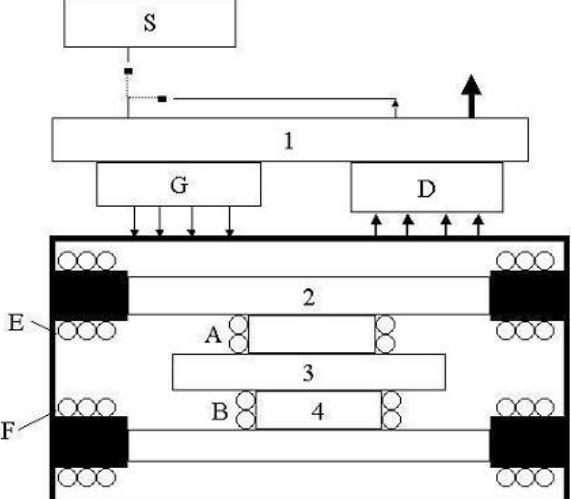
 <p>Non-rotating Surface containing China IC 3001</p> <p>Rotating Surface containing China IC 3008</p> <p>Electricity Generator</p> <p>Rotating Cylinder rigidly connected to the central axle. The combination of IC 3001 and 3008 provides The necessary Pulse Force after steady rotation.</p>	<p>Figure 4.9 The Engine behind the Dr. Liang Car.</p> <p>It consists of two cylinders with ICs to provide the Pulse Force. The disadvantage was loss of power when climbing steep slopes.</p>
	<p>Figure 4.10 The Car that requires no fuel</p> <p>The details could be seen in the video AVSEQ01.DAT.</p>

Dr. Liang made a major mistake in his raising of funds. He authorized many agents to help him. Many of these agents made false promises to investors. When Dr. Liang tried to present his inventions in Dec 2004, many angry investors filed lawsuits against him and his agents. The show was cancelled.

I believe that Dr. Liang should be rescued. His invention and ours will create phenomenal wealth for China and the World. See China Patent Application Number 01123526.8 for details. Ms. Forever Yuen translated the Liang Patent into English. She also edited and commented on the videos. See her posts in <http://www.overunity.com>.

4.4 Fourth Generation (Extract Energy via Changes of Magnetic Flux)

After we understood the use of rotation to extract energy from gravitational or magnetic fields, we started to investigate whether we could use vibration or no vibration at all. The answers to both questions were yes. The demonstration of a vibration device was from Taiwan using ocean waves. The description of a non-vibrating device came from US patent 6,326,718. One of the inventors of that US patent is Mr. Tom Bearden who is well known in the Over Unity Development World. The non-vibrating device used changes in magnetic flux as the pulse force. Figures 4.11 and 4.12 show the details. Figure 4.12 uses the figure from the Lee-Sung-Tseung China patent.

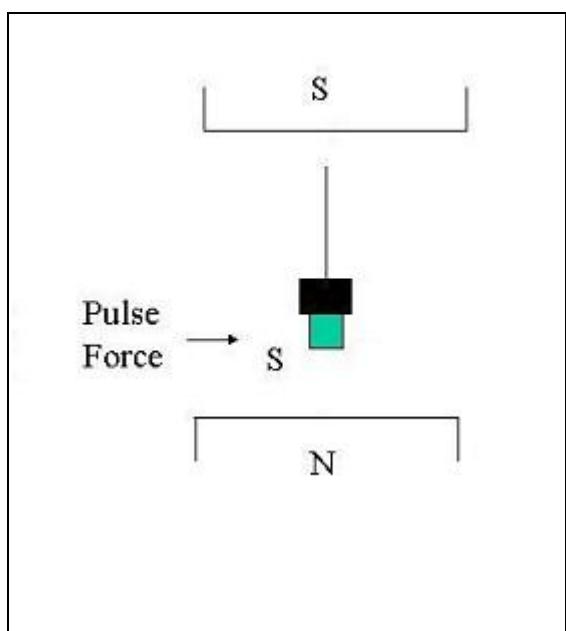
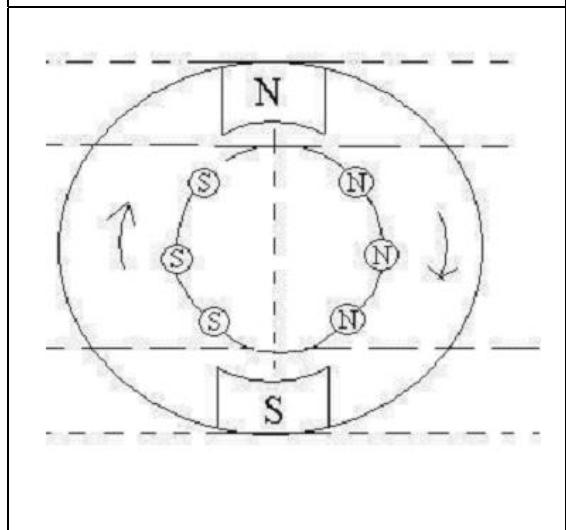
	<p>Figure 4.11 shows a vibration system. A practical implementation was a vibration system using ocean waves as power from an Inventor in Taiwan.</p>
	<p>Figure 4.12 shows a non-vibration system S supplies power to 1 which provides AC current via G to coils A and B. 3 is a permanent magnet to provide added magnetic flux to 2 and then to coils E and F. E and F provide AC power via D to 1. The output power from E and F is higher than that from A and B</p>

The advantage of this technique is that the size of the Generator can be very small. However, the development is in early stages and much more effort is required to turn it into a usable product. Lee Cheung Kin has been working with a well funded Japanese Company since late 2006 and believes that working products will come out soon.

4.5 Fifth Generation (Improving the Third Generation over 100 times)

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The Fifth Generation came as a flash of brilliance from Mr. Lee Cheung Kin. We were trying to solve the slope-climbing problem of the Dr. Liang car. With pure gravitational force as source of power, the power decreases when the car climbs up a steep slope. If the outer cylinder of the Dr. Liang engine were replaced by a magnetic field and the Intelligent Chips in the inner rotating cylinder changed polarity at the highest and lowest positions, the problem would be solved with great increase in power at the same time. Figures 4.13 and 4.14 show the details.

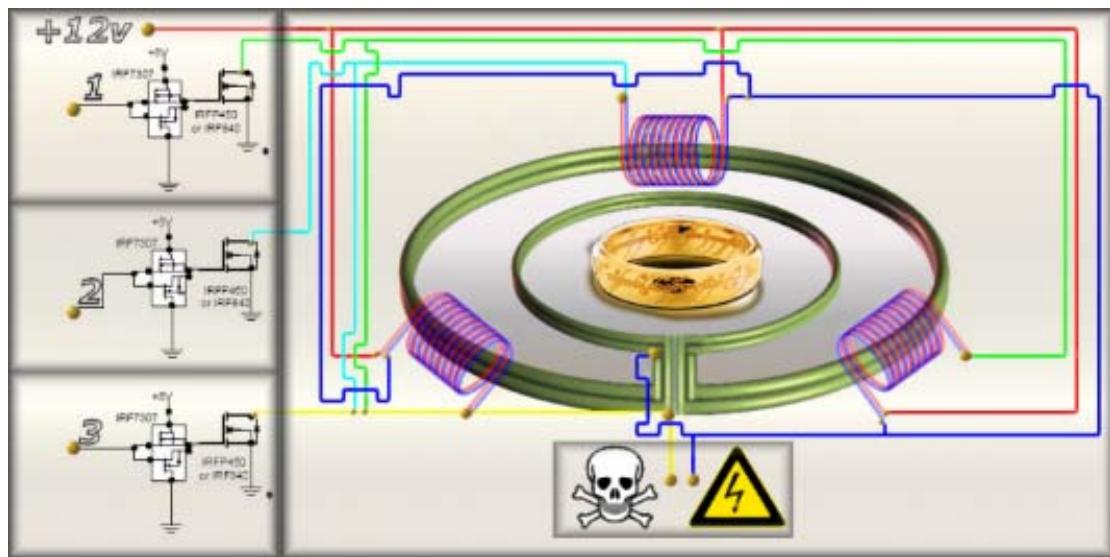
	<p>Figure 4.13 shows the enhancement of Gravity with Magnetic field</p> <p>The magnetic pendulum has magnetic shielding material at the top. When such a pendulum swings under the Pulse Force, both Gravitational and Magnetic Energies are extracted.</p> <p>(The equivalent gravitational constant can be less if the shielded magnet has N pole exposed. The consequence will be the subject of another report.)</p>
	<p>Figure 4.14 shows the improvement over the Dr. Liang Engine</p> <p>The Intelligent Chips at the outer cylinder are replaced by a magnetic field. The ICs in the inner cylinder are programmed so that they are N poles on one side and S poles on the other to provide a clockwise pulse force. The Magnetic Field can be very strong and all IC chips contribute to the Pulse Force.</p>

5. Explaining the operation of the TPU (for comparison)

This part is reproduced as part of the historical record. This file was modified from the TPU description file written in August 2007. The key concepts from the Lee-Tseung Lead Out theory that can be applied directly to the Toroidal Power Unit are as follows:

1. The Law of Conservation of Energy is NOT violated. The source of energy is the electron motion energy already surrounding and interacting with us.
2. The Pulse Force required comes from the oscillator circuits of the TPU. The correct resonance frequency or its harmonics is required.
3. When the oscillator or pulse current passes through the Toroidal coils, electron motion or electrical current is induced. These pulses keep accelerating the electrons Leading Out more electron motion energy.
4. At this point, we should mention the Wang Shum Ho four-legged stool experiment. (see <http://www.energyfromair.com/beijing/wang3a.htm> for details.) A rotating object such as the Earth rotating around the Sun requires Centripetal Force but no energy. (No work is done, as the displacement is perpendicular to the force.) Any addition of energy will increase the speed of rotation or change the radius of the orbit.
5. The Pulse or KICK in the TPU Leads Out additional Electron Motion Energy. The actual quantity of Lead Out energy depends on the frequency of the KICK, the diameter of the Toroidal coil, the strength of the KICK etc.
6. The feedback of the TPU can be via the same KICK coils or via separate Feedback coils. I believe some on this OverUnity.com forum focus on using the same KICK coil. It may be possible to use one frequency to KICK and another harmonic frequency to Feedback or Collect. This may explain the special effect when two different frequencies are used.
7. Looking at the diagram further, it may be possible for the electric or electrostatic field to play a much greater part. A gap preventing direct electron flow may cause the built-up of the electric potential. Thus energy may be drained out directly.
8. Once started, the TPU is essentially in a constant operational state. It does not rotate like the Wang device. However, the KICKs occur all the time, leading out additional energy. The accelerating electrons might cause deviation from the resonance condition – preventing the TPU from self-destruction.

The following diagram is from the posts in the OverUnity.com Forum. They have a group of dedicated persons replicating and improving the TPU invention originally invented by Steven Mark. The open sharing of information is highly appreciated. There are already many videos on YouTube. An example as outlined by Otto, and Roberto. is: <http://youtube.com/watch?v=tPwQ6AzBSko>

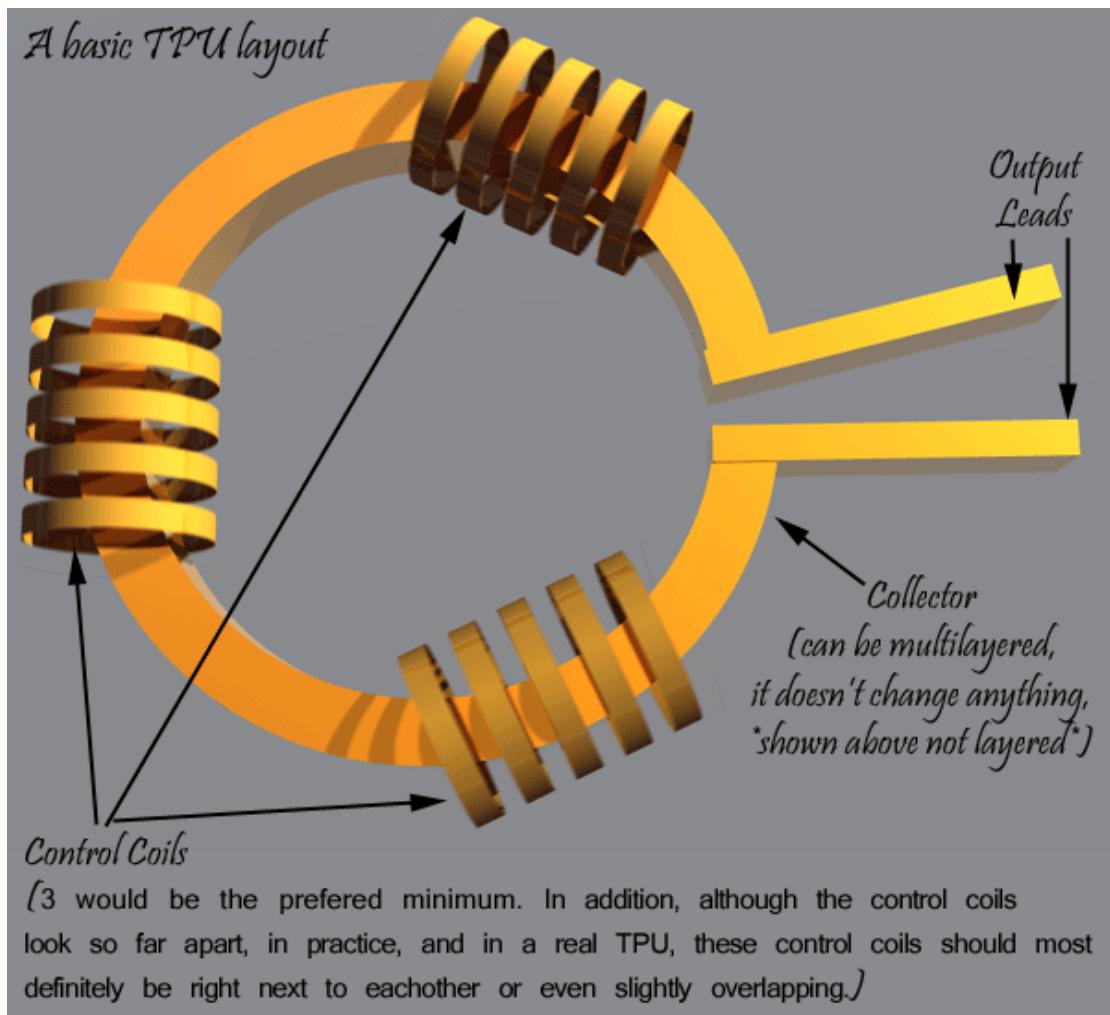


If a Pulsing Current is passing through the coils, electricity will flow in the Toroidal copper ring according to Lenz's Law. Note that Pulsing Current is different from AC current. In alternating current (AC) environment, the voltage fluctuates from positive to negative. In a Pulsing Current environment, the voltage is on and off but always in the same direction.

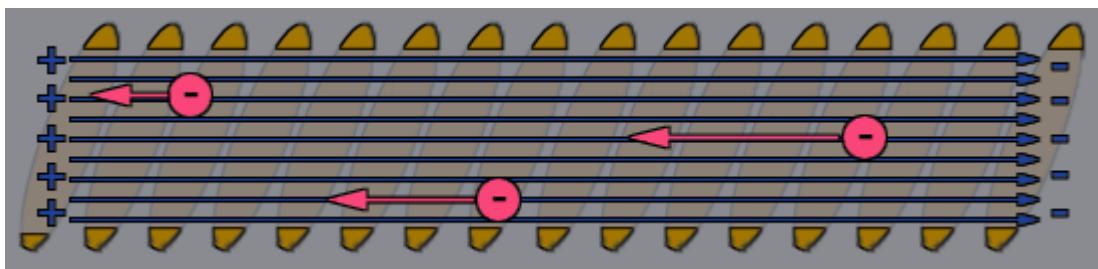
The Pulsing Current is not the only source of input energy. It will Lead Out additional electron motion energy. In the TPU, the energy can be extracted via the Pulsing Coils or via the electric potential across the gap. Two frequencies are often used. (One may be used for Pulsing, the other for collecting or feedback.)

Tao of the OverUnity.com forum produced some very good explanation diagrams. The first one shows the basic layout of the TPU. Three control coils are shown. The KICK or Pulse on Control Coil A will actually accelerate and move the electrons towards Control Coil B. If the timing is right, the KICK or Pulse on Control Coil B will further accelerate and move the electrons towards Control Coil C. If the timing is right, the KICK on Control Coil C will further accelerate and move the electrons towards Control Coil A. This looping effect will keep Adding and Leading Out more

energy into the system.



The other diagram from Tao is also informative:



The Control Coil produces an electric field and thus causes the electrons to move. This is analogous to the particle accelerators such as the Cyclotron in high-energy physics. The one directional movement of electrons is effectively Direct Current. Since the KICK or Pulse of the Control Coil is not the Only Input (additional electron motion energy is Lead Out), more energy is available for the Collector to collect.

One potential problem mentioned by Steven Mark is that the KICK frequency must be slightly different from the ideal resonance frequency. If the KICK frequency is exact, the resonance effect (similar to the collapsing bridge under same stepping frequency by the soldiers) will destroy the TPU. In other words, too much electron motion energy will be Lead Out.

One solution is the constant monitoring and controlling of the KICK frequency. Even a slight deviation will get away from the resonance condition. Much less electron motion energy will be Lead Out.

If all the right controls are in place, the TPU can be started and then self-maintained. It becomes a Perpetual Motion Machine (Leading Out the immersed electron motion energy) with no movement (some vibration will be detected because of the KICKs). It can act as a battery that will never need charging.

My earlier thought of size reduction might be misleading. The power output from a TPU will depend on its diameter. Too tiny a ring may not generate the power required.

Another point to emphasize is that the Pulse Motor also needs the correct resonance frequency to function. The whole family of TPU, Pulse Motor, Bedini, Minato, Joseph Newman, John Searl, Liang and Chao Cosmic Energy Machines are related. A good comparison study will help all. Some common elements such as Pulsing Circuit, permanent and/or electromagnetic positioning, magnetic shielding, Feedback Circuit, Resonance Tuning, Output Monitoring and Control etc. may result.

(I hope Tsing Hua University in Beijing has started on such a systematic research. Lee, Wang and I are all honorary guest lecturers. I believe Harvard, MIT and other top Universities may also have started already. Lee informed me that the Energy Department of China in Beijing has a research laboratory working on all known Cosmic Energy Machines. It is like telling the World that USA has advanced projects on UFOs at or near Area 51.)

6. Comparing the TPU with Other Cosmic Energy Machines

The first obvious comparison is with the no motion, flux change configuration such as that in Figure 4.12. In Figure 4.12, S supplies power to 1 that provides AC current via G to coils A and B.

We can think of coils A and B as the Primary Side of a conventional transformer. The secret of this invention is the use of a permanent magnet C sandwiched between coils A and B. 3 will provide added magnetic flux to 2 and then to coils E and F. E and F provide AC power via D to 1. The output power from E and F is higher than that from A and B.

The drawback of this configuration is that 3 lost its magnetism after operating for a while.

For this invention to work, the AC must have certain frequencies. To be more exact, resonance or harmonic frequencies must be chosen – at the higher frequency, more electron motion energy appears to be Lead Out.

The comparison chart with TPU is as follows:

- (1) Both systems do not need physical motion.
- (2) Both systems required resonance pulsing circuits
- (3) TPU may use same Pulsing Coil as Energy Collection. The Figure 4.12 system uses separate Coils (A,B as Pulsing and E,F as Collecting)
- (4) Both Lead Out electron motion energy and thus do not violate the Law of Conservation of Energy.
- (5) TPU uses no permanent magnets. The Figure 4.12 system uses one permanent magnet that need to be replaced from time to time.
- (6) The Figure 4.12 system uses magnetic coils to induce current for output. The TPU can use the Pulsing Coil to generate electricity directly. Thus one conversion step is eliminated. The TPU is expected to be more efficient than the Figure 4.12 system.

Professor Woo, the retired Scientist who helped to create the first China Atomic Bomb, informed me that he and his group have successfully produced a Cosmic Energy Machine prototype based on High Frequency Pulses. Some of the Output Energy of the Machine can be fed back as Input. They are trying to improve on the actual Output Power. I shall try to report more on that when appropriate.

The next comparison is with the 225 HP Pulse Motor as displayed in <http://youtube.com/watch?v=ArX7BDY1XRM>

The Pulse Motor shown has nine elements packed together. One element can be taken out and generate over 20HP. Such an element has 8 permanent magnets on the inner rotor and eight coils on the outer stator. Pulses are supplied by the coils to rotate the rotor. However, we can use all eight coils as Pulsing – and use the rotating axle to extract power. Or we can use seven coils as Pulsing – and use one as Collector to light some bulbs.

The comparison Chart is as follows:

- (1) Both devices are circular in shape.
- (2) Both systems required resonance pulsing circuits
- (3) Pulse Motor uses magnetic fields to rotate the inner cylinder. (This may have the advantage of leading to the Flying Saucer Development.)
- (4) Pulse Motor may impart the Pulsing simultaneously to the many rotor magnets. The circuit design may be easier.
- (7) Both Lead Out electron motion energy. Thus they do not violate the Law of Conservation of Energy.
- (5) TPU uses no permanent magnets. The Pulse Motor uses eight permanent magnets and eight coils.
- (6) The Output Energy of the Pulse Motor depends on the rotational speed, the number of Pulsing Coils, the Strength of the Pulse, the diameter of the wheel, the strength of the magnets, the method of extracting such energy such as via axle or via Collector Coils. A control circuit is needed to sense the Output Load – if that drops, generate less energy to avoid overheating. (Or damage to bearing as claimed by Steorn). I believe Steven Mark mentioned this already.

(The Pulse Motor is not ideal as it is difficult to determine the minimum energy used to provide rotation. Coils radiate and thus lose energy. The use of IC may be better – such as the Liang and Chao systems.)

As remarked by some members of the OverUnity.com Forum, the Lee-Tseung Lead Out theory can be applied to almost all known Over Unity Inventions. The theory essentially overcomes the use of the Law of Conservation of Energy as a Roadblock. Whenever Cosmic Energy (Energy from Still Air, Gravitational and Electron Motion Energy) is Lead Out in an invention, the invention does not Create or Destroy energy.

Successful demonstration of any Cosmic Energy Invention is a further confirmation of the Lee-Tseung Lead Out theory. There are probably two hundred known Cosmic Energy (or Over Unity) Inventions. Thus there may be over 200 confirmations of the Lee-Tseung Lead Out theory in the near future.

One group worth mentioning is Sun et al (孙等). They started working on Cosmic Energy Machine in February 2007 when I placed a USD300 gravity wheel order with them. Instead of building the one device I ordered, they built over 30 different devices with their own resources. Some examples can be seen on YouTube.

- Experimenting with Electric Pulse Coils with wheel in vertical position
<http://www.youtube.com/watch?v=BX0hoiVnrxA>
- Experimenting with Electric Pulse Coils with wheel in the horizontal position
<http://www.youtube.com/watch?v=CT9EPYHDjDg>
- Simulating the Minato Wheel with magnet positioning
<http://www.youtube.com/watch?v=dvlDEqf2pCc>
- Simulating the Minato wheel in the vertical position
<http://www.youtube.com/watch?v=98u1FAx9JkM>
- Simulating the Minato wheel in the horizontal position
<http://www.youtube.com/watch?v=JLkMaS3Xj0I>

7. Enhancing the Chas Campbell Gravity Wheel

The Chas Campbell Gravity Wheel came to light when Overunity.com managed by Stefan Hartmann and Ashtweth of Panacea-bocaf.org cooperated to get information from Mr. Chas Campbell. Mr. Campbell is a retired inventor living in Australia. He appeared on Australian Television on his invention of an Electricity Magnifier that could increase the input power 10 times.

http://www.youtube.com/watch?v=8QD2Whs_LxA

The TV commentator, however, did not really believe the invention and got a scientist with conventional thinking to state that such an invention violated the CoE. Mr. Campbell did not get any Official support from the Australian Government. The alternative energy researchers thought otherwise and were willing to support him. The visit on September 1, 2007 by Ash et al showed that Mr. Campbell had a gravity wheel device in addition to the Electricity Magnifier. The focus in this chapter is on the Gravity Wheel. The details are in:

<http://www.overunity.com/index.php/topic,2487.0.html>

Mr. Chas Campbell is willing to open-source his invention. This means that he is not seeking patent protection and encourages all to learn and/or benefit from his hard work and knowledge. Salute to Mr. Campbell.

As of September 1, 2007, the Chas Campbell Gravity Wheel was not rotating perpetually. Mr. Campbell believed that use of better material and better engineering could do the job. He based his reasoning on the difference in moment of the balls on the RHS of the big wheel and that of the balls on the LHS of the smaller wheel. See Figure 7.1 for a conceptual understanding.

- (1) There were snooker balls rolling from the top fixed ramp (guiding rails) to the rim of the Large Wheel on the RHS. The balls then dropped into pipes attached to the rotating Large Wheel. This will provide the turning moment to rotate the Large Wheel in the clockwise direction.
- (2) The balls rolled back to the smaller wheel via the bottom fixed ramp (guiding rails) to the rim of the Small Wheel. These balls would then be transported up to the initial position in (1).
- (3) The cycle was then repeated. The reasoning was that even though the balls fell and rose about the same distance, the difference in torque or moment (moment = force x lever arm) will keep the combined system rotating forever,

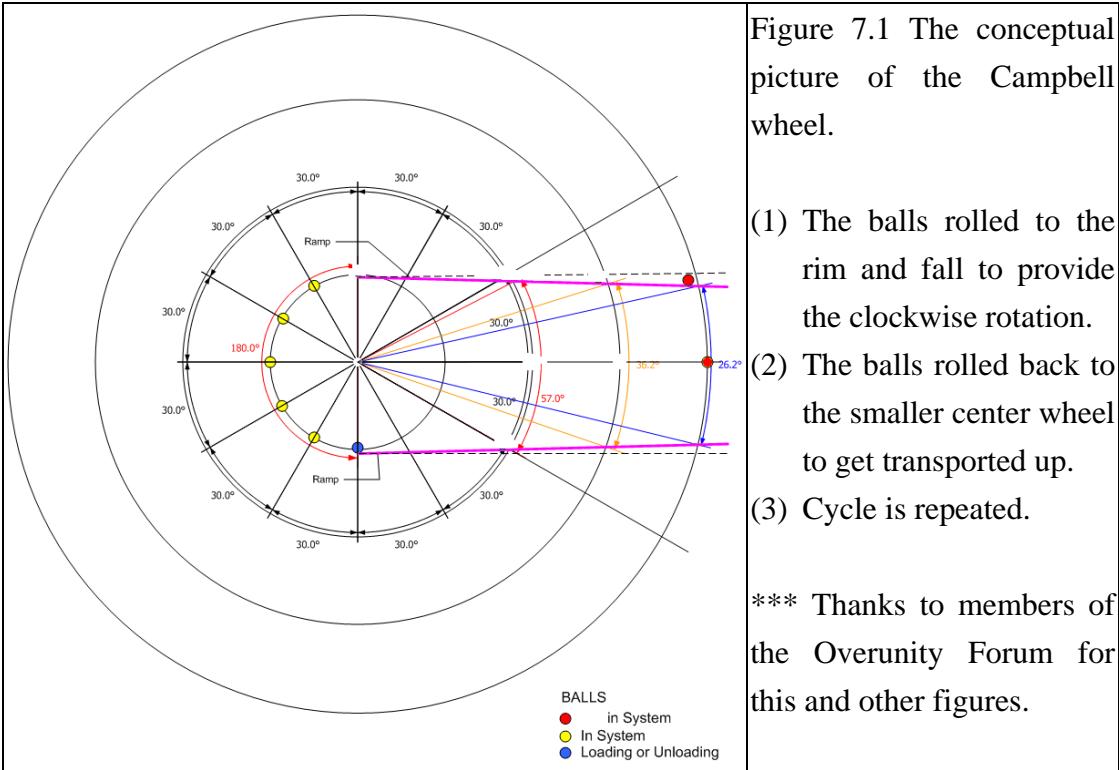


Figure 7.1 The conceptual picture of the Campbell wheel.

- (1) The balls rolled to the rim and fall to provide the clockwise rotation.
- (2) The balls rolled back to the smaller center wheel to get transported up.
- (3) Cycle is repeated.

*** Thanks to members of the Overunity Forum for this and other figures.

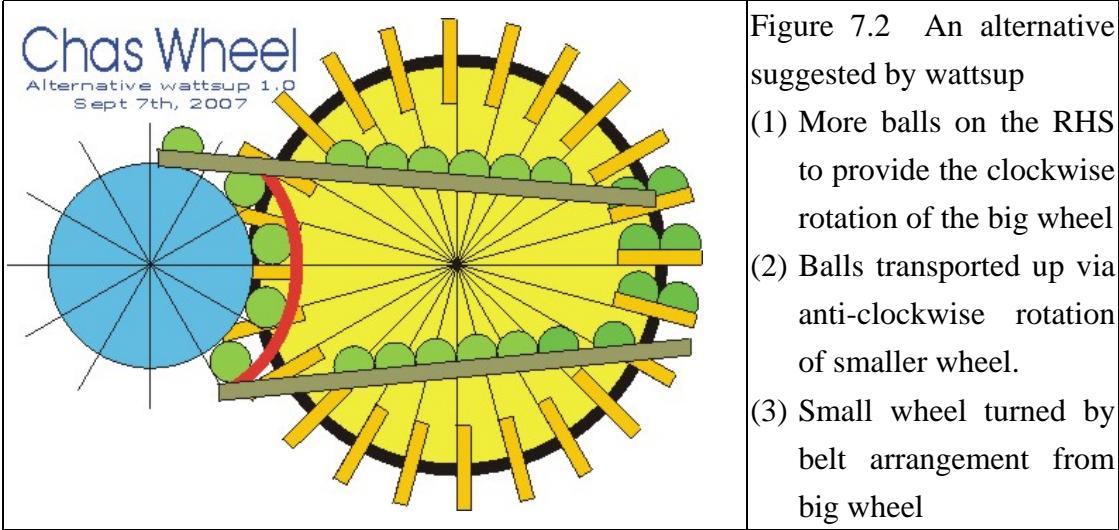


Figure 7.2 An alternative suggested by wattsup

- (1) More balls on the RHS to provide the clockwise rotation of the big wheel
- (2) Balls transported up via anti-clockwise rotation of smaller wheel.
- (3) Small wheel turned by belt arrangement from big wheel

Some of the objections to the above reasoning were:

- (1) There must be a slope for the balls to roll. This means the height on the RHS is less than the height on the LHS. The Potential Energy is unequal on the two sides.
- (2) The curvature of the smaller wheel is higher. This means that the distance the ball needs to roll is longer. To keep the timing right, the ball must travel faster on the smaller wheel.
- (3) Some Physicists might not even do the mathematics and conclude that these two objections would destroy all chances of Chas Campbell having a working perpetual motion machine. They might even suggest dropping all efforts! They might

quote the Law of Conservation of Energy and recommend not to waste time and effort.

Some forum members did some mathematics of the required relationship between the diameters of the two wheels (assuming that they are concentric) as in Figure 7.1. Others proposed non-concentric arrangements as in Figure 7.2. Some pointed out the different energy requirements. Some pointed out the different rates of the balls falling down and going up. That would form a queue of waiting balls on the lower ramp or guiding rail. No amount of engineering ingenuity could make the system work. Some went beyond the static cases and mentioned the mechanism of rotation (angular momentum, centripetal force etc.) Some commented that it would be one of the many failures and that there was nothing new to learn.

The Lee-Tseung theory provided a different analysis:

- (1) The Big Wheel with balls feeding to the rim is effectively a pulsed rotation system. Pulsed rotations can Lead Out Gravitational Energy. Traditional Physicists did not consider this additional Lead Out Energy. This additional energy may be sufficient to overcome friction and the two above objections.
- (2) The amount of Lead Out Gravitational Energy is likely to depend on:
 1. The Mass and Mass Distribution of the big Wheel. The best arrangement is for the mass to be concentrated on the rim. (Thus a Cylinder is better than a Wheel. Or the wheel should be weighted at the rim.)
 2. The Number of Pulses per unit time. This will depend on the rotational speed and the number of balls involved per rotation. Thus we should try to get the highest value possible.
 3. The Length or Duration of each Pulse. The Lead Out occurs only during the application of the Pulse. The longer, the better. In this case, that time is affected by the falling distance and contact time. A larger diameter wheel is better.
 4. The effective gravitational constant g. This may be changed with the use of special magnetic balls. Such balls can have N poles showing on the surface. Suitable Magnets placed at appropriate positions with appropriate shielding may help. (Some N poles and some S poles interacting with the balls to provide higher effective g.)
 5. Fixing Magnets on the rim to do additional pulsing via Magnetic Coils. This will change the pure mechanical setup. If this path were chosen, it would be easier to just use the 225 HP Pulse Motor design or the Liang IC pulsed

cylinder design.

6. Many Cosmic Energy Machines have their axle in the horizontal direction. This will use or Lead Out gravitational energy. This is a simple way to Lead Out extra energy at virtually no expense or complexity. This is already done in the Chas Campbell Gravity wheel.
 - (3) The small wheel may rotate at a different speed as the large wheel. However, its driving power can only come from the big wheel. Thus a loose belt like arrangement should be considered. Different wheel sizes could be tested easily.
 - (4) One suggestion is the use of additional flywheels or cylinders to store and/or Lead Out more Gravitational Energy. This will required starting mechanism to get the flywheels or cylinders to rotate to the designed speed. Additional engineering effort is required.
 - (5) If we accept the Lee-Tseung theory, we need to consider the pulse frequency. The best example is the simple swing. If the pushing is not done at the right time, the swing will not swing high. More force might even reduce the swinging height! From our experience, tuning for the right frequency is a painstaking process. The existing Campbell setup is not designed for tuning.
 - (6) It may be a fun project for the Research Students at Universities or for engineers who do not need money to pay for food or mortgages. The Chas Campbell Gravity Wheel will require much additional engineering effort even under the Lee-Tseung theory.

I strongly recommend the Systematic research and development of Cosmic Energy Machines to be done at the University environment. Many textbooks need to be re-written. Many disciplines will be affected – Physics, mechanical and electrical engineering etc. Some will face revolutions – the Flying Saucer or the Magneto Propulsion Unit.

I hope International Cooperation on this new technology will take place. This technology will provide infinite energy and hence infinite wealth. Ignorance and poverty will be history.

8. Enhancing the Chas Campbell Electricity Magnifier

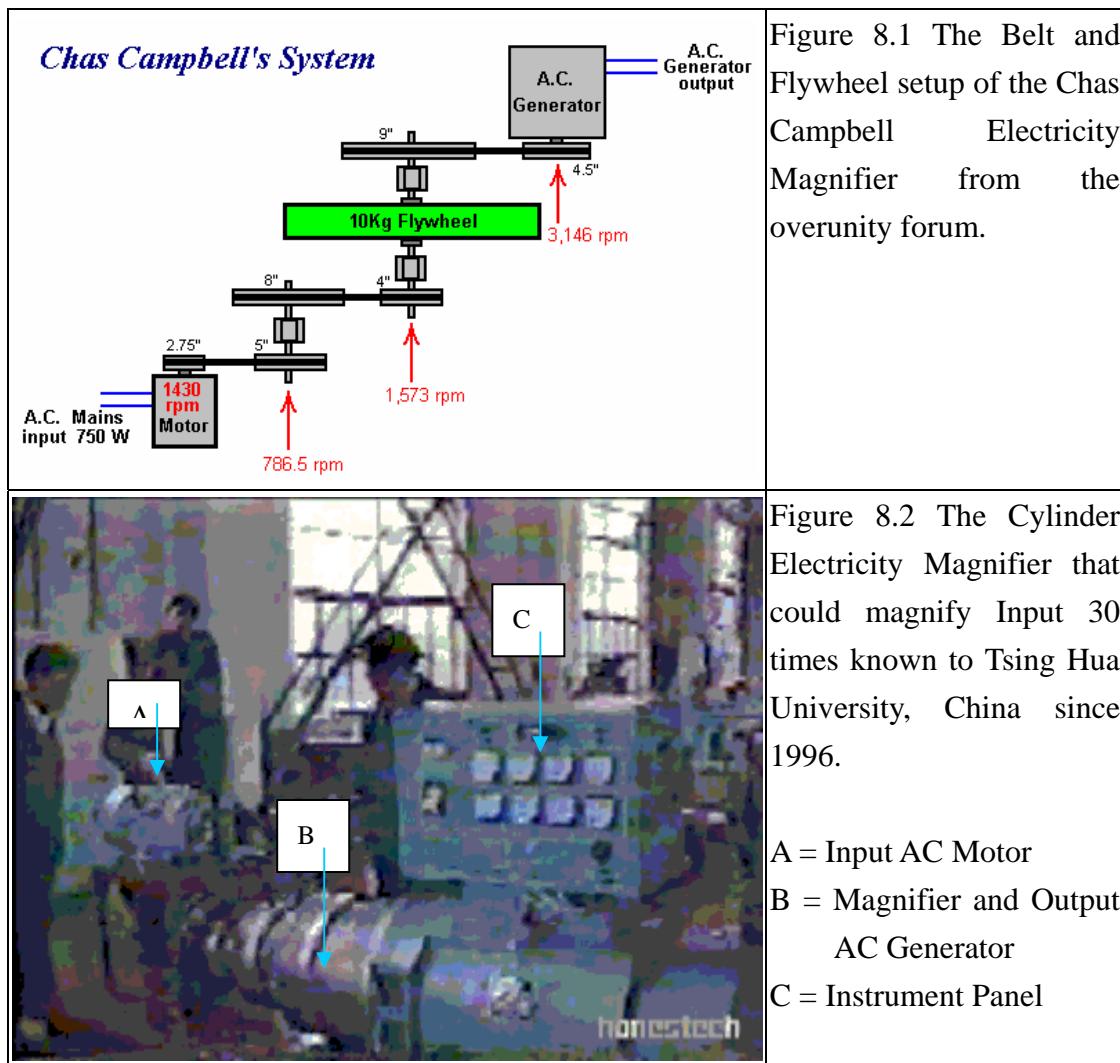


Figure 8.1 is the Chas Campbell Electricity Magnifier. From the Figure, it has no special magic. There is an AC Input Motor that is commercially available. There are some Wheels with belts driving other Wheels and a Flywheel. There is an AC Output Motor. The Claim as reported on the Australian TV was that a Magnifying Factor of 10 was achieved. The visit by Ash et al on September 1, 2007 revealed that there was more to the story. More testing is need.

Figure 8.2 is the Electricity Magnifier from Tsing Hua University. Tsing Hua University has been working with an old inventor since 1996 on this invention. This invention used cylinders instead of flywheels. Ms. Forever Yuen edited the video and provided additional comments on the overunity.com forum. For details, see: <http://www.overunity.com/index.php/topic,2794.msg46560.html#msg46560> and <http://www.overunity.com/index.php/topic,2794.msg46108.html#msg46108>

Some overunity.com members could not believe how simple the Chas Campbell Electricity Magnifier was. Some comments included: if the invention were so simple, someone else would have discovered it long ago; the flywheel might have been used as energy storage and that were so, there was nothing new; some believed a more efficient Input Motor would help.

The Lee-Tseung theory predicts that Pulsed Rotation in a Gravitational Field can Lead Out Gravitational Energy.

Pulsed Rotation is just an extension of Pulsed Oscillation. In the original PCT patent application, Lee-Tseung used the example of applying the horizontal pulse force. In the continued communication with the Patent Examiner, Lee-Tseung extended the example to applying the pulse force in any direction. The analysis using the parallelogram of force during the application of the Pulse Force in all directions showed that gravitation energy could be Lead Out.

Some Forum Members used the static analysis and modeling tools. They looked for different leverage on the two sides of a wheel in a static case. From that they concluded that no Gravitational Energy could be Lead Out. The Lad-Tseung theory stressed the importance of Pulsed Oscillation, Vibration or Rotation. It is the dynamic motion of the Pulse that is responsible for Leading Out the Gravitational Energy. There must be Force. That Force must do work. In doing work, there must be motion (linear or circular). That motion must accelerate or decelerate as a result of the force. Constant Linear Motion requires no force. Circular Motion requires force but that force does not do work, as displacement is perpendicular to the direction of the force. These dynamic motion concepts caused much misunderstanding to some Forum Members.

Some Forum Members even said that Lee-Tseung misused the Laws of Physics. In Science, we constantly test the limitation of the known Laws. There is no such concept of “misuse”. In this case, we are using the Law of Parallelogram of Forces in the various instances of the Pulsed Pendulum Motion. Ms. Forever posted a good analysis and is quoted here:

<http://www.overunity.com/index.php/topic,2794.msg48246.html#msg48246>

In the case of a Pulsed Pendulum, we stated that when a horizontal force (H) was applied to the stationary Pendulum, the tension of the String of the pendulum would

increase. This increased tensional force (S) would be along the string at a small “angle a ” with the Vertical. This force S can be resolved into two components – vertical and horizontal. The horizontal component is equal and opposite to the horizontal force H . The vertical component is equal to and is responsible for lifting the Weight of the Pendulum Bob.

Ms. Forever Yuen posted the following 10 points:

- (1) Tension is a Force. Force by itself is NOT energy.
- (2) Force is a vector quantity (has direction). In order for it to do Work, there must be Displacement.
- (3) Displacement is NOT distance. Displacement is also a vector quantity.
- (4) In order for the Force to do Work, there must be Displacement in the direction of the Force.
- (5) When Work is done, Energy is exchanged. Both Work and Energy are scalar quantities. (No direction) Note that the product of two vector quantities becomes a scalar quantity.
- (6) Tension in the pendulum string by itself does not imply Work done or Energy Exchange. However, the pendulum swings to a different position. This implies Displacement. We can resolve this Displacement into vertical and horizontal components. (Vector arithmetic).
- (7) We can also resolve the Tension (a Force) into vertical and horizontal components (Vector arithmetic).
- (8) The product of Tension(vertical) x Displacement(vertical) represents the Work done or Energy exchange in the vertical direction.
- (9) The product of Tension(horizontal) x Displacement(horizontal) represents the Work done or Energy exchange in the horizontal direction.
- (10) The sum of (8) and (9) represents the energy exchanged

If we accept the Lee-Tseung theory that Pulsed Rotation can Lead Out Gravitational Energy, both the Chas Chambell and the Tsing Hua Electricity magnifiers can be explained readily as follows:

- (1) In order to use Gravitation Energy Continuously, we need ANY system with pulsed rotation with the axle in the horizontal direction.
- (2) The most important contribution of the Lee-Tseung theory is that Gravitational Energy can be Lead Out during the application of the pulse.
- (3) We can apply tangential force on a wheel at the rim to pulse rotate it.
- (4) We can have a belt type arrangement on a wheel to pulse rotate it. Once rotated,

we can change the rotational speed and the torque via different conventional setups.

- (5) The Flywheel, the Wheel or the Cylinder does not only act as Energy Storage devices. They also act as Energy Lead Out devices.

The amount of Gravitational Energy that can be Lead out in the Electricity Magnifier will depend on:

- (1) The Number of pulses per revolution (varies due to tension of belt)
- (2) The Duration of the pulse (fluctuate continuously)
- (3) Strength of the pulses (varies with tension of belt)
- (4) The Mass and Mass Distribution of the wheel or cylinder (all at rim best)
- (5) The Diameter of the wheel or cylinder (Larger is better)
- (6) The numbers or stages of magnification (Up to a certain limit)
- (7) Type of Load (Sudden large torque will decrease the rotational speed and immediately lower efficiency)

Point (7) is worth more discussion. Almost all pulsed rotational devices have the same characteristics in that the output efficiency is rotational speed dependent. Sudden decrease in the rotational speed is NOT recommended. The best external load is a relatively constant load such as lamps. Adding multiple 100 watt lamps is much better than turning on one 1,000 watt lamp. There is need for buffering systems such as capacitors, batteries or other energy storage systems.

Another important point is the feedback system. Many forum members pointed out that if the Output is so much higher than the Input, we can feedback some of the Output to the Input. In that case, we do not need to touch the Local Power Supply Company at all. This is theoretically possible. Actual experience showed that the Output Power is not always steady. The resonance effect was used. This means that if someone turns off the lights (as an example), the Output Load becomes zero.

If the Feedback mechanism is not perfected, there might be a huge surge of energy back to the Input. That might generate much higher Output, which in turn produces even higher Input. This looping surge effect had been observed in the Tsing Hua University Electricity Magnifier and some other Cosmic Energy Inventions. This must be overcome before working products can be introduced to the Consumer Market.

9. Summary

The summary is modified from our PCT patent application. (PCT/IB05/00138)

This invention uses the corrected theory of the pendulum to extract energy from gravitational fields. A pulse force applied to a pendulum can lead out gravitational energy. The energy can be changed into electrical energy such as allowing the metallic string of the pendulum to cut a magnetic field. The oscillation motion will slow down but the pulse force will lead out gravitational energy to speed it up again. The oscillation motion can be changed into a rotational motion for a more efficient operation. The same technique can be applied to magnetic or electrical fields.

We have effectively solved the World Energy Crisis. Oil is no longer a strategic material and there is no need to go to war over it. World Peace is one step closer. Modern Wealth will be the quality and quantity of Meaningful Economic Activities. Such Activities are infinite. The World can embark on the path leading to the Wisdom Society. Ignorance and Poverty will be history.

*** I am aware that some persons may be offended with this article. They have spent much time and energy on the Gravity Wheel, the TPU or other Cosmic Energy Machines. I appreciate and praise their efforts. However, the Cosmic Energy Machines field is very new. It is only beginning to be accepted in China. Wang Shum Ho worked on it for over 40 years and only gained recognition recently. Joseph Newman worked on it in USA for similar length and is still meeting strong opposition.

Lee and I have already given all our patent rights to the Chinese Government and People. We have no financial stake in the success of these Cosmic Energy Inventions. Others more brilliant than us will improve or even replace the Lead Out theory. Our purpose in writing this article is to Benefit the World.