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Stanley MEYER

Water Fuel Cell

Electronics World & Wireless World (January 1991)
Dan Danforth: Molecular Dissociation of Water
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Raum & Zeit 1(6) 63-68 (1990)
Patents Granted (@ 1990)
Water Fuel Cell R&D Format
Infinite Energy 19: 50-51 (1998) Obituary
Water-Powered Car Video (Link to http://www.lonelantern.org/collection.html)
USP # 4,936,961 ~ Method for the Production of a Fuel Gas
USP # 4,826,581 ~ Controlled Process for the Production of Thermal Energy from Gases...
USP # 4,798,661 ~ Gas Generator Voltage Control Circuit
USP # 4,613,304 ~ Gas Electrical Hydrogen Generator
USP # 4,465,455 ~ Start-up/Shut-down for a Hydrogen Gas Burner
USP # 4,421,474 ~ Hydrogen Gas Burner
USP # 4,389,981 ~ Hydrogen Gas Injector System for Internal Combustion Engine
Canadian Patent # 2,067,735 ~ Water Fuel Injection System
WO 92/07861 ~ Control & Driver Circuits for a Hydrogen Gas Fuel Producing Cell
USP Appln. 2005/0246059 ~ Hydroxyl Filling Station (Stephen Meyer)

KeelyNet File MEYER1.ASC
Excerpts from:

Electronics World & Wireless World

(January 1991)

Eye-witness accounts suggest that US inventor Stanley Meyer has developed an electric cell which will split ordinary tap water into hydrogen and oxygen with far less energy than that required by a normal electrolytic cell.

In a demonstration made before Professor Michael Laughton, Dean of Engineering at Mary College, London, Admiral Sir Anthony Griffin, a former controller of the British Navy, and Dr Keith Hindley, a UK research chemist. Meyer's cell, developed at the inventor's home in Grove City, Ohio, produced far more hydrogen/oxygen mixture than could have been expected by simple electrolysis.

Where normal water electrolysis requires the passage of current measured in amps, Meyer's cell achieves the same effect in milliamps. Furthermore, ordinary tap water requires the addition of an electrolyte such as sulphuric acid to aid current conduction; Meyer's cell functions at greatest efficiency with pure water.

According to the witnesses, the most startling aspect of the Meyer cell was that it remained cold, even after hours of gas production.

Meyer's experiments, which he seems to be able to perform to order, have earned him a series of US patents granted under Section 101. The granting of a patent under this section is dependent on a successful demonstration of the invention to a Patent Review Board.

Meyer's cell seems to have many of the attributes of an electrolytic cell except that it functions at high voltage, low current rather than the other way around. Construction is unremarkable. The electrodes --- referred to as "excitors" by Meyer --- are made from parallel plates of stainless steel formed in either flat or concentric topography. Gas production seems to vary as the inverse of the distance between them; the patents suggest a spacing of 1.5 mm produces satisfactory results.

The real differences occur in the power supply to the cell. Meyer uses an external inductance which appears to resonate with the capacitance of the cell --- pure water apparently possesses a dielectric constant of about 5 --- to produce a parallel resonant circuit.

This is excited by a high power pulse generator which, together with the cell capacitance and a rectifier diode, forms a charge pump circuit. High frequency pulses build a rising staircase DC potential across the electrodes of the cell until a point is reached where the water breaks down and a momentary high current flows. A current measuring circuit in the supply detects this breakdown and removes the pulse drive for a few cycles allowing the water to "recover".

Research chemist Keith Hindley offers this description of a Meyer cell demonstration: "After a day of presentations, the Griffin committee witnessed a number of important demonstration of the WFC" (water fuel cell as named by the inventor).

A witness team of independent UK scientifc observers testified that US inventor Stanley Meyer successfully decomposed ordinary tap water into constituent elements through a combination of high, pulsed voltage using an average current measured only in milliamps. Reported gas evolution was enough to sustain a hydrogen /oxygen flame which instantly melted steel.

In contrast with normal high current electrolysis, the witnesses report the lack of any heating within the cell. Meyer declines to release details which would allow scientists to duplicate and evaluate his "water fuel cell". However, he has supplied enough detail to the US Patent Office to persuade them that he can substantiate his 'power-from-water' claims.

One demonstration cell was fitted with two parallel plate "excitors". Using tap water to fill the cell, the plates generated gas at very low current levels --- no greater than a tenth of an amp on the ammeter, and claimed to be milliamps by Meyer --- and this gas production increased steadily as the plates were moved closer together and decreased as they were separated. The DC voltage appeared to be pulsed at tens of thousands of volts.

A second cell carried nine stainless steel double tube cell units and generated much more gas. A sequence of photographs was taken showing gas production at milliamp levels. When the voltage was turned up to its peak value, the gas then poured off at a very impressive level.

"We did notice that the water at the top of the cell slowly became discolored with a pale cream and dark brown precipitate, almost certainly the effects of the chlorine in the heavily chlorinated tap water on the stainless steel tubes used as "excitors".

He was demonstrating hydrogen gas production at milliamp and kilovolt levels.

"The most remarkable observation is that the WFC and all its metal pipework remained quite cold to the touch, even after more than twenty minutes of operation. The splitting mechanism clearly evolves little heat in sharp contrast to electrolysis where the electrolyte warms up quickly."

"The results appear to suggest efficient and controllable gas production that responds rapidly to demand and yet is safe in operation. We clearly saw how increasing and decreasing the voltage is used to control gas production. We saw how gas generation ceased and then began again instantly as the voltage driving circuit was switched off and then on again."

"After hours of discussion between ourselves, we concluded that Stan Meyer did appear to have discovered an entirely new method for splitting water which showed few of the characteristics of classical electrolysis. Confirmation that his devices actually do work come from his collection of granted US patents on various parts of the WFC system. Since they were granted under Section 101 by the US Patent Office, the hardware involved in the patents has been examined experimentally by US Patent Office experts and their seconded experts and all the claims have been established."

"The basic WFC was subjected to three years of testing. This raises the granted patents to the level of independent, critical, scientific and engineering confirmation that the devices actually perform as claimed."

The practical demonstration of the Meyer cell appears substantially more convincing than the para-scientific jargon which has been used to explain it. The inventor himself talks about a distortion and polarization of the water molecule resulting in the H:OH bonding tearing itself apart under the electrostatic potential gradient, of a resonance within the molecule which amplifies the effect.

Apart from the copious hydrogen/oxygen gas evolution and the minimal temperature rise within the cell, witnesses also report that water within the cell disappears rapidly, presumably into its component parts and as an aerosol from the myriad of tiny bubbles breaking the surface of the cell.

Meyer claims to have run a converted VW on hydrogen/oxygen mixture for the last four years using a chain of six cylindrical cells. He also claims that photon stimulation of the reactor space by optical fibre piped laser light increases gas production.

The inventor is a protegee' of the Advanced Energy Institute.

Molecular Dissociation of Water:

A Project for the Experimenter

by Dan Danforth

In the original setup that Stan Meyer showed us, he used 36 volts as the basic potential applied to the reaction chamber. He also commented that stainless steel (410 not 403) was the only metal that could be used as oxides formed with all others. His original chamber used 18 inch long by 0.375 inch diameter (o.d.) rod surrounded by 1 inch diameter (i.d.) 16 inch long pipe. The reason for the difference in length is for mechanical ease of construction. My prototype used 14 inch long rod and 12 inch long pipe of similar diameters as the drawing indicates.

Having a severe lack of parts diversity here in Sri-Lanka, I was only able to obtain a 24 volt. 8 amp transformer and built my circuitry around that. The final output is 20 volts with Ml reading 10 amps to the pulsing circuit which generates a symetricel squarewave (50% duty cycle) to the flyback inductor connected in series with the chamber as the schematic shows. The flyback high voltage spike is directed across the chamber via c* end d*. The use of a high voltage spike alone, without the current being delivered through the liquid, will not cause the disassociation to take place. This I verified using an ignition coil in place of the inductor and applied the secondary with halfwave rectification and blocking capacitor to prevent burn out to the chamber with no results. Apparently the current in the water aligns the molecules approprately to allow the high voltege spike to do its workr which in my opinion is the stimulation of molecular resonance. Once Stan's unit was made to begin breakdown (which takes 6 to 8 seconds) he was able to reduce both current and voltage to miniscule proportions. I attribute this to sympathetic oscillation of the aligned molecules, requiring very little in the way of additional excitation. A phenomena akin to Tesla's super resonance... resulting in Stan discovering that he only had to supply three pulses in ten to satisfy the requirement of the chamber. I have not yet had the opportunity to duplicate this portion of the experiment but, in time I vill.

Duplication of the device described in these pages, however, will produce the phenomena and hopefully launch other enterprising end inventive souls on to designing their own refined models. It would be nice to have feedback so that we can all collectively work to bring about the transition to non-pollution energy.

P.S.- Though electrical circuit is by no means optinised, but represents instead the result of parts availability here. Any good technician could improve on it quite readily.

There are two primary frequencies that produce the best results. They are: 14,372 Hz and 43,430 Hz. The former is about 50% more efficient, but it seems that just about any frequency between 9 KHz and 143,762 KHz works quite well. (1) This is because the nature of the wave form (a spike) is rich in harmonics and one of them is bound to be close to one of the two primary frequencies.

Use of permanent magnets may also increase efficiency. I'll give you the outcome of that attempt in my next letter along with the plans for what I hope to be a much improved version.

Note: Sub-harmonics of the two primary frequencies at which dissociation will occur:

43430 Hz	143762 HZ
SUBHARMONIC	SUBHARMONIC
1st 21715 HZ	1st 71881 HZ
2nd 14476.67 HZ	2nd 47920.67 HZ
3rd 15517.5 HZ	3rd 35840.1 HZ
4th 8686	4th 28752.4 HZ

*1500 VOLTS IS THE MINIMUM REQUIRED FOR MOLECULAR RINGING TO BEGIN.

Source publication: Unknown... Scanned from very bad photocopy.

Excerpts from *Water Fuel Cell News Release* # 4 (Winter/Spring 87/88)

"The Birth of New Technology: The Hydrogen Fracturing Process & Related Water Fuel Cell Technology"

by Marcia Thompson

The purpose of establishing the Hydrogen Fracturing technology which ahs been developed is to use energy from the atom to produce a system which would lend itself to mass production. Meyer is now in the process of integrating the Electrical Polarization Generator (EPG) into the Hydrogen Fracturing Process. The Electrical Polarization Generator is in essence a gas battery which produces electric energy directly from the fuel cell gases without chemical interaction. The significance of the voltage is that it is a potential energy source, not consumed energy. The most significant point is that the influence of voltage has a phenomenal effect on the splitting of the water molecule and does it in a controlled state. Voltage from the Electrical Polarization Generator separates the water molecule economically by not consuming power. It's a new technology --- bringing the water molecule from a liquid to gas ionization state, which in turn sets up the Hydrogen Fracturing Process of destabilization of the gas atoms to release their atomic energy. The process consumes very little power to accomplish this task.

The Voltage Intensifier Circuit (VIC) patent development had to be fully developed to bring on the voltage phenomenon where very low energy is being consumed.

In conjunction with this development, a new Electron Grid Extractor Circuit (EGEC) has been fully developed to extend the operability of the Hydrogen Gas Gun technology, which sets up the hydrogen fracturing process. The Voltage Intensifier Circuit patent development and Electron Grid Extraction Circuit had to be fully developed to bring on the voltage phenomenon where very low energy is being consumed.
What is this Hydrogen Fracturing Process? Since the Water Fuel Cell (WFC) dissociates the water molecule by the stimulation of voltage, this voltage technology has now been applied to the Fuel Cell gas atoms to release their atomic energy. Meyer discovered that not only can the water molecule be split into its component parts, but it is also possible to separate the atoms of gases into their component parts by the same voltage stimulation, releasing a tremendous amount of thermal explosive energy from the atom under a controlled state. Under this process, preliminary tests show that energy yields from one gallon of water are predicted to equal that of 44,000 to 108,000 barrels of oil. The Hydrogen Fracturing Process is environmentally safe since the gas atoms are split into their component parts, releasing explosive thermal energy from the gas atom. The nucleus remains intact.

In conjunction to the Hydrogen Fracturing Process of the Water Fuel Cell technology, Meyer is now working out systems mechanics of retrofitting the EPG system to the entire Water Fuel Cell system. The entire systems mechanics are now being integrated together into a package system which, when miniaturized, will lend itself to production. All of these previous steps have been necessary to ensure the system lends itself to the economics of mass production with costs held down.

Beyond the Electrical Particle Generator (EPG) system, which utilizes a magnetized gas to produce electrical energy, work is continuing on the Electrical Polarization Generator to optimize its operational performance, which is also required for mass production. The EPG system is now being prepared for design interfacing with the existing WFC technology.

To reach the maximum operational effect of the EPG system, several types of magnetized gases are being developed and tested. Meyer is also developing the technology to enhance the electromagnetic deflection of the gas to optimize the EPG system still further. This development phase is now being considered for systems economics with regard to manufacturing techniques.

What does the Hydrogen Fracturing Process (HFP) really do for the system? It destabilizes the mass and electrical equilibrium of the gas atoms, bringing them into a critical state for energy utilization.

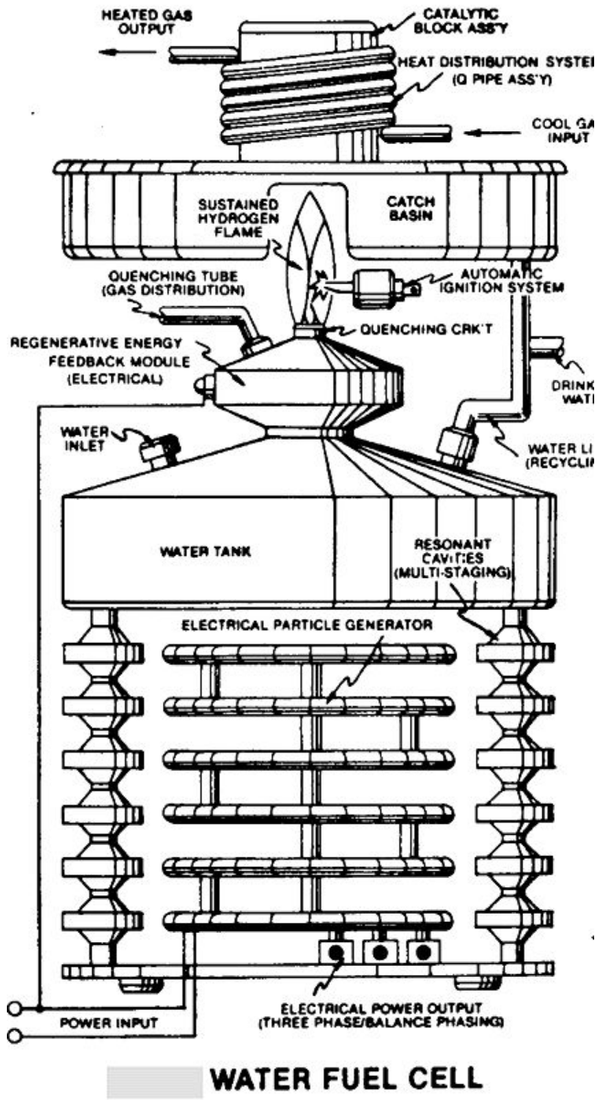
The electronics control system determines systems operation and efficiency and is part of the HFP. It complies with both US and foreign patent requirements. It establishes electric circuit interfacing for the operability and efficiency of the HFP. In mass production, it will be reduced to a small, simple circuit component. The control system triggers the HFP and maintains control of it.

The Hydrogen Gas Injector Fuel Cell (HGIFC) is composed of resonant cavities (lower section) in a vertical array which splits water molecules into component parts by stimulation of a high pulse voltage frequency, setting up the resonant action. The liberated hydrogen and oxygen atoms and ambient air gases are stimulated from a liquid to gas ionization state prior to entering the Hydrogen Gas Gun (HGG), located on top of the resonant cavities. Gases are then allowed to go into the Hydrogen Fracturing Process. The thrust nozzle, located at the very top of the system, is an optical thermal lens affixed to the unit which triggers and sustains the Hydrogen Fracturing Process as to the flow rate of fuel cell gases. In mass production, the whole unit forms the Gas Injector Fuel Cell (GIFC). The complete unit will be reduced to a small, extremely light-weight unit. The Hydrogen Fracturing Process is completely environmentally safe. There are no radioactive materials used in the process, and it applies to all EPA standards, plus safety, housing and highway codes…

Hydrogen Gas Gun

Hydrogen Gas Gun

Water Fuel Cell



WATER FUEL CELL

Excerpts from ***Raum & Zeit*** 1(6):63-68 (1990)

Hydrogen Gas Gun

The Electron Extraction Circuit removes, captures, and consumes the "dislodged" eelctrons (from the gas atoms) to cause the gas atoms to go into and reach "Critical State", forming highly energized combustiblegas atoms having missing electrons. Resistive values (R4, R6, R7) and dielectric constant of gas (Rg) and isolated ground (W) prevents "electron-flow" or "electron deflection" from occurring within the circuit during pulsing operations (at resonant frequency) and, therefore, keeps the gas atoms in critical state by not allowing electron replacement to occur or take place between the moving gas atoms. The "dislodged" negative charged electrons are "destroyed" or "consumed" in the form of heat when Amp Consuming Device (S) such as a light bulb) is positively electrically energized during alternate pulsing operations. Laser activated or laser primed gas ions repel the dislodged electrons being consumed. The Electron Extraction Process is hereinafter called the "Hydrogen Gas Gun" and is placed on top of a Resonant Cavity Assembly.

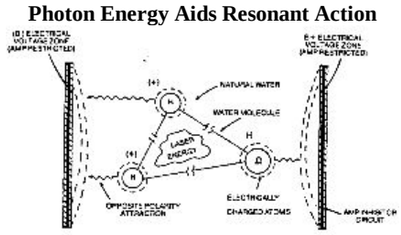
Thermal Explosive Energy

Exposing the expelling "laser-primed" and electrically chareged combustible gas ions (exiting from the Gas Resonant Cavity) to a thermal spark or heat zone causes thermal gas ignition, releasing Thermal Explosive Energy (gtnt) beyond the Gas-Flame Stage...

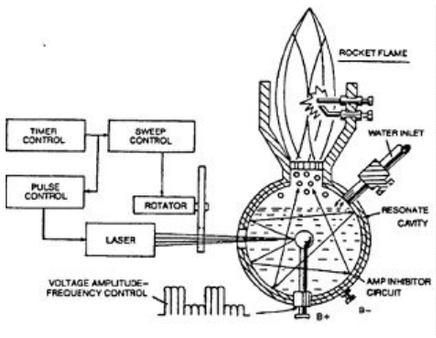
Thermal Atomic interaction (gtnt) is caused when the combustible gas ions (from water) fail to unite or form a Covalent Linkup or Bond between the water molecule atoms. The oxygen atom having less than four covalent electrons (Electron Extraction Process) is unable to reach "Stable State" (6 to 8 covalent electrons required) when the two hydrogen atoms seek to form the water molecule during thermal gas ignition. The absorbed laser energy (Va, Vb, and Vc) weakens the electrical bond between the orbital electrons and the nucleus of the atom. And, electrical attraction force being stronger than normal due to the lack of covalent electrons, "locks onto" and "keeps" the hydrogen electrons... This Atomic Thermal INteraction between combustible gas opns is from now on called the "Hydrogen Fracturing Process".

By simply attentuating or varying the voltage amplitude in direct relationship to voltage pulse rate determines Atmomic Power Yield under control state...

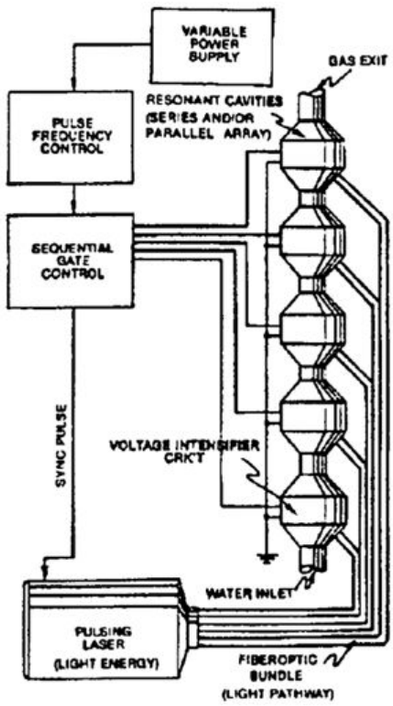
Photon Energy Aids Resonant Action



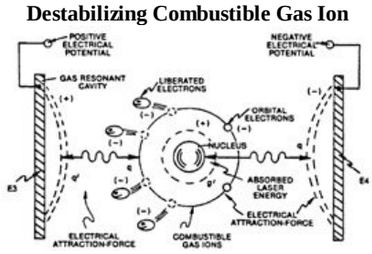
Laser-Injected Resonant Cavity



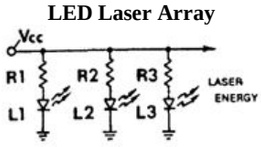
Power Load Distributor



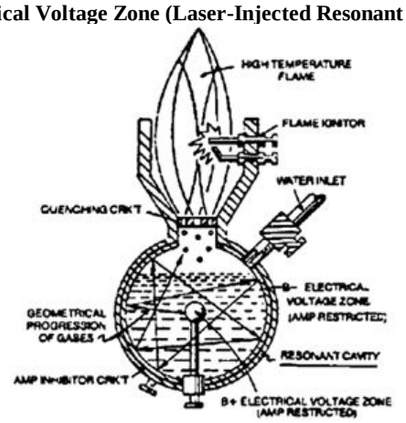
Destabilizing Combustible Gas Ion



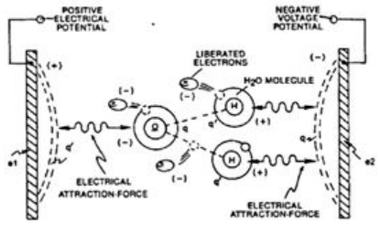
LED Laser Array



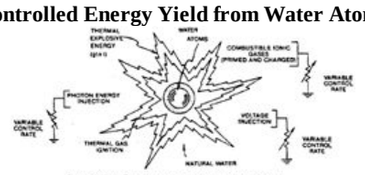
Electrical Voltage Zone (Laser-Injected Resonant Cavity)



Destabilizing Combustible Gas Ion



Controlled Energy Yield from Water Atoms



Controlled Energy-Yield From Water Atoms

Patents Granted

USP # 4,936,961 - Method for the Production of a Fuel Gas
USP # 4,826,581 - Controlled Production of Thermal Energy from Gases
USP # 4,798,661 - Gas generator voltage control circuit
USP # 4,613,779 ~ Electrical Pulse Generator
USP # 4,613,304 ~ Gas Electrical H Generator
USP # 4,465,455 ~ Start-up/Shut-down for H Gas Burner
USP # 4,421,474 ~ H Gas Burner
USP # 4,389,981 ~ H Gas Injector System for IC Engine
USP # 4,275,950 ~ Light-Guide Lense
USP # 3,970,070 ~ Solar Heating System
USP # 4,265,224 ~ Multi-Stage Solar Storage System
USP # 3,970,070 - Solar heating system

Canada Patent # 1,231,872 ~ H Injector System
CP # 1,233,379 ~ H Gas Injector System for IC Engine
CP # 1,235,669 ~ Controlled H Gas Flame
CP # 1,228,833 ~ Gas Electrical H Generator
CP # 1,227,094 ~ H/Air & Non-Combustible Gas Mixing Combustion System
CP # 1,234,774 ~ H Generator System
CP # 1,234,773 ~ Resonant Cavity H Generator...
CP # 1,213,671 ~ Electrical Particle Generator

Water Fuel Cell R&D Format

Fuel Cell Technology:

Electrical Polarization Process ~ Producing H gas economically from water by voltage stimulation
Voltage Intensifier Circuit ~ Controls H gas production on demand
Cluster Array ~ Light manufacturing
Resonant Cavity ~Home/transportation
Laser-Injected Resonant Cavity ~ Medium industry
Atom-Injected Resonant Cavity ~ Heavy industry
H Fracturing Process ~ Controlled energy yield from water atoms (Aircraft/rockets)

Processed H Gas:
Rendering H Gas Safe ~ Adjust H gas burn rate to co-equal natural gasQuenching Circuit ~ Anti-Spark back
Quenching Tube ~ Distribute H gas without spark ignition
H Ignition ~ Sustain & maintain H flame regardless of gas rate
Startup/Shutdown Electronic Circuit ~ Automatically reignites H gas after flame-out
H Pipeline Storage ~ Transporting H gas through existing pipelines safely
H Gas Reclaim ~ Recycling water for H re-use & producing pure drinking water

Electrical Power Generation:
Electrical Particle Generator (EPG) ~ Using a magnetized gas or slurry to produce electrical energy without any air-gap
EPG Mechanical Drive System ~ To propel said magnetized gas/slurry by mechanical displacement
EPG Electromagnetic Drive System ~ To propel said magnetized gas/slurry by EM deflection
EPG Laser Drive System ~ To propel said magnetized gas/slurry by photon or particle injection
Magnetic Spin Generator ~ Reorient dyne-axis of said magnetized gas/slurry by variable pulse voltage
Spiral Transformer Configuration ~ Pass electrical energy at high pulse voltage frequencies
Electrical Pulsing Generator ~ EM amplifier that produces a variable voltage frequency

Electrical Feedback Network:
Gas Activated Electrical Generator ~ Using a thermal pump to move said magnetized gas/slurry to produce electricity
Internal Combustion Electrical Generator ~ Using IC engine power by processed H gas to move magnetized gas/slurry to produce electricity
Fluid Drive Electrical Generator ~ Using H gas pressure to move magnetized gas/slurry to produce electricity
Electrical Polarization Generator ~ Using electrically charged gas to produce electrical energy

Others:
Steam Resonator ~ Producing superheated steam by polar-voltage stimulation
Light-Guide Lens Assembly ~ Collects, redirects, transfers & focuses solar energy without any moving parts

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Infinite Energy 19: 50-51 (1998)

Stanley Meyer, Water-Fuel Cell Inventor & Promoter, Dies Suddenly

by Eugene Mallove

Stanley A. Meyer, the controversial Ohio inventor who had claimed his technology could produce a hydrogen-oxygen mixture with a minimal energy input (compared with conventional electrolysis) died on March 21, 1998. He had gained a world-wide following of adherents and people who had invested in his activities --- Water Fuel Cell (Grove City, OH). He was famous for his claimed "water fueled car" which was exhibited symbolically in the BBC/CBC 1994 documentary on cold fusion, "Too Close to the Sun".

There were also those who were initially curious about Meyer's work, such as the editor of this magazine, the late Christopher Tinsley of the UK, and the late Admiral of the British Navy, Sir Anthony Griffin, but who became frustrated by being unable --- or, more to the point, not allowed --- to confirm (or reject finally) Meyer's claims.

I have absolutely NO DOUBT today that Stanley Meyer was his own worst enemy. IF --- and a very big IF --- he had discovered the technological process that he had said he had, there is no way that a reasonable, straightforward marketing strategy would have failed to make his technology quickly spread worldwide. He could have become very influential and very rich.

There remains a very strong suspicion that he had no such process, even though he conducted a demonstration (before this writer and another engineer at the Meyer lab in 1993) of the production of copious hydrogen/oxygen gas from what visually seemed like a small input power. But Meyer was exceedingly paranoid and he flatly refused reasonable requests by us and others to test the performance --- the input/out power ratio, even with the proviso that we did not have to "look into his black box" of electronics feeding his rather simply constructed stainless steel electrode, alternating current and voltage cell. The last such refusal --- this one in public and recorded on video tape --- was at the ANE meeting in Denver CO in 1997. Then Meyer loudly and falsely protested to me that he would "lose his patent rights" if he were to release anything but complete, integrated systems --- such as a water-fueled vehicle. Excuses, excuses, excuses...

In 1996, Meyer lost a long-lasting Ohio civil court battle accusing him of "egregious fraud" against a former associate. As was Meyer's custom, he ascribed this and other alleged assaults on him to various conspiracies. To television cameras he suggested that he had been offered huge sums of money to "suppress this technology", but that he had refused those sums. One had the impression that he really believed that there were conspiracies against him. That is a tragedy, a very compounded tragedy if he had actually come up with something novel and useful that he was hiding.

This is a very complex human and scientific story that we shall want to cover in greater detail in a future issue of Infinite Energy. There are other processes and inventions that suggest that splitting water molecules with much greater efficiency than with conventional electrolysis may be possible. Certainly there are other novelties within water --- "cold fusion" to be sure --- that really do produce prodigious quantities of energy, but not in the mode Meyer claimed. For now, here are some of the facts surrounding Meyer's death:

He was apparently eating dinner at a Grove City OH restaurant, when it is reported that he jumped up from the table, yelled that he'd been poisoned", and rushed out into the parking lot, where he collapsed and died. It has been reported by Meyer's associates that Meyer had just secured funding for a $50 million research center near Grove City, but there is no way to confirm or reject this at the moment.
