

Thrity Years From Now

Source: <http://sci.tech-archive.net/Archive/sci.space.policy/2007-01/msg00837.html>

- *From:* "American" <samuelransom@xxxxxxxxxxx>
 - *Date:* 23 Jan 2007 11:59:47 -0800
-

Not true. Brown's gas was a scam, and the people who engaged in it didn't understand what they were doing.

No, not yet FALSE. Those comments on the link to the forum are all baseless rhetoric. Not a single one of those posts goes towards disproving the cheaply remarkable adaptability of H-H-O gas. Not a one. In fact, it's really a bigger mystery now that more people don't understand the nature of how Brown's gas could be applied to the reduction of radioactivity in Americanum. Therefore, as the demand for Brown's gas increases, so will the competition, and so will the price of it come down.

Brown's gas is a scam sir. We've gone over this.

Can't be – The Egyptians used it (engravings depict electric lights at Dendera, the Mayans used it (wet & dry wood = steam → H-H-O) to purify ore, and Zechariah Sitchin (The Lost Realms) makes the claim that the statues of Tollan show some type of backpack with a pistol like device inside a holster used to shape a stone. All these events occurred over 2000 years ago, and there is evidence to suggest that the ancient Egyptians knew about electroplating.

Rewriting H₂O as HHO is just like rewriting 2x2x4 as 2x4x2 the result has to be the same.

I don't doubt that you're pretty down pat with your math on numbers of atoms, but why obfuscate the H-H-O electrolysis process with nonsensical semantics like this? H-H-O is the H₂ 'split' into its single atomic state, H₂O is the 'unsplit' state.

The equipment in the Fox News Report is an electrolytic process that makes a combination of diatomic hydrogen from water, and hydrogen-peroxide from water.

Thrity Years From Now

I'm not talking about just the "Denny Klein" process. He's probably the closest thing to actually invalidating any other automotive H-H-0 cracking processes that might come the way of the PTO.

A careful analysis of the heat balance of what is going on shows that ALL the energy that appears in the system comes from the plug in the wall its connected to, minus heat losses due to system inefficiencies.

By 'careful analysis' aren't you, IMHO, suggesting that it was a 'carefully SPUN analysis' in order to discredit any similar technology that might go the way of the PTO (Patent and Trademark) office? I think so. Good for you! I'd do the same thing if I wanted to protect the effort to establish my invention in 'good' standing. The PTO is, and always has been, an enemy of cold fusion, since the Federal minions reflect the views and desires of each other and must 'cover each other's back', because ridicule would make the entire organization 'suspect' by the bureacracy-at-large. Don't think so? Then observe here what they have done: The document with letters S A W L (Sensitive Application Warning List) was circulated among supervisors who are involved in the examination of patents. The document stated that no document shall be issued on "cold fusion" (paraphrasing) because it would result in embarrassing the PTO. A Freedom of Information Act filing (5 USC 522) request was denied because the information "related solely to the personnel rules and practices of an agency" and that the information could be "... used to circumvent internal processes and procedures". Clearly it is the Federal bureaucracy that holds back any kind of revolutionary technology making it to the mainstream.

The Brown's gas doesn't work, any clear analysis of the energy inputs and outputs show its an inefficient electrolysis system using an acidic rather than a basic water mix, which promotes the production of hydrogen peroxide along with the hydrogen.

Yeah, 'any clear analysis' of *the Denny Klein Process* will invalidate just about any "inside the box" effort to use the *Denny Klein Process* with Brown's gas.

Brown's gas is not the issue, the *Denny Klein Process* IS.

However with all due respect, I think you're dumbing down the 'plug in the wall'. You see, Brown's gas is more revolutionary than that. The 'plug in the wall' could be any number of energy creating technologies that offer a clean, unlimited source of energy. (e.g., the nuclear betavoltaic battery, Perendev and Brady motors, homopolar

Thrity Years From Now

generators, spray-on solar cells) The creation of H-H-O is, as you have said, a 'secondary energy source', but there is reason to believe that, the primary source too, has been extremely *cost sublimated*. If Brown's gas is 'secondary', then your's is certainly 'tertiary'. You want facts? Don't talk to the PTO, i.e., the 'establishment', because they are, and have always been, TRAITORS TO MODERNIZATION. It's in their minutia, and they are in the business of obfuscating, sublimating, and discrediting the drive to liberate these technologies. Just as I have said earlier, the level of any advanced civilization depends upon the establishment's ability to help those who are less advanced come to the level where they can be a contributing member of society, yet I believe that because there are soooo many liberals in society and government today, some *very* potential wheels of progress get lost and eliminated by the legislating of minutia, rather than implementing new sources of energy (in order to expand and privatize a free market economy). They DUMB DOWN the awareness of revolutionary technology by creating STRONG DELUSION, and take the weak-minded along with them. They are like ships without a compass, foaming at their own shame. I am not part of their 'team'. Victims of the liberal PTO establishment are unwittingly drawn in Disneylike fashion to accomodate what is seen as their PTO-glorifying lifestyle rather than one of true modernization. I'd give them an overall 'D' for not currently meeting or surpassing technological expectation. The best R&D must now work in the black.

Nevertheless, the 'magnetic injector' I am designing consists of LHe-4 superconducting circuit. The specifications for the axial coil have already been calculated. There needs to be a correlation between the laboratory version and the working model so that coil life expectancy can be resolved. The specific impulse is 'several minutes'. There are actually two coils involved – an exciter coil, and axial field coil. Pellets are delivered to an induction tube edge-to-edge, with the bulk of fuel spaced at one pellet diameter.

Since the operation of the tank collector is unable to keep up w/ the rate at which the feed lines are emptied, multiple feed lines are grouped together behind a tacking plate, which consists of a rotating metal plate with peripheral holes accessed in step, much like a gatling gun. One hundred individual lines will require less mechanical interruption than say, 150 lines. Each line would then be 37.5 feet in length. Fifty lines @ 75 ft. per line is also possible. Each of the charging capacitors also have to be designed. I've chosen Kezite K270 as the dielectric. There are a total of 600 – 360 coil charging units for the injector.

The length of a single charging unit is $(360)(.01313\text{m})=4.7268\text{ m}$. Grouping numbers of charging units into a single fuel cell would require the length of the fuel cell to be a multiple of 4.7268 m. I have chosen a five second fuel cell, so that # fuel cells = $600\text{ second total impulse} / 5\text{ seconds per cell} = 120\text{ cells per}$

Thirty Years From Now

thruster. The aforementioned clean fission ($\text{Li}^6\text{D}+\text{B}\text{Li}$) for each individual pellet delivers the density radius product of the imploded pellet raised beyond a few hundred, with a pellet density greater than 100,000 times the liquid density. X-rays are trapped with laser energy outputs of 10^{**4} joules, at 50% efficiency. As the pellet becomes imploded tenfold in radius (1,000 times in volume), the confinement time is also reduced tenfold, and the burn time is reduced by a factor of 1,000. The burn efficiency is therefore increased by a factor of 100 to 10%, yielding 30 times the laser input energy. About 50% of the initial fireball explosion is converted into thrust. This means that the actual working thrust amounts to about 15 times the laser input energy. The pellets themselves are stratified with Boron 11, so that the reactants are all non-radioactive.

The ignition lasers consist of phenolic resin foundations that provide initial damping for the lense, mirror housings, pulse power, and amplifiers, while the instrument racks provide damping for the laser ignition pulse, preamp, optical switches, alignment, frequency converter, controllers, triggers, and charging supplies. High energy density, self-healing, metallized dielectric capacitors are used in the pulse power system. RG-217 50 ohm high voltage coaxial cables in 25 to 70 meter lengths are used to deliver the capacitor energy from the bank to junction blocks near the flashlamp amplifiers.

Pulse power is supplied by the (5) 40KW reactors (reactor.gif) and their Heat Shields, with the associated bus system to the charging capacitors (a step down transformer supplies 480V/208V RMS CW to the 0-22KV DC High Power Supply for a continuous 60 second charge to the energy storage capacitors). Coaxial cables transfer the capacitor energy to the flash lamps. A schematic representation of the laser ignition system capacitor bank power supply is shown in laser.gif. 1% of the capacitor is charged 600msec prior to full charging the flash lamps.

(reactor.gif) available on request

(laser.gif) available on request

Equipment racks containing the controllers, triggers, and charging supplies are mounted on the LARS (Laser Rack System). The pulse shaper produces spatially and temporally shaped pulses for the main laser. The shaper uses a narrow-band oscillator, electro-optic modulators (temporal and bandwidth shaping) and a preamplifier. The pulse generator utilizes diode-pumped oscillators, integrated optical-waveguide modulators, and a high-gain multipass preamplifier. The diode output is concentrated to produce $11\text{kw}/\text{cm}^{**2}$ to pump the Ti:sapphire laser crystal (in ring configuration) into spatial beam shaping prior to amplification.

Thrity Years From Now

The reason for beam shaping is to compensate for spatial gain variations in the main laser amplifier. The filters consist of simple spatial neutral density type. The filters used are similar to the ones used at LLNL's NIF project "using variable speed computer controlled e-beam deposition of Cr on BK-7 glass substrate".

The beam shaping is a three step process: A birefringent beam shaper and polarizer are used to flatten the beam. Next, a parabolic transmission filter with serrated aperature is used to square-shape the beam. Finally, a 5X magnifying spatial filter is used to enlarge the square shaped beam.

Adaptive optics are required for focusing the beam to within tolerances because of beam divergence. Irregularity in optical surfaces, diode pump beam steering, thermal effects in the amplifier, and turbulence affect beam focus. This is in addition to g-jitter. (transient, oscillatory accelerations). A system incorporated into the space station uses the ARIS (Active Rack Isolation System) for instrument racks which is incorporated into the laser foundations using LARS (Laser Rack System). The laser racks are calibrated for precise alignment with the ignition lasers (96 in all).

Since turbulence induced in amps (because of thermal convection currents) can only be marginally corrected, convection currents can be dealt with by choosing a different actuator density, adding gas cooling sensors and/or increasing the sensitivity of the system interface using *CDDI. The actuators are bonded to the backside of each deformable mirror within the **deformable mirror bank. The reason for using a deformable mirror bank is to increase the response time for controller wavefront analysis and preselection of the desired wavefront for injection into the main laser. Remember, the maximum repetition rate for each thruster is ~2400 shots/min with a maximum 4 minute burn at 20% explosion fraction range. The deformable mirror bank ring consists of "banks" of three mirrors each, arranged to reflect the input beam in a series of triangular paths. The input beam is assumed to be collimated, and each ring is scanned linearly by translating each deformable mirror within each "bank". With one hundred "rings" per laser, each set of timed "rings" would be capable of delivering the desired wavefront at 24 shots/min for four minutes into the main laser.

* CDDI = Computerized Design Digital Interface, see:

cddi1.gif available on request

cddi2.gif available on request

cddi3.gif available on request

Thrity Years From Now

cddi4.gif available on request

cddi5.gif available on request

cddi6.gif available on request

** If only the input mirror for each ring is partially reflective, while the other two mirrors in each ring are total reflectors, then there is only a reflected output beam for each ring. To obtain a transmission type spectrum, at least one of the other mirrors for each ring must be made partially transmissive. While each ring must have at least three mirrors (with one mirror a translating deformable type), the calculated results are not changed by adding additional totally reflecting mirrors with the same total optical path length.

.