

Fuel for combustion engines and gas turbines, with additional Nukleair Merging Component.

Extract.

A Method and its derivatives Process liners to form stable 'isotopes to be added to hydrocarbon fuels, which are used in internal combustion engines, wherein some of said ° isotope "atoms / ions merge with some protons (H⁺ ions), which instantaneously released when the explosive breakup of the said hydro-carbons, at the time of ignition, at the time of which, extreme pressure and high temperature performance. the mass defects in the fusion events produce additional power, which is added to the energy that is released from the conventional combustion-divider (oxidation) process, so that with substantially less consumption of hydrocarbon fuels, the same amount of energy per unit of time is generated.

Summary.

A Method and its derivatives Process linings, have been discovered to form stable 'isotopes ° will be added to hydrocarbon fuels, which are used in internal combustion engines, wherein a part of "isotopes" referred to merge with a portion of the protons (H⁺ ions), which instantaneously released from the "explosive disintegration of hydrocarbons referred to at the time of ignition, at the time of which is, extreme pressure and temperature occur.

Because acting "mass defect" to that fusion reactions is substantially more energy added to the energy which is released due to the conventional combustion (oxidation) process, so with substantially less consumption of hydrocarbon fuels, the same amount of energy is generated.

Background.

The importance of this Invention is rooted in the fact that last consumption of fuel / hydrocarbon compounds from fossil origin in combustion engines and gas turbines, sectors as well as (in some countries or regions) also consumption in the heating sector, the production of fuels mentioned begins to beat. Named fact is caused by. the growing world population, which also enjoy increased prosperity in many countries, including with autmobielen and traffic. The price development of these fuels has been strongly increasing and it is expected that this will continue until forced thereby less consumption, which in many areas, a decline of prosperity achieved will mean.

Encourage problematical circumstances latter and a strong pressure for the development of alternative energy sources, and this happens in many areas of science and technology.

The introduction of alternative (other than arising from petroleum) fuels suitable for internal as well as external (Stirling) combustion processes by which mechanical energy is obtained, in time, far back and there was even before the introduction of oil derivatives got underway .

Some of them, in "generally liquid, fuels which in the first instance be provided by means of oxidation gas-or vapor-shaped products, which are due to free-coming reaction heat, expand greatly, let intimate mixing or also called macro-molecular formation increases with specific stable isotope wherein said isotopes merge with components, which are released during the disintegration of molecules of said liquid fuel at the time of ignition and starting combustion with oxygen.

Said inflammation may possibly by means a spark is induced, in the case of internal combustion engines with carburettors or injection, or can be self-ignition, as in the case of Diesel engines, or it may be continuous, after a first start-up, such as when used in gas turbines. Said fusion reactions can, as a percentage the greater part of the total by two processes (oxidation and fusion) supplying heat generated by sufficient addition of the fusion inducing component, which makes it possible to reduce the volume of the conventional liquid fuel in the mixture

description

(a) Background

The importance of this invention is rooted in the fact that:

(1) that the consumption of petroleum products in the consumption sector, combustion engines and heating in some countries / regions, this year (2005) the production thereof, about beginning to surpass, which poses a threat to the sustainability of the economies and prosperity in many countries.

(2) that applications of the technology described in this invention, little or no changes require about engines and their adherent systems, such as fuel injection, carburetor, fuel tank, pump and piping.

(3), that some isotopes, which may be attached to certain fuels in internal combustion engine processes, is relatively inexpensive to obtain. Added

The mentioned under (2) and (3) makes the application of this technology has a direct economic benefit, even when fuel price levels as these occur during the year 2005.

Theory

Nuclear Fusion and the subject was by Classic Physica very incomplete and incorrectly treated. Major mistakes were made in the 1930-ies regarding the structure of atomic nuclei, en the assumption of the existence of the "strong force" and the "weak interaction". These assumptions were dogmas and as such are still taught, which is incorrect.

These assumptions were realized as a result of lack of understanding and passing on the Primary ("Aether") Physica. Classic Physica must have an explanation for the non-disintegration of nuclei in which the protons have the same positive charge, so the trick was done and assumptions mentioned were created.

With regard to the generation of energy is up to now practically only looked at the copy of the processes such as would take place in the sun. This location (See work of John Bahcall in the 1960's when CalTech.USA) The net result of these processes represents the fusion of hydrogen (H_1^1) to helium (He_2^4). A very high temperature / pressure combination is necessary to accomplishment of this merger.

The design of equipment with which the said merger can take place possibly be extremely costly. Billions have been spent without any reliability with an economic feasibility has been demonstrated. Thermo-nuclear fusion is the hobbyhorse of the Classical physicists and because those who decide on the financing on this note, insufficient scientific knowledge and because the Classic physicists wrongly, and with the support of the established energy supply interests succeeded in the first discovery of z.g.n. 'cold fusion' pressing the head there is no alternative nuclear - fusion processes on the table came to decision makers.

Numerous fusion reactions are to be known, however, may no attention was paid to certain of, to bring this matter. Practice With electric effects, such as high-voltage discharges many fusion reactions already, place can not be found at very high temperatures, several thousand degrees. This invention relates to nuclear fusion reactions in which a temperature / pressure region are located between that of cold fusion and that of the thermo-nuclear fusion such as in the conversion of H_1^1 to He_2^4 ; Where for example 20 million degrees may be necessary.

We consider the prevention of any familiar elements like that are also included in the Periodic Table (Mendeleev) in our Universe, there is a graphical representation, which is roughly a curve with decreasing values exhibits from hydrogen to the transuranic elements, being the exception, that the elements Li, Be and B occur very much less than one would expect, for example at for Be even by a factor of 109.

The graph in question is attached hereto as Fig. 1. The Classical Astronomy pays little attention to this important observation and has a lousy interpretation above.

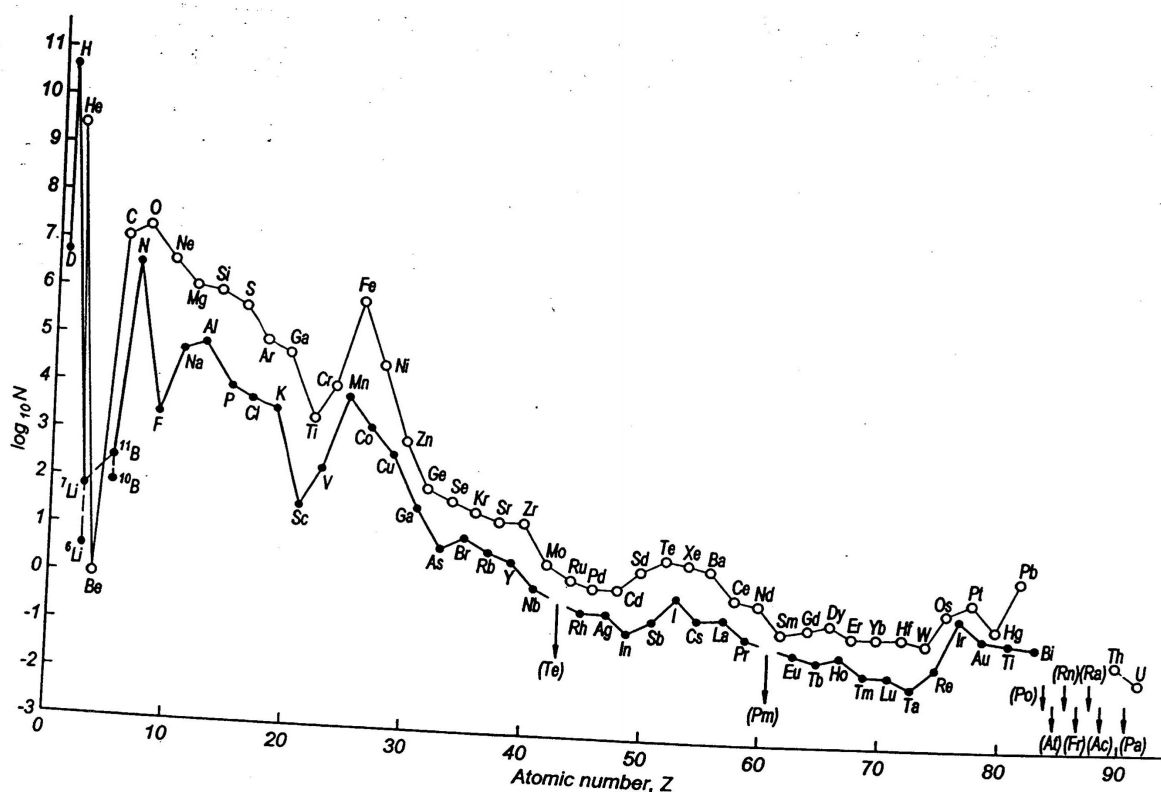


Fig. 1

Inventor hereto has been able to observe that the list pretty easy to merge with several other elements, such as various laboratory tests Mg and Al. Also fairly easy fusion reactions possible with: H_1^1 , H_1^2 and He_2^3 All laboratory tests, as in recent years were undertaken by inventor, were done with hydrogen in the plasma phase and at the same time with high-voltage discharges of a certain time characteristic curve by the plasma, which then vortex formation takes place.

Following are some fusion reactions which may be using just mentioned Procedure:

- (1) $Li_3^7 + H_1^1 \rightarrow 2He_2^4$, (2) $Li_3^7 + He_2^3 \rightarrow B_5^{10}$, (3) $Be_4^9 + H_1^1 \rightarrow B_5^{10}$,
- (4) $B_5^{11} + H_1^1 \rightarrow 3He_2^4$, (5) $B_5^{11} + H_1^1 \rightarrow C_6^{12}$, (6) $e_1^0 + Mg_{12}^{24} + 2Be_4^9 \rightarrow K_{19}^{40} + 2H_1^1$,
- (7) $e_1^0 + Al_{13}^{27} + Be_4^9 \rightarrow S_{16}^{32} + He_2^4$.

All reactions mentioned here have a positive mass defect and thus provide photon energy, from 200 - 1200 nm wavelengths.

This invention is limited to the application of reactions (1) and (4) which can take place in conjunction with certain conventional combustion processes, such as those common occurrence in internal combustion engines.

Comment (1): $Li_3^7 + H_1^1 \rightarrow Li_3^7 + H_1^1$. Lithium is stable found in nature as follows: 92.44% Li_3^7 and 7.56% Li_3^6 also with very little, unstable, the Lithiums 5, 8 and 9.

Atomic weight (in nature): 6,940 g / gr.mol.; atomic weight of Li_3^7 : 7,016 g / gr.mol. and Li_3^6 : 6,015 g / gr.mol. The mass defect shows itself figure out if: $MD = 7.01600 \times 4.00260 = -2 + 1,00797 \times 8.02397$ to $8.00520 = 0.01877$ g / gr.mol..

The energy equivalent is ($E = mc^2$), $E = 1.877 \times 10^{-5} \times 9 \times 10^{16} = 16,89 \times 10 \times 10^{-11} \times 10^{-3} \approx 16,9 \times 10^8$ / grave. ; a large amount of energy that is released during the conversion of about 7 grams of lithium and 1 gram in about 8 ounces Hydrogen Helium.

If we compare this quantity of energy with the amount of energy that is released as a result of the combustion of gasoline, of which the calorific value can be between 900 and 1200 Kcal / mole. Roughly made.

Ter voorbeeld: neem Nonaan voor benzine, C_9H_{20} mole weight approx: 128 gr./gr.mol. Calorific value of nonane: about 1,370 Kcal / mole.

7 gr. Nonane has a calorific value: $\approx 75Kcal$ 315kJ, so the fusion energy per gram. Li_3^7 with H_1^1 is a factor: $16,9 \times 10^8 / 315 = 5.36 \times 10^6$ larger than the calorific value of nonane. Conclusion: Addition of a very small amount of Li_3^7 , E.g. 1 per thousand, e.g., wherein only 1% of the lithium nuclei

would merge with flying protons, it would then only 50 x produce the energy of the combustion of conventional fuels, to which it is added.

Reaction (4): $B_{11} + H_1 \rightarrow 3He_4$. The stable macromolecular Boriums which are found in nature: B_{10} , approximately 19.9% and B_{11} , approximately 80.1%. The Boriums: 8, 9, 12 and 13 are unstable. Atomic Weight B_{10} : 10,0129 gr / gr.mol; B_{11} atomic weight 11,0093 gr / gr.mol.

Boron is "electro phil. B_{10} merges easy to B_{11} ", Taking a proton and electron winning (the neutron is a proton and an electron held together by an anti-neutrino, see the work of R. Hofstadter and L. Pauling and P. Pauling in "Chemistry").

Also, the above reaction (4) takes place quite easily with vortex-type fusion with and in Hydrogen plasma by means of pulsed electron discharge between a cathode and an anode. Calculation of the mass defect that occurs at the completion of reaction (4):

$M-D = 11,00930 + 1,00930 - 3 \times 4,00260 = 0.00947 \text{ gr / gr.at.}$. The energy equivalent is: ($E = mc^2$), $E = 0,947 \times 10^{-5} \times 9 \times 10^{16} \times 10^{-3} \text{ kJ / gr.at} = 8,52 \times 10^8 \text{ kJ / gr.at}$;

a large amount of energy released by fusion of 11 g. Boron with 1 gr. Is hydrogen. Comparing reaction (1) reaction (4), we see that reaction (4) produces about half Attn reaction (1).

If we compare the energy output of these fusion reaction with the energy that is released during the combustion of gasoline, the same example using as above, with gasoline nonane is taken, we find an energy yield factor equal amounts between the boron-hydrogen fusion and the combustion of nonane worth $8,52 \times 10^8 / 315 = 2,70 \times 10^6$.

Conclusion: By means of the addition of small amounts of B_{11} of conventional fuel (petrol) in which a portion of the boron atoms, then merge with the protons, that fly around in the combustion chamber at the point of maximum compression and ignition can be a very much larger energy yield can be obtained.

This implies that much less fuel consumption with an equivalent performance can be expected. The same is true, and even more for the addition of small amounts of Li; fusion with reaction (1), as this was described in the foregoing.

Description of process-liners.

Addition of lithium, as well as of Boron, in a conventional fuel, which is used, such as petrol or diesel, without the parts that are to be changed or added to the engine, in internal combustion engines should preferably be in the liquid form.

It has been found that higher compression ratios give much better results for the number of atomic fusion events per unit of time. Compression ratios below 9.5 / 1 are undesirable and allow fusion to sporadic; from 11/1 and later, clear results obtained. The compression ratios of diesel engines, eg 22/1 to give good fusion results, however, a ignition promoter (annealing) is desirable.

Preference is also given to:

Have (1) organic liquids which, or lithium, boron or macromolecular bound to it.

(2) liquids, as under (1), which also have good mengbaarheids have properties with the conventional fuel component.

However, this is not absolutely necessary; the added liquid, which the lithium or boron bound macromolecular brings, can be provided along with the conventional fuel input. for the fuel-injection may be directly The feed in this case takes place via pipes from a 2-tank, in which the liquid to be added is. This tank may be smaller than the fuel tank.

Organic liquids:

a Lithium: It is possible to bind to structures of higher alcohol Lithium directly: pentanol and higher. Binding to lower alcohols as well as Isopropyl lithium is too dangerous due to ease inflammation. (The acquisition of these compounds is via chlorination and then substitution of the chlorine atom with lithium).

Lithium hydroxide (LiOH), and mixes readily with alcohols in these harmless. Inventor has positive experience with testing with lithium grease (Lithium-stearate) is dissolved in Ethanol.

A 2, the tank is desired, i.v.m. possibility of partial separation; the stearate can indicate the fuel filter in the feed line will clog.

b. Boron: Borax ($Na_2B_4O_7 \cdot 5H_2O$), is miscible with light alcohols; Boric acid (H_3BO_3) is soluble in

alcohols. These solutions are preferably fed in a 2-tank just before the fuel injection.

The fusion reaction $B^{11} + H^1 \rightarrow 3He^4$ is easy to bring about. In inventor's laboratory, this reaction is realized in a reactor with hydrogen plasma.

Temperatures of 600 ° C were measured on the borosilicate glass reactor wall and Helium has been demonstrated. Stirling engines and conventional thermodynamic cycles (Carnot) can be driven when such high temperatures are present. Latter process is also emphasized become articles (progressive researchers), which were recorded in progressive scientific journals several times (eg in Infinite Energy Magazine, Concord, NH, USA).

If macromolecular bound Li^7 or B^{11} be employed, or in light alcohols either directly or indirectly (dissolved), it is possible, after engine warm-operative normal turning, that dilution of light alcohols mentioned is permissible with water, which is interesting because of the good thermo-dynamical properties of water.

More energy can thereby be obtained free of charge. If water would be supplied to simultaneously update and percentage increase in the added component to or Li^7 or B^{11} has found one place. Can be. Installed adding water if necessary would be a three-tank

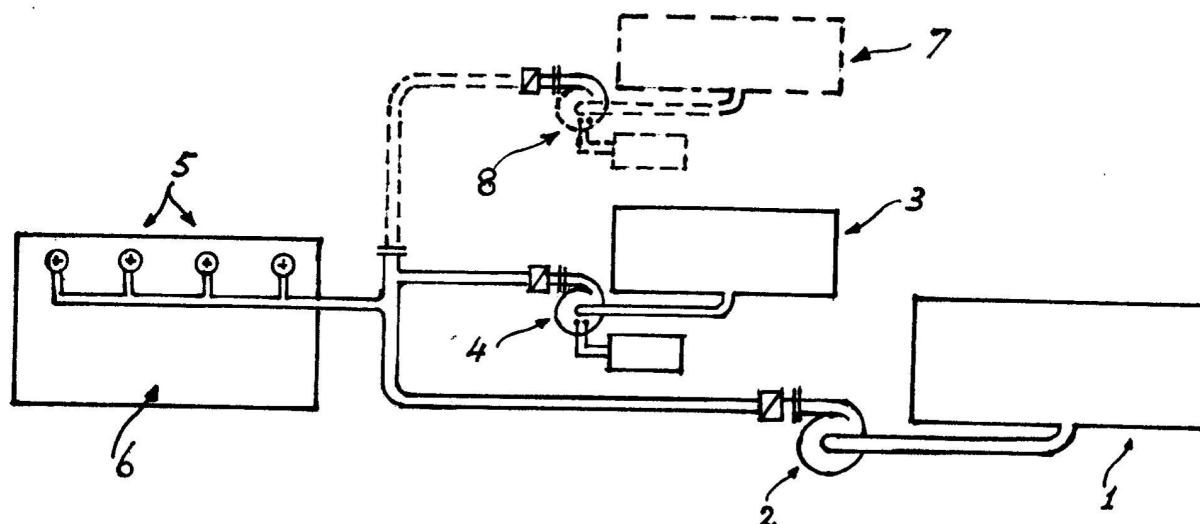
It is not excluded that some inorganic liquids, or what Li^7 or B^{11} or would have bound in itself could be added to the conventional combustion processes that would occur without damage.

Engines Tests with the addition of Li^7 organically bound lithium stearate and dissolved in ethanol to drive on over 1000 miles have no appreciable disadvantages caused to the respective motor.

Figure description.

The graph in Figure 1 shows the relative scarcity in our universe of elements: Li, Be and B, which emphasizes the likelihood of easy conversions fusion of these elements. Figure 2 shows a schematic representation of the more elaborate "fuel" supply system, with a 2-in the tank of the nuclear merging component (bound to structures), and dissolved in a liquid.

A 3, the tank is provided for the possibility of the addition of water. In FIG. 2, (1) the fuel tank, (2) the normal fuel pump, (3) the 2-tank for "isotope" fluid, (4) dosing pump for "isotope" with continuously adjustable fluid flow, (5) to the engine injectors, (6) internal combustion engine, (7) 3-, any tank for water, (8) in connection with metering pump (7).



Conclusions.

1 A method and derived Process -. Linings, which, directly or 5 indirectly easy proton merging "isotope" is added to combustion processes for hydrocarbons.

2. A method and process-derived liners, as in (1), wherein said combustion ash tests for hydrocarbons takes place in internal combustion engines or gas turbines.

3. Method and a process-derived liners, as in (1) and (2), wherein said merging ° isotope "is bound. Organic, or inorganic
4. A method and process-derived liners, as in (1), (2) and (3), wherein the merging linked "° isotope as a liquid, or dissolved in a liquid, is added.
5. Method and a process-derived liners, as in (1) T / m (4), wherein the "isotope"-containing liquid is added to the gasoline in the gasoline tank.
6. One method and derived Procedure, as in (1) T / m (4), wherein the "isotope"-containing liquid is administered from a separate 2-the tank with the aid of an additional 2-fluid (dosing) pump, the flow rate of which is adjustable.
- 7 a method. And derived Procedure, as in (1) T / m (4) and (6), wherein from a separate 3-the tank water can be added with the aid of a pump (dosing) of which the flow rate is adjustable.
8. One method, as in (1) t / m (6), wherein the derived process is based on the lithium element, with the active, in participating in the process, component Li_3^7
9. One method, as in (1) t / m (6), wherein the derivative thereof is participating process, B_5^{11} component based on the boron element, with the active in the process,
10. One method and process, as in (8), wherein lithium is bonded directly to alcohol higher than propanol.
11. One method and process, as in (8) and (10), wherein the higher alcohol to which lithium is bonded (for example, lithium-stearate) is dissolved in a light alcohol (eg methanol, ethanol, iso-propyl alc.)
12. One method and process, as in (8) and (10), said. Lithium in the mol.vorm of $Li(OH)$ is mixed / dissolved in a light alcohol or ketone.
13. One method and process, as in (9), wherein Boron, as "Borax", in the form mole ($Na_2B_4O_7 \cdot 5H_2O$) will be mixed / dissolved in a light alcohol or ketone.
14. A method and process, as in (9), Boron, as weak "boric acid" in the form moles (H_3BO_3) is combined / dissolved in an alcohol.
15. One method and procedures as in (10) T / m (14), wherein the flow rate of the liquid which is added, continuously adjustable, and optionally, with the help of combustion information, (which is electrically is obtained), "sent "is.
16. A method and procedures as in (10) T / m (15), wherein water can be added to the total fuel input.
17. A method and processes, as in (10) T / m (16), wherein the flow rate of any water supply is continuously adjustable and, if appropriate, the words "controlled