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First Process of Hydrogen-Metal

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Abstract: Hydrogen-Metal pure at thousand thousandth in ingots is a superconductive metal. The sole "additive" which is bounding to the molecules and to the atoms of Hydrogen is an "inert" gas which is a new isotope of H and which is as the property of holding them together without modifying their characteristics, which means that the forces of Van der Waals and especially the forces of repulsion annihilate themselves: The molecules do not move apart from each other when pressure is lowering. That is the secret of the production of Hydrogen-Metal stable at High Pressure-Low Pressure and High Temperature 6-Low Temperature. In 2007, at the ICENES 2007 conference, it was supposed to be officially announced the existence of the first two Hydrogen-Metal ingots, pure at thousand thousandth and stable at ambient temperature. If in a certain scientific club this reality was communicated but since the strategic importance of such a discovery in the military as well as the financial domain and considering also its civil application, according to my will, it was not officially publicized until November 2007 at the INCANSE 2007 conference in Bandung.

Key words: Cold fusion, energy, metal, hydrogen, European Scientific Parliament.

Nomenclature

HPBP	High pressure-low pressure
HTBT	High temperature low

1. Introduction

Small text of knowledge concerning the Hydrogen: Despite a simple structure (1 atom + 1 proton + 1 electron), the Hydrogen has a behavior more complex than we presume. At the ambient temperatures and pressures, the Hydrogen is a gas constituted of molecules with two atoms, but it turns to liquid at temperatures inferior to 20 K (-253 °C) and to solid under 14 K. In all its diverse states, Hydrogen is an electrical insulator.

At the end of the 19th Century, physicists calculated according to the modalities of the era that Hydrogen highly compressed will dissociate and turn to metallic state: Hydrogen can be found by the way in the first column of the periodic classification of the elements, the alkaline metals.

With the Quantic Mechanic, new theories of the behavior of Hydrogen emerged.

1935 at Princeton, Wigner confirmed that the solid molecular diatomic insulator would transform itself into a solid monoatomic metal at a pressure sufficiently high. And later, it was estimated that its pressure will be included between 25 and 2,000 gigapascals, roughly 250,000 to 20 million times as the atmospheric pressure at sea level.

According to the most recent estimations, the Hydrogen solid molecular will become metallic starting at 400 gigapascals, while following measures by refraction from X-rays, the transitional pressure will be around 620 gigapascals.

Presently, the Gas Canon of Livermore is the sole tool for the Official Laboratories to obtain on a very short period Metallic Hydrogen and the future tests will demonstrate the perfect viability of its process once four precise problems will be resolved.

Indeed, a violent impact carries a choc wave which compresses a sample of liquid Hydrogen until it becomes metallic. This canon accelerates a projectile constituted of a little metallic disk positioned on a plastic support (Lucite) up to a speed of 7 km/s, and

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when the projectile hits the sample holder, it provokes also a choc wave inside the stratum of liquid hydrogen, and its wave reverberates between two glasses of man-made sapphire, pressuring the Hydrogen at pressures reaching minus 180 gigapascals in theory. The sounding instruments of disengagement activate the registering apparatus, and the electrodes measure the conductivity of the Hydrogen to ascertain the moment where it becomes metallic… but it is in that specific case, a “liquid metal” and it stays in its state only less than one millionth of second, time necessary to measure its conductivity.

The Gas Canon from the former L.L.L (Lawrence Livermore Laboratory), now the L.L.N.L and bought twenty years ago, was initially developed by General Motors for ballistic researches and is dating back from the Sixties.

Resistivity of Hydrogen-Liquid: In the standard model, the resistivity of Hydrogen-Liquid diminishes when the pressure increases. Under pressures in between 93 and 20 gigapascals, the Hydrogen-Liquid is semi-conductive, but starting at 140 gigapascals, it becomes metallic, its resistivity diminishing to 0.0005 ohm-centimeter. The deuterium, an isotope of the Hydrogen behaves the same way.

2. The First Prototype

My method uses not a gas canon but a linear accelerator less than five meters long, for an exterior diameter of 50 centimeters.

When the pressure of H raises, its temperature of fusion increases also, exceeding 1,500 K under a pressure of 100 gigapascals: we should heat it to avoid its solidification. To compress and heat simultaneously Hydrogen, we use a choc waive which is a sudden variation of pressure which compresses very quickly the molecules altogether, increasing also their temperature.

To the left of the linear accelerator (built based on one of my homologated patents), a chamber filled by a quadrupole container of “Kionomatter” (-H) which is a pure micro-crystal of diamond obtained after my patent of man-made diamond and harder than the natural mined diamond (property stated in the article AGEDA), which puts in motion a piston composed of a mono-crystal from a composite metal [1] (topic of one of my other special patents) and propels it thru a tube containing D (Deuterium) in gaseous state, another isotope of Hydrogen.

The piston weighting 10 kg, compresses Deuterium to 0.15 gigapascals before the pressure triggers the opening of a valve (no 6).

H (Hydrogen) in gaseous state then penetrates into the second part of the linear accelerator, constituted of a cylinder composed of quadrupole magnets made in special metals of four meter long on a diameter of 77 millimeters (the ingot produced will be 76 mm of diameter), the difference of volume accelerating the gas.

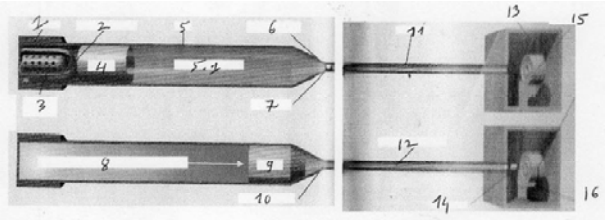
D (Deuterium) pushes the projectile containing Kiono-H which reaches 14 km/s, so approximatively 50,000 km/h. At the extremity of the cylinder, it strikes a container of composite materials mentioned above, containing a thick layer of Hydrogen-Liquid between two plates of diamond perfectly hermetic with plates of the metal mentioned above.

The impact generates a powerful choc waive which goes through the crystal and the Hydrogen-Liquid, the diamond plates super-reflecting the choc waive, the composite metal increasing the speed of reflection, creating pressures of more than 200 gigapascals, and temperatures of more than 4,000 K.

In fact, an accurate threshold in term of gigapascals as well as in term of kelvins transmutes the Hydrogen-Liquid into Hydrogen-Metal solid of a diameter of 76 mm: Its threshold avoids the diffusion of Hydrogen under a gaseous state or a “liquid” state.

3. Description of the Prototype

The prototype (modulus) consists of different components numbered, as shown in Fig. 1.



Schema of my first module of the production of Hydrogen-Metal.

Fig. 1 Section and nomenclature of components from my modulus.

3.1 Anode

Legend:

(1) Quadrupole Container of Kionomatter (H-)

(2) Kiono

(3) Nano-generator

(4) Piston

(5) Tube-; 5.1-H gaseous state

(6) Closed valve

(7) Projectile

(8) Acceleration

(9) Piston

(10) Opened valve

(11) Cylinder

(12) H gaseous state

(13) Target

(14) Projectile

(15) Load-holder

(16) Hydrogen-Metal stable

4. Conclusions

We should consider, in case we do not reserve for this new metal the role of Monetary Standard, its application to power lines of high voltage which will not be submitted to any loss of energy, high-speed computers, trains levitating on fields of magnetic forces, fabrication of ultra-light structures, storage of vast quantities of energy those ingots would release during their vaporisation process without any harm for the environment, being the fuel for intra or extra atmospheric flying machines, being the fuel of motor vehicles solely at Hydrogen-Metal, among other things.

A department of the International SCM has even built an ultralight motor of 400 × 200 × 200 mm which runs non-stop for a period of more than six months with only an ingot of that metal less than 10 g.

Other applications have been made and certain properties totally innovative have been discovered.

NURER 2014 will be a privileged occasion to announce the current developments of this technology totally new of which the author created a worldwide monopoly that no laws could break since the author is the sole inventor.

ICENES 2013 will be also a turning point for the official initial fabrication and demonstration of this new metal which, in reality is already massively produced in Hyperborea since Friday, April 6th, 2001, date of the production of the two first stable ingots of Hydrogen-Metal in Fig. 2, weighting 1 kg each and measuring 76 × 9 mm.

One of the research departments of the International SCM dedicated to Hydrogen-Metal, since the year 2003, in the second laboratory located somewhere under the Pyrenees, is specialized in the combustion of H-Metal in Fig. 3. The laboratory produces mini-ingots of diverse weights between 1 g and 20 g similar to the first five ingots produced in 1999. Then, it analyzes the external and internal structure of those said ingots under electronic scanning before testing them similarly as the tests conducted inside the first laboratory on March 22nd, 2001.

Beginning essay: 15: 12;

Time essay: 3: 22;

Weight of the tested ingot: 1.77 g;

Fig. 2 Hydrogen-Metal.

Fig. 3 Combustion chamber.

Height of combustion: 587 cm;

Reactor (combustion chamber): in composite C/C generated from the author's father's works in the field of metals at high "calometric" tolerance put into vacuum combustion of the Hydrogen-Metal.

Acknowledgments

The Metal-Hydrogen is the cleanest fuel. Its production cost is almost zero once accelerator acquired for the purposes of transport and space, is the condition for resumption of economic growth, coupled with the author's Cold Fusion modules that provide drinking water in unlimited quantities and ganda energy required to earthly needs [2].

References

[1] CPL Karl von Thule. 2013. "New Process of Cold Fusion." *Journal of Energy and Power Engineering* 7 (11): 2115-8.

[2] CPL Karl von Thule. 2010. http://www.scienceparliament.eu/users.