

# **7th International Conference On Earth Science, Recycling & Space Technology Rome Italy 22-23 May 2019.**

Presentation of the following topics:

**Someone in the world should prohibit the incomplete inventions of science – artificial heart oxygenator of blood.**

**(twenty-first open letter to the International Court of Justice and the United Nations)**



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## Certificate of Recognition

Allied Academies and the Editors of Journal of Environmental Waste Management and Recycling & Allied Journal of Environmental Earth Sciences wish to thank

**Luigi Antonio Pezone**


Private Inventor, Italy

for his phenomenal and worthy oral presentation on

*"Someone in the world should prohibit the incomplete inventions of science"*

at the 7<sup>th</sup> International Conference on  
Earth Science, Recycling & Space Technology  
held during May 22-23, 2019 in Rome, Italy

  
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My name is Luigi Antonio Pezone. I am a retired industrial expert who has lived half the working life in industrial plant engineering and half in the environmental one. Only as a pensioner I did allow myself to be the inventor to try to correct the incomplete inventions of science. This is not a

normal presentation of an industrial or environmental innovation that a public or private company presents to a congress to acquire greater market shares or simply to update the state of the art of a sector specialized in certain technologies. It is the summary of impartial inventions of the undersigned that public and private companies, which participate in congresses, cannot share, unless they first admit that the current development model is wrong, having developed based on random and incomplete inventions, not coordinated by an impartial global scientific committee that does not yet exist. Today it is no longer possible to continue to develop and commercialize random inventions without correcting the inventions of the past and creating complete inventions that close all the cycles they open. Since my presentation is very long and at the same time, I do not speak English fluently, I will say a few things, showing above all the figures. Those interested in learning more about the subject can find this publication on the congress website and on the undersigned website (<http://www.spawhe.eu>) with the subtitle of twenty-first open letter to the International Court of Justice and to the United Nations. Obviously, the previous twenty letters written by the undersigned to these very important democratic institutions of reference for those who love the planet and sustainable development, have not yet been answered.

Long before Greta Thumberg was born, I realized that we were in bad shape from an environmental point of view. In fact, I started working in 1970 and for about seventeen years I worked on the design of the plants of a multinational company called Alfa Romeo, before it was absorbed by the current Fiat Chrysler (FCA). I was fortunate enough to participate in the installation of the entire plant in Pomigliano di Arco, in the province of Naples, dealing with the lay out of the processing, assembly and internal transport departments. The latter had to guarantee the arrival of the components to be machined and assembled in the right place and at the right

time following precise work cycles. Being also sensitive to environmental problems, I understood that even environmental problems could be solved by organizing capillary work cycles, the position of energy and purification plants, above all, transforming the sewage system into an interactive depurative transport system. To deepen my knowledge in global public facilities, in 1987 I left the automotive industry to go to work in a small company that installed sub-contracting systems for lifting water, purification, public energy. After twenty years of this work, as a pensioner, I began the third phase of my life's work, proposing the inventions of the interactive purification systems between water and air that simultaneously modified both chimneys and sewers and purifiers to create unique purification cycles, both of fumes and water. The study of these systems involved eight years of work with the filing of approximately twenty-five patents, of which one converted into a European patent and five international patents. But global public bodies have never appreciated and implemented them. However, they have grown virtually and their growth can be understood by reading the website from the old home page (<http://www.spawhe.eu/hold-home-page/>) and going upwards. In fact, assuming them to be functional, all subsequent inventions, gradually, led to the conception by interactive purification systems and interactive energies, without world science, multinationals, world authorities, the United Nations, to notice anything, although the solutions they were regularly deposited in the Italian patent offices and in some cases, european and world. Despite the worldwide organization of patents (W.I.P.O.) is part of the United Nations Organization, which organize COP summits to combat climate change, at the United Nations and in individual countries, no one has ever noticed the interactive purification systems. Not even interactive energies were noticed that I started publishing since two thousand fourteen, when I also created the website and I started to publish articles with the subtitle of open letters to the Italian, European, and above all, to the International Judges and to the United Nations. I

have also sent the articles to their e-mail addresses to these large and important global public bodies. I did this because I believe I know my work and I think that my solutions are so simple and logical, that my work would have been useless, if the scientists, the world inventors, who deal with the environment and energy, worked for a only owner, for example the United Nations. A single owner would have eliminated obsolete and uneconomic installations. I also think it is very strange that the United Nations never thought of putting together a working group, that they would study the basic energy and purification solutions, as the undersigned did alone and without economic means. I did this job because everyone criticizes global energy and purification plants but no one studies really alternative solutions to protect the investments already made in these sectors. Unfortunately you can't save both. This can only be stated by the impartial technical body that does not exist worldwide Instead there are rating agencies, which are not impartial and that do not understand anything about energy and purification plants.

For the undersigned the United Nations, which does not govern any country, should be, above all, a great body of scientific reference, to which all countries should draw for the purposes of proper planning, legislation and work organization in the general interest. In other words, the United Nations, which organized 24 global environmental summits called COP, without bringing any concrete results, would have had to demonstrate practically how to design and legislate in the general interests, without privileging any nation and no energy source, but demonstrating what comes out of the scientific application of global work as it progresses. But also opening up to inventions such as the undersigned inventors who are not tied to any center of power, which today are excluded from any form of public and private financing, without anyone wanting to discuss the solutions. If the governments or the United Nations had done this, as the industry in general, chemistry, automotive, mechanics, aeronautics, naval, agricultural,

electro-medical advanced, environmental technologies would also be advanced, becoming interactive. Doing the work that the undersigned has done, with greater scientific and economic resources, it would have been impossible not to notice the interactivity between the physical properties of water, air, the principles of Newton, Torricelli, Pascal, Henry, Venturi, the functioning of the pumps, turbines and the principles of electromagnetism, which enable self-purifying energy processes to be carried out both in fixed and mobile plants. These advances in public research would have allowed lawmakers to also impose improvements in the industrial processes mentioned above in terms of energy and the environment. But the advantages would also have been economic because the energy would cost very little in all areas of human activity.

The two topics presented in this conference have already been published on the website <http://www.Spawhe.eu>, with the subtitle of letters open to International Judges and the United Nations, respectively with letters 19 and 15, which have not received answer, like all the other seventeen letters concerning purifications and interactive energies. I don't know if there are other private inventors who develop the details of the energy and purification plants by referring to the complete closure of the general carbon and alkaline cycle. I don't even know the reasons why these cycles were neglected by the world public research institutes when they designed the current energy and purification plants. I only know that the centers of power that govern the world on these topics do not respond.

I can only write open letters to the highest institutional figures in the world by proposing my solutions, even if they do not answer. Unfortunately, we have no other institutions.

Allow me to mention the greatest scientist of all time. Which is undoubtedly, Albert Einstein, who strongly advocated a world government to avert the danger of a nuclear war. He regretted that his relativity theories had opened the mind to

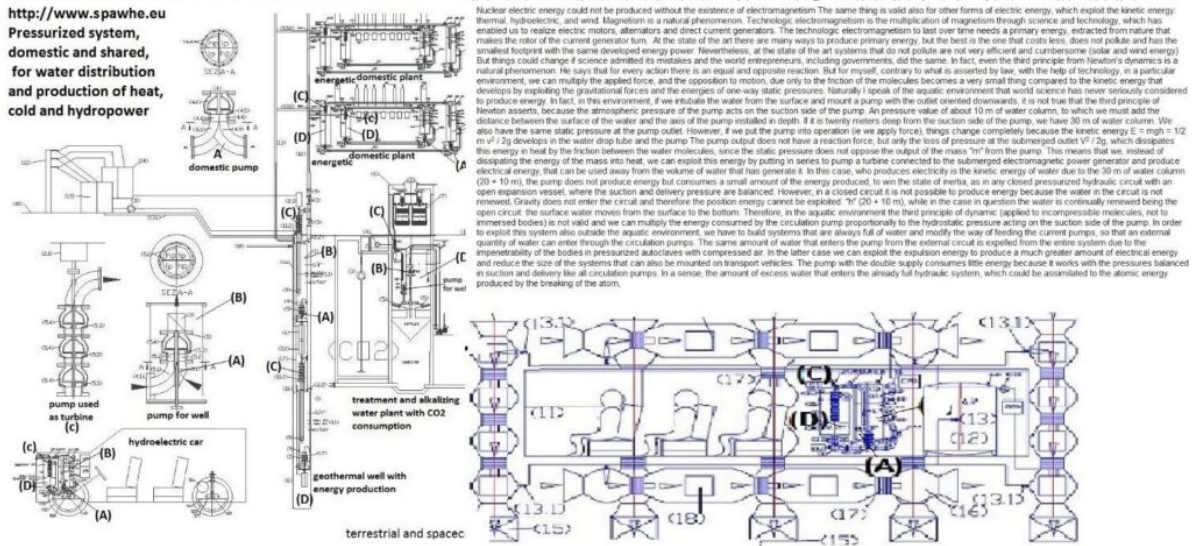
other scientists who started working on the division of the atom, to which he was clearly opposed. Einstein had also sensed practical aspects that prevent development, which today is even more evident. In fact, at a meeting that dealt with "freedom of opinion" he said the following words: "The centralization of production has led to a concentration of productive capital in the hands of a relatively small number of citizens of the country (United States). This small group exercises an oppressive dominion over the educational institutions of our youth, as well as in the large newspapers of the country. At the same time, it has enormous influence over the government. In itself this constitutes a serious threat to the intellectual freedom of the nation. But to this is added the fact that the aforementioned process of economic concentration has generated a previously unknown problem: the permanent unemployment of people able to work.

For the undersigned Einstein was right both as a scientist and on the level of social reasoning. In fact, we don't need nuclear power to replace fossil energy but only the gravity and physical effects it produces on the earth's planet. Unfortunately Einstein did not investigate these practical effects and most of the environmental and social ills we are experiencing today are due to the fact that scientists and technicians have misinterpreted the universal energy and purification concepts, focusing only on specific physical and chemical laws, biological, nuclear, mechanical. Instead, the correct search for the best terrestrial energy had to be carried out by rationally interpreting the scientific organization of the work globally. In other words, the concepts expressed by Frederick Taylor in 1911 on the scientific organization of work should not be limited only to the industrial manufacturing sector, but studied globally in all production activities, including the energy and purification sectors, in order to find always the simplest and cheapest solution from the point of view of saving resources, maximum economic yield and compatibility with the environment.



**THERE IS NO NEED TO BREAK THE ATOM TO CREATE INFINITE ENERGY, IT IS SUFFICIENT SYNERGIES BETWEEN ELECTROMAGNETISM AND DYNAMIC FLUID.**

<http://www.spawhe.eu>  
**Pressurized system,  
 domestic and shared,  
 for water distribution  
 and production of heat,  
 cold and hydropower**



Nuclear electric energy could not be produced without the existence of electromagnetism. The same thing is valid also for other forms of electric energy, which exploit the kinetic energy: thermal, hydroelectric, and wind. Magnetism is a natural phenomenon. Technologic electromagnetism is the multiplication of magnetism through science and technology, which has enabled us to realize electric motors, alternators and direct current generators. The technologic electromagnetism to last over time needs a primary energy, extracted from nature that makes the rotor of the current generator turn. At the state of the art there are many ways to produce primary energy, but the best is the one that costs less, does not pollute and has the smallest footprint with the same developed energy power. Nevertheless, at the state of the art systems that do not pollute are not very efficient and cumbersome (solar and wind energy). But things could change if science admitted its mistakes and the world entrepreneurs, including governments, did the same. In fact, even the third principle from Newton's dynamics is a natural phenomenon. He says that for every action there is an equal and opposite reaction. But for myself, contrary to what is asserted by law, with the help of technology, in a particular environment, we can multiply the applied force, and the opposition to motion, due only to the friction of the molecules becomes a very small thing compared to the kinetic energy that develops by exploiting the gravitational forces and the energies of one-way static pressures. Naturally I speak of the aquatic environment that world science has never seriously considered to produce energy. In fact, in this environment, if we imbibe the water from the surface and mount a pump with the outlet oriented downwards, it is not true that the third principle of Newton asserts, because the atmospheric pressure of the pump acts on the suction side of the pump. An pressure value of about 10 m of water column, to which we must add the distance between the surface of the water and the axis of the pump installed in depth. If it is twenty meters deep from the suction side of the pump, we have 30 m of water column. We also have the same static pressure at the pump outlet. However, if we put the pump into operation (ie we apply force), things change completely because the kinetic energy  $E = mgh = 1/2 m v^2 = 2g$  develops in the water drop tube and the pump. The pump output does not have a reaction force, but only the loss of pressure at the submerged outlet  $V^2/2g$ , which dissipates this energy in heat by the friction between the water molecules, since the static pressure does not oppose the output of the mass "m" from the pump. This means that we, instead of dissipating the energy of the mass into heat, we can exploit this energy by putting in series to pump a turbine connected to the submerged electromagnetic power generator and produce electrical energy that can be used away from the volume of water that has generated it. In this case, who produces electricity is the kinetic energy of water due to the 30 m of water column ( $20 + 10$  m), the pump does not produce energy but consumes a small amount of the energy produced, to win the static inertia, as in any closed pressurized hydraulic circuit with an open expansion vessel, where the suction and delivery pressure are balanced. However, in a closed circuit it is not possible to produce energy because the water in the circuit is not renewed. Gravity does not enter the circuit and therefore the position energy cannot be exploited "m" ( $20 + 10$  m), while in the case in question the water is continually renewed being the open circuit: the surface water moves from the surface to the bottom. Therefore, in the aquatic environment the third principle of dynamic, applied to incompressible molecules, not to immersed bodies) is not valid and we can multiply the energy consumed by the circulation pump proportionally to the hydrostatic pressure acting on the suction side of the pump. In order to exploit this system also outside the aquatic environment, we have to build systems that are always full of water and modify the way of feeding the current pumps, so that an external quantity of water can enter through the circulation pumps. The same amount of water that enters the pump from the external circuit is expelled from the entire system due to the impermeability of the bodies in pressurized autoclaves with compressed air. In the latter case we can exploit the expulsion energy to produce a much greater amount of electrical energy and reduce the size of the systems that can also be mounted on transport vehicles. The pump with the double supply consumes little energy because it works with the pressures balanced in suction and delivery like all circulation pumps. In a sense, the amount of excess water that enters the already full hydraulic system, which could be assimilated to the atomic energy produced by the breaking of the atom.

**THERE IS NO NEED TO BREAK THE ATOM TO CREATE INFINITE ENERGY, IT IS SUFFICIENT SYNERGIES BETWEEN ELECTROMAGNETISM AND DYNAMIC FLUID.**

Nuclear electric energy could not be produced without the existence of electromagnetism. The same thing is valid also for other forms of electric energy, which exploit the kinetic energy: thermal, hydroelectric, and wind. Magnetism is a natural phenomenon. Technologic electromagnetism is the multiplication of magnetism through science and technology, which has enabled us to realize electric motors, alternators and direct current generators. The technologic electromagnetism to last over time needs a primary energy, extracted from nature that makes the rotor of the current generator turn. At the state of the art there are many ways to produce primary energy, but the best is the one that costs less, does not pollute and has the smallest footprint with the same developed energy power. Nevertheless, at the state of the art systems that do not pollute are not very efficient and cumbersome (solar and wind energy). But things could change if science admitted its mistakes and the world entrepreneurs, including governments, did the same. In fact, even the third principle from Newton's dynamics is a natural phenomenon. He says that for every action there is an equal and opposite reaction. But, with the help of technology, in a particular



environment, we can multiply the applied force, and the opposition to motion, due only to the friction of the molecules becomes a very small thing compared to the kinetic energy that develops by exploiting the gravitational forces and the energies of one-way static pressures. Naturally I speak of the aquatic environment that world science has never seriously considered to twenty meters deep from the suction side of the pump, we have 30 m of water column. We also have the same static pressure at the pump outlet. However, if we put the pump into operation (ie we apply force), things change completely because the kinetic energy  $E = mgh = 1/2 m v^2 / 2g$  develops in the water drop tube and the pump. The pump output does not have a reaction force, but only the loss of pressure at the submerged outlet  $V^2 / 2g$ , which dissipates this energy in heat by the friction between the water molecules, since the static pressure does not oppose the output of the mass "m" from the pump. This means that we, instead of dissipating the energy of the mass into heat, we can exploit this energy by putting in series to pump a turbine connected to the submerged electromagnetic power generator and produce electrical energy, that can be used away from the volume of water that has generate it. In this case, who produces electricity is the kinetic energy of water due to the 30 m of water column (20 + 10 m), the pump consumes a small amount of the energy produced, to win the initial state of inertia, as in any hydraulic circuit, where the suction and delivery pressure are balanced. However, in a closed circuit it is not possible to produce energy because the water in the circuit is not renewed and therefore does not exploit the energy of position "h" (20 + 10 m), while in the case in question the water is continually renewed being the open circuit: the surface water moves from the surface to the bottom e and stops. Therefore, in the aquatic environment the third principle of dynamic (applied to incompressible molecules, not to immersed bodies) is not valid and we can multiply the energy consumed by the circulation pump in direction of gravity proportionally to

the hydrostatic pressure acting on the suction side of the pump. In other word, we can use the pumps that are invented to lift water to produce energy.

In order to exploit this system also outside the aquatic environment, we have to build systems that are always full of water and modify the way of feeding the current pumps, so that an external quantity of water can enter through the circulation pumps. The same amount of water that enters the pump from the external circuit is expelled from the entire system due to the impenetrability of the bodies, in pressurized autoclaves with compressed air. In the latter case we can exploit the expulsion energy to produce a much greater amount of electrical energy and reduce the size of the systems that can also be mounted on transport vehicles. The pump with the double supply consumes little energy because it works with the pressures balanced in suction and delivery like all circulation pumps. In a sense, the amount of excess water that enters the already full hydraulic system, which could be assimilated to the atomic energy produced by the breaking of the atom, as effectively explained by Albert Einstein in the example already mentioned in the article <http://www.spawhe.eu/the-lost-civilizations-einstein-s-thought-and-survival-energy/>: "The atom M is like a rich miser who, as long as he lives, gives no money (energy). But in his will he leaves his fortune in inheritance to his sons M 'and M ", on the condition that they allocate a small amount for social purposes (less than a thousandth of the entire patrimony of energy or mass). The children together receive a little less than their father, but the part destined for society, although relatively small, is nevertheless so important (considered as kinetic energy) that it constitutes a great threat. Threatening this threat has become the most pressing problem of our time ".

As explained above and in numerous other publications, in our case there is no need to divide the atom: it is sufficient to

create an open / closed dynamic fluid circuit, which allows multiplication of the primary energy extracted from nature, and 'electromagnetic energy without violating the principles of energy conservation and without resorting to nuclear energy and all the complications that entails environmental and economic. In fact, the system automatically expels the same amount of water that enters excess through the recycling circuit without changing neither the volume of water nor the pressure of the compressed air, producing hydroelectric energy by statically exploiting the principle of Pascal (which does not consume energy ) and the Torricelli principle (which equally does not consume energy).

These arguments do not arise only from the technical and scientific reasoning but also from the reasoning of the organization of global work. Each technical and scientific step can lead in one direction or another direction, completing all the cycles, or not completing them all. This is a technical but also a moral choice. We can also call it an economic choice. Pure science cannot hide behind the word games. He has the duty to develop all the options and only at the end choose the best solution for the good of all. In my experience, world public science has not done its duty. If he had investigated, eventually it would have arrived at my solutions and the world public legislators would have been obliged to legislate them in favor of the environment and the sustainable economy. Instead, on these topics, despite the many publications there is a silence of the grave. There are too many options deliberately overlooked by science. For many years, I have been wondering what has influenced science without ever having answers? Yet even the soldiers sometimes disobeyed orders not to produce innocent victims.

The words of Einstein, which I extracted from the book "Thoughts, ideas, opinions of Einstein" of Newton Compton Publishers, seem a prophecy because today there would be work for everyone just to correct all the world plants that pollute

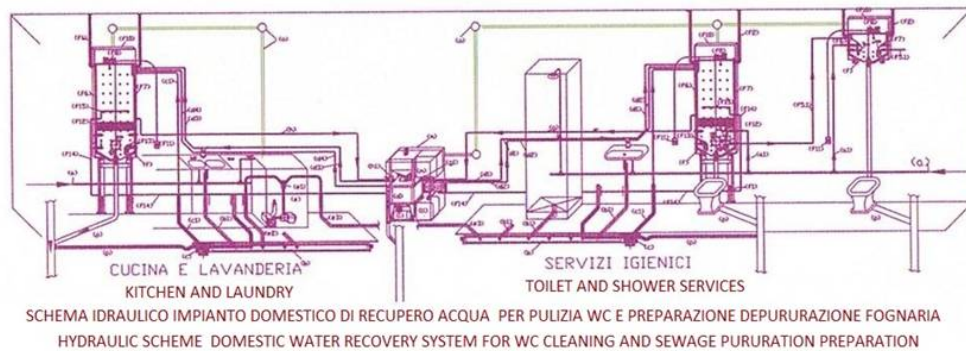
the environment with paid fuels , while we could have free interactive energies that protect the environment. They would only consume materials but to a lesser extent than current systems that use thermal energy and mechanical transmissions. But nobody brings out the little money needed for experimentation. Not even the poor who would benefit much more from it.

For the undersigned, the greatest damage is being caused by the scientific bodies and the media that keep silence waiting for the truth to come out by itself so as not to put themselves against their employers. Today we are not summing up global scientific expertise to achieve common goals. We are realizing a development without any scientific and technological coordination from the world institutional bodies. No plant made by man is truly sustainable from an environmental and economic point of view. To add up the skills by integrating them together, more complex reasoning is needed, which no one wants to do in order not to discover the Pandora's box of global scientific inefficiencies, which concern the way in which the design of world plants must be done, which must be interdisciplinary. Indeed it could have been interdisciplinary since the advent of the industrial era, if the best world brains, immediately after the knowledge of the theory of relativity, had not devoted themselves to nuclear research, probably, encouraged by the ambitious governments that were preparing to do the first and the second world war. For this reason Einstein was against the division of the atom, which led to the Hiroshima bomb and feared for the third world war. The thirst for power of some world governments has stimulated nuclear research as if it were the only source of infinite energy, neglecting to deepen the practical effects that gravity could produce on planet Earth also for energy purposes. The most obvious example of the lack of practicality of science is precisely the interactive energies, which were visible to everyone and which no one saw, including myself, until I developed the details of global

purification. In fact, my goal was not to produce energy. I just wanted to affirm that even CO<sub>2</sub> could be used in favor of the environment by producing carbonates in water. But the interactive energy could not escape the undersigned because I had entered into the details of the global and interdisciplinary purification processes of water and air, starting from the origins of the processes, before entering the sewers and letting out the fumes in the atmosphere after making them react with water and limestone. In fact, the scientific organization of global work is a mosaic that must be developed in every detail of human activity, rejecting all the solutions that waste resources and energy unnecessarily and do not properly close the chemical and biological cycles they open. Having the world's public bodies wrong, purification systems have also failed energy research. Although boilers, steam turbines, heat engines, blast furnaces, incinerators, were inventions of private industry, purification and energy supply were and are public tasks. Designing the water and smoke purification correctly, sooner or later, the knots of the carbon cycle closure, which has never been closed and the waters that are acidifying because they have never been alkalized, had to come out necessarily because the two cycles are complementary and had to be unified. In fact, CO<sub>2</sub> reacts with calcium and water to produce carbonates in water, solving both problems. But it is not possible to do this with calcium oxide or commercial hydroxide, since each kg of calcium oxide produced by heating the limestone to almost 1000 centigrade, involves the emission into the atmosphere of about 2 kg of CO<sub>2</sub>, in part due to the ratio between the molar masses, partly due to the heat to be developed by burning fuels. Therefore, in order for the process to be sustainable from an environmental point of view, the carbonates in the water must be produced by corroding cold calcareous rocks in the limestone greenhouses proposed by the undersigned since 2012, which no world public body has ever built small or large size. This solution requires large circulations of water, which involve large spaces and high

energy consumption to circulate water. But the world public bodies that have built very large thermal power stations, have not foreseen, neither the cold neutralization cycle of CO<sub>2</sub>, nor the necessary spaces, nor the amount of water needed, so they wanted to hide the CO<sub>2</sub> underground. While the undersigned who proposed complete cycles has been isolated from everyone and his patents have been dropped. In this presentation of a few minutes thirteen years of work cannot be exhibited. I can only show the figures of the plants rejected by the world public bodies, which gradually, the undersigned has improved to economize the processes, up to realize that the pumps invented to lift the water, if used to send the water down can become a great energy production tool, simply by exploiting the energy of the surface water with respect to that of the seabed and the force of gravity in plants that are always full of water. Given the low costs of this clean energy production, it is not even worth extracting fossil energy from underground. It is better to scrap everything and start from scratch by saving the technologies that can be saved to produce interactive energy, which can be produced at all hours of the day and night, even at the poles and deserts. The more we produce it, the more we oxygenate water.

Looking at the figures that I will publish below, which have been extracted from the unrealized patent applications, it can be seen that the state of the art is still advanced albeit only virtually in all sectors following the invention of the pump with the double separate supply until to the impeller. The progress involved all sectors, including land, sea and air transport, until to the artificial heart.



This plant represents the first example of “organization of environmental work” because those who thought that water and air purification could take place without widespread worldwide work are naive even if they were awarded Nobel prizes. In fact, those who receive these coveted awards, from the moral point of view, cannot remain silent on the general aspects of the organization of world work, which is also the basis of sustainable economic development. Public technicians must not be offended, but if they do not decide to establish global purification cycles, starting from small domestic plants, from changes in chimneys and sewers, pollution and global warming cannot be combated. But unemployment cannot be fought either.

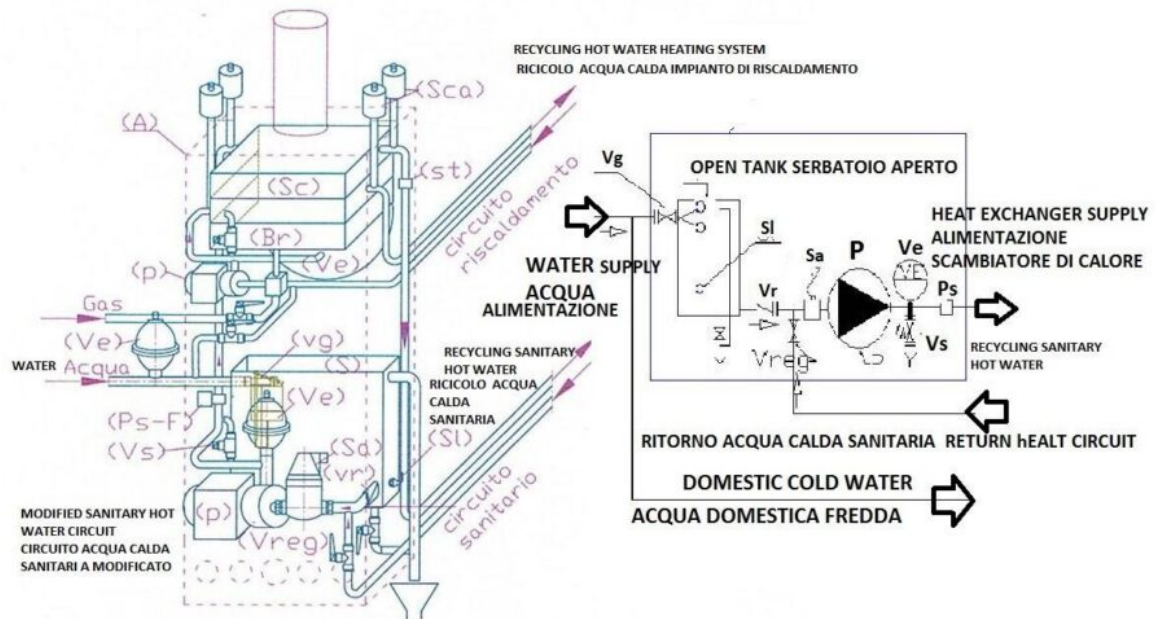
Governments without ideas, along with legislators, public scientists, economists and judges, do not understand that industrial automation produces unemployment, while in the environment and energy sectors, all installations, fixed and mobile, are incomplete from the point of view environmental. It's all to be redone. It 'better to create useful work to protect the environment than paying unnecessary unemployment benefits.

The superficiality of world governments and their advisers is impressive. They think they solve the problems of urban pollution with battery-powered cars, but they aggravate the problem of global warming even more, making transport means less efficient and uneconomical. They do not understand that to power the batteries, apart from the costs necessary for the construction, the management, the consumption of resources,



they lower the yields of the energy production and we must greatly increase the production of fossil energy, moreover with the current plants that should to be scrapped, both as incomplete fossil plants, and because, they would be widely superseded by the various versions of compressed and uncompressed interactive hydroelectric energies, with recycled water.

Another unfinished plant is the recycling of sanitary water in domestic heating boilers and domestic hot water production, where water and methane are wasted while hot water is expected to reach the consumption tap. With the circuit proposed by the undersigned in far back in 2006, both savings could be saved. Today the manufacturers do not modify the boilers spontaneously because they would unnecessarily increase the cost of the boilers because the domestic systems are designed without the tube that returns to the boiler and the plant installers do not realize the plants with the recycling of the water because there are no boilers in degree to realize the type of savings proposed by the undersigned. What is the use of global public research if they do not experiment these things to impose them to boiler manufacturers and home installers?



DOMESTIC BOILER MODIFICATION SCHEME WITH CONSUMPTION ECONOMISER BY RECYCLING WATER IN THE OPEN TANK AND WATER RETURN TUBE FROM THE HEALTH CIRCUIT.

Vreg = FLOW REGULATION VALVE Vg = FLOATING VALVE

P = ELECTRIC PUMP

Sa = AIR SEPARATOR

Vs = SAFETY VALVE

Vr = CHECK VALVE

Ve = MINI EXPANSION VESSEL

Ps = PRESSURE SWITCH

Si = LEVEL PROB

EF = FLOW SWITCH

St = TEMPERATURE PROBE

Sca = AIR DISCHARGE

SCHEMA DI MODIFICA CALDAIA DOMESTICA CON ECONOMIZZATORE DI CONSUMO PER MEZZO DEL RICICLO DELL'ACQUA NEL SERBATOIO DI ALIMENTAZIONE APERTO E TUBO DI RITORNO DELL'ACQUA DAL CIRCUITO SANITARIO.

Vreg = VALVOLA DI REGOLAZIONE PORTATA Vg = VALVOLA A GALLEGGIANTE

P = ELETTROPOMPA

Sa = SEPARATORE DI ARIA

Vs = VALVOLA DI SICUREZZA

Vr = VALVOLA DI RITEGNO

Ve = MINI VASO DI ESPANSIONE

Ps = PRESSOSTATO

SI = SONDA DI LIVELLO

F = FLUSSOSTATO

St = SONDA DI TEMPERATURA

Sca = SCARICATORE DI ARIA

This system could have worked in two ways:

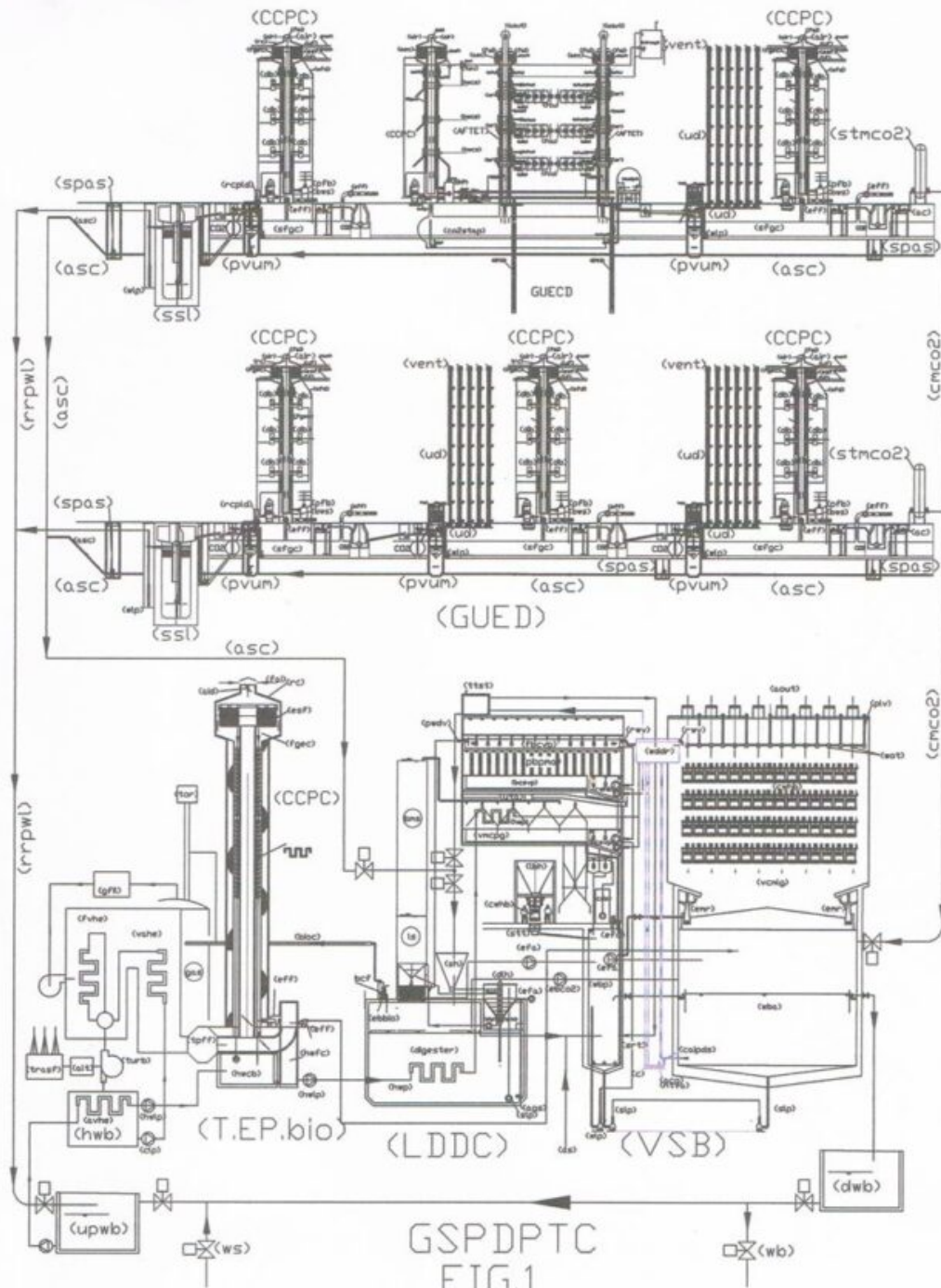
Continuously recycling hot water in the sanitary circuit. Or by starting the heating when the flow switch F or the pressure switch Ps detect the opening of a tap. The user who wants to save water and energy would have to close it again and wait 20 – 30 seconds to reopen it again and use hot water. While in the current systems it waits 20 – 30 seconds with the tap open waiting for the water to become hot. Instead, this plant has never worked either in one way or another because global public bodies have never included it in public regulations,

which use domestic boilers. If I had been a young inventor, I would probably have focused only on developing the prototypes of these two domestic systems, turning myself into an entrepreneur. Probably, I would have made more money and I would not have produced other inventions. Instead, the case wanted me to start working as a retired inventor and I had many ideas to develop. I couldn't waste time developing the patents myself, because I didn't know how many years life gave me. Not finding public and private interlocutors, I went on to develop the following ideas, which very strangely, did not even find public and private interlocutors. I think that today it is much more difficult to be an inventor than in the past because the alliances between public bodies and multinationals have created authentic centers of power that prevent the realization of new ideas also through the patent trade and the absurd rules of the legislators that deny the copyright to inventors who cannot pay the patent maintenance fees that no government intends to finance precisely because of the scientific ignorance of the ruling class, fueled even by the silence of science, which tries to hide its mistakes. If the lies have short legs, sooner or later even the silences will be discovered. Those who lose out the credibility are all public institutions worldwide. None excluded. But even private institutions, such as Rating agencies, that give efficiency scores to individual countries, have failed to understand that the basis of the entire world economy is wrong.

Today, even this plant, which has never been built, has been exceeded, at least by the undersigned on <http://www.spawhe.eu>, because it does not need either methane or boilers to produce domestic hot water, heating and cooling, but no thanks to the global public research and legislators who are doing everything to delay progress and sustainable economy, to save what can be saved of this economy based on incomplete inventions . These incomplete inventions could only be overcome by going into the details of all the world plants, improving the purification processes and saving resources

through the scientific organization of global work. Sooner or later even those who are not great scientists like Albert Einstein would have noticed the usefulness of the principles of Henry, Pascal, Torricelli and that the turbines and autoclaves had to be used differently to arrive at the invention of hydroelectric energy compressed. In human homes, including those at the poles and in the deserts, heating and cooling systems and the distribution of consumer water will produce much more energy than they consume. In the future, governments will have to pay the consumption bill to users, because fossil thermal energy will be completely eliminated and public lighting will not be provided by current thermal power stations but by excess energy produced by private plants, without any type of fuel.

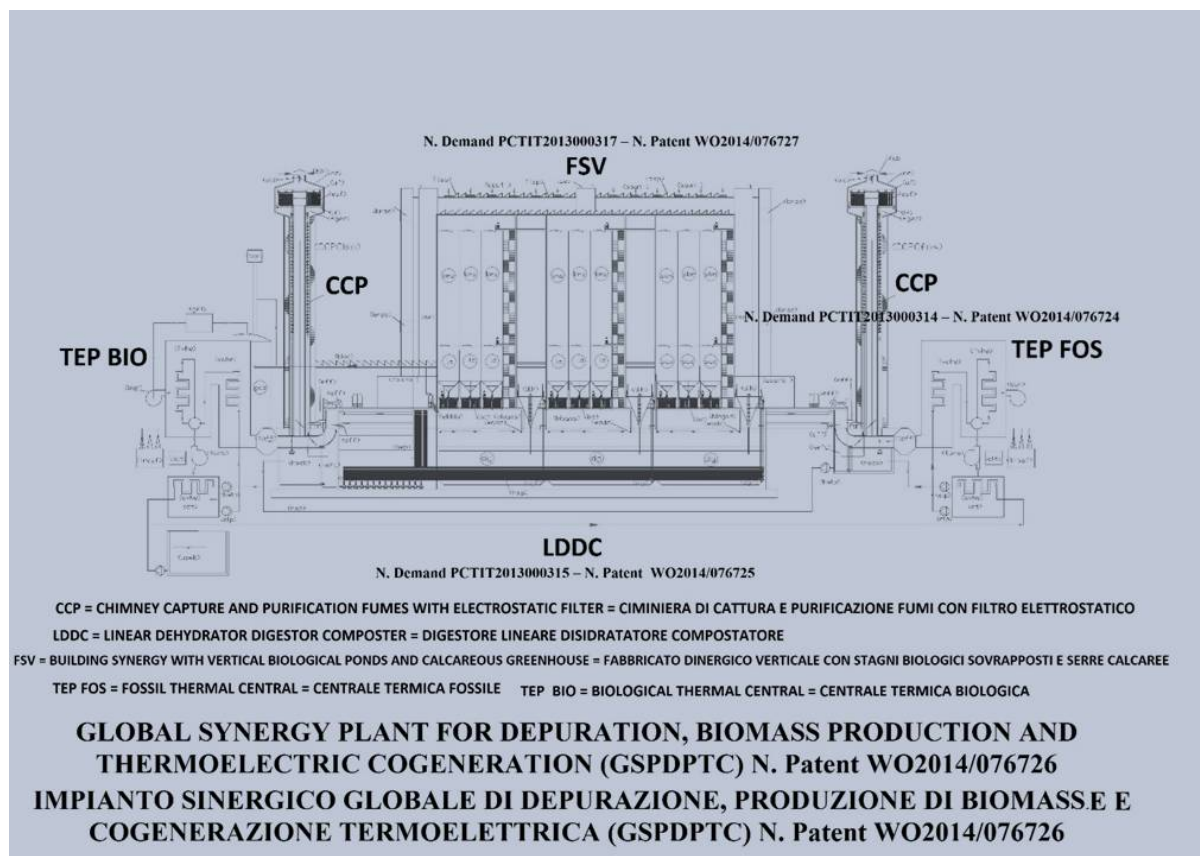
If the world power centers, which have warmed the planet wanted to continue using fossil energy, they would have had to carry out the first phase of the global environmental protection system designed by the undersigned called SPAWHE, where SP means "Synergic Plants". The purification of fumes and water was to begin in urban centers by modifying both the chimneys and the sewers, and the way of designing the heating, air conditioning and purification systems inside homes and industrial plants, so as to create systems complete. While the large thermal power plants should have been flanked by large water and smoke purifiers with common purification cycles, as indicated below.



The figure below shows a global synergic purification, biomass production and cogeneration plant composed of four international patents that have not found public interlocutors worldwide. Evidently, the governments and their consultants



have considered satisfactory the performances of the current world plants, which are arranged at random on the territory, they carry out partial water purification, they only filter the fumes, they do not neutralize the CO<sub>2</sub> through the limestone greenhouses producing carbonates in the water that they discharge. The result that we currently have is global warming due to the CO<sub>2</sub> that continues to increase in the atmosphere and the purifiers that produce acid water, since the water oxidation treatments without natural alkalization produce acid water and they also emit CO<sub>2</sub> into the atmosphere through the open-air pools. Current international laws accept wastewater with 5.5 PH, precisely because global facilities have never been designed anywhere in the world.



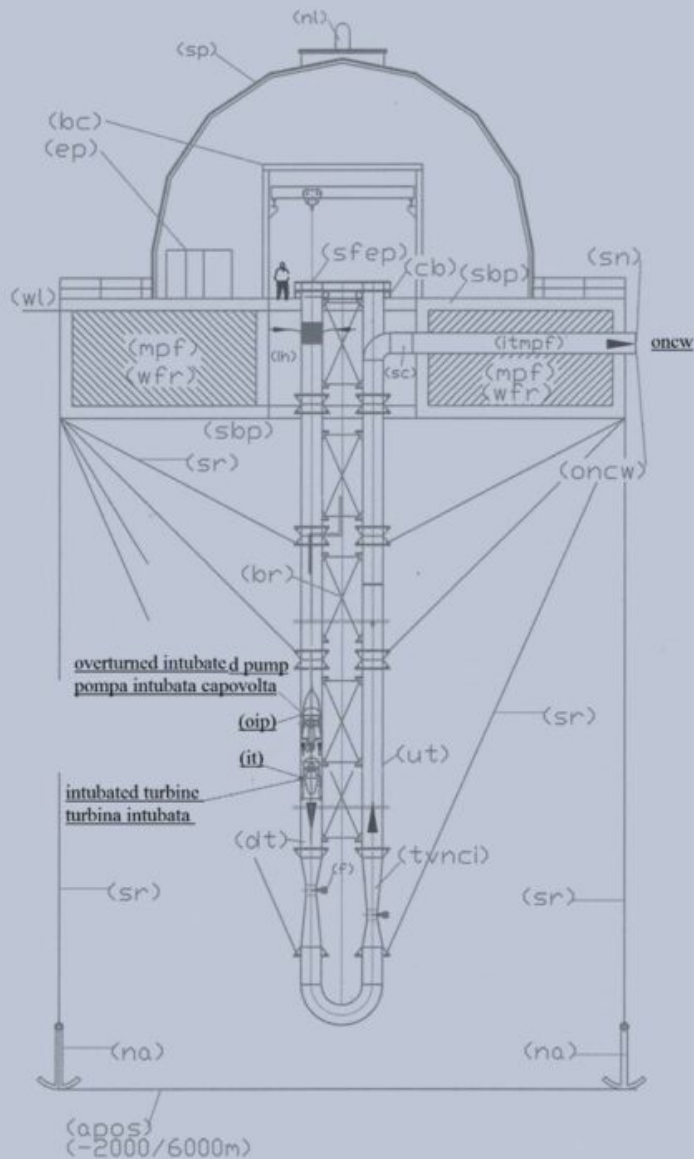




anaerobically to digesters. Therefore, the entire system purifies water, air, exchanges summer and winter heat with the subsoil, and ends with the production of biological energy. Obviously, in this system, that when it was born it did not foresee the use of pumps with double feeding, pressurized autoclaves and small turbines, the purification yields will be multiplied and the energy costs eliminated, since the plant will produce much more energy than it consumes. Details of this facility can be found at <http://www.spawhe.eu/synergic-plants-files/>



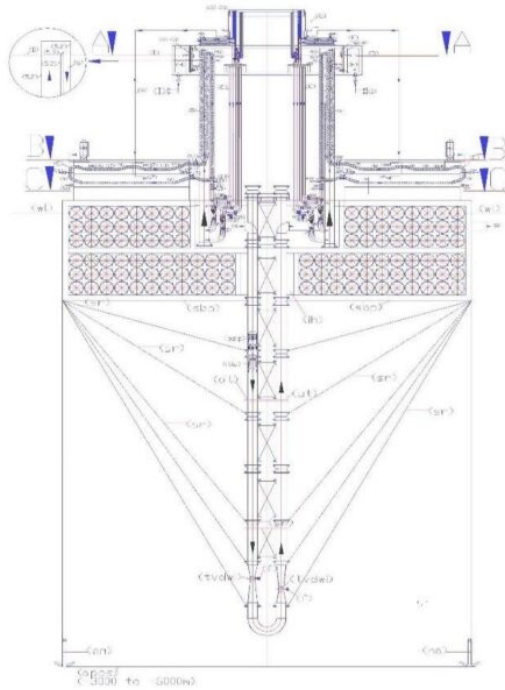
oceans have lost 30% of alkalinity. The only defense that we can implement, besides reducing CO<sub>2</sub> emissions and improving purification systems, also alkalizing the waters that go to the sea is precisely artificial welling. The system diagram is shown in the figure below. Where the venturi bottlenecks that suck carbon and calcium are positioned below the carbonates solubilization threshold, at over 4500 meters of depth. Details of this facility can be found at <http://www.spawhe.eu/artificial-welling-files/>



HYDROELECTRIC PLANT COMBINED WITH MARINE FLOATING STATION FOR ARTIFICIAL WELLING TO COMBACT ACIDIFICATION AND INCREASE PRODUCTION OF FISH.  
 IMPIANTO IDRDELETTRICO SOMMERSO COMBINATO CON STAZIONE GALLEGGIANTE PER WELLING ARTIFICIALE PER COMBATTERE L'ACIDIFICAZIONE E INCREMENTARE LA PESCA

The plant shown below shows the artificial welling plant with the seawater desalination plant reported above, detailed in <http://www.spawhe.eu/sustainable-desalination/>, which together with the system of floatation reported in

<http://www.spawhe.eu/artificial-welling-files/>, will allow to create work and well-being and to populate the oceanic plains with artificial islands without dangers of earthquakes and tsunamis.



The state of the art in the development of desalination and demineralization treatment of marine and brackish water has been affected, along with industrial systems, purification, energy, food and protective of the environment, the absence of synergies between the pumps and hydraulic turbines and from the incorrect approach with the gravitational force, which must not be won by the hydraulic lifting but sustained, with one-way movement of water, especially in the gravitational direction, in the sea, in large basins, in open tanks. With simply overturned pumps coupled to the turbines can produce low-cost all the energy you need; continuing the descent and ascent of water in deep waters, for the venturi effect, we can suck and lift small percentages of deep water with high calcium and carbon percentage solubilized in them, that arrived at the surface, producing phytoplankton and alkalinity, increasing the abundance of fish and combating acidification and global warming; while on the floating platform, made with extruded and ribbed tubes made of low density polyethylene, blown in them polystyrene foam to make them unsinkable, with the triple synergy between the dual fuel pumps, turbines and the marine water recycling, by applying known hydraulic principles for centuries, as that of communicating vessels, the laws of Bernoulli and Pascal, placing, strategically, the electric double suction pump between a high positive hydraulic head and the turbines, we can desalinate large quantities of water, simply transforming a vertical tube in a ionic exchanger and recycling pipes and mixing in the energy producers, while the anionic and cationic synthetic resins, circulating contained in perforated polyethylene spheres as sieves. These spheres, floating climbing ion exchanger and descend for gravity emptying water in downhill tubes. By means of diverters change the path compared to the flow to be immersed in the washing tanks and regeneration of the resins, and reinserted again, indefinitely, in ion exchange circuit without interruption of the desalination cycle and energy production and without costs for heating the water or replace the membranes. If we want to exploit the immense riches of the sea, floating solutions have no alternative. The systems must be designed supported from above, since it cannot exist electromechanical equipment that can work to the abyssal depths. The sustainability of global systems is not only based on high technologies and special materials but above all on the physical basic principles, chemical, hydraulic and mechanical. The first problem that could face this solution is to provide a home and a job to migrant peoples fleeing war and hunger.

**FLOATING SYSTEM, HYDROELECTRIC, DESALTER, EXTRACTOR OF CALCIUM AND CARBON FROM MARINE DEEP WATER.**  
<http://www.spawhe.eu>

■

The system below shows the submerged hydroelectric energy that the undersigned has identified in 2014, simply by intubating (theoretically) from the surface of a basin the water and putting in series a pump with the delivery to the bottom and a turbine that discharges the water in the seabed. This simple system can produce energy at infinity because the kinetic energy that develops in the descent tube ( $(1/2 \text{ mass multiplied } 2 \text{ squared})$ ) saves energy to the motor that feeds the pump, while it increases the electric energy that the generator of current coupled to the turbine produces. Infact, this by slowing down the speed of the water, transfers all its force to the shaft of the current generator. In fact, with this system we could produce electricity by exploiting the energy of the surface water position compared to that found in the



seabed. Who asserts that the water that comes out consumes energy for the ascent is wrong because going out on a large surface the speed of ascent would be equal to zero. Furthermore, the water does not need to rise to the surface at the expense of the energy produced, being an incompressible liquid that spontaneously assumes the shape of the basin that contains it. Therefore, the electricity produced is due to the potential energy transformed into kinetic (mass multiplied gravity acceleration multiplied h) as the hydraulic circuit is an open circuit and is affected by the force of gravity. The water enters the descent tube from above and leaves the turbine without finding any resistance to the outlet, except for the friction between the molecules ( $v^2 / 2g$ ) (squared speed divided by 2 multiplied gravity acceleration), as in all submerged outlets. Below are also reported several applications of this system assumed at atmospheric pressure in non-submerged systems.

**SYNERGIC PLANT, ARTIFICIAL WELLING, HYDROELECTRIC ENERGY**

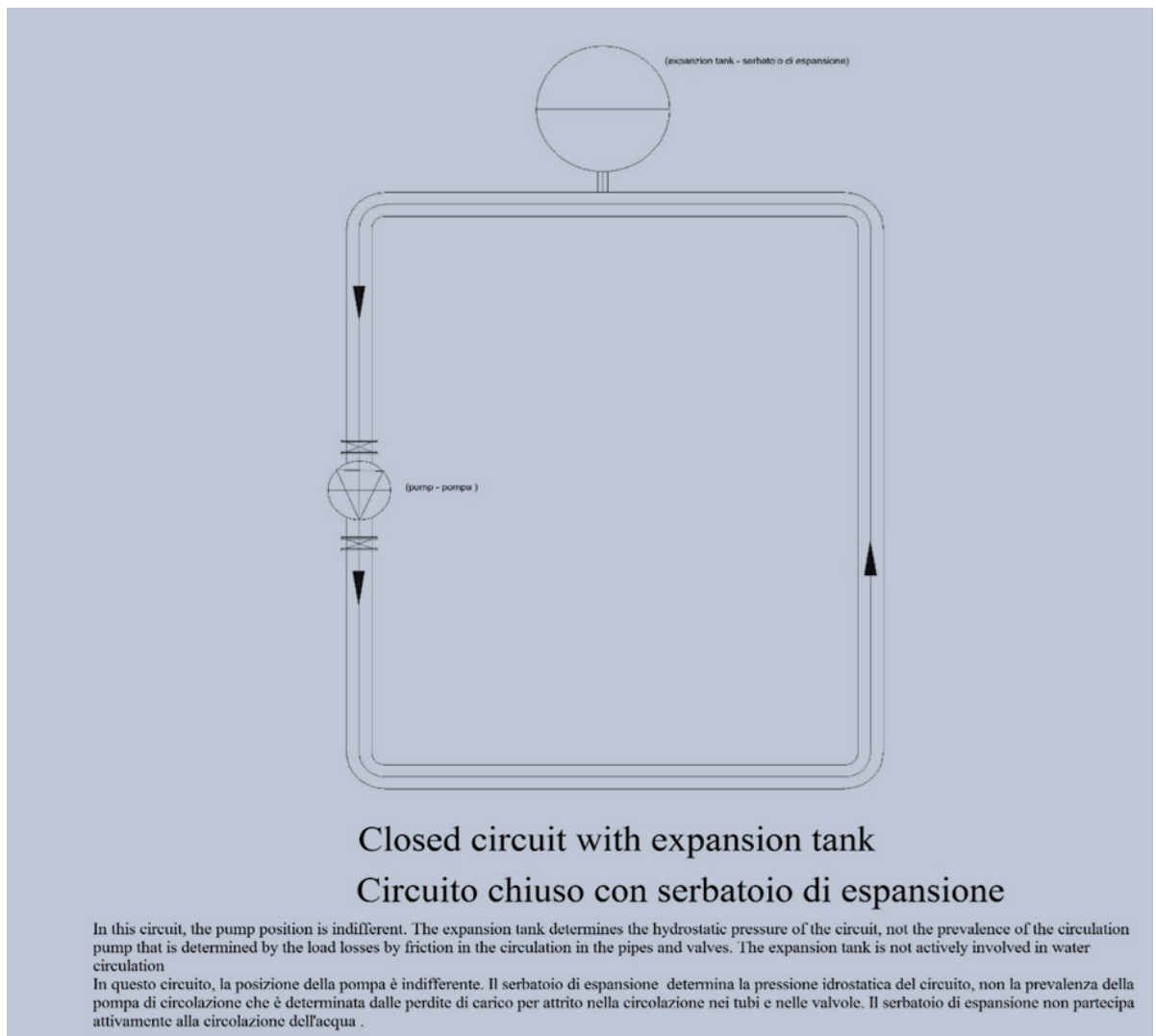
The submerged hydroelectric plants in the lake and sea, in addition to producing energy with lower cost, oxygenate the seabed and increase fish production. This energy exploits the energy position of surface water in tube ( $m \cdot g \cdot h$ ) and the fact that at the turbine outlet have only the small pressure drop of the residual velocity ( $v^2 / 2g$ ). I do not understand the reasons why the world prefers dirty energy such as fossil and others with very low yields such as solar and wind power from the point of view of the environment is at best neutral and it neglects the energy that would not only yield very higher, using the energy of position of surface water that turns into kinetic energy the whole mass of water ducted having even important environmental benefits.

[WWW.SPAWHE.EU](http://WWW.SPAWHE.EU)  
Luigiantonio.pezone@gmail.com

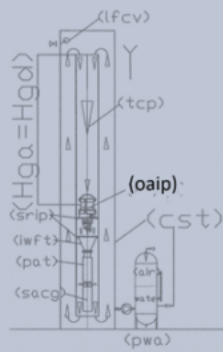
Submerged hydroelectric energy with seabed oxidation

A closed circuit, even if pressurized, cannot be transformed into an energy circuit because it cannot exploit any energy of

water position. In other words, since the gravitational force cannot enter, the mass does not transform into weight, multiplying with the acceleration of gravity ( $m$  per  $g$ ). Therefore, if we insert a turbine, it would produce less energy than the pump consumes because of the load losses due to friction.







(oaip) overturned axial intubated pump = pompa assiale capovolta intubata

(iwft) inlet water to feed turbine = alimentazione acqua per alimento turbina

(lfcv) level floating control valve = valvola a galleggiante di controllo livello

(pat) pump as turbine = pompa usata come turbina

(pwa) pump with autoclave = pompa con autoclave

(sacg) submersible alternating current generator = generatore di corrente alternata sommersibile

(srip) support ring for intubate pump = anello di supporto per pompa intubata

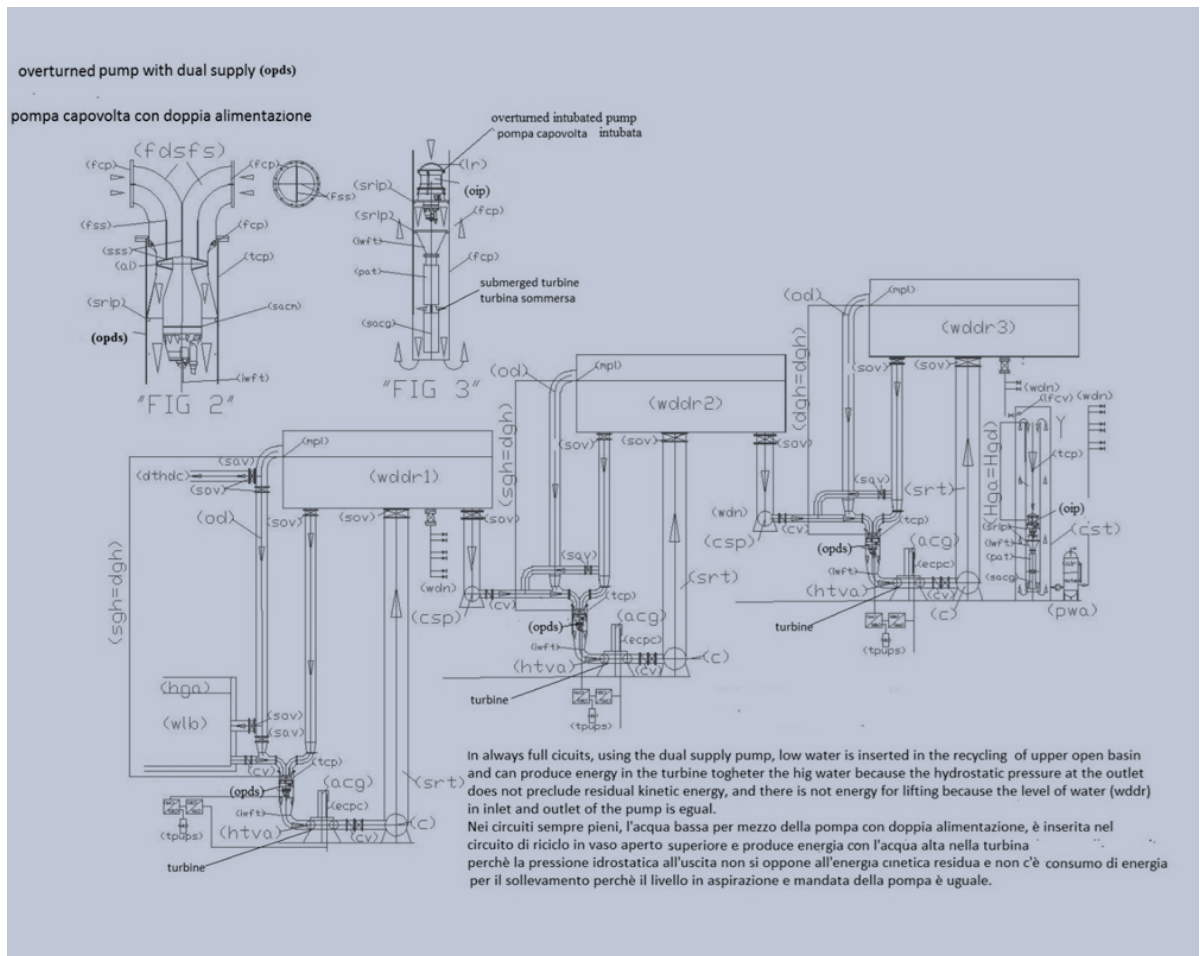
condominium hydroelectric plant  
 impianto idroelettrico condominiale

Come si vede dalla figura sopra riportata, persino l'acqua in attesa di essere consumata dai condomini e dalle abitazioni private, può produrre energia con mini pompe e mini turbine, o pompe usate come turbine (Pat). Supponiamo di realizzare in un tubo contenitore (cst) diametro di un metro che può essere facilmente incorporato nel fabbricato che sfrutta l'altezza utile  $H_u = 10$  m nel tubo di discesa DN 300 (hdrt) incorporato nel tubo (cst). Supponendo che la portata dell'impianto sia  $0,2$  m<sup>3</sup>/s, il rendimento della turbina sia  $0,75$ , applicando la stessa formula  $P_u = \eta * 1000 * Q * H_u / 102$ , abbiamo una produzione energetica di  $14,6$  Kw ( $0,75 * 1000 * 0,2 * 10 / 102$ ). Assegnando alla pompa una prevalenza di  $0,2$  m e un rendimento  $0,6$ , la potenza assorbita dalla stessa, calcolata con la formula  $0,2 * 1000 * 0,2 / 102 * 0,6 = 0,64$  KW. In questo caso il rapporto tra l'energia spesa e resa è  $22,8$  ( $14,6/0,64$ ). Le perdite di carico nel tubo di discesa, i pezzi speciali e le perdite allo sbocco, sono tutte assorbite dal battente positivo sulla pompa. Applicando le formule di Bazin, [dove  $P_{dc}$  in m/km =  $1000 * 4 * V^2 / C^2 * D$ , dove  $C = 87 / (1 + 2\gamma / \sqrt{D})$ , dove  $\gamma$  è il coefficiente medio di scabrezza =  $0,16$ ]. Mentre la perdita di carico (pds) allo sbocco in m è  $V^2 / 2g$ . Queste perdite, se calcolate, per 10 metri di tubazione sono trascurabili e addebitabili al battente positivo sulla pompa

As shown in the figure above, even the water waiting to be consumed by condos and private homes, can produce energy with mini pumps and mini turbines, or pumps used as turbine (Pat). Suppose to realize in a container tube (cst) diameter of one meter that can be easily incorporated in the building that utilizes the useful height  $H_u = 10$  m in descent DN 300 (HDRT) tube embedded in the tube (cst). Assuming that the system flow rate is  $0.2$  m<sup>3</sup> / s, the turbine efficiency is  $0.75$ , applying the same formula  $P_u = \eta * 1000 * Q * H_u / 102$ , we have an energy output of  $14.6$  kW ( $0.75 * 1000 * 0.2 * 10/102$ ). Assigning to the pump a prevalence of  $0.2$  m and a  $0.6$  output, the power absorbed by it, calculated by the formula  $0.2 * 0.2 * 1000/102 * 0.6 = 0.64$  kW. In this case the ratio between the energy expenditure and yield is  $22.8$  ( $14.6 / 0.64$ ). The load losses in the descent tube, the special pieces and losses at the outlet, are all absorbed by the positive head to the pump. By applying the formulas of Bazin, [where  $P_{dc}$  in m / km =  $1000 * 4 * V^2 / C^2 * D$ , where  $C = 87 / (1 + 2\gamma / \sqrt{D})$ , where  $\gamma$  is the average roughness coefficient =  $0.16$  ]. While the loss of load (pds) to the opening in m is  $V^2 / 2g$ . These losses, if calculated, for 10 meters d are very low and absorbed by positive head on the pump

In the above circuit the water is raised from the lower basin to the upper basin producing in the turbine current generator much more current than that which the motor coupled to the pump consumes because the water of the lower basin by means of the pump with the separate double supply up to the impeller enters in the open recycling circuit of the upper basin. While to let the total flow into the upper basin the water must not overcome the hydrostatic pressure due to the total height but only the pressure drops of the pipe and the valves and at the outlet ( $v^2 / 2g$ ), since the hydrostatic pressures are balanced

by the descending tube which feeds one of the two inlets into the pump impeller with the separate double feed up to the impeller.



As can be seen in the figures above, in some circuits at atmospheric pressure they were used pumps with the double supply on the suction side before of the turbines, but like the previous ones also these pumps instead of being used to lift water are used to push it towards the low. The reason is very simple because, by changing the power supply and using them in this way all the hydraulic systems that raise the world waters that today represent an immense energy expenditure, can be transformed into energy producers and simultaneously lift the waters, if the basins upper ones always remain full with wide section ascent pipes, in order to reduce the load losses to assimilate the operation to the submerged hydroelectric system. In fact, by recycling the water of the upper basins (wddr1 - 2 - 3) with one of the two

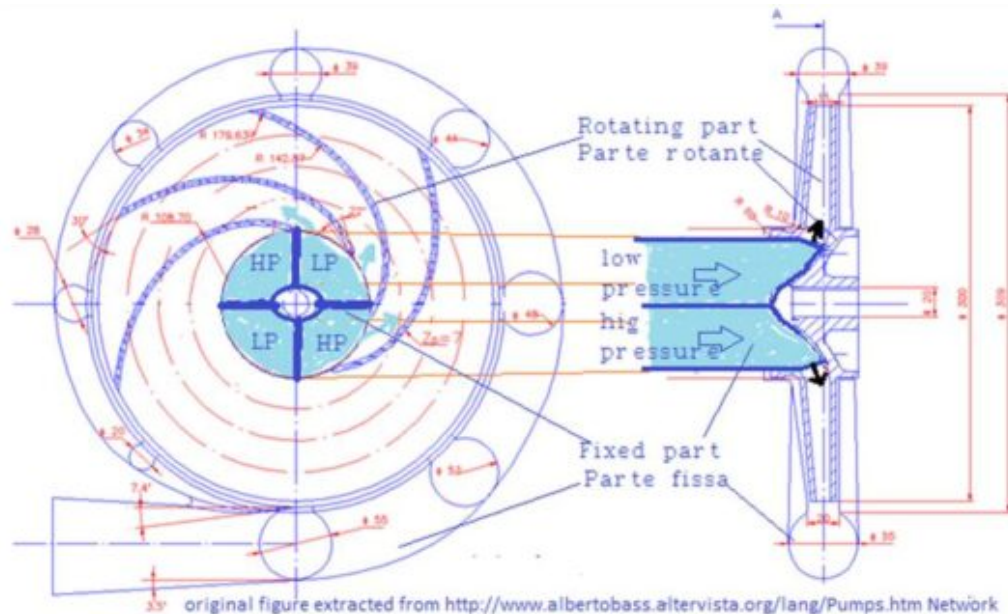
pump feeds we can balance the hydrostatic thrust in the pump body and take advantage of the depression that creates the centrifugal pump in the center of the impeller to let the water from the low basin (wlb) to enter in the recycling circuit of the upper basin, which with the same system transfers water to the following basins. Since the hydraulic circuits are open, kinetic energy is developed in the descent piping thanks to gravity and atmospheric pressure which are used by the turbine to produce electricity, while the pump motor only has to overcome the inertial state.











HP = High pressure - alta pressione  
 LP = Low pressure - bassa pressione

**Dual power scheme of a pump with a closed impeller for lifting the water and the feeding of hydraulic turbines with recycling of water according <http://www.spawhe.eu>.**

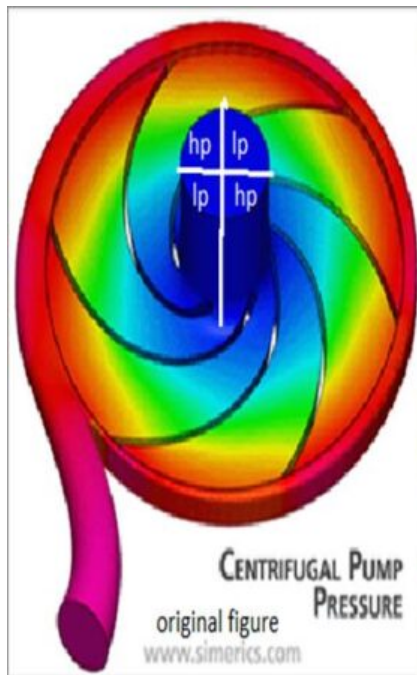
We can note that the two flows with approximately equal flow rates and different pressures, are divided into four sectors arranged diagonally to balance the hydraulic forces. The feeding of the four streams is continuous, but the impeller, rotating clockwise, receives alternately, on the same blade, the two flow rates, for which the flow with higher pressure pushes the flow rate with less pressure, without any possibility of creating turbulence and outflows against the feeding with less pressure.

**Schema di doppia alimentazione di una pompa con girante chiusa per il sollevamento delle acque e l'alimentazione di turbine idrauliche con il riciclo delle acque secondo <http://www.spawhe.eu>.**

Noi possiamo notare che i due flussi con portate approssimativamente uguali e pressioni diverse, sono divisi in quattro settori disposti in diagonale per equilibrare le spinte idrauliche. L'alimentazione dei quattro flussi è continua, ma la girante, ruotando in senso orario, riceve alternativamente, sulla stessa pala, le due portate, per cui la portata con pressione maggiore spinge la portata con pressione inferiore, senza nessuna possibilità di realizzare turbolenze e deflussi contro l'alimentazione con minore pressione.

<http://www.spawhe.eu/relativity-and-technology-in-the-new-hydroelectric-energy/>





hp = high pressure = alta pressione  
 lp = low pressure = bassa pressione

<http://www.spawhe.eu/relativity-and-technology-in-the-new-hydroelectric-energy/>

In the pumps, the centrifugal force, having radial direction, creates a depression capable of attracting the liquid intubated, external to the pump. The low pressure area is at the center of the impeller, is called "eye of the pump" is colored in blue on the attached drawing and corresponds to the input of water into the impeller. In the green zone begins the pressurization of the liquid, which is completed in the red zone. It 'clear that if we feed a pump with two flow rates equal but different geodetic heights, we have a considerable energy saving because it is the water from the upper reservoir, which can be recycled, to raise the water from the lower basin, by means of mixing water and the expansion of the greater pressure that happens in green and red area. Obviously, with this solution, they do not serve multistage pumps and motors of great power, but single-stage pumps with double flow and small power engines , dimensioned for water recycling, and not for lifting. If we divide the two flow rates in four areas, arranged diagonally, also we balance the forces on the bearings. Each sector is always powered with the same water, but the rotation of the impeller allows the flow sequence on the same blade so that the one with greater hydrostatic pressure to push the one with lower pressure. In essence, it is what happens in multistage pumps but with lower costs in the construction of pumps, motors and absorbed powers. But the dual supply pumps, coupled to the turbines also allow the production of energy with the recycling and the water lifting. However, it seems that the pumps with dual power does not affect the authority of the environment, the pump manufacturers and investors in general. They find not investors.

Nelle pompe, la forza centrifuga, avente direzione radiale, crea una depressione capace di richiamare il liquido intubato, esterno alla pompa. La zona di depressione è al centro della girante, è chiamata "occhio della pompa" è colorata in blu sul disegno allegato e corrisponde all'ingresso dell'acqua nella girante. Nella zona verde inizia la pressurizzazione del liquido, che si completa nella zona rossa. E' evidente che se alimentiamo una pompa con due portate uguali ma battenti diversi, abbiamo un notevole risparmio energetico perché è l'acqua del bacino superiore, che può essere a riciclo, a sollevare l'acqua del bacino inferiore, per mezzo della miscelazione dell'acqua e l'espansione della pressione maggiore che avviene nella zona verde e rossa. Ovviamente, con questa soluzione, non servono pompe multistadio e motori di grande potenza, ma pompe monostadio con portate doppie e motori di piccola potenza, dimensionati per il riciclo dell'acqua, non per il sollevamento. Se dividiamo le due portate in quattro settori, disposti in diagonale, equilibriamo anche le spinte sui cuscinetti. Ogni settore è alimentato sempre con la stessa acqua, ma la rotazione della girante consente la successione dei flussi sulla stessa pala in modo che quello con maggiore pressione idrostatica spinga quello con minore pressione. Nella sostanza, è quello che avviene nelle pompe multistadio ma con minori costi nella costruzione delle pompe, dei motori e delle potenze assorbite. Ma le pompe con doppia alimentazione, abbinata alle turbine consentono anche la produzione di energia con il riciclo e il sollevamento delle acque. Tuttavia, sembra che le pompe con la doppia alimentazione non interessino le autorità dell'ambiente, i costruttori di pompe e gli investitori in generale. Esse non trovano investitori.

While developing these solutions, the world of science and entrepreneurs remained stationary and silent to hide the mistakes made. With the complicity of the ministerial bureaucrats and the patent offices that declare the my very simple reflections perpetual motion, they are neglecting the possibility of producing abundant hydroelectric energy by recycling water without polluting and without building dams

and large basins that have altered the natural world water distribution and produced drought and floods. The pump with the separate dual power supply up to the impeller, which no one wanted to experiment, has plunged the knife into the scourge of scientific, entrepreneurial, political and legislative inefficiencies worldwide, also allowing the invention of compressed hydroelectric energy that multiplies even more the energy yields by increasing pressures and making plants even more smaller, which can also be mounted on transport vehicles. Obviously, we cannot neglect even the purifying effects due to Henry's law, since every time the water introduced through the second supply of the pump passes through a pressurized autoclave, this due to the principle of impenetrability of the bodies, is forced to expel the same amount of water already present in the autoclave, which contains an amount of oxygen greater than that allowed at atmospheric pressure. In fact, at 20 ° C and at atmospheric pressure, in fresh water we can have a maximum of 9.17 mg / L, which corresponds to 100% saturation. Obviously, in a pressurized twenty-bar autoclave that drains water into a basin, a well, or a sewage pit, we will have a greater amount of oxygen supplied free, in addition to the energy that will also be free. This is not perpetual motion, there is the wear of the machines. It is only a correct design of the systems that the ruling classes of the past and present have never financed. Governments today welcome a young girl who scolds them (Greta Thunberg) with the honors of a head of state, while ignoring the undersigned who has proposed solutions for thirteen years, after having spent a lifetime studying the scientific organization of work, the plants industrial, environmental and energy.

The main mistake committed by those who have studied without understanding the general principles of energy is the difference between electricity and the primary energy used to produce it.

Thermodynamics serves to produce heat, not electricity. Electricity is produced in many ways, but the most efficient way is through electromagnetism and this is produced by rotating magnetic brushes (rotor) in an electric field wrapped in a solenoid (stator). More bigger is the rotor that turns, more greater is the number of rotating brushes, more greater is the amount of energy produced. But to turn the rotor a primary energy is needed which must be cheap and must be clean. Only inventors and incompetent scientists used indirect primary or polluting energies to make the rotor turn. Among the indirect means is heat, solar energy, electrolysis, chemistry, biology. The direct ones are hydroelectric and wind power, but the most convenient is the hydroelectric system because the water has a density eight hundred thirty times higher than air. The absolute best method is the system that allows the recycling of water. It would have been enough to remember that the energy is due to the product of the flow rate for the pressure of the fluid density to understand that no thermal energy, produced with fuels and one-way combustion gases, can approach the efficiency of an energy that exploits much higher liquid density and the static pressure of the compressed air that can reach even thousands of bars, moreover, without dispersing into the environment, but dissolving slightly in the water up to the saturation point, purifying it. But on the planet Earth, since the advent of the industrial era, we are producing electricity, without recycling water, with plants that exploit the flow of water in a one-way direction, through hydraulic leap and river currents. These hydroelectric plants, in many cases, have produced more disasters than benefits to accumulate water by means of dams, which have created flood disasters and summer droughts.

Therefore, after the inventions of the submerged hydroelectric energy, the pump was invented with the separate double supply up to the impeller which led first to the solutions, with the recycling of the water and the lifting to the atmospheric

pressure already illustrated above, and then to the recycling and lifting with pressurized autoclaves, which further reduce the overall dimensions and improve energy and purification performance, up to being able to be mounted on transport vehicles, and suitably miniaturized, even in the man's chest.

But the scientific, political, economic, entrepreneurial, religious, trade union, environmentalist world has not noticed this virtual increase in the state of the art. He continued to raise funds and loans to increase the number of current installations that produced global warming, or to finance current renewable energies that, not being interactive, having high costs, low returns, cannot effectively combat global warming, reversing the process, as is possible with compressed interactive energy.

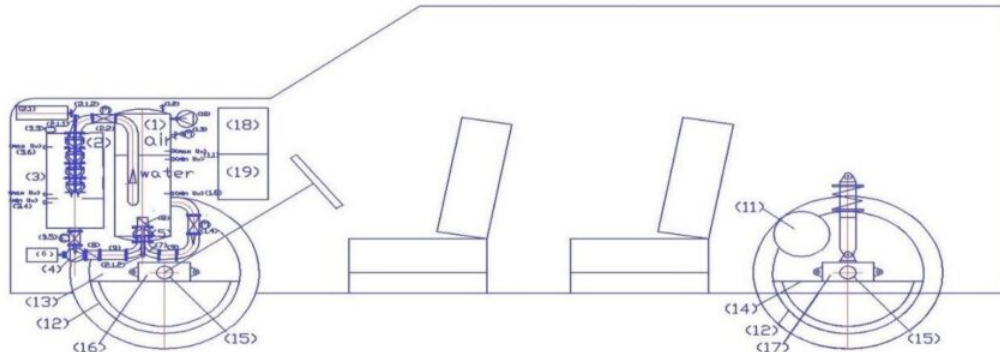
Besides, simultaneously, to my inventions, as we know, electromagnetism is making strides, and the rotors always absorb less energy, as if they had mass. Indeed, we are witnessing videos on Youtube showing power generators not connected to any energy source, to which it is sufficient to only give the initial energy supply (<https://www.youtube.com/watch?v=EmdKVecQhXs>). Moreover, here we return to the concept of perpetual motion and mass in motion, which is fundamental for understanding the interactive energy, which the undersigned proposes, since, in the past, mass was defined as the quantity of matter that constitutes the body. Today physics provides a much more rigorous definition: "The mass of a body is the measure of its inertia, that is, of the resistance that the body opposes to all the variations of its state of rest or motion". In the case of hydroelectric submerged and compressed the body does not move. Only the water moves inside the accumulated volume and through the machines mechanical energy is produced, which transformed into electromagnetic can reach very high powers, which without fuels, move the body that contains the volume of water and air that supply the primary energy for electromagnetism that powers the motors of the wheels or propellers. I say that only





fuels. Moreover, considering that the energy will not cost anything and that the volume of water inside the autoclaves never changes because it expels all the water that enters from the feeding in low pressure, for the principle of the impenetrability of bodies, in the same instant that enters, with the same volume of water, we can have more energy systems in parallel. This means that we increase the safety of means of transport, especially aircraft and submarines, which work in conditions of danger for human life. But at the same time we are not required to save energy and therefore, in the case of air transport, we must not abide by the laws of dynamic aviation. We simply have to use a large amount of turbo electric fans that move large volumes of air from above to below the means of transport so as to create the vacuum in the upper area and the lift thrust in the lower part. As a result, we will circumvent the gravitational force and rise in the atmosphere. The air transport of the future over large distances will be cheaper and safer than other means of transport as it will not need fuels, nor will it need infrastructure, such as roads, viaducts, bridges, tunnels, railways. These infrastructures need maintenance and are subject to collapses due to old age, such as the Morandi bridge in Genoa on 14 August 2018. But other collapses and alterations of the structures can produce earthquakes. Moreover all these works require deforestation. With vertical flight it will also be easier to extinguish fires, approaching fires and creating a normal fire rain. Not violent water jets that produce other damages. Let's think again about the cathedral of Notre Dame there could be saved with a fire extinguishing system with hydroelectric power compressed from below and another from above. But the ruling class and world science have pretended not to understand these very simple inventions to save the oil economy. For more details see <http://www.spawhe.eu/aerospatial-pressurized-hydroelectric-transport-system/>, <http://www.spawhe.eu/hydroelectric-power-auto-with-torque-peripheral-to-the-wheels/>.

## CAR WITH HYDRO POWER ENGINE



<http://www.spawhe.eu/hydroelectric-power-auto-with-torque-peripheral-to-the-wheels-novit%C3%A0/>

Legend: (1) autoclave pressurized tank; (1.1) level regulator with capacitive probes; (1.2) safety valve; (1.3) manometer with shut-off valve; (1.4) motorized valve flow control with position transmitter; (1.5) pressure or flow transmitter; (1.6) minimum level probe in the start system; (2) pump used as a turbine (pat); (2.1) alternating current generator; (2.1.1) bushing with sealing ring; (2.1.2) angle diverter with conical gears; (2.1.3) transmission shaft; (2.1.4) transmission shaft protection tube (2.1.5) double curve with septa crossed separators in low pressure (LP) and high pressure (hp); (2.1.6) septa separators of flow; (2.1.7) closed type; (2.1.8) Diffuser of the pump; (2.2) motorized valve to supply turbine with flow adjustment; (3) water transit tank at atmospheric pressure and containment pat; (3.1) motorized valve to feed pressurized water network; (3.2) motorized valve bypass supply at low pressure; (3.3) air valves; (3.4) Water level control with capacitance probes; (3.5) motorized valve for water supply at low pressure; (3.6) maximum level probe in the start system; (4) electric pump to supply in low pressure (5) electric pump with double separate supply until the impeller; (6) pump drive motor, with variable speed, controlled by an inverter; (7) double curve with septa crossed separators in low pressure (LP) and high pressure (hp); (7.1) septa to flow separators; (8) check valve. (9) flow diverter stub pipe; (10) electrocompressor; (11) self braking engine with variable revs (11.1) sprocket gears; (12) wheel rim; 12.1 ring gear; (13) motorization support of front wheel; (14) motorization support of rear wheel; (15) stationary shaft; (15.1) bearing; (15.2) wheel rim mounting flange; 15.3 brake disc; (16) front Axle; (17) rear axle; (18) electric command and control panel; (19) heat pump for summer and winter air conditioning.

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From the above, we can easily understand that the best way to advance global development, in addition to research, is above all the study of the scientific organization of work, but done globally. This study cannot be done by entrepreneurs because multinationals also deal with individual sectors and can only organize work inside their factories, where I learned to put



together the plants respecting the work cycles to produce a thousand cars a day. But I didn't realize that there could be a clean and cheaper engine than the one mounted on the cars that Alfa Romeo and other global companies produced. How I didn't realize that even the factory chimneys and the water purification system were not efficient. To notice these things I had to change jobs and observe the organization of work from another point of view, even if I could not suggest my solutions, being obliged to respect the orders received and the public procurement specifications. The solutions I studied and published as a pensioner, after having filed them as patents. Obviously, I did not expect so much indifference to the solutions I proposed. But precisely this resistance has stimulated me even more to move forward. I didn't know how far I would go with my own strength, but the deeper the solutions, the more convinced I became that the inefficiency of global public facilities is spreading in all directions precisely because they do not follow cycles studied before realizing the facilities between the various company experts, as happens in large private companies. The undersigned, studying the organization of environmental and energy work together has increased purification and energy productivity with very small changes to existing technologies, but the existing purification and energy plants need very big changes. Few things can be saved.

Only by establishing global work cycles, which obviously no world public institution has taken into consideration and through the virtual modifications of the chimneys, sewage and thermal plants, was it possible to identify the interactive energies that exploit together, the water, the air, the gravitational force and from these arrive to the compressed hydroelectric energy, which forced me to go back to modify the first inventions made, when I had not yet identified the power of this system. But only by establishing global work cycles, and through the virtual modifications of the chimneys, sewage and thermal plants, was it possible to identify the

interactive energies that exploit together, the water, the air, the gravitational force and from these arrive to the compressed hydroelectric energy.

How could public institutions and multinationals that have not taken this route and which have even hindered it by not understanding it or pretending not to understand it yet, while I speak at this congress, identify hydroelectric energy?

I am participating only because the congress organizers have accepted my participation without payment of the fee they pay all speakers representing public and private companies. However, I would not have attended the congress if this had taken place abroad and I also had to incur expenses for travel and overnight stays in the hotel. Obviously, I thank the organizers of the congress, but I expect answers from the world institutions that want to fight pollution, unemployment, and would like a sustainable economy, but in fact, with their laws they hinder the work of inventors like the undersigned that they do not find any collaboration from the research bodies and from the legislators who do not recognize the intellectual property and the author's rights to the inventors, not linked to centers of power that can afford industrial property. It does not take much to understand that inventions of public utility, such as those produced by the undersigned, above all compressed hydroelectric power, must be made accessible to all without any industrial monopoly if we want to make up for lost time in the direction of environmental protection, sustainable development and the fight against global unemployment.

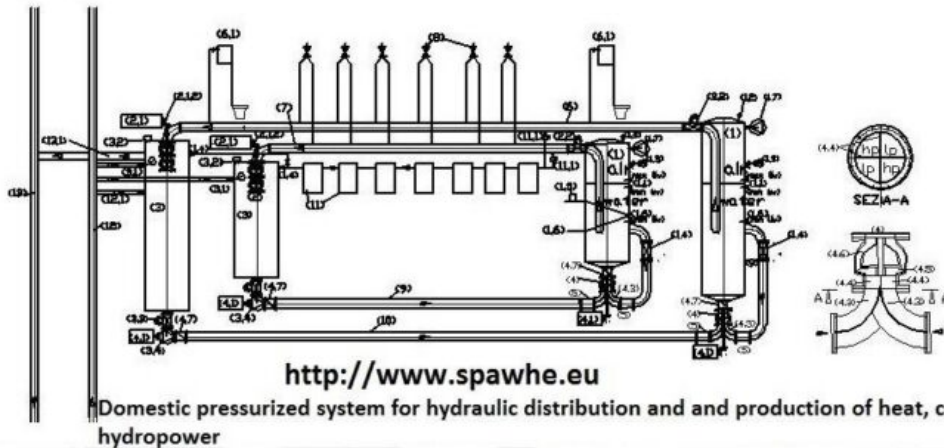
However, the logic of the plants proposed by undersigned has not changed, since the progress of the state of the art only involves the replacement of the current lifting pumps with a complete group that recycling water on itself and exploiting the force of gravity and the principle of Impenetrability of bodies makes it possible to transform current plumbing systems to produce much more energy than they consume without

violating the principles of energy.

In fact, even the domestic water saving plant that no one has ever built, illustrated in the first pages has been modified and simplified to become an energy producer, like all the other plants of the undersigned patented uselessly from 2006 to 2016.

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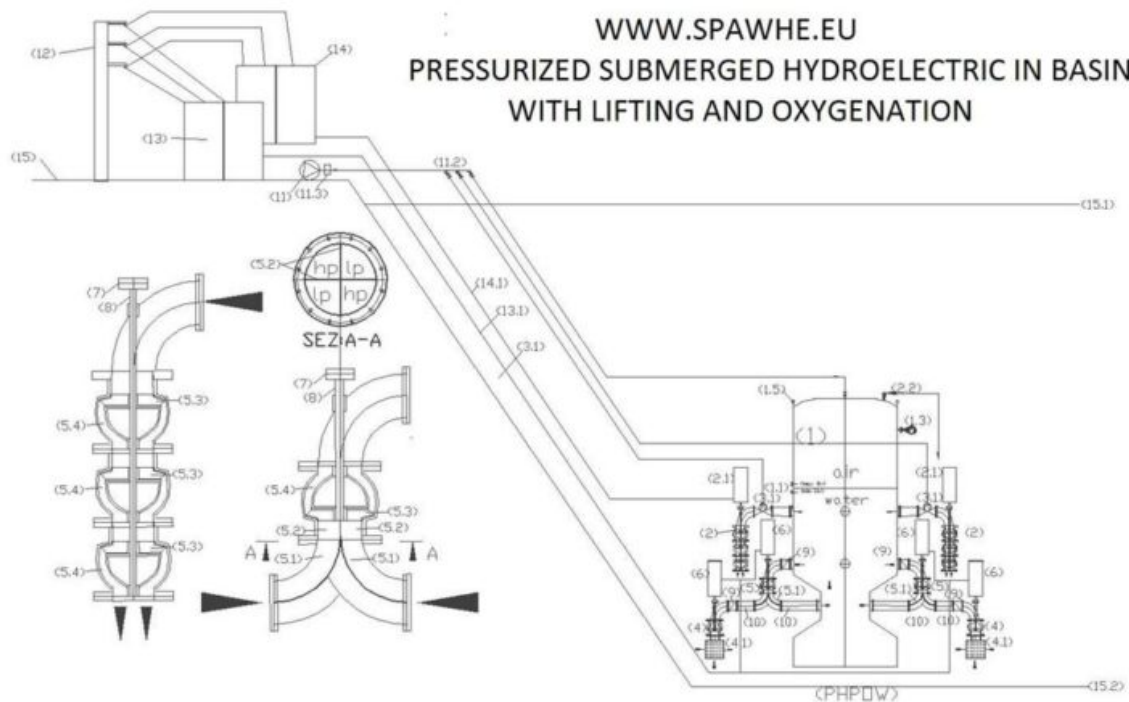
The figures below show other very important plants for the protection of the environment and sustainable energy production that have never been made, which can be found described in all the details on [http // www.spawhe.eu](http://www.spawhe.eu).



I think it can all become energy producers, abolishing the bills to pay not only for the electricity but also for heating, because in the condominiums and apartments we can produce all the energy whom serves with hydropower pressurized which can produce energy and exchange heat with the ground even at the poles, the Arctic and Antarctic, where there are the famous polar night that lasts six months with conditions weather prohibitive. Probably, it has arrived the perfect energy, only with the impartial reasoning of those who are not tied to any economic power and has no money for the trials. But using rational systems already tested by nature, which only required the expertise to industrialization with modern technologies, since the current energies, do not use synergies. They are all incomplete and in competition with each other. Let's start with the most common one: The fossil energy has not solved the problem of CO2 emissions. Nuclear energy has not solved the problem of waste disposal. Organic farming is confined solely to emit organic CO2 instead of the fossil. The photo voltaic energy and wind power, are bulky, low performance, discontinuous and require materials that are already running low for the construction and energy storage. Hydropower has not solved the problem of water recycling, it requires great works, with large investments. In many cases creates more harm than good: torrential rains, finding water basins already full, produce floods. Today there is responsibility of all states on the current environmental degradation sovereign. Even the United Nations, which in 2001 produced a document called "Coding Project on the responsibility of states for internationally unlawful acts" signed by almost all sovereign states, are not free from crimes of omission. The joints of responsibility of global public officials, for myself, have created and create more damage of the eco-mafia. Which they may be identified and convicted, while the half scientific and technological truths, half-cleansings, half energies is difficult to locate them. You can unmask only with the most complete alternative projects. But who has the power to develop more comprehensive plans of governments and multinationals? Myself as a designer and inventor could only put on paper how, in his view, should generally be designed plants that should never be only purifying and never just energy. Politics, economics, philosophy alternatives are important, but do not prove anything. All problems, even those social resolve with the transparency of studying, which must be complete, leaving no pending cycles, especially public ones, should be the guide and example for private studying. Why the public and private powerful continue to fund, develop technologically advanced solutions, but still incomplete, and lacking of a global logic in all sectors? The industrial Taylorism taught to the undersigned in many years of work that a great series product can be produced in many different ways, but only one is the best: One that use better the industrial organization and the maximum automation. When I tired of the big industry has moved to work in the environmental sector, I have noticed that the environmental and energy Taylorism was never born. Therefore, things are not done in the best way, but worse. If it was born, It would change everything, how did SPAWHE, unfortunately, only virtually, being only the web site of a pensioner with no money. He would still taught the industrial Taylorism that the internal combustion engine on transportation could not be mounted, not being able to close the carbon cycle according to the rules required by the nature. There would be an exchange of positive experiences between industry and the environment, instead of the current exchange code of silence to hide their mistakes. You can find the new way to produce low-cost and cleanly electric power, heat and cold in the apartments and condominiums in all seasons and all hours and in every place of earth on <http://www.spawhe.eu/pressurized-domestic-hydraulic-energy-system/>. For a long time I seek public and private partners to achieve together this great adventure.

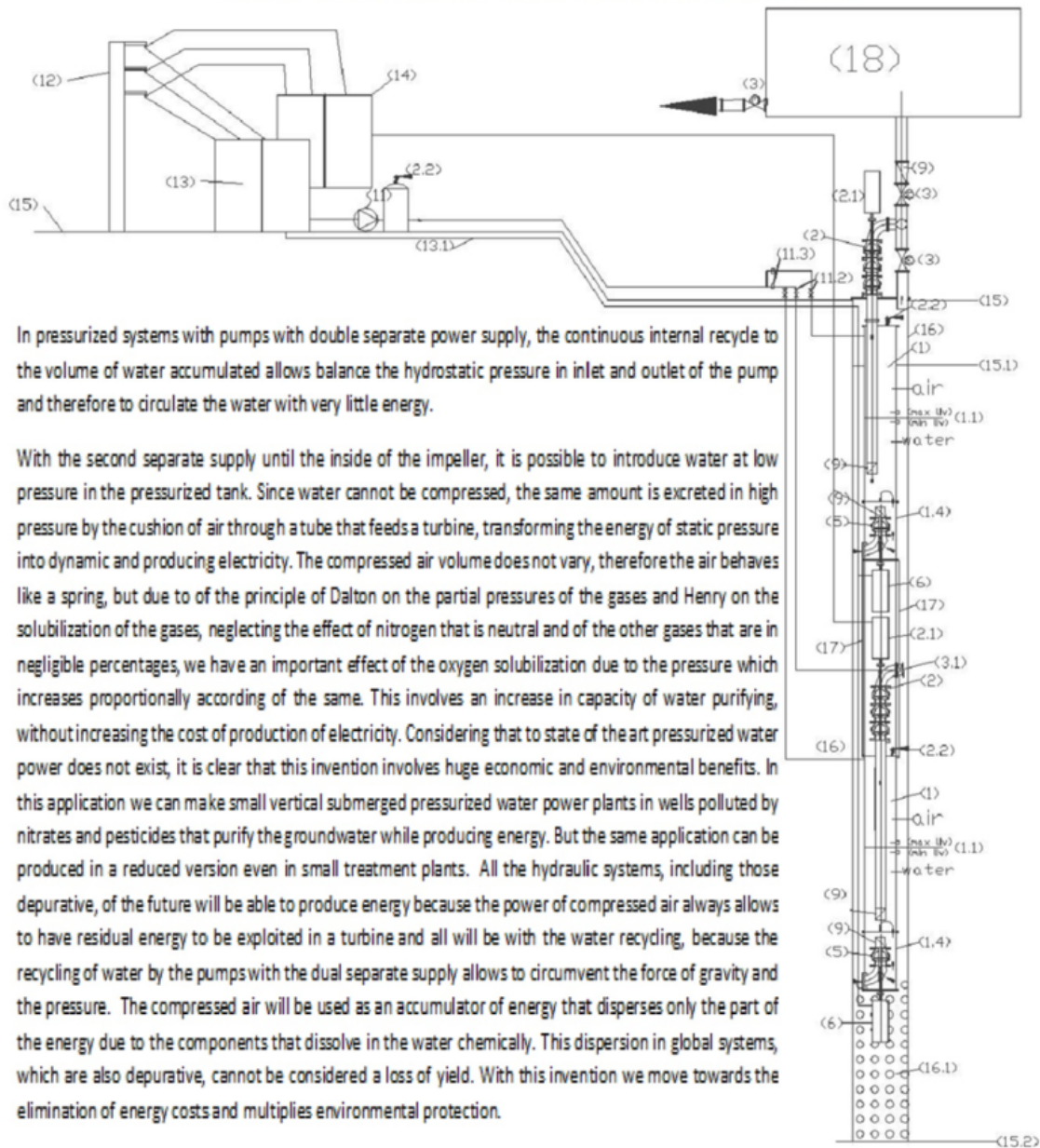


WWW.SPAWHE.EU  
 PRESSURIZED SUBMERGED HYDROELECTRIC IN BASINS  
 WITH LIFTING AND OXYGENATION



With the second separate supply until the inside of the impeller, it is possible to introduce water at low pressure in the pressurized tank. Since water cannot be compressed, the same amount is excreted in high pressure by the cushion of air through a tube that feeds a turbine, transforming the energy of static pressure into dynamic and producing electricity. The compressed air volume does not vary, therefore the air behaves like a spring, but due to of the principle of Dalton on the partial pressures of the gases and Henry on the solubilization of the gases, neglecting the effect of nitrogen that is neutral and of the other gases that are in negligible percentages, we have an important effect of the oxygen solubilization due to the pressure which increases proportionally according of the same. This involves an increase in capacity of water purifying, without increasing the cost of production of electricity. Considering that to state of the art pressurized water power does not exist, it is clear that this invention involves huge economic and environmental benefits. If with the pump with double separate supply introduce polluted water into the pressurized tank, we can produce energy while we clean instead of consuming energy. We can realize submerged pressurized water power plants in the depths of lakes and seas. But the same application can be produced in a reduced version even in small treatment plants. All the hydraulic systems, including those depurative, of the future will be able to produce energy because the power of compressed air always allows to have residual energy to be exploited in a turbine and all will be with the water recycling, because the recycling of water by the pumps with the dual separate supply allows to circumvent the force of gravity and the pressure. The compressed air will be used as an accumulator of energy that disperses only the part of the energy due to the components that dissolve in the water chemically. This dispersion in global systems, which are also depurative, cannot be considered a loss of yield. With this invention we move towards the elimination of energy costs and multiplies environmental protection.

**PRESSURIZED SUBMERGED HYDROELECTRIC  
PLANT IN WELL WITH LIFTING AND OXIGENATION**



Let's talk a moment about the crime of omission committed by global public bodies on CO2 cleaning systems. The science close to the United Nations (IPCC), awarded with the NOBEL in 2007 along with former US vice president Al Gore, strongly wanted the CCS system to save the current thermal power stations, with a chemical washing of fossil fuels that increases the energy costs of 12%, while costs with coal would increase by 30%, but without neutralizing CO2. Catching it

and hiding it only under very high pressures (800 bar) at about a thousand meters deep in land cavities to be identified. This absurd solution so far throughout the world has cost at least fifty billion dollars could lead to the release of gas due to earthquakes or even trigger them and make victims among the populations (Effetto Nyos). This super award-winning science, due to its competence, has not spent a word for my solution of flanking thermal power plants, incinerators, high furnaces, cement plants, common chimneys to limestone greenhouses with large artificial rains with water recycling that they would produce carbonates in the water that would be sent to the sea, to which alkaline water would be convenient, since they are acidifying and the glaciers melting. I do not know if these great scientists are convinced, like the patent offices, that my inventions are "perpetual motion" or keep silent because they have understood that since the beginning of the industrial era, they have allowed governments and multinationals to make huge wrong investments on wrong energy and purification principles. In both cases, the United Nations must be the one to clarify. Not in words but with demonstration prototypes, which certainly cannot be afforded by the undersigned, who has already spent about 20,000 euros to deposit forty national and international public utility patents that are not worth a shred of copyright because patent filings only serve to protect the industrial property of those who can pay, even if the inventions are environmentally wrong.

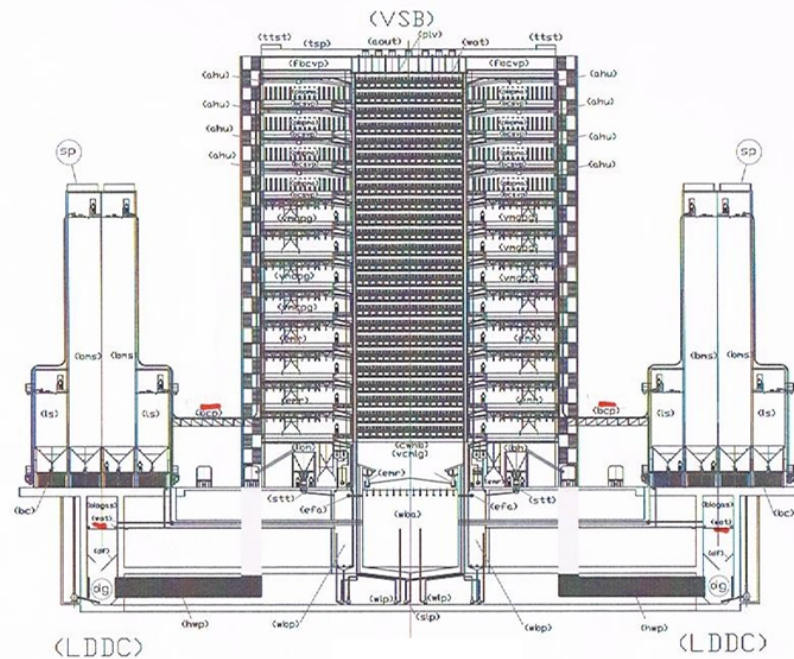
Could you ask yourself why I chose to file patents instead of writing books? I believe I did both by posting articles online immediately after filing patents. But patent deposits are important because, the huge archive of world patents shows that no one has ever tried to rationally clean fossil energy by reacting water fumes and limestone, as nature has done, since the primordial era, when atmospheric gases were much more polluting and numerous than now. If this system worked in the primordial era, why should it not work also by



artificially creating the right environments for reactions to take place?

The two figures below show the solutions proposed by the undersigned to complement the large plants that produce CO<sub>2</sub> and organic pollution.

The first is that of the adjacent FSV and LDDC buildings studied before the invention of compressed hydroelectric energy. It shows the cross section of the large VSB vertical buildings and of the large linear composting dehydrator digesters that should have completed the cycles left hanging both from the chimneys and from the purifiers, reacting in the limestone greenhouses the water with the fumes and the calcareous material to close the carbon cycle and in the overlapping biological ponds the completion of the organic cycles, which would have worked in combination with the LDDC buildings. Obviously, this solution with the invention of pumps with separate dual supply up to the impeller and to the compressed hydroelectric energy would reduce the costs and multiply the performances. These plants, when fossil energy is eliminated, could be used for vertical agricultural production, creating complete biological cycles that close all the cycles they open. Details of these solutions are available at <http://www.spawhe.eu/patent-drawings-synergic-plants/>, <http://www.spawhe.eu/synergic-plants-files/>.



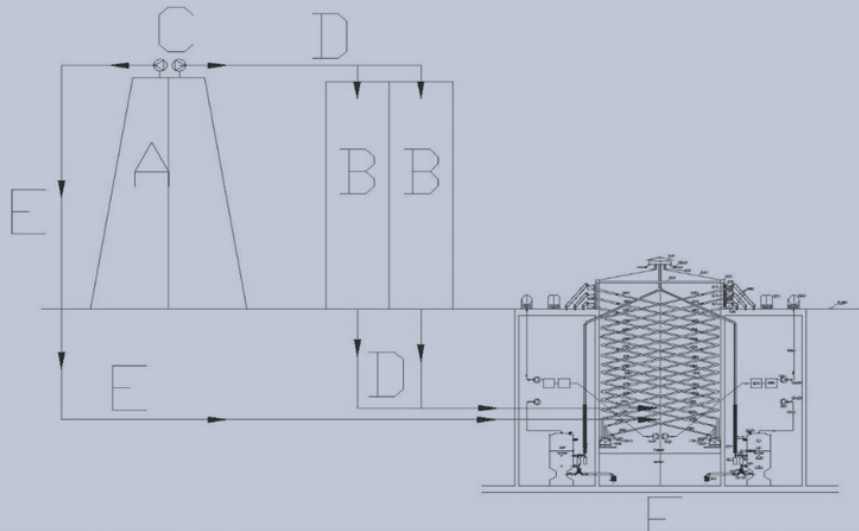
VSB = VERTICAL SYNERGIC BUILDINGS  
 LDDC = DIGESTORS DISIDRATOR LINEAR COMPOSTATORS

The second solution, developed after the inventions of the pumps with the separate double supply up to the impeller and the compressed hydroelectric energy, concentrates only on an advancement of the state of the art of the limestone greenhouses, since if the fossil energy is completely eliminated for civil installations, large industrial plants that produce steel, incinerators, cement plants and plants that produce lime will not be eliminated. These large plants that will continue to emit CO<sub>2</sub> and dust can be flanked by these large underground greenhouses, where the limestone material is moving without the mechanized systems, provided by the undersigned in the previous solution of the FSV buildings. These plants will also be able to support the overlapping biological ponds that global public bodies have never built to complete the purification and alkalization cycles, producing energy instead of consuming it.

These plants will be very simple and efficient even if the bureaucrats of the patent offices have declared them perpetual motion, while world science, governments, the United Nations,

entrepreneurs, environmental associations are silent.

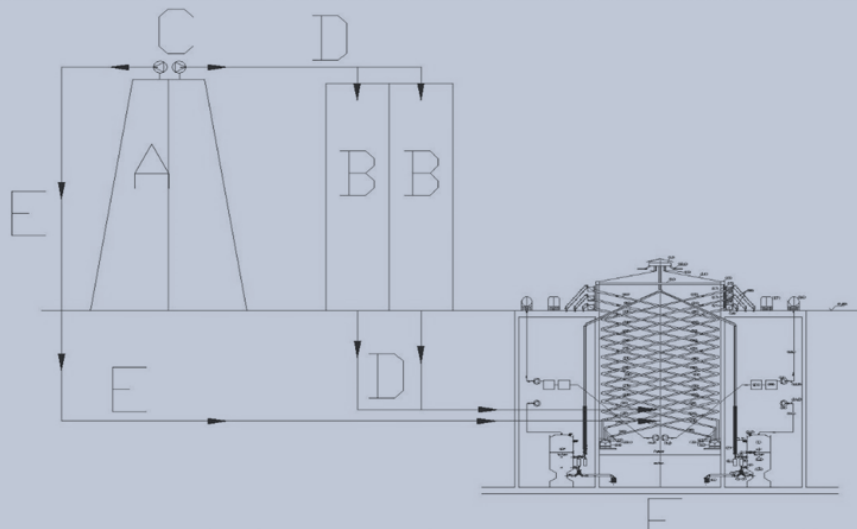
### CALCAREOUS GREENHOUSES FOR FUMES AND DUST PURIFICATION SERRE CALCAREE PER DEPURAZIONE FUMI E POLVERI



The Figure shows the connection scheme to the world's most polluting thermal plants. Where A represents a blast furnace, incinerator, cement plant, a large thermal power plant, an oven for the production of lime. B represents the current filtration system of plants A which clearly are not sufficient to purify globally. C are the fumes and dust extraction fans. D and E, are the paths of the dust up to the inside of the calcareous greenhouse F, which purifies them by consuming the CO<sub>2</sub> the SO<sub>x</sub> and NO<sub>x</sub> contained in the fumes while producing compressed hydroelectric energy.

La Figura mostra lo schema di collegamento agli impianti termici più inquinanti al mondo. Dove A rappresenta un altoforno, inceneritore, cementificio, una grande centrale termica, un forno per la produzione della calce. B rappresenta l'attuale sistema di filtrazione degli impianti A che chiaramente non sono sufficienti a depurare globalmente. C sono i ventilatori di estrazione dei fumi e delle polveri. D ed E, sono i percorsi delle polveri fino all'interno della serra calcarea F, che li depura consumando il CO<sub>2</sub> i SO<sub>x</sub> e NO<sub>x</sub> contenuti nei fumi mentre si produce energia idroelettrica compressa.

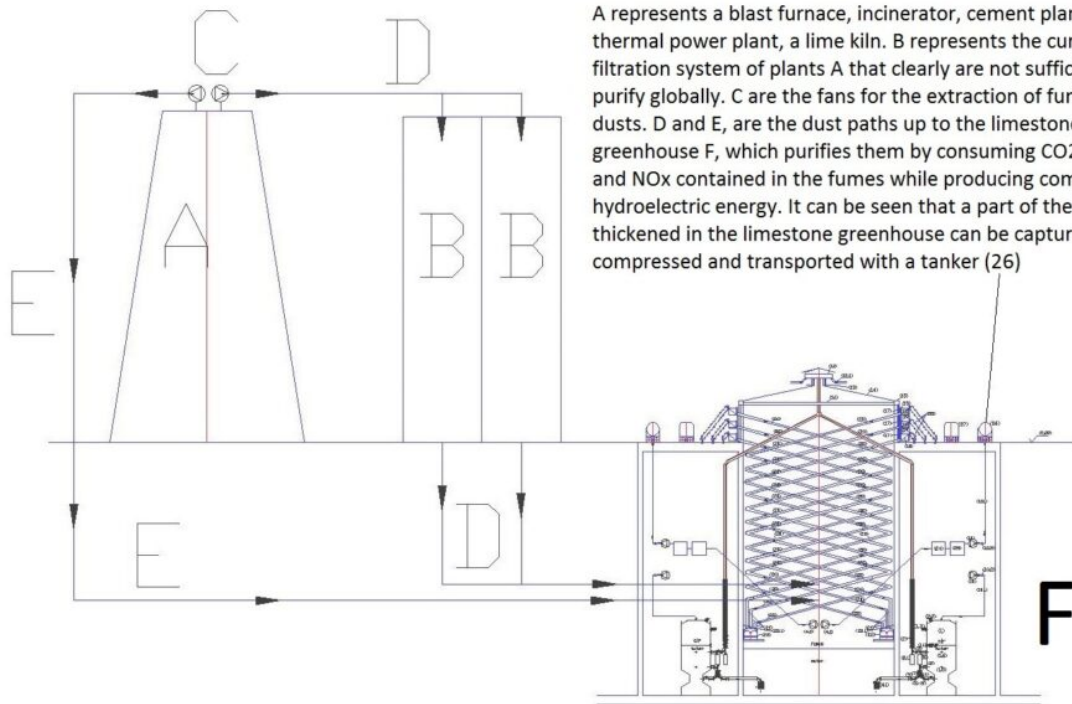
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**MANY WORDS ON THE POLLUTION OF BLAST FURNACES AND INCINERATORS  
BUT NO PROPOSED SERIOUS ON THE COMPLETE DEPURATION**



A represents a blast furnace, incinerator, cement plant, a large thermal power plant, a lime kiln. B represents the current filtration system of plants A that clearly are not sufficient to purify globally. C are the fans for the extraction of fumes and dusts. D and E, are the dust paths up to the limestone greenhouse F, which purifies them by consuming CO<sub>2</sub> the SO<sub>x</sub> and NO<sub>x</sub> contained in the fumes while producing compressed hydroelectric energy. It can be seen that a part of the fumes thickened in the limestone greenhouse can be captured, compressed and transported with a tanker (26)

The steel cycle, which can be produced or recycled only by melting, that of non-recyclable solid waste, which must necessarily be incinerated, the production of lime and cement are incomplete, like those of thermal power stations, but produce toxic emissions, powders and CO<sub>2</sub> in much greater quantities. Therefore, these systems, like thermal power plants, must be designed differently from the current ones. Even though today, more than sixty percent of the world steel is produced with electric ovens, and many waste is burned with the same system, which reduces toxic emissions, we can not say that electric ovens also reduce CO<sub>2</sub> emissions, being the primary source of electricity always due to fossil thermal power plants. In addition, even electric ovens for accelerated processes use fossil or biological fuels. Therefore, not only must the primary source of energy be changed, which must become hydro-electric compressed with water recycling. The current chimneys, both of the thermal power stations and of the melting furnaces and of the incinerators, must be eliminated, because no filtration in the world can neutralize the fossil or biological CO<sub>2</sub> that it is. In fact, if we want to lower the percentage of CO<sub>2</sub> in the environment we must also neutralize the biological one. In addition, even electric ovens, although in smaller quantities, produce toxic substances such as NO<sub>x</sub>, SO<sub>x</sub>, fine powders. The undersigned has already obtained international recognition of patents that eliminate the chimneys and replace them with small and large scale greenhouses, but these have not found lenders, especially public, therefore, also proposes those underground hydroelectric, which are simpler and cheaper from the point of view of the movement of calcareous material. These greenhouses will not only neutralize CO<sub>2</sub> in a sustainable way for the environment, they can also replace the existing large and small water purifiers of existing waters, which produce acidic waters, producing lower alkaline water costs, which counteract the acidification of oceans.

To carry out the same purifying and alkalizing function, without any environmental impact, rivers, lakes and artificial basins can also be added, producing the same water that circulates all the electrical energy needed to power the ovens, incinerators and the neighboring cities.

Today to assert that energy is not created from nothing is a scientific banality because quantum physics that deals specifically with the energy mysteries of the universe, is using quantum computers to try to understand the mysteries of the origins of matter, electromagnetism and universal gravity. The quantum computer is able to process – at the same time, through parallel computing, more solutions to a single problem instead of carrying out sequential calculations as is now the case with electronic processing. Today, the only certainty about the perpetual motion possess the ignorant who have memorized the principles of thermodynamics that are absent in fluid dynamics and electromagnetics that are used to produce



hydroelectric energy and water recycling.

Who taught these principles in world universities has not been able to teach the neutralization of the side effects of heat production, above all, pollution, but also the reasons for which they have accepted the low efficiency of engines and thermal power plants that do not exceed the efficiency of 35 – 40% of the lower calorific value of the fuel, while the statically exploited compressed air energy, not only costs nothing, but has no pressure limits. The scientists and inventors of the past only had to invent the way to overcome the state of inertia of small aquatic masses as nature does with large masses to produce the carbon cycle and thermohaline circulation using gravity, atmospheric pressure and different densities, position and temperature of water and air. The undersigned has investigated these phenomena to reduce the costs of purification and alkalisation of water, especially to neutralize CO<sub>2</sub>. This research allowed me to identify hydroelectric energy with the recycling of water at atmospheric and compressed pressure. The global public bodies and the multinationals could not identify these energies because they never thought of achieving global cycles by modifying the chimneys, the sewage treatment plants and the thermal power plants as the undersigned has done in all the national and international patents that they have allowed to lapse without ever finance them.

It is obvious that those who did not know or not wanted to conceive interactive purification, could not conceive interactive energies. What is not obvious is the global silence on these logical and linear solutions that do not need secret formulas and that for the undersigned can not even fail because everything he proposes has already been scientifically legislated and technologically tested but never put together synergistically. This is due to the division of scientific and technological skills that have prevented the entire world from designing complete systems. It is not logical that these

things are also silent on environmental oppositions that do not want to go into the details of alternative solutions but only choose the lesser evil studied by public research institutions and multinationals. In many cases there are also conflicts of interest due to large contracts that no one questions on the technical and scientific level and the sale of public patents to private companies on solutions, which the identification of interactive systems make obsolete.

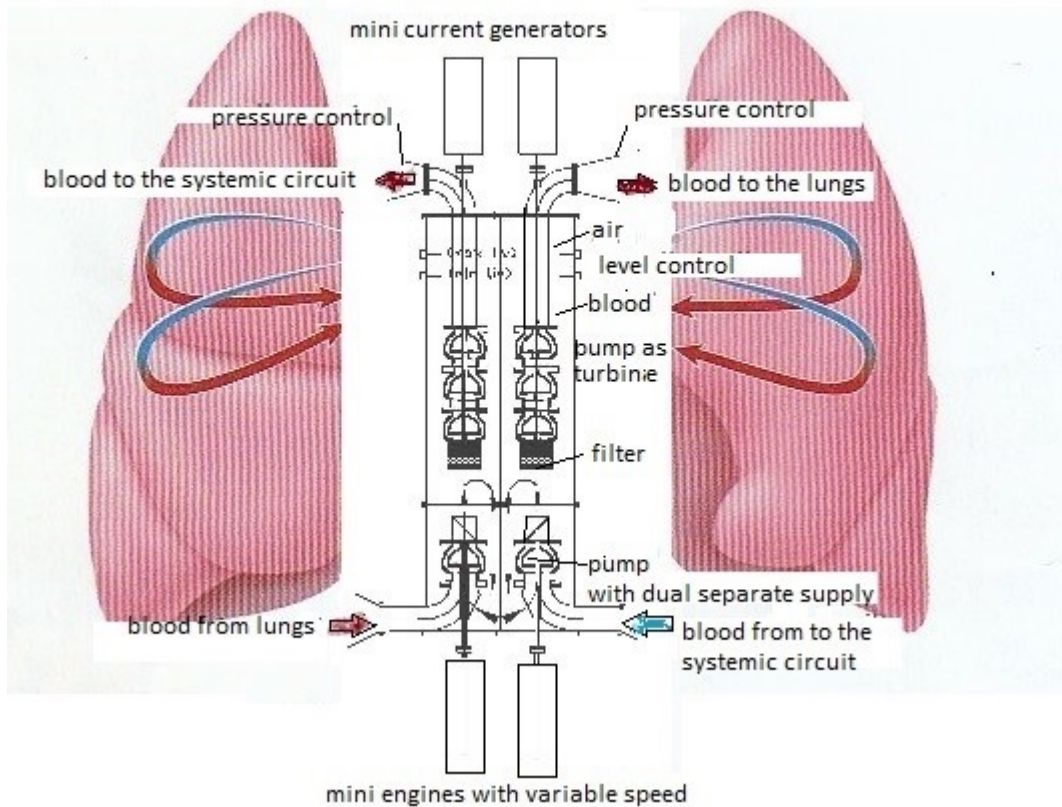
For myself, those who have insisted on improving fossil energy without neutralizing CO<sub>2</sub>, and those who for over a century have been trying to divide the atom, without neutralizing radioactive waste, have produced more damage than good for humanity and to the world economy, because with a little patience interactive energies could be identified for at least a hundred years, being the solutions already implicit in natural systems and in the laws already published by Einstein, Newton, Henry, Pascal, Torricelli. In fact, CO<sub>2</sub> is easy to neutralize. It has virtually neutralized the undersigned in national and international patents, first separating it from the air, being heavier (through modified chimneys), and then making it react chemically with water and the limestone material that is widely present in nature. To economize the fossil energy cleaning processes, completed after eight years of solitary studies and around 25 patent deposits, ignored by world public science, the undersigned has identified the interactive energies in 2014 and 2016, also them ignored by public and private world science. Obviously, even from scientific journalism, politicians, and legislators and judges worldwide.

All these gentlemen of the past and present who have not investigated and kept silent about global purification and interactive energy, have created a development full of defects, where the various branches of science do not interact with each other. The same thing was done by the designers of the great world plant and structural works. The result we had,



in addition to global warming, are also immense public works completely wrong both to produce energy, to purify and to travel. In fact, if energy costs little and purifies the environment by dissolving oxygen in water, we must not save it, but produce it even where it is not needed. Therefore, it makes no sense to use aerodynamics to travel in the atmosphere, which saves energy, but does not allow the transport of large loads, while on earth we are forced to build roads bridge galleries viaducts and to destroy forests only to move from one place to another, with very high costs. Therefore, over long distances, the cheapest, fastest and safest way to move goods and people will be by air. We conclude this presentation by talking about the artificial heart of man which is nothing that the miniaturization of one of the compressed hydroelectric systems described above. In particular, the one used by the undersigned to lift and oxygenate the wells of the water we drink, which today is polluted by every type of substance used in agriculture to combat pests, by non-purified organic substances, by agricultural fertilizers, etc. If with this system we could enter the wells and oxygenate the water, I asked myself why not reduce the size even more and let the system enter the man's chest to circulate and oxygenate human blood?

## ARTIFICIAL HEART OXYGENATOR OF BLOOD, ENERGYCALLY AUTONOMOUS.



THE ARTIFICIAL OXYGENATOR HEART OF THE AUTONOMOUS ENERGY BLOOD was the fifteenth open letter (without answers) to the international Court of Justice and United Nations. Obviously, not even governments and large private companies worldwide have responded.

Of the blood oxygenator system I have already spoken indirectly in this presentation as it is based on the same scientific principles already illustrated in describing the previous implants that try to complete THE INCOMPLETE INVENTIONS OF SCIENCE. But it must be said that even this invention would never have been conceived by medical science, as the industrial one was not able to overcome the thermal engines, the nuclear neutralize the radioactive waste, the solar and wind overcoming the limits due to the discontinuity energy, because working in watertight compartments inevitably leads to the acceptance of incomplete systems because not everything can be solved with a single technology or a single

branch of science.

By thinking about small but complete implants, the artificial blood oxygenator was also born. It has aroused much interest from publishers and congress organizers, who have also offered me a stay in a hotel abroad to illustrate it, but I did not accept it because for a simple pensioner, ignored by scientific, political and economic institutions, even the travel costs are an insurmountable problem. I talk about it at this congress in Rome only because it is close to home. Even the age and difficulty in speaking the English language, which until now I have only written, are problems. But the main problem is the hypocrisy and the lack of transparency of the world ruling class. As I wrote in my last article (THE CRIME OF OMISSION IS THE DAILY BREAD OF SCIENCES, BUROCRATES AND WORLD GOVERNMENTS), which is the twentieth open letter to international judges and the United Nations, it is certain that some research laboratories are trying to modify genetically man. I do not condemn these researches. I only say that even if they create super men, they will not be immortal and free from accidents. The artificial heart blood oxygenator serves for survival and lengthen human life.

Not even the artificial heart was able to break the wall of silence of public and private science. If someone accepts the logic of the artificial heart functioning, others must also accept the logic of global purification, of interactive energy, which means accepting the failure of the current industrial age.

Obviously, even the artificial heart oxygenator of the blood cannot function without the invention of the pump with the separate double supply up to the impeller that the undersigned has transformed into an international patent (W02017 / 042847 published 16/03/2017) which unfortunately, the world has not financed.

The artificial heart works like the other compressed

hydroelectric plants, but using a lower pressure compatible with the human organism. While the shape of the autoclaves used is similar to that used to lift and purify water in the wells. Someone more skilled in hydraulics can assert that the flow that enters from the side with less pressure is lower than that which is recycled inside the autoclave. In fact, the side with a higher static pressure has lower load losses, but this fact is not very important for the purpose of operation. Incrementando i giri della pompa raggiungiamo ugualmente la portata di sangue che serve all'organismo umano (5 – 15 L/min).

In fact, by varying the revolutions of the pump, both the inlet and the recycled flow rate vary, but only the quantity of blood coming from the outside enters the pump used as turbine inside the autoclave (2.1 – 2.2), which is not powered by any electrical energy. It is that which produces energy, expelling at the same time the amount of blood entered that is incompatible with the volumetric capacities of the small autoclave. But the expulsion takes place with the force of the small cushion of compressed air, and since it happens at the same instant of the water that enters, the air cushion can not expand and can not consume energy. It can only be produced by rotating the multi-stage pump impellers and the shaft connected to the generator (3.1 – 3.2). The liquid level excursion is regulated by the level sensors (10.1 -10.2). In fact, if the level is lowered, the revolutions of the motors increase (6.1 -6-2) which increase the flow rate of the pump which raises the level only with the blood coming from the outside. If the blood level increases the revolutions of the motors are lowered automatically. The system is managed by an electronic control unit (12) to which the following parameters are received:

the number of revolutions of the circulation pumps motors (6.1 – 6.2);

the signal of the high or low level of the sensors (10.1

-10.2);

The 4 – 20 mA signal of the pressure transmitters (13.1 – 13.2);

Since this value is the one that must be controlled by the electronic control unit (12) depending on the activity performed (rest, normal, fast), the pressure to be maintained automatically can be set by varying the revolutions of the motors (6.1 – 6.2) and the working pressure of the autoclave through the operation of the compressor (8) and the position of the level of the sensors (10.1 – 10.2). The three adjustments are necessary to perfectly center the points of best functioning that can also be identified by the storage of the energy absorbed by the motors of the circulation pumps (6.1 -6.2) and of the one produced by the current generators (3.1 – 3.2) in the three predefined working conditions, ordered vocally to the control unit. In fact, both the circulation pumps and those used as turbines, will have operating curves drawn at the different numbers of revolutions and pressures, traced in the phase of development of the final prototypes. The operating points with better efficiency for each rest position, normal, fast activity, will correspond to the lower absorption of the motors (6.1 -6.2) and the maximum energy produced by the generators (3.1 – 3.2).

Since the spaces are quite small, it is probably not possible to reach the maximum flow rates (25 L / min.) And the maximum pressures (180 mm / Hg), but stop at more moderate values (5 – 15 L / min. maximum pressures of 140 mm / Hg Considering that the pressures measured with the natural heart oscillate between the systolic and diastolic values, the artificial heart will avoid pressure peaks and low pressures, both of which are unwanted for different reasons.

According to the medical literature, the average blood flow in an adult person is about 5 L / minute while the pressure oscillates between the systolic value, equal to about 120 mm /

Hg and the diastolic value of 80 mm / Hg due to the contractions of ventricles. These values increase under stress up to over 25 L / minute and pressure of 180 mm / Hg and decrease when you sleep. Arterial pressure is determined by three main factors:

the amount of blood that is released into the circulation during systole;

the viscosity of the blood (hematocrit);

Resistances offered by vessels (arteries and veins) to the passage of blood flow.

In the artificial heart designed as two small autoclaves that replace the right and left ventricles and ventricles, the blood flow is regulated by two mini-pumps with variable revolutions, equipped with a separate double supply up to the impeller, while the circulation pressure is provided by a mini electrocompressor placed outside, but in the future, it can also be installed in the ribcage, connected to an eternal air intake. We should not be surprised by this solution because the compressor will be very small, having to supply only the amount of air that dissolves in the blood. If we pressurize the mini autoclaves to 1.0 bar that correspond to 750 mm / Hg of mercury, we double the capacity of oxidation of the blood due to the law of Henry and Dalton with respect to atmospheric pressure. The phenomenon of solubilization of gas in the water is quantifiable in milligrams of water per liter of gas (nitrogen, oxygen, CO<sub>2</sub>, helium, etc) according to the law of Dalton, on the partial pressure of the gas and Henry on the solubility in water of the same.

According to Dalton's law, the sum of the corresponding partial pressures must be equal to atmospheric pressure (1 atm = 101.3 kPa) and in fact:

Nitrogen: 79.014 kPa; Oxygen: 21.232 kPa; Carbon dioxide: 0.04 kPa; Argon: 0.8104 kPa;



other gases: 0.2127 kPa. Total (air): 101.3 kPa.

The Henry's law says that at constant temperature, the solubility of a gas is directly proportional to the pressure that the gas exerts on the solution. Reached equilibrium, the liquid is defined saturated with the gas at that pressure. This state of equilibrium is maintained until when the external pressure of the gas will stay the same, otherwise, if it increases, more gas will enter into solution; if it decreases, the liquid will be in a situation of supersaturation and the gas is freed back up to the outside when the pressures are again balanced. The speed, with which a gas enters or is free in solution, varies as a function of the difference of the pressures (external and internal) and is conditioned by its molecular composition and the nature of the solvent liquid.

To compare among them the solubility of gases in liquids, you may consider their absorption coefficient, which is the volume of gas at normal conditions ( $T = 20\text{ }^{\circ}\text{C}$  and  $p = 1\text{ atm}$ ) and expressed in milliliters which was dissolved in a milliliter of liquid. In the table are reported the absorption coefficients in water of some gases at different temperatures at atmospheric pressure:

Gas	Temperatura		
	$0\text{ }^{\circ}\text{C}$	$20\text{ }^{\circ}\text{C}$	$30\text{ }^{\circ}\text{C}$
Elio	0.0094	0.009	0.0081
Azoto	0.0235	0.015	0.0134
Ossigeno	0.0489	0.028	0.0261
Anidride carbonica	1.713	0.88	0.655

In order to understand the meaning of the data in the table, for example, consider the value of 0.028 corresponding to the coefficient of absorption of oxygen in water at  $20\text{ }^{\circ}\text{C}$  at atmospheric pressure. This means that in a vessel containing water at  $20\text{ }^{\circ}\text{C}$ , the gas phase above the liquid contains

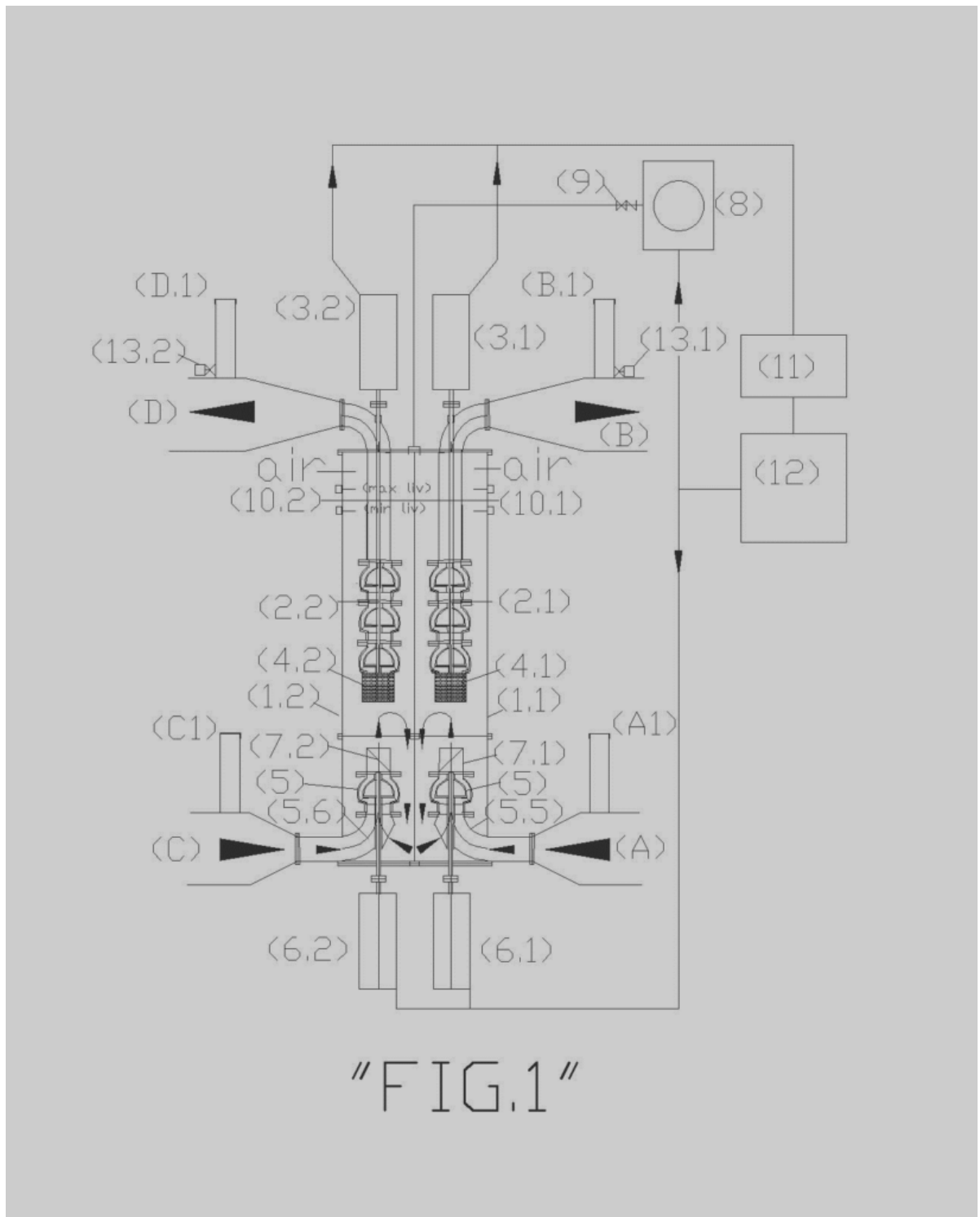
oxygen to the partial pressure of 1 atm, in a milliliter of water is dissolved O<sub>2</sub> equal to a volume of 0.028 mL. In a tank pressurized at a bar more than atmospheric pressure the amount of soluble oxygen doubles and becomes 0.056 mL.

The first principle of thermodynamics is a formulation of the principle of conservation of energy and states that: "The internal energy of an isolated thermodynamic system is constant". In other words it means that energy is transformed, not produced. This is also confirmed in the field of chemical energy, where The Law of Lavoisier, also known as the law of mass conservation, states that in the course of a chemical reaction the sum of the masses of the reagents is equal to the sum of the masses of the products. In other words, in the course of a chemical reaction, matter is not created and not destroyed.

The first principle of dynamic fluid has not been formulated by science, but for myself it denies the principles of thermodynamics and chemistry, because starting from the exploitation of the gravitational force and the position energy of a non-compressible fluid, energy can be create in any place where there is a liquid and a compressible gas, such as atmospheric air, including the inside of the human body, where there is blood and the air we breathe.

If we wish to formulate a general principle of dynamic fluid, we could say that: the electrical energy that an isolated dynamic fluid system can transmit outside its own system is proportional to the pressure of the compressible fluid acting on the incompressible liquid for the liquid flow rate. incompressible, the density of the same, the efficiency of the electric pump with the double power supply separated to the impeller, which introduces it into the system, and the efficiency of the pump used as a turbine that transforms static and kinetic pressure energy into electrical energy. However, talking about efficiency in this system is quite improper because there is no consumption and transformation of

matter, as happens in thermodynamics, chemistry and nuclear, but only the wear and tear of materials



The legend is reported:

(A) blood entry from a systemic circuit, (A1) connection with quick coupling and external cap for first aid supply; (B) blood output to the lungs, (B1) quick coupling and external

cap for first aid supply; (C) entry of oxygenated blood from the lungs, (C1) attachment with quick coupling and external cap for first aid feeding; (D) oxygenated blood output to the systemic circuit, (D1) attachment with quick coupling and external cap for first aid supply. (1.1 – 1.2) pressurized tanks in biocompatible material; (2.1 – 2.2) pump used as a turbine; (3.1 – 3.2) direct current generator; (4.1 – 4.2) filter against impurities, clots of blood and air bubbles; (5) electric pump with double separate power supply up to the impeller; (5.1) transmission shaft; (5.2) partitions divisions up to the impeller; (5.2) partition divider in the pump body up to the impeller; (5.3) pump impeller; (5.4) pump diffuser; (5.5 – 5.6) double curve with separator partitions and transmission shaft passage tube; (6.1 – 6.2) 12 vdc motor with variable revolutions; (7.1 – 7.2) clapet check valve; (8) 12 V DC electrocompressor; (9) shut-off valve and check valve; (10.1 – 10.2) level regulator with capacitive probes; (11) 12 v DC electrical voltage stabilizer; (12) electronic control unit for power supply and system control; (13.1 – 13.2) 4 – 20 mA pressure transmitting probe.

Let's see the path of the blood by looking at fig.1:

1. From the systemic circuit the superior vena cava and the inferior vena cava carry oxygen-poor blood to one of the mini pump (5) feeds with the separate double feed up to the impeller, inserted in the pressurized mini autoclave (1.1) (which replaces the atrium and the right ventricle of the heart). The second supply of the mini pump (5) internally recycling the blood present in the autoclave to the pressurized tank (1.1), allows to balance the pressure in the impeller and to make a first oxygenation of the blood due to Henry's law. Lightening the work of the lungs. The check valve (7.1) guarantees one-way flow.

2. From the right mini autoclave (1.1) exits through the blood through a mini pump used as a turbine (2.1) and a filter against impurities of blood clots and air bubbles (4.1)

reducing the pressure, while a small dynamo (3.1) connected to the shaft of the turbine produces direct current electricity. The output of the mini right autoclave feeds the lungs where the oxygenation of the blood takes place;

3. The oxygenated blood from the pulmonary capillaries arrives in the lower area of the lungs, where the pulmonary veins feed another minipump (5) with the separate double feed up to the impeller, inserted in the pressurized mini autoclave (1.2) (which replaces the atrium and the left ventricle of the heart). The second feeding of the mini pump (5) internally recycling the blood present in the autoclave inside the pressurized tank (1.2), allows to balance the pressure in the impeller and to effect a further oxygenation of the blood due to Henry's law. Lightening the work of the lungs. The check valve (7.2) guarantees one-way flow.

4. From the mini left autoclave (1.2) the blood exits passing through a mini pump used as turbine (2.2) and a filter against impurities clots of blood and air bubbles (4.2) reducing the pressure, while a small dynamo (3.1) connected the turbine shaft produces direct current electricity. The output of the mini autoclave left feeds the artery called aorta, and from there it resumes its path within the systemic circulation.

We do not have to worry about the greater pressure contained in the autoclaves compared to the internal pressure of the human organism because this greater pressure exists only in the autoclave, the blood pressure measured at the exit of the turbines (2.1 – 2.2) after having exploited and reduced it will fall within the values normal human body. In fact, the hydraulic resistance of the turbine and the mechanical one of the current generator, well proportioned in the testing of the prototypes can give a precise regulation of the pressure, but the greater regulation will be made through the number of engine revolutions (6.1 – 6.2) of the pump of power supply with the double power supply separated up to the impeller.

Human blood is a liquid with a color ranging from ruby red to purplish red depending on the amount of oxygen bound to hemoglobin; has a viscosity about 4 times higher than water and a specific weight of 1.041-1.062 g / cm<sup>3</sup>. For the purposes of energy calculations it is important both the high viscosity that reduces the loss of load, and the density that increases the power absorbed by the pumps and produced in the turbines.

Assuming to use the blood with a mean density between the two implants 1,055 and that the pump used as a turbine and that of blood circulation have the same efficiency (0,60), that the flow rate of the pump is 10 L / min (0,166 L / s) load losses 0.2 m, the circulation pump absorbs 0.57 Watt ( $0.166 * 0.2 * 1055/102 * 06$ ), while the turbine exploits the flow rate of 5 L / min (0.083 L / s) and the autoclave pressure of 10 m produces a power of 5.17 watts ( $0.6 * 0.083 * 10 * 1055/102$ ). Considerando che abbiamo due mini impianti idroelettrici pressurizzati che lavorano in parallelo, abbiamo una potenza assorbita di 1.14 W e una potenza energetica prodotta di 10,34 Watt.

Therefore, without energy sources external to the human body we can manage a small digital electronic circuit (12), equipped with a voltage stabilizer (12 v DC), which feeds the mini compressor (8) to maintain constant pressure and blood levels in the autoclaves using the level regulators (10.1 – 10.2) and adjust the number of revolutions of the motors (6.1 – 6.2) of the pumps that regulate the flow rate of the blood. If we need a higher energy output, we should only increase the working pressure of the mini autoclaves and the capacity of the pumps with the motors (6.1 – 6.2), controlling the outlet pressure with the pressure transmitters (13.1 – 13.2 ) arranged near the B1-D1 couplings, which depend on the operating curves of the pumps used as turbines (2.1 – 2.2), which as seen in Fig. 1 are shown in three stages having to lower the pressure from about 750 Hg to the normal pressure of circulation (80 – 140 Hg). However, the adjustments must not



be done by the patient, but by the voice control control unit (12).

As mentioned above, the pressure of the mini autoclaves is limited within the autoclaves to produce the pressure energy for the circulation of blood (according to the principle of Torricelli and the dissolution of oxygen in the blood according to the principles of Henry and Dalton). But the outlet pressure can be established precisely only by verifying the operating characteristics of the pumps used as turbines. If we increase the pressures with the compressor (8) we also increase the pressures detected by the pressure transmitters (13.1-13.2); if we increase the flow of blood with the engines (6.1 – 6.2) part of the pressure is absorbed by the pressure drops of the pumps used as turbines and the pressure is lowered. But we may have an excess of disproportionate scope for human activity that takes place. Since the flow rates of the blood can not be measured in the human body, moment by moment, it is necessary to realize the optimal operating curves in the laboratory so that they are stored in the electronic control unit (12). At each pressure level measured by the pressure transmitters (13.1 – 13.2) corresponds an ideal number of revolutions of the motors (6.1 – 6.2) and automatically an optimum pressure level supplied by the compressor (8), depending on the pump test performance used as turbines (2.1 – 2.2). These can not be adjusted, unless we add an adjustable mechanical or electromagnetic brake to the current generator connected to them. If we use a mechanical brake, they dissipate energy, but if we use a heavier electromagnetic brake with a larger quantity of magnets, we produce more energy. This is a choice we have to make according to the energy we need to manage the artificial heart with maximum efficiency.

The scientific and technological world, which has not identified the primary clean source of global energy along with the legislators are making themselves silly with their

silences, forcing the undersigned to patent the individual applications of compressed hydroelectric power while everyone pretends that it does not exist and therefore none finances it, like the previous inventions that led to the discovery of this energy. Being the artificial heart the fortieth patent, it can not be random, the isolation in which you find an inventor who seeks sustainable alternative solutions to the centers of power, for this reason I hope that, at least the medical science dissolve this silence and finance at the international level this patent deposit, recognizing the undersigned not the industrial property, but the sweaty copyrights, breaking the wall of silence of the research bodies and multinationals against private inventors.

In the artificial heart and in all similar industrial applications it is evident that the check valves (7.1 and 7.2) kept open by the one-way blood circulation would automatically close if the circulation pumps stopped. These can not be stopped otherwise the artificial heart stops. If this happens, it means that the motor of a pump does not work. But the problem is less serious than natural heart arrest because the other pump continues to function and the blood to the brain, albeit in smaller quantities, continues to arrive. The emergency medical staff from the control circuit (12), realizes which of the two mini autoclave systems does not work and already in the home rescue phase, can connect the internal cardiac circuit to an external artificial heart of the same blood group supplied ambulance. In the hospital the final repair operation will take place, without the patient risking his life. The study of this solution has led to think also for the natural hearts that will have greater chances of survival if you make the predisposition to the connection on the ribcage of four standard bypass attacks for all heart patients awaiting transplantation of a natural heart or an artificial heart, so that they can be rescued before the brain damage occurs by means of an external temporary artificial heart. In fact, we lose consciousness if oxygen does not get to the

brain for eight ten seconds. If the absence of oxygen persists for over 4 – 6 minutes, the brain begins to die. Even if the heart can be reactivated, after this period the damages are irreversible.

Neurological, pneumocardiological medical science and the medical electromechanical equipment industry are not guilty of this delay in the advancement of the state of the art in preventing neurological death that renders heart resuscitation useless. Four minutes are very few to be able to intervene, and yet with the artificial hearts available and an efficient organization, four minutes could be enough. In fact, if we look at Fig.1 we can see that there are the positions (A1-B1-C1- D1) that in the legend are called “quick coupling and external cap for first aid supply”. With these predispositions carried out surgically on all subjects at risk of heart attack, a blood circulation parallel to the heart can be organized immediately regardless of cardiac stimulation by cardiac massage or defibrillator. Certainly this solution is more efficient and safe than cardiac massages and external defibrillators, which only in 2-3% of cases are successful, when the heart has stopped for several seconds. When a heart is sick, it is necessary to think of the definitive substitution of the heart with a new heart, natural or artificial, but nothing excludes cardiac dysfunction. I think that the quality of life of men and women of the future will not be much worse if you have four holes with quick hydraulic couplings (already existing at the state of the art) on the chest hidden with skin-colored caps, considering that many people today they make tattoos in various parts of the body. When the artificial heart will be a reality, in every home there should be an artificial heart already ready for use with the blood group of the risk person equipped with standard quick couplings for connection to the connection points (A1 – B1 – C1 – D1) of natural or artificial hearts to be rescued. Four minutes are few but enough to save the life and the integrity of the brain of people who love each other if

nothing is left to chance. But we must also think about children born with serious cardiac malformations that are destined to never become adults. I think that as soon as the predispositions can be made (A1 – B1 – C1 – D1) the child can live an almost normal life with an external artificial heart of small size and weight (without batteries) and when it will exceed the age of growth the implant can be installed totally or partially inside the ribcage. This will depend on the evolution that the state of the art will undergo in the coming years.

However, from the description of this patent filing, it should be clear that in the future the life of man and woman will lengthen greatly. Much of life will be spent with artificial hearts ever more perfect, not so much from the hydraulic and mechanical point of view, already quite defined by myself (even if the performance will improve continuously, especially using new lightweight and resistant biocompatible synthetic materials) but above all, from the management one. It will be very important to manage the functions of the artificial heart directly with the brain or at least with voice commands, without maneuvering a digital keyboard. The small compressor and the control unit must also be miniaturized and inserted under the skin. This is not impossible because, as explained, the statically-used compressed air must not be expelled as it does in the pneumatic motors. Only the one that is dissolved in the blood is consumed as in the lungs. Probably, since the artificial heart improves the capacity of oxygenation, if necessary, it will be possible to slightly limit the space of expansion of the lungs to let everything enter the chest. This can be precisely defined after having made the first prototypes. I publish these things, coherently, with previous publications, hoping that the International Judges and the WIPO (World International Property Organization) understand what they have not understood until now. That is, that environmental, energy, health, and public utility patents must be treated differently from commercial patents, recognizing

intellectual property and copyrights to inventors. The industrial property may concern the single pump, turbine, compressor, electronic control unit, if the manufacturers believe they have special requirements, which fall within the criteria of patentability.

Best Regard

Luigi Antonio Pezone