

# Aerospace and submarine transport system with interactive primary and inductive linear motors.

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Twenty-fifth open letter to the International Court of Justice and the United Nations.

## ABSTRACT

To purify the environment, it is essential to identify the interactive principles between water and air. It also serves to design a rational terrestrial and spatial transport system. In fact, gravity and atmospheric pressure hinder the lifting and movement of the masses. The thrusts of Newton and Lorentz have been legislated for centuries, but in air transport only the first are used because of the difficulties encountered by science in inventing a space-saving system that produces sufficient electricity on board the means of transport to feed both thrusts, which together, with their accelerations, would zero the weight of the mass, which is a vectorial force, according to the relation  $F = m * (a - a_L - a_N)$ , where "a<sub>N</sub>" and "a<sub>L</sub>" are the respective accelerations of Newton and Lorentz in the opposite direction to gravity. This problem was solved with the invention of the "primary and induced global interactive linear motor", which is a complete system, which exploits air pressure statically, one-way, circulates pressurized water through a turbine with current generator and uses a pump with the separate double supply up to the

impeller, which recycles the water discharged from the turbine by inserting it again into the internal recycling circuit of a pressurized autoclave in the form of a tube, placed in series or in parallel to an electric turbofan, while the primary electric current produced by the generator feeds the turbofan motor and moves the permanent magnets of two parallel or superimposed inductor circuits, concentric to the autoclave and to the turbofan, induced currents are also produced in the external enclosures of the autoclave and turbofan they generate two Lorentz thrusts which add up to the Newton thrust of the turbofan. Therefore, the electric turbofan becomes an induced interactive linear motor that simultaneously produces the thrust of Newton and Lorentz, while the primary plant, in addition to feeding the inductor circuits, produces in its own armature the Lorentz thrust which is added to the two thrusts of the turbofan. Considering that space starts, conventionally, only 100 km away from the surface of the earth, it will not cost much to climb into the atmosphere vertically with the forces of Newton and Lorentz together. It will cost even less to move into the void with just the electromagnetic drive and get off at the destination airports. Obviously, even submarines will be able to use these interactive global engines by replacing the turbofan with marine propellers, making them cheaper and safer. These plants will also be able to defend us from the high waters with the thrusts of Lorentz and Newton while the primary energy oxygenates the water with the static air pressure in the autoclave according to Henry's principle.

## DESCRIPTION

Before starting the description of this patent filing, I consider the following premise necessary: "Nature, by thickening the atmospheric air, has given us the tool to slow down the fall of bodies and to counteract and overcome it if we want to overcome the gravitational force, allowing us to produce the compressed hydroelectric primary energy that

directly produces the drive torque at the output of a turbine connected to a current generator that produces direct electromagnetic current, which produces Newton's thrust by means of propellers and fans and the inductive and induced Lorentz one by means of permanent magnets and solenoids. The most difficult energy to discover was the primary one with the recycling of water, which also allows the best energy gain thanks to the Pascal principle which states that the pressure of a compressed gas (air) expands in all directions and therefore if it cannot expand it exerts static pressure on the surface of the liquid (Water), referring to the Torricelli principle which states that the velocity "v" of water leaving a hole subjected to pressure "h" is equal to the square root of  $2gh$ , where g is gravity acceleration. This is the speed of the water that passes through the turbine and moves the shaft of the current generator. However, the invention that was missing to exploit the same amount of water indefinitely, and to allow energy and purification gains was "the pump with the double separate supply up to the impeller". In fact, this pump, having two clearly separate supplies that meet only in the rotating impeller (not before) allows to insert the water discharged by the turbine directly into the internal recycling circuit of the autoclave without having to overcome the opposition of the static pressure. But the same amount of water that enters low pressure is simultaneously expelled at the same time by the pressure "h" of the autoclave which makes it enter again into the hole that feeds the turbine with the Torricelli speed, due to Pascal's principle or impenetrability of bodies. This allows an immense energy gain, which does not require fuels, electrolytic materials or active radios. It only depends on the pressure and wear of the materials that make up the pump, the turbine, the turbofans that produce Newton's thrust and the mechanical motion transmission organs to the wheels or marine propellers and to the permanent magnets that produce the induced currents, which they produce the Lorentz thrusts. To this we must add that every time the water that produces the energy passes through the autoclave it

absorbs a greater quantity of oxygen according to the laws of Henry and Dalton, therefore these systems can also be used as purifiers of polluted water. It is no coincidence that the degree of water pollution is measured in BOD which means the need for dissolved oxygen. Isn't it ridiculous that we consume a lot of energy today to oxygenate the water, while the oxygenation of the water could be a secondary effect of energy production? Who should answer for these worldwide mistakes? Certainly not the patent offices that have declared the energy systems proposed by the undersigned "perpetual motion" and "utility model" the pump with the double separate power supply up to the impeller. In my opinion, public and private world science must respond. For a matter of intellectual honesty, otherwise the legislators will continue to believe indefinitely in the fable of "perpetual motion" that does not exist, but if it existed, it could not compete with interactive energy, which does not exist only because of the inability of science public and private, which together have not been able to extract it from nature ".

Since described in the summary, in the near future, the simplest and most economical way to produce energy, purification, and above all, to move on the earth, in space and in submarine environment will be with the "primary linear and induced interactive linear engines". This is the name I gave to these complete energy and collateral depurative systems, autonomously energetic, that do not require public infrastructures such as roads, bridges, viaducts, tunnels, railways, subways, energy distribution networks. I don't think it's a coincidence that Newton's thrust opposes the flow of air that enters the turbofan and that it goes in the same direction as the Lorentz force, if the flow of the permanent magnets that we use to produce the induced current, goes into the same direction as the air passing through the turbofan. In fact, even the electromagnetic force of Lorentz is opposed to the magnetic flux that generates it. On the other hand, these laws have been widely tested even if no one has thought

of sliding permanent magnets outside the turbofans and creating the air gap and an induced outside solenoid. And to do the same thing even outside the primary circuit producing compressed hydroelectric energy and the compressed air and water tanks that feed it and that recover water and air in an infinite recycling cycle that does not it leaves nothing out of primary energy sources. More than a hundred years after the important discoveries of electromagnetism, it can be said that apart from the Maglev high-speed trains that use them only partially, there are no practical applications of linear motors, which instead have great potential if they are used in conjunction with production of primary compressed hydroelectric mobile energy and to the cylindrical surfaces of electric tanks and turbofans.

According to many authoritative scientific publications, including "Nature Geoscience", the Earth's core is composed of a viscose inner part, made almost entirely of iron and a fluid outer core, made of iron and nickel. The movements of the material in the external nucleus give rise to the earth's magnetic field. The terrestrial atmosphere that is produced by this field and the electromagnetic interactivity with the surrounding satellites and planets protect us from solar radiations and have allowed the creation of very rare climatic conditions in the universe that have allowed the development of photosynthesis and all the terrestrial life forms. We do not know if there are other civilizations similar to men, but there are certainly planets similar to the earth where human life could be compatible. How to reach them? Despite the scientific and technological advances made in the last century, after the publication of Albert Einstein's theories of relativity, the development of astronomy and quantum physics, we have not yet taken the first step in the right direction. In fact, we leave the earthly atmosphere with a polluting and rudimentary system such as rockets fueled with chemical fuels, which bypass the insights necessary to develop a sustainable, interactive, universal aerospace transport

system, which also guarantees the return of transport vehicles to the earth. Not just astronauts with makeshift vehicles like spaceships, parachutes and inflatable dinghies in the seas.

Reading the following article available on the web [http://www.lescienze.it/news/2015/06/30/news/campi\\_magnetici\\_cosmo\\_modello\\_laser-2672381/](http://www.lescienze.it/news/2015/06/30/news/campi_magnetici_cosmo_modello_laser-2672381/), I extracted some concepts that led me to revise my previous patent filing concerning the way to navigate in space, N. 102017000059993 of 01/06/2017, based only on the reaction thrust of Newton (<http://www.spawhe.eu/aerospatial-pressurized-hydroelectric-transport-system/>). From the aforementioned article and other similar ones, we can learn that in the universe, matter forms a web of clusters of densely populated galaxies and connecting strands separated by vast empty spaces. When astronomers began to observe magnetic fields in space, they noticed something strange: the universe is magnetized. Scientists expected to find these magnetic fields in active regions, where plasma currents like those inside stars can generate them. But apparently even the empty cosmic traits, where scientists had expected that it could hardly happen, are woven magnetism. To explain the incredible strength of magnetic fields in space, scientists have hypothesized that the seeds of magnetic fields can be amplified by cosmic turbulence. For the undersigned the identification of the causes that have produced and produce the magnetic fields are important, but it is above all important, to concentrate on the way to use the technologies to move away from the undesired magnetic fields and to use the electromagnetic currents that make us comfortable also in the design of the means of transport of the future. The "polarization" (the direction along which the electromagnetic wave oscillates) can be exploited and interact with the electromagnetic waves that we will produce on board the aircraft that will act in the same direction. This does not mean that we must produce nuclear energy on board aircraft, as has been interpreted by the major scientists of the last century and current, who have spent immense economic resources

in order to create such energy and are still spending (especially the ITER project from twenty billion euros that are being tested in the south of France, which promises to extract energy from sea water and lithium). Until now, nuclear energy has only produced disasters and even if it had not produced them, it is unthinkable that the large reactors it requires can be mounted on transport vehicles. While it is essential that electromagnetic energy is produced on board the air and space transport vehicles, but this needs a clean and non-depletable primary energy source, as it should have also been on land transport if we did not mistake the primary sources world energy. The source of this energy cannot be, for different reasons, neither thermal (due to the enormous heat it should develop), nor nuclear (for the same reasons and radioactive contraindications), nor solar, which is not very powerful and discontinuous. Moreover, to have a very long autonomy we cannot use elements that come from other sources (fuels, chemical elements, catalysts, radioactive metals).

World science on planet Earth has made the mistake of not properly investigating and exploiting the energy present in the environment produced by gravity, which has thickened the air to allow us to statically exploit the atmospheric pressure. On the other hand, nature uses the simple atmospheric pressure on the water to produce sea currents, artesian wells, rivers, waterfalls, teaching us that it is convenient to use the force of the water under the pressure of the air which can act even statically, taking advantage of its own elasticity. World science has not perfected this system technologically with new and simple inventions. The undersigned did this by first inventing the "artificial welling" (patent filing 102014902290390 of 09/03/2014) and then "submerged hydroelectric energy" (Italian patent filing 102014902298581 of 06/10/2014) and subsequently, " the pumps with the separate double supply up to the impeller "(Italian patent filing 102015000048796 dated 07/09/2015) which would allow to exploit the compressed air pressures in the

autoclaves to produce fixed and mobile electromagnetic energy. An invention is considered as such when it has the requirements of novelty, inventiveness and industrial applicability. Above all, it must not be easily understood by the experts. Obviously, if the experts do not understand them or pretend not to understand them in order not to scrap the previous inventions, they do not even include the patent offices, which very quickly declare that they are contrary to the principles of energy conservation. The current system of managing and granting patents, above all, of public, utility is obsolete and against the interests of the environment and the world population.

To think evil is a sin but we often guess. It is very strange that some inventors of important energy solutions died mysteriously when they tried to sell or produce their invention. I know that my solutions are inconvenient for current fossil, nuclear and renewable energy producers. I do not try to sell my patent deposits nor am I aiming to become an entrepreneur. It would be too big for my age and my modest retirement income. I took the liberty to develop them virtually because, as part of my experience as a technical designer and installer of industrial and environmental systems, I realized the designers of the private industry only set themselves goals of productivity and industrial quality within the framework of existing environmental regulations. Instead, public designers do not have the organizational mentality of industrial work that uses the best state-of-the-art technologies and the best work organization to identify the best environmental and energy solutions. Having worked for almost two decades in both sectors, applying the organization of industrial work to environmental systems as a pensioner, gradually, all the interactive connections that world public science has overlooked have emerged. Obviously, these could not be identified either by the private industry that did not set environmental objectives, or by the designers of the public plants who, working in compartments of physics,



chemistry, biology and the various branches of energy production, do not interact with each other, produce incomplete cycles that acidify the water and enrich the air with unwanted gases. It is very strange that world public science has not wanted to carry out the patents that have been granted to me at national and international level, that have modified the chimneys and the sewers for the realization of the purifying sewers with global purification cycles. These would have neutralized the CO<sub>2</sub> directly in the fixed installations. Indirectly, in urban environments it would also reduce the emissions of means of transport, since the gases are on average heavier than atmospheric air. The letters open to European and Italian environmental authorities on these topics were of no use. But what happened afterwards is even stranger, when the reflections on interactive purification led me to the conception of interactive energies, not to solve the environmental problems that I had already solved, but to make interactive purifications cheaper. It was also a surprise for the undersigned to realize that the interactive energies, produced only with water and air, are not only cheaper than all the energies existing on planet Earth, but also simplify the purification due to Henry's physical principles, Dalton, Pascal that in the current purification plants are not involved. Despite these advantages, the interactive energies have been declared perpetual motion by the Italian and European patent offices, while world science is shamefully silent. Under these global conditions, who could I sell my environmental and energy patents to? It was good that they refused me the interactive energy patents, because the only interactive purifications, just to pay the costs of the patent deposits, cost me about 20,000 euros, not downloadable from the pensioner taxes of the Italian laws. If I had also paid the maintenance fees for national and international patents, while waiting for the world scientific and political authorities to understand the usefulness of interactive purifications, I could not have fed my family, which has always lived with the only income, with the daily food of my

work.

Since my patents on interactive energies have been declared "perpetual motion", I publish them immediately along with my articles with the subtitle of "open letters to the international justice court and to the United Nations", so that full light is shed on the real causes of global pollution, floods, droughts and energy costs. Above all, the global institutional bodies must assume their responsibilities in the face of wrong, realized, universally spread, and incorrect inventions by anyone. Whoever proposes alternative solutions to those produced by the centers of power, if not eliminated physically, is not believed by anyone, above all because of the silence of science, public and private. Today all scientists are employees, therefore, required to comply with company directives. Why should they express their opinion on purification and interactive energies if their public and private employers continue to produce non-interactive systems? International judges and the United Nations should investigate and demand objective answers. Indeed, they should have the power and the duty to experiment with interactive solutions due to their global importance. But after twenty-five open letters with no answers from the judges and the United Nations, it is clear that they too cannot investigate if they do not want to lose their jobs.

If world institutions did their institutional duty well, they would grant intellectual copyrights to inventors, as is the case with all intellectual works. These rights would have no cost to the world community if the inventions are really wrong. In fact, if no one finances the inventions and nobody realizes them, they cost nothing, just as all my patents do not cost the community anything. But why deny even the intellectual right to inventions that would prove to be accurate, would create an environmental and economic well-being for the entire world community, while industrial patents only create economic well-being for the few?

If the world's institutional bodies did the general interests, they would have to encourage the search for interactive solutions and even requisition strategic public utility patents to make them available to everyone. Instead, they don't even want to experience them. I don't know what the worst evil is. The scientific ignorance of the institutional bodies, or their indifference to the sustainable development that would be allowed by the purification and interactive energies that the undersigned has proposed unnecessarily since 2006 in over forty patent deposits not made by anyone.

Very strangely, the only energy that has never been produced on planet Earth are the submerged and compressed hydroelectric ones, which would dissolve oxygen in the water on Henry's principle. These energies do not consume and do not transform primary sources (water and air), they only wear materials that can be regenerated with fusions and mechanical processing. The primary hydroelectric energy compressed with water recycling, mounted on the means of transport, through the current generators can produce both the reaction thrust and the electromagnetic thrust without any counter environmental indication. Today, it should be considered a fortune that the undersigned, has already proposed a sustainable aerial and space navigation system, based on Newtonian thrust, through the realization of thrust tunnel with electric fans and turbo compressed air injections. From this system it was natural to add the electromagnetic thrust to be used above all in the vacuum to the electric Newtonian thrust tunnels. But, as anticipated in the summary, it is clear that the electromagnetic thrust can also be used in the atmospheric environment, if the way of flying is changed, creating a unique air navigation system that is both terrestrial and spatial. This system would not only not pollute the environment, but would also be cheaper and safer than current aircraft that use fuels and aerodynamic principles to float in the atmosphere. In fact, if the primary energy becomes the compressed air exploited statically and the principle of

impenetrability of the bodies, the energy vector will be the simple incompressible water that has a density about 1000 times higher than a combustion gas. It means that for the same flow rate and pressure on the means of transport we will produce 1000 times more power than that produced with fossil and chemical fuels, with the same flow rate as the carrier fluid, in addition by recovering it and inserting it back into the energy circuit. In fact, scientists should know that power does not produce heat, but the flow rate for pressure for the density of the fluid circulating in the turbine.

What scientists today still do not understand are that they focus only on mathematical expressions and not on the practical aspects, is the fact that the power of the centrifugal pumps can be modified to recover the water that produced the energy and insert it back into the pressurized recycling circuit, exploiting the depression that the centrifugal pump produces in the center of the impeller. It does not matter that the recycling pump must circulate in the pressurized autoclave tank a much higher quantity of water since this circulation absorbs very little energy, being the circuit very short, moreover, working with balanced pressures on suction and delivery the pump absorbs energy of a closed circuit, even if a branch of the circuit is open to relieve the pressure at the turbine outlet. What is important is the fact that the water inserted more into the impeller than the volumetric capacity of the circuit is immediately expelled from the static pressure of the autoclave due to the principle of impenetrability of the bodies. This expulsion done at high pressure does not cost energy, as it is produced by the elasticity of the air, in a one-way water circuit, which first passes through the turbine, then a tank at atmospheric pressure and returns through the second supply of the pump back into the pressurized autoclave (2). This circuit produces the best possible primary energy on planet earth, we can also bring it to space because it does not consume water and also recovers the air that comes out of the tank vent at

atmospheric pressure (1), as seen in Fig. 2. In this circuit the main supply of the pump continues to recycle its pressurized flow rate with the same direction of flow, without varying the volume and pressure of the air cushion of the tank (2) (checking the revolutions of the circulation pump and the autoclave level probes). We know that due to the principle of impenetrability of bodies, water would not have entered the pressurized circuit of the autoclave (2) if the outlet that powers the turbine (3) had not been opened at the same time, but we also know that if it did not exist the depression in the center of the centrifugal impeller of the pump (6), and that if the two inlet streams were not clearly separated until the impeller inlet, the system would not work as well.

However, having specifically created these three conditions (ignored by science, by the manufacturers of pumps and turbines) in the design and patent filing phase, there is no doubt about the operation of this system that produces free electromagnetic energy through the coupled current generator to the turbine, using the one-way principle of the impenetrability of bodies, but also those of Pascal and Torricelli lead to the same conclusions. Why are the scientists of world physics silent by continuing to insist only on thermal and nuclear energy? Science must above all be transversal and take advantage of the opportunities that technology and research also offer by expanding the functions of man-made plants.

Today, thanks to the revolutionary ability of the diodes and power thyristors to make the voltage and frequency of the power supply line independent of those that power the motors, it has made it possible to use three-phase asynchronous motors powered no longer at fixed voltages and frequencies but finely variable so as to accurately adjust torque and speed. Therefore, by feeding a pump with variable revolutions with separate double feeds up to the impeller, which is the heart of a very complex system that I called in the summary

“interactive global linear motor”, all the connected electric motors are automatically adjusted simultaneously and therefore also the induced currents and consequently also the thrusts of Newton and Lorentz. Today, we no longer need the electricity distribution network and heavy power transformers. It is worth noting that the asynchronous motors can be powered with a symmetric polyphase system at any voltage, and can also be used as current generators if coupled directly to the pumps used as hydraulic turbines, as provided by myself in the submerged electricity production and compressed. Today, we no longer need the electricity distribution network and heavy power transformers. It is worth noting that the asynchronous motors can be powered with a symmetric polyphase system at any voltage, and can also be used as current generators if coupled directly to the pumps used as hydraulic turbines, as provided by myself in the submerged electricity production and compressed. But to introduce the electromagnetic thrust in the terrestrial and space aircraft of the future it is necessary to insert the concept of electromagnetic mass.

According to Newton’s gravitational law, two generic masses, without any artificial electromagnetic charge produced by man  $m_1$  and  $m_2$  attract each other with a force whose modulus holds:

$F = G * m_1 * m_2 / R^2$ , where  $G$  is the universal gravitation constant which is  $6.67 * 10^{-11} \text{ N (m / kg)}^2$ ,  $m_1$  and  $m_2$  are the masses expressed in kg,  $R$  is the distance between the centers of the masses expressed in m.

It is important to note in this formula the fact that the attraction force of the masses is inversely proportional to the square of the distance. Another important aspect is that this attraction force is directly proportional to the masses. Mass, like force, is expressed in kg, while weight is a vector quantity measured in Newton indicating the force with which the body is attracted to the earth:  $P = m * g$  or  $m * a$ . In modern physics, the resistance that the body opposes to all

the variations of its state of quiet and motion is defined as mass.

The word mass indicates a property of bodies, it is commonly associated with the meaning of quantity of matter. Weight is instead a force. A body, if it is not subjected to forces, maintains its state of motion, that is, if it is in motion, it continues to move with the same speed and in the same direction, if it is stationary it remains stationary. To change the state of motion of a body we must therefore exert a force on it. The mass of a body can be defined as the "reaction" that a body opposes to the action of a force. It is precisely the inertial mass  $m$  that appears in Newton's famous formula  $F = ma$ .  $F$  indicates the most generic of the forces, and "a" is the acceleration (speed change), which produces the force on a body, not bound, inertial mass "m". With the same force, the greater the inertial mass of the body, the smaller the acceleration. That is, the greater the inertial mass of a body is more difficult to change the state of motion. The greater the inertial mass of a body, the greater the force applied to put it into motion or change its speed and direction of motion must be.

But as legislated by Newton himself, all material bodies attract each other. This attractive force is the force of gravity (gravitational attraction), and is proportional to the product of the gravitational masses of the attracting bodies. Considering that on planet Earth the main mass is that of planet Earth, the force of attraction suffered by all terrestrial bodies has been called weight force. The objective of this patent filing is to overcome the weight force of the bodies by producing energy internally within the bodies themselves, exploiting all the known energy principles and adding them to act in the direction of motion.

In classical mechanics there is the fundamental law of mass conservation, in various formulations. In essence, the mass cannot be created or destroyed, but only moved from one form

to another. In chemistry, Antoine Lavoisier established in the eighteenth century that in a chemical reaction the mass of the reactants is equal to the mass of the products. The principle of conservation of mass applies with excellent approximation in terrestrial experience, but ceases to apply in nuclear and spatial reactions, in general, in phenomena involving relativistic energies.

**The undersigned, with the invention of compressed hydroelectric energy, which is based on the one-way circulation of incompressible water, the exploitation of the static pressure of compressed air and the principle of impenetrability of bodies, has identified the terrestrial application perfect of the principle of conservation of the masses, which does not destroy or transform matter. It only borrows it and returns it with the same chemical composition because clean water cannot absorb more gas than those already dissolved in it, according to the laws of Henry and Dalton.**

Who provides the energy in this system is the flexibility of the air trapped in a small volume that can only expel the incompressible water, which is forced to pass through a turbine and return to its initial state. In fact, the water introduced in low pressure through a pump equipped with a second separate supply that reaches until to the rotating impeller, the volume  $V$  of the material does not change. The mass is not created or destroyed, but as it passes through the turbine connected to the current generator, it transforms the pressure energy into electricity. In fact, the pump motor, working with balanced suction and delivery pressures on one of the two feeds, works with a very low head, and a very low absorbed power. In fact, it allows the multiplication of the energy contained in the mass that passes through the pressurized autoclave. Electricity, transported in electric cables, can be used in a different place from where it was produced, for industrial, civil uses, or it can be used to move the same means of land, sea and air transport using the



principle of Newton's or Lorentz's reaction (as happens in Maglev levitation trains).

Today, there is no energetically autonomous electromagnetic mobile technological mass, but all the ingredients to achieve it exist, since the electromagnetic principles that lead to and the thrust of Henrik Antoon Lorentz have been identified and developed. Only the primary source of non-exhaustible powerful energy was missing (hydroelectric compressed with the recycling of water), already identified by the undersigned and already applied virtually, in terrestrial applications. Unfortunately you don't realize.

It is obvious that changing the way of producing energy changes the entire world development model and requires a different scientific organization of work in all currently developed systems. Having undersigned already written abundantly about the changes to be made in energy and purification systems, including land transport, he finally addresses the most complex aspect which is that of the future way of navigating in the atmosphere and in space. Even these already partially developed but only with Newton's thrust. In fact, in these two environments we can no longer rely on aerodynamics, studied since Leonardo da Vinci times. We must rely on the management of the physical and electromagnetic forces produced by man and of the existing natural ones which oppose or facilitate the movement of bodies.

The state of the art cannot advance quickly and efficiently and sustainably in this sector, which draws energy systems only from thermodynamics and nuclear power. Without compressed fluid dynamics, the solution to produce electricity on board the aircraft and to replace turbofans powered by combustion gases with electric ones could not have been conceived. Nor could this update of the state of the art be conceived, which creates the Lorentz thrust on the external wall of the turbofans and fluid-dynamic systems that produce primary energy without fuels, like the previous version, but modified

in shape to make them more suitable. In fact, the undersigned, continuing to develop his inventions virtually, believes that for air and space transport, the best solution is to superimpose electric turbofans on compressed hydroelectric plants developed linearly in an elongated cylindrical shape, and to use the external walls of the two systems as sliding tracks of the permanent magnets, which serve to develop the induced currents, also adding the external solenoids. In essence, these systems are "interactive linear global motors" that produce together with primary energy also the electromagnetic thrust of Lorentz, which adds up to that of Newton's reaction of the turbofans, also modified, so that they produce the double thrust, as it can be seen from the section drawings of figures 1 to 8, where the thrusts of Newton and Lorentz are indicated respectively with the abbreviations FN and FL. From the drawings and from the description it can be seen that with appropriate modifications these systems can also be used to create submarine transport systems, barriers against high waters that oxygen the water and artificial islands to be built in the calm ocean areas, which will remain afloat by means of the thrust of Newton and Lorentz, even if lightened by other floating solutions, such as the Italian patent of the undersigned No. 102016000058416, consisting of polyethylene pipes, extruded, ribbed and filled with polystyrene, combined with artificial welling. Obviously, the world's ruling class has never taken into account even the artificial welling, knowing that the oceans are becoming more acidic, and that there needs to bring to the surface the dissolved carbonates, not only to feed the world population with the production of plankton, but also to combat acidification.

However, in the system in question, both the thrust of Newton and that of Lorentz depend on the small energy that the pump consumes with the separate double power supply up to the impeller that keeps the whole system in operation, operating all the time, recovering the mass of water discharged from the

turbine at atmospheric pressure, recycling it and inserting it back into the pressurized tank that feeds the turbine itself. This circuit consumes energy as a closed hydraulic circuit but produces energy as an open hydroelectric circuit (moreover pressurized for free by compressed air, which is exploited statically, without the expansion and compression of heat engines that waste energy and pollute the environment). The higher the pressure we will develop in the autoclaves built into the aircraft, the greater the newton thrusts and the induced currents that will produce the Lorentz thrusts.

If we think that the pressures produced in the current combustion chambers of thermal engines and turbofans, at most they can reach the pressure of forty bar with the density of the combustion gases about a thousand times lower than the water that would circulate in cold and with very static pressures. higher, we can only imagine the power that we could develop with the "primary and induced interactive global linear motors" in fact, the water is incompressible and the compressed air can also be compressed at thousands of bars. We need to find materials that can withstand these pressures, but even with existing materials we can take advantage of pressures higher than those produced by turbofans that use combustion gases, without polluting and without paying for fuels.

Working in watertight compartments, the state of the art is progressing very slowly, hampered, above all, by those who have invested in partial inventions and by the legislators and governments that have allowed it. Today, these interactive inventions are also hampered by the conflicts of interest created by the sale of patents by public researchers to private industries, which also involve world legislators and national and international judges, which should condemn governments and the huge crimes of omission that are committed. Instead, the crime of omission has become the daily bread of the entire world ruling class. Today, inventions are paid for

by scientific editions and congress organizers, while patent filings have to pay filing and maintenance fees in all countries of the world. It is clear that with the current laws on industrial property and the current partisan scientific diffusion system, without international guarantors, only multinationals and large public bodies could afford to produce important inventions for the future of humanity. Unfortunately for these multinationals and public bodies that do not do their duty, the undersigned has realized that they have been mistaking the fundamental principles of world energy since the advent of the industrial era and that the state of the art, until proven otherwise, it can even advance virtually, without paying all the taxes that world power centers demand. These inventions cannot be hidden forever.

The least cumbersome version to produce compressed hydroelectric energy is the one that the undersigned used (virtually) in the wells in a patent filing of 11/08/2016 and in the oxygenator heart of the blood deposited on 29/05/2018, while the storage of flight system patent with electric jet fans took place on 01/06/2017. Although all these solutions have all been declared "perpetual motion" by incompetent bureaucrats, with the silence of science and legislators, these solutions have represented the starting point for the conception of "primary and induced interactive global linear motors". This solution is the most suitable for adding the electromagnetic thrust to the reaction thrust tunnels, for the simple fact that it develops vertically together with the reaction thrust as seen in figures 4, 5, 7, where the coupling is seen in Lorentz and Newton thrust series and global thrust motor rotation.

It is the duty of the undersigned to update again the virtual state of the art of space transport systems, waiting for world institutions to create the conditions for designing anthropogenic systems globally, not relying only on nuclear, aeronautical, thermal specialists, but putting together

different experiences in order to identify synergies escaped, which until now have also prevented from putting together the thrust of Newton and Lorentz.

According to Maxwell's equations, a variable electric field induces a magnetic field in the surrounding space and a variable magnetic field induces an electric field. The combination of the two effects gives rise to the electromagnetic wave that propagates in space transporting energy even after the original particle has stopped oscillating. In fact, the wave has a sinusoidal shape and does not require a material support. But, for myself, if we want to create a stable and safe aerospace transport system, especially in the initial phase, in order not to endanger the lives of crews and passengers, we must start by organizing the work of the airports. We must reinforce natural electromagnetism by creating a kind of overhead railway, where the cars, equipped with autonomous energy, are also pushed from the initial station and push each other in the air while maintaining optimal distances. This sort of air railway will cost much less than the current land railways that need bridges, viaducts, tunnels and the electrification of the entire railway network. Today, the electrification of land railways is mainly done with fossil energy. If it were not for the quiet and compact obstruction of all the world's power centers, the compressed hydropower would already be a global reality and we would not need the energy transmission. Therefore, the electrification of railway networks would not be necessary either, as the energy that can be produced locally without fuels in fixed and mobile plants. Instead, from the early stages of the study of purification and interactive energies, I was left alone by paying unnecessarily the filing fees of the national and international patents of interactive purification, which were regularly granted to me by the patent offices. In fact, no country in the world wanted to clean fossil energy by transforming chimneys and sewers into a global purifier that would purify water and air

together. While interactive energies have cost less since they have been declared "perpetual motion" by the patent offices. It would have made no sense to indebt me to make legal claims against world public bodies. If these did not finance interactive purification after granting me national and international patents, they certainly would not have financed the submerged and compressed energies. All I could do was continue filing the patents without taking into consideration their opinion, not expressed by any world scientific authority. These scientific authorities, if they exist, keep away from all my publications, which gradually led me to the conception of the "primary and induced interactive linear motors" that allow to add the thrust of Newton and Lorentz produced on board the vehicles of transportation that even NASA never thought possible.

The formula that binds electromagnetic waves to energy is  $E = c \times B$ , where  $c$  is the speed of light and  $B$  is the magnetic field.

The magnetic field is due to the movement of electric charges. It depends on the size and strength that the conductor passes through. It is measured in Tesla ( $T = \text{Weber} / \text{m}^2$ ), where Weber is equal to the magnetic flux which, passing through a loop, produces an electromotive force equal to 1 volt when it is uniformly reduced to zero in 1 second.

The electric field is related to the potential difference in a conductor. It is measured in volts / meters.

Without going into the details of the calculations of the electrotechnical design which will be very complex for the quantity of the components that will produce induced currents and for the immense quantity of the solenoid wires, the choices of the voltages and the frequency of the currents, it is worth remembering the fundamental concepts of electromagnetic induction.

For the Faraday-Neumann – Lenz law. The value of the induced electromotive force is equal to the ratio between the variation of the flux of the magnetic field and the time required to have this variation ( $\mathcal{E}_i = \Delta\Phi / \Delta t$ ).

In fact, in the system proposed by myself to fly in the atmosphere and in the space, both the windings of the electric motors of the turbofans, and those of the pumps, both those of the current generators connected to the turbines, and the motors that will make the magnets move, both the water itself which has a bipolar molecule that polarizes, will be found simultaneously within the magnetic field and the solenoids of the induced currents that will be and produced outside the turbofans, and the cylindrical tanks in which the water that circulates. produces primary energy by means of the product of the pressure for the flow rate for the mass density ( $E = P \times Q \times r$ ).

In this system, all these electromagnetic fluxes can influence Newton and Lorentz thrust differently by regulating the direction of rotation of the propeller and impeller motors, while unwanted functions can be isolated from the magnetic flux by incorporating the non-magnetic materials, as would return paths of the permanent magnets, which can be inverted by changing the direction of the electromagnetic thrust.

As we know, the technological definition of the current linear electromagnetic motors is as follows: “they produce a force instead of a torque, as they were conceived by imagining to unroll the rotor and stator of the current electric motors.

The most famous application of linear electromagnetic motors is that of electromagnetic levitation railway lines (Maglev), where the inductor is the locomotive itself, while the induced is a solid steel continuous sheet of the length of the entire railway section.

In Maglev, the inductor (locomotive) consists of a flat

magnetic structure on which a winding powered by a symmetrical three-phase system of voltages with "p" pairs of poles, frequency "f" and polar pitch "t" is placed. The synchronism speed is  $v = 2 f t$ . By appropriately adjusting the frequency and the polar step, train speeds of over 500 km / h can also be obtained. This system was created only to connect railway stations placed on linear paths without path deviations due to the difficulties in changing the direction of travel as occurs in current railway exchanges. In fact, the inductor, in its rectilinear movement, cuts the conductors of the armature generating f.e.m. and induced currents. These currents, immersed in the same magnetic field that produces them, are the seat of electromagnetic forces that push the armature (fixed to the ground) in the same direction as the magnetic field, but with the opposite direction. In the case of the locomotive, since there is not the rotation axis of the armature but two inductors that balance the thrusts on it, linear thrust is obtained without physical contact between the metal masses of the inductor locomotive and the induced sliding track.

Energy savings and higher speed than the current trains in the maglev take place because the frictions between the mechanical parts and between the rails and the wheels are eliminated due to the fact that the two inductors are attracted to the armature but simultaneously repel each other. Therefore, the air gap between armature and inductor remains constant and the locomotive moves linearly parallel to the armature track.

The Maglev solution has the main defect which is that no changes in direction can be made and the making of curves is also a problem due to the centrifugal force of the masses. But the main flaw is that since there is no system to produce sustainable energy on board the locomotive, the power supply must take place from the outside, as is the case for current electric trains. Although it is possible to power only the section of track involved in the passage of the train, the



infrastructures external to the means of transport still involve significant costs and a considerable technological commitment, without solving the problems of sustainable production of clean primary energy, both in power plants than on board the means of transport. The ideal solution is always the one that would allow the Newton and Lorentz thrust to be produced without the structural costs of bridges, tunnels, thermal power station tracks and related management and maintenance costs. Above all, these structures are subject to earthquakes, like all fixed structures and can be damaged even if they do not collapse

Today, unfortunately, due to the divisions of scientific, economic and political technical skills, all inventions are incomplete for one reason or another and all compete with each other, not to find global solutions, but specific solutions to individual problems, including land, road, rail, air, marine and submarine transport, but also in other sectors there is the same competition, such as the production of agricultural vehicles and earthwork, which have not solved the main problem that is production fixed and mobile of sustainable primary energy, which can feed the electromagnetism of the main current generators in a simple and clean way, which feed the induced electromagnetic systems at low cost and without producing pollution.

Sustainable primary energy production had to be the first problem to be solved to start the industrial era, instead it became the last. It is better to write these things also in the filings of the current industrial patents, where before talking about the inventions it is necessary to take stock of the state of the art of the sector concerned. But to take the exact point of the state of the art, one should also investigate the reasons why world legislators have not encouraged the filing of intellectual patents that would have opened the mind to other inventors before embarking on wrong paths, especially energy. Choices of the wrong primary

energies have created disasters of all kinds, including global public debt and current conflicts of interest that prevent real sustainable development and also a sustainable race to conquer space, which cannot begin with the energy that it runs out because it cannot be renewed simply and naturally.

A complete system that produces electricity on board does not need to build a fixed armature on the ground. The non-rotating global linear motor can be made up of permanent magnets circulating linearly in the external grooves of the tube that contains the fluid-dynamic system by mounting the same magnets on a mechanical transport roller chain equipped with fins on which the magnets are screwed, after inserting an insulating gasket, driven by one or more electric motors and gear wheels that they circulate linearly along the entire length of the hydraulic system, which in this way also becomes an inductor of electromagnetic energy. In fact, by incorporating in the return slots the chain that transports the magnets in a magnetically insulated tube, we can create a continuous one-way magnetic flux, which interacts with an external solenoid to the fluid dynamic system producing the Lorentz thrust. We do not need to make two opposing inductors and the sliding track in the center along the entire path. Not needing the sliding track, this system can also be implemented in the airspace. While on planet earth it is better to combine it with Newton's thrust to travel in the atmosphere.

Faced with this solution, high-speed trains also become obsolete for many technical and economic reasons. It should be evident that the cheapest way to travel on planet Earth and in space becomes by air. In fact, the electromagnetic thrust also propagates in the vacuum, but decreases its strength with the square of the distance between the bodies that attract or repel each other. If we hypothesize to divide the external circumference of the containment tube of the turbofan and the pressurized hydroelectric plant below with 36 external slots for magnet sliding (one every ten degrees) we will have 18

rows of permanent magnets that go down and 18 that go up in the inductor circuit. We will only use non-isolated rows. In this way we will produce two overlapping but separate inductor circuits, as they perform different functions internally: One produces the Newton thrust and another the compressed hydroelectric energy which is the primary energy of the entire plant. The armatures of these two different superimposed systems, on the other hand, will consist of simple long solenoids when the entire plants and produce two Lorentz thrusts that go in the same direction. There is no need to have the induced armature fixed to the ground as in the Maglev as they always flow in the same direction to infinity. The total thrust will depend on the quantity of the components used, their size, their speed and the size of the external induced solenoids, according to the laws of Newton, Faraday, Neuman, Lenz, Lorentz.

This complete but simple system constitutes the “interactive global linear motor” and can be reproduced in many elements fixed around the perimeter of the means of transport. The compressed hydroelectric primary energy is not new, even if it has never been created. In fact, the undersigned has developed this solution in different versions. The most suitable version to make the “interactive linear motors” is the one that the undersigned used in the patent filing entitled “Submerged pressurized hydroelectric plants in wells with lifting and oxygenation” filed on 08/11/2016. The same solution was also used in the patent filing entitled “Artificial heart oxygenator of the blood autonomous energy” filed on 29/05/2018. Without these previous interactive inventions I would not have been able to conceive the “primary and induced interactive global linear motors” that improve my previous interactive flight system concerning the way to navigate in space and atmosphere No. 102017000059993 of 01/06/2017.

The system of land and space transport with primary and induced interactive global linear motors, the undersigned, has

developed it only virtually, like the interactive purification and energy systems, mentioned above, that nobody has financed. We should not be surprised at this strange advancement of the state of the art in areas so important for the survival of the planet and humanity. We should not even be surprised at the lack of funding for private inventors and we should not be surprised at the fact that public and private science of multinationals do not investigate interactive systems. This is because inventors dependent on public and private entities cannot work on their ideas. They must follow company guidelines.

The freedom to think impartially can only be afforded by inventors who do not have masters who must defend their interests and investments already made. Since interactive solutions have not been implemented in any sector of world development, it is normal for both public research bodies and multinationals to pretend that these solutions do not exist. It is not mentioned in congresses and not even at the organized international UN COP summits. While the World Intellectual Property Organization (WIPO), which is a United Nations body, does not protect inventions of public utility and intellectual property. It demands the same deposit and maintenance fees from them as it does from industrialists, even if they do not find lenders. These bureaucrats did not understand that inventors should not turn into entrepreneurs, since they would lose the ability to invent in the general interest, having to defend the investments made, even if they become aware of any mistakes made. At least a part of the inventors must be free to invent in the general interest through inventions developed virtually linked together to identify an alternative development model. With current patent legislation, inventors are penalized for seeking complete solutions that cannot be achieved with isolated inventions. Above all, environmental and energy inventions must be linked together interactively. It is no coincidence that current inventions produced in these sectors have led to global

warming. Current renewable energies are not a solution either. Not being interactive, they do not have the technical and economic requirements to validly replace fossil energy.

For myself, the fact that interactive inventions have not been financed by any public body and no multinational company worldwide is not a defeat, but the demonstration of the seriousness of the current conflicts of interest involving the entire world ruling class. With the general silence of the world ruling class and a large part of the scientific media, no concrete progress can be made in the direction of interactive systems, which are the only ones that can positively change world development. Above all, the silence of world science is very serious.

A complex invention such as the "interactive global linear motor" cannot be born out of thin air as it is an invention transversal to different scientific laws and technologies. It is very serious that both public researchers and multinational purification, energy and transport companies have not noticed the gradual development of the parallel and alternative state of the art to their solutions. They enjoy great funding, great opportunities to test their inventions in the laboratories and there is a flourishing trade in patents from public researchers to multinationals with the consent of all world legislators. However, together, they didn't even produce an interactive invention. How could the world giants produce from nothing and against their economic interests intertwined in a century of wrong industrial development to invent the "primary and induced interactive global linear motors" that aim to achieve the thrust of Newton and Lorentz together? The most backward part of this system is fluid dynamics. This is really strange because the fluid dynamic concepts, as well as clearly legislated by Torricelli, Venturi, Pascal, Henry, Bernoulli before the invention of electricity, are easier to understand and also simpler to experiment than electromagnetism, nuclear energy, the production of new expensive chemical fuels or

super-compressed hydrogen. However, not even a dollar or a euro has been spent since the beginning of the industrial era to rationalize the connections between water and air in common processes both in post-combustion and purification, and in the production of submerged and compressed hydroelectric energy with recycling of water and the exploitation of static air pressure. These topics that seem completely unknown to world science. They are processed only on the website <http://www.spawhe.eu>, without public and private interlocutors. Yet the conclusion reached by myself even before this very important virtual intellectual invention is very evident: if you change the primary source of world energy, the entire world development changes and the entire world ruling class, including the scientific one, he must apologize for creating a development that is damaging the planet not only from an environmental point of view but also from an economic point of view.

The interactive energy that would protect the environment is much cheaper than that which has polluted it irreparably. But the undersigned has already written these things in many publications. In this intellectual patent filing, which is the only form of patent that can be filed by an inventor unrelated to the centers of power, even if this form of filing under current laws does not grant rights to inventors who cannot pay meaningless taxes (only inventors have to pay taxes even if inventions do not produce any income), the simultaneous realization of the thrust of Newton and Lorentz on air transport means that has never been imagined. In addition, with an autonomy of almost infinite navigation autonomy, which does not depend on the energy source but on the wear of the materials that make up the system.

In this patent filing we speak above all of Lorentz's thrust, of the reason why it must be added to that of Newton also in land transport systems. Not just to navigate space. In fact, the Lorentz force being a vector force based on

electromagnetic waves, reduces the effects of gravity and the weight of the aircraft will no longer be  $P = m * a$  but equal to  $P = m * (a - a_L - a_N)$ , where "a" is the acceleration of gravity"  $a_L$  "is the acceleration produced artificially with Lorentz's force)"  $a_N$  "is the acceleration produced by Newton's force. If " $a_L$ " and " $a_N$ " are powerful until canceling "a", the weight (ie the force with which the aircraft is attracted to the earth) becomes zero.

The Lorentz thrust is expressed with the following vector product:  $F = qv \times B \times \sin \phi$ , where  $q$  indicates the electric charge in Coulomb,  $v$  is the velocity vector in  $m / s$  with which the electric charge moves,  $B$  is the field magnetic in Tesla to which it is subjected,  $\phi$  is the angle between  $V$  and  $B$ .

If we consider that the Lorentz force in Newton ( $Kg \cdot m / s^2$ ) is exerted by the two overlapping external solenoids that enclose the electric turbofan and the primary hydroelectric energy production plant, we can realize the direction of this force by ideally putting the right hand on a wire of the coil of the solenoid, where our fingers indicate the direction of the current and the thumb indicates the direction of the magnetic field. The Lorentz force is always perpendicular to the current velocity vector ( $qv$ ) and to the magnetic field ( $B$ ), which in this case, are perpendicular to each other and express the maximum force, being the sin of the angle of 90 degrees equal to "1". Therefore, Lorentz's force follows the spiral of the wire parallel to the longitudinal development of the solenoids that surround the electric turbofan and the external tube in which the compressed hydroelectric primary energy is produced.

Obviously, it is not easy to accurately calculate the force produced by an interactive global linear motor because within the solenoids that express the final force there are many different materials, with different proportions and

arrangements (iron, copper, steel, light alloys, water, air). Some of these elements move continuously, such as permanent magnets and water. All these elements have a different magnetic permeability, which should be inserted in the Biot and Savart formula to calculate their own magnetic field modulus.

As an indication only, this formula is given:  $B = \frac{\mu \times i \times}{2\pi \times r}$ , where: "μ" is the magnetic permeability, "i" is the current intensity, "r" is the distance from the wire traveled by the current.

To simplify the concepts, the induction vector module gives only the formula of the magnetic field of a common solenoid:  $B = \frac{\mu \times N \times i}{L}$ , where "μ" is the magnetic permeability, "i" is the current intensity, "N" "Is the number of turns," L "the length of turns.

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Beyond the formulas that express the basic scientific concepts, what is important is the fact that today we have the possibility to vary the magnetic field and the Lorentz force, by varying the circulation speed of the permanent magnets, or by varying the engine rpm of the electric turbofan, which are powered by compressed hydroelectric primary energy, which is produced by statically exploiting the pressure of the compressed air and the principle of impenetrability of the bodies, which expels the water that enters the pressurized



recycling circuit in excess of a very simple autoclave by means of a modified pump which has a second power supply, in addition to the recycling one, which makes the water discharged by the turbine which produced the electricity return into the circuit. The division of the water flow between the two parts in the same system that falls through the modified circulation pump, can be assimilated conceptually to the division of the atom, but has no environmental contraindications, indeed it improves the quality of the water because every time the water re-enters the pressurized autoclave absorbs a greater quantity of oxygen due to Henry's law.

Obviously, the scientists and industrialists who produced terrestrial energy with fuels and the push to exit the atmosphere with chemical rockets or thermal gas turbofans, have not been able to advance the state of the art in the way indicated by myself because the technologies and scientific principles used by fuels are not compatible with electromagnetism as is the kinetic energy produced by a hydraulic turbine, whose current generator is powered directly by the turbine shaft itself, without unnecessary thermal passages.

To produce the Lorentz thrust from fossil and chemical fuels, the necessary quantity of fuel must be transported on the aircraft, which, in addition to having an economic cost, also has a volumetric mass and weight. In addition, it is necessary to go through energy transformation processes that produce steam or combustion gases, expansion and compression cycles are unnecessary pollutants and expensive compared to energy produced cold with the recycling of the same amount of water, which having a density about a thousand times higher than a combustion gas, at the same pressure (static) and weight flow it produces an electrical power about a thousand times higher than any gas. In addition, fuels run out while compressed hydroelectric energy is the only renewable energy that can be

produced independently, recycling both water and air which always return to the initial state. Even in space with the developed technologies, artificial light, chlorophyll photosynthesis we can produce water and air together with human nutrition. I think that the world's ruling classes, including the major scientists, even if they have done something good, are playing their role in the history of humanity, for the silence they are keeping on interactive energy, which has never found interlocutors public and private, despite the numerous publications of the undersigned.

The evident evolution that even land and space transport would have with this type of energy shows even more that it is not possible to govern the world without scientifically organizing world work globally, respecting the environment in all man-made, land and space plants. Current alliances between public and private bodies, patent trade, congresses and paid scientific publications are obscuring sustainable solutions for the benefit of commercial ones that do not create global cycles. They will never be able to accomplish them unless world public bodies organize the work globally. Those who protest, including Scientist of I.P.C.C, without proposing alternative solutions and not talking of interactive systems published on <http://www.spawhe.eu>, and many other scientific magazines, simply ask for more investments in favor of the environment. But power centers continue to invest in non-interactive energies in order not to admit their mistakes. These errors all involve, above all, science since the advent of the industrial era. No employee scientist is allowed to study global solutions. The undersigned, who is a simple system designer, was able to do it only as a pensioner, but in general silence, paying taxes that he should not pay, without having any recognition of intellectual property and copyright. The current patent rules are simply Kafkaesque. It would not take long to understand that patent maintenance fees should be paid by entrepreneurs who exploit patents, not inventors who do not find financiers. As it would not take long to

understand that inventions that pollute the environment should not be protected by public institutions, which should encourage the overcoming of the state of the art in protecting the environment. Instead, with current world institutions, the opposite happens.

The production of clean and inexhaustible primary energy on board the means of transport is also indispensable for conquering space, but how can it be produced if it has not been produced even in fixed land plants?

Yet it would be easy to produce it through fluid dynamics with electric pumps equipped with separate double power supply up to the impeller; the passage of one-way water in pressurized autoclaves with compressed air, the outlet of pressurized water (expelled by the pressure of the autoclave due to the principle of impenetrability of the bodies) through multistage pumps used as turbines coupled to current generators electromagnetic; the recovery of the water discharged by the turbines and their reintegration into the autoclave recycling circuit by means of the same pumps with double separate power supply up to the impeller.

As stated by Maxwell, Faraday, Ferraris, Lenz, Lorentz, and demonstrated in many practical applications, we must assume that if we slide permanent magnets into the slots of the external wall of the turbofan and we create an air gap and a second external wall that incorporates a solenoid, The moving magnets become inductors and the solenoid becomes an induced armature that produces an induced current that opposes the variation of magnetic flux that generates it and therefore also produces the Lorentz thrust together with that of Newton. This is what is shown in fig. 1, which also inspired figure 2, where, instead, the Lorentz thrust is made by a special solenoid that even incorporates the primary source of compressed hydroelectric energy, specially developed in concentric tanks pressurized in low and high pressure, which as written, is the solution already used by myself, in

unnecessary (for the world ruling class) deposits of previous patents that would have been useful to purify and lift the water from the wells and to circulate and purify human blood, without energy costs and batteries to be recharged. This obtuse and ignorant ruling class, including the one that should represent science, cannot continue to govern the world and produce damage by hiding sustainable solutions, which, as the undersigned has shown on the website <http://www.spawhe.eu>, concern all human activities, including large wrong public works, which have created economic growth that produces more harm than good.

In these solutions, considering that the magnetic flux can be inverted by changing the supply polarity of motors that make the magnets move, we can also align the Lorentz thrusts in the direction of the Newton thrust produced by the turbofans. In addition, by adjusting the thrust force and acceleration by means of variable speed motors that feed the water circulation pumps, turbofans and small motors that circulate the permanent magnets.

Furthermore, as can be seen from the figures of section 4, 5, 6 in large transport vehicles, primary energy (compressed hydroelectric) with electromagnetic thrust can also be produced in the versions placed in the internal environment of the transport vehicle with tanks, larger pumps, motor turbines, power generators and external solenoids.

The legend of the drawings is reported:

Fig. 1, Modified electric turbofan with Newton and Lorentz thrust:

(1) Electric turbofan; (1.2) variable speed motor controlled by inverter; 1.3 inverter controlled variable speed motor for magnet movement; (1.4) transmission chain complete with permanent magnets; (1.5) open sliding track for chain with permanent magnets; (1.6) closed and magnetically insulated

sliding track for chain with permanent magnets; (1.7) air gap; (1.8) solenoid external to the turbofan in a metal housing;

Fig. 2, Plant for the production of compressed hydroelectric primary energy with Lorentz electromagnetic thrust, complete with air and vapor recovery scheme and modified water and compressed air tanks for the production of electromagnetic thrust:

(1) external water tank at atmospheric pressure; (1.1) level regulator with capacitive probes; (1.2) safety valve with conveyed air discharge; (1.3) variable speed motor with gear wheel for transmission chain; (1.4) transmission chain of permanent magnet transport; (1.5) open sliding track for chain with permanent magnets; (1.6) closed and magnetically insulated sliding track for chain with permanent magnets; (1.7) air gap; (1.8) solenoid external to the external water tank in a metal housing; (2) high pressure tank; (2.1) level regulator with capacitive probes; (2.2) safety valve with conveyed air discharge; (3) pump used as a turbine; (3.1) alternating current generator; (3.2) pump motor coupling joint; (4) suction filter and anti-air bubbles; (5) check valve; (6) pump with double separate power supply up to the impeller; (6.1) double curve with crossed separator partitions in low pressure (lp) and high pressure (hp); (7) variable speed motor controlled by inverter; (8) pump motor coupling joint; (9) air and steam recovery tank; (9.1) safety valve; (9.2) pressure switch; (9.3) water level probe; (9.4) mini electric compressor; (9.5) water drain solenoid valve; (10) system support frame. (11) modified water tank with production of electromagnetic thrust; (12) modified compressed air tank with electromagnetic thrust production, (13) shut-off and pressure adjustment group for compressed air; (14) shut-off unit with primary tank feed pump (1).

Fig. 3: Plant for the production of compressed hydroelectric primary energy with Lorentz electromagnetic thrust, modified for the tipper versions and the production of the horizontal

electromagnetic thrust: it is possible to note the displacement from only one side of the pump used as a turbine (3) and of the generator current (3.1), so that no air bubbles enter the energy circuit, which is also protected by the suction filter and anti air bubbles (4);

Fig. 4: Cross section of a generic land and space transport vehicle: This diagram shows the figures concerning the components used to make the Lorentz thrust (FL), the Newton thrust (FN) and the position of the containers interchangeable inside the transport frame (T) and the rotation axis of the primary and induced global linear motor (X – X)

Fig. 5: Longitudinal section of a generic means of land and space transport: Cross section of a generic means of land and space transport: This diagram shows the figures concerning the components used to make the Lorentz thrust (FL, the Newton's thrust (FN), the position of the telescopic hydraulic cylinders (15) (one for each side of the global linear motor of fig1), which make the rotation of an arc of circumference of 90 degrees to an element, through the tie rods and articulated struts (16) pivoted at the end of the systems, make all the connected global linear motors perform the same degree of rotation.

With these innovations, with the small volumes of water and compressed air, which are not consumed, we can create a single air and space navigation system much more powerful than current systems, exploiting the primary fluid dynamic energy that produces the electrical energy that I powered the main motors of the turbofans, of the pumps with the double separate supply of recycling and water circulation and the small motors that make the permanent magnets move that by feeding the solenoids made outside the six cylindrical tanks that contain the systems and of the turbofans themselves, we can create the induced currents and the Lorentz thrust which adds up to that of Newton, lightening the weight force in  $N / ms^2$ .

Considering that for long journeys, the weight of fuels also affects the energy absorbed by the aircraft to navigate the atmosphere of the Earth and other planets, with global linear motors we can avoid their unnecessary weight. Furthermore, if compressed air does not fall below the critical temperature of  $-140.6\text{ }^{\circ}\text{C}$ , it can also be pressurized at thousands of bars without losing its physical characteristics of elasticity which allow it to be the most powerful and economical accumulator of world energy. We must concentrate research and technology, above all on the resistance of the materials and the precision of the mechanical processes, which must not allow pressure losses in the interception parts, the impellers of the pumps and turbines. In fact, the higher the pressures we will use, the lighter the transport systems will be.

At the airports of the future we will not have runways and take-offs, but electromagnetic push stations of various sizes depending on the size of the aircraft of the future. These positions will be nothing more than fixed positions of "interactive linear global motors" of Fig. 2 solidly anchored to the subsoil which will emit electromagnetic waves to lighten the earth's gravitational force locally. In fact, the area above the airports will be polarized in the opposite direction to the Earth's gravitational attraction, flying bodies with a large percentage of ferromagnetic material will rise more easily and more easily move away from the Earth's surface. In essence, they will use the same electromagnetic thrust system mounted on the aircraft but much more powerful, having more space in width and depth.

Considering that there will be a single fixed location Airport to produce electromagnetic waves opposite to the gravitational force, but all airport locations simultaneously, it is clear that it will create electromagnetic corridors on the future of airports that will help take off and make it sweet and Securing landings. In addition, airports will also become large water purifiers because of the oxygen they dissolve in

water according to the principles of Henry and Dalton.

The introduction of the Lorentz thrust and the system of motorized chassis completely change the organization of the work inside the airports because the Lorentz thrust can also be produced from fixed positions similar to those shown in fig. 2 of large dimensions, which facilitate the lifting of the aircraft in the take-off phase giving an additional acceleration ( $a_L$ ) which corresponds to a ( $F_L =$  force of Lorentz) which decreases with the square of the distance according to the gravitational laws  $F = G * m_1 * m_2 / R^2$ .

Where  $G$  is the universal gravitation constant that is  $6.67 * 10^{-11} \text{ N (m / kg)}^2$ ,  $m_1$  is the mass of the Earth,  $m_2$  is the mass that moves away from the earth due to the Lorentz thrust component produced in the subsoil which adds to the thrust produced on board the means of transport.  $R$  is the distance between the centers of the masses expressed in m, therefore in this patent filing, in order not to disperse this small advantage offered by the gravitational law, it was foreseen to lift the air transport vehicles upwards in an Indian row to reduce the dispersion of the thrust due to the distances between the means of transport and the creation of frames orbiting above the airports polarized in the opposite direction to the earth's magnetic pole. This measure contributes to making the air transport of the future safer because air accidents currently occur mainly in the take-off phase.

In fact, if at each airport, a little more than a hundred kilometers away, we vertically place orbiting frames such as those shown in Figs. 4 and 5 with electromagnetic powers higher than those of common transport aircraft, we will also create electromagnetic attraction points. Basically, we will create electromagnetic corridors where the weight of the means of transport will be very low:  $\text{Weight} = m * (a - a_L - a_N)$  as already described in the first part of this document.



If we manage the ascent of the aircraft by lining them up in an Indian row, so that they take advantage of this corridor and also push each other, without dispersing the magnetic force, using simultaneously the push of Newton, we can easily overcome the hundred kilometers that separate us from space. With variable speed motors that regulate the reaction thrust and the magnetic one and anti-collision devices, not only will there be no danger of air accidents, but by investing in these technologies we solve the problems of global warming and lighten the global public debt that is mainly due to the major works produced worldwide to build roads, bridges, railways, dams, artificial reservoirs, precisely because of the error made by world science in identifying the primary energy source of energy.

If the way of planning world transport changes, the current management of the airports will also change, working in one direction and in parallel with another sister airport located a few kilometers away but managed by the same control tower. At alternating periods the two airports will manage departures or landings. To accommodate the landings it will not be necessary to invert the magnetic polarity of the motors and current generators, but only to reduce the number of revolutions of the electric motors that feed the pumps with the double separate power supply from which the primary source of the energy produced and managed by all motors that will produce electromagnetic thrust.

Air and space transport will take place in containers or interchangeable wagons that will rest on towable platforms mounted on wheels. These platforms will also be equipped with a hydraulic pantograph lifting structure, while the workstations will be equipped with floor guides so that the position of the wagons can be connected and disconnected with millimeter precision from the aerospace transport frames, equipped with interactive global engines.

This type of organization is indispensable because it is

unthinkable that the same workstations can simultaneously act as arrival and departure positions, nor that the wagons can stay unused for a long time in airports. Therefore, the arriving wagons will be moved immediately to the departure stations if they have to continue to other destinations, or to other locations to unload the passengers. Obviously each type of transport will have its own stations, its own wagons and transfer platforms of different sizes. Those intended for road transport must be limited to the dimensions permitted by the highway code (approximately 2.4 x 13 m).

It is clear that on the basis of these considerations on the organization of global work and on the technologies currently feasible but not implemented so far, the current transport systems are already outdated, not only from an environmental point of view, but also from a technical and economic point of view. As on the other hand, purification systems, world energy production and other transport systems are already outdated, which do not use as a primary energy and purification source at low cost that only interactivity between water, air and gravitational force can provide.

We know that the atmosphere traveling with the Earth at a speed of about 1670 km / h at the equator, but making economic calculations and time, agree equally meet the quota of hundred meters above sea level and move with the single electromagnetic drive instead to waste fuel and pollute the environment.

We remember how the atmosphere is composed: it is composed of the troposphere which is the lowest layer, which comes from 9 and 17 kilometers above sea level. This area is ideal for current scheduled flights which are based on aerodynamics and the floating of aircraft on the wings due to the effect of kinetic energy. Once the troposphere is over, the stratosphere begins, which extends around 50 kilometers above sea level and immediately afterwards lies the mesosphere, the layer where according to the United States Space begins. The exosphere,

the largest layer, begins at 690 kilometers above the earth's soil and continues up to 10 thousand kilometers: it is not very dense and does not have many things in common with the lower layers of the atmosphere. For land flights we do not have to reach these quotas. Having the World Space Federation established that space conventionally starts at an altitude of 100 kilometers, it means that from this altitude we can orbit the atmosphere without encountering the friction of the air that exists in the underlying atmospheric layers. At this altitude, we can rotate the "primary and induced interactive global linear motors" by 90 degrees, which in vacuum will operate with Lorentz's thrust only. Obviously, with this system we can increase our relative speed within the Earth's orbit, or go in the opposite direction. The route to be followed will be determined by specific satellite navigators. When we have reached an optimal position to get closer to our goal, also guided by the reference electromagnetism produced by the landing stations of the airports, we begin the descent, rotating the global linear motors again, also restarting Newton's thrust and adjusting the speeds we also regulate the intensity of the induced currents of the motors of the electric turbofans, of the motors that circulate the water and the permanent magnets. So we also adjust the descent speed.

With this flight system the possibilities of flight attitude adjustments will be infinite and all more reliable than the current way of flying. Today, the failure of a single turbofan or a fire on board the aircraft caused by fuels is enough to endanger the lives of several hundred people. Already today with the level of electronic and computer knowledge and satellite position control, we could easily reach any destination, going down from the top to the destination points without crossing the routes with other aircraft.

Climbing the hundred kilometers that separate us from infinite space vertically in an Indian row we could cover them simply by establishing the ascent speed (equal for all) and

consequently the starting times, so that the magnetized Lorentz space creates a kind of vertical railway without tracks. Obviously, creating anti-collision devices that reduce the speed of the engines when they get too close and acceleration when the distance increases excessively from the aircraft that precede the climb in the corridor, also because flights to the nearest destinations will be able to exit the magnetized corridor long before reach the space quota.

Let's suppose we want to move a 2.4 m wide, 10 m high and 50 m long container by air with the turbo fans 1.0 m away from the traveling wagons by air. If we wanted to lift the bearing frame and the container with Newton's push, with the turbofans we would have to produce an air gap of about 3200 m<sup>3</sup> ( $6.4 * 10 * 50$ ), and we have to renew it quickly so that the weight of the the extracted air is greater than the weight of the wagon and the load it contains. To do this lifting with the push of Newton would require several dozen electric turbofans, as provided by the undersigned in the previous patent filing (<http://www.spawhe.eu/aerospatial-pressurized-hydroelectric-transport-system/>). To overcome the gravitational force since the time of Leonardo da Vinci, aerodynamics has been studied in order to float on the wings of airplanes. But aerodynamics will not be able to take us into space because it would not work. How the system used by public and private world space agencies that use the fuels that consume and pollute the earth's environment does not work. In addition, consuming the fuel does not guarantee the return trip.

This is the reason why the undersigned gradually came to the conception of the "interactive global linear motors" that produce sustainable primary energy and the thrusts of Newton and Lorentz together, arranged laterally to the container to be transported, but mounted on a separate frame so that the system becomes efficient also from the point of view of the organization of the global work. Where science and technology does not arrive, the study of the scientific organization of

work arrives, which always seeks the best solution by putting together existing technologies and adapting them case by case. This is the work that inventors must do, but they cannot do it because of the parceling out of the work wanted by governments, multinationals and the United Nations that regulate patent laws.

As mentioned above, the electromagnetic thrust does not depend only on the technology that we will use on the aircraft but also on the external thrusts existing in the universal electromagnetic network, and on the initial thrusts that we will produce at airports to overcome the gravitational and attraction force that we will produce in artificial satellites.

This does not mean that the aircraft outside the hypothesized system will not be able to navigate independently. It means that we are designing a new transportation system through an intellectual patent filing, which must take into account from the beginning of its birth the favorable and unfavorable conditions in which it will operate. Therefore, if the aircraft that we will build with this system would be less autonomous than the current planes or helicopters that operate on fuels, it does not mean that they are less advantageous, but only that they are designed with different criteria, as means of transport in need of infrastructure. These infrastructures, however, will be lower than those necessary for other current means of transport, which need roads, bridges, expressways, railways which also involve significant maintenance costs and can be destroyed in a few minutes by earthquakes and tsunamis.

It is obvious that completely autonomous means of transport will have to be designed with higher overload coefficients than those that make planned routes in a fixed transport network, where it costs very little to create additional electromagnetic thrusts external to those produced on board the aircraft. However, if we think that most of the accidents

of current aircraft take place in the take-off phase, when there is a need for maximum upward thrust, we can also think that it is time to change the world energy system and create everywhere underground "fixed global linear motors", which will feed the services and purify the water with primary energy by dissolving oxygen as a result of the law of Henry, while with the induced currents they would lighten the weight of the aircraft in the take-off phase. The current urban traffic could be decongested by flying cars that would have a very different shape and that obviously would not pass through airports. In other words, it is the entire global organization of environmental, energy and transport work that needs to be changed.

Local politicians who fight for local management autonomies make people smile. What autonomy can they have if world science and technology has not been able to create a valid purification and energy and universal transport system? Local management autonomy can only be achieved by politicians after world science and technology has remedied all the mistakes made. A new industrial revolution will be needed.

Today, world authorities are equipping cities with battery-powered car charging points. These charging points are powered by fossil thermal energy. This is all wasted science and technology that does not solve any global environmental and economic problems. Adds new damage to previous ones. With thermal energy you don't go anywhere, even if we alleviate urban pollution with battery-powered cars, pollution is equally produced outside the cities in greater quantities, because the transport and storage of energy require greater amount of thermal energy produced. In the meantime, air transport continues to pollute with impunity in the name of progress, but for myself, also in the name of scientific ignorance, since science has never deepened the organization of global work

How can science keep silent about the pollution of air

transport vehicles? Just think that from a small online research on costs and pollution produced by current flight systems

(<http://www.focus.it/tecnologia/innovazione/quanto-carburante-consuma-un-aereo-di-linea>) , with a little approximation, it is estimated that a Jumbo jet on a route of about 6 thousand km (for example Milan-New York), consumes more than 63 thousand liters of kerosene, an average of 19 liters per nautical mile (1,8 km), about 158 for each passenger (400 in total). For each seat, 4,000 kilos of carbon dioxide are also produced. Short routes have proportionately higher fuel consumption because 1/3 of the fuel is burned during take-off. On long flights, however, the proportion drops to 1/8.

Thermal energy is the biggest mistake of world science, which implies more disadvantages than benefits: fuel costs, energy consumption for cooling, the production of toxic gases that to be neutralized, would require purification plants that science has not designed and he also kept silent on the proposed global urban purification. Until proven otherwise, it is not the heat that produces energy, but the pressure produced by the combustion gases, which press on the cylinders of a piston engine, or make a gas turbine turn. This can also be done by the compressed air used statically as the undersigned has shown by purifying the environment and economically saving.

I think it is worth going up to a hundred kilometers to save 63 thousand liters of kerosene in a single flight from Milan to New York and travel in the void in less time the 6000 km of distance with a much higher means of transport speed , not having to overcome atmospheric disturbances and air friction.

Other important changes due to the study of the organization of industrial work also from a sustainable environmental point of view are:

- 1) The realization of means of transport that can be disassembled between the driving and the transported parts,

allows a more flexible transport management and faster maintenance interventions. In fact, in many cases the transported containers, equipped with only the connections for lighting and air conditioning, can be made interchangeable with the means of transport by road and sea.

2) The solution of the supporting frames, separated from the transported containers, allows the use of the same primary and induced interactive global linear motors for both horizontal and vertical thrusts. In fact, these can rotate 90 degrees in a synchronized way being mounted with two parallel articulated fulcrums moved by a single telescopic cylinder per side.

3) With this new system, we will simultaneously have the Newtonian urge to navigate the spaces where there is an atmosphere and the polarization of the external solenoids which can be attracted or repelled by the dominant magnetic field in space and on earth. By reversing the flow polarity of the external solenoids we can decide the direction in which to go and by adjusting the speed of the electric motors of the pumps that circulate the water and turn the turbo fans, decide the speed with which we want to travel. It is clear that with this system we can enter and exit any space orbit and once inside we can increase the speed compared to other orbiting bodies without internal energy. To increase the force of the thrust of Newton and Lorentz in addition to the increase in the rpm of electric motors. We can also increase the pressure of the compressed air.

In a reaction to the air transport system, the performance of a propulsion increases when more approaching speed of the air that pushes to that of the aircraft that moves. The two factors that most influence the thrust performance are the speed  $W$  with which the fluid leaves the thrusters and the flight speed of the aircraft  $V$ : the more  $W$  is greater than  $V$  the less the propulsive efficiency, which is determined by the relation:  $2 / [1 + (W / V)]$ . Much higher force is required when the aircraft is stationary. In fact, a body persists in



its state until an external force modifies the state of quiet. As  $V$  increases the propulsive efficiency increases (theoretically it could become equal to 1 (100%) if  $V$  could increase up to become equal to  $W$ ). Taking into consideration that the propulsive efficiency depends on  $W / V$ , while the thrust is given by the formula:  $M * (W-V)$ , where  $M$  is the mass flow that crosses the turbofans in the unit of time, it is noted that to obtain propulsive efficiency high, therefore with low specific consumption, while keeping the thrust equally high, the mass of air to be accelerated must be privileged over its speed. This is the reason why, the lighter helicopters also rise vertically while the planes take advantage of the kinetic energy developed by the thermal fan heaters mounted horizontally under the wings and the rolling friction of the take-off carriages to rise towards the atmosphere by floating in the air. In fact, helicopters move much more air than their aircraft to lift. If the planes had more energy at their disposal, they could feed a greater amount of turbofans and they would fly up like helicopters or spaceships in science fiction films. Of course, even in science fiction films, no one ever thought that the energy could be produced with water and compressed air, and even that turbofans could be incorporated into the electromagnetic drive solenoids, which not only produce the thrust of Lorentz, ( $F_{\square} = qv_{\square} \times B_{\square}$ ) which depends on the amount of electric charges and the speed with which they move, but we also have the local reduction in the weight of the means of transport due to the accelerations of Lorentz and Newton which locally oppose gravity by reducing the weight ( $P = ma - aL - aN$ ). Furthermore, if the aircraft is parked above a fixed electromagnetic thrust station (Fig. 2) located underground, which can also be used as a water purifier, it also receives an additional thrust.

I think that the current world ruling class, including the scientific one, is the worst of all time because, in the last conference between the parties COP 25, which was attended by representatives of all the countries of the world, postponed

decarbonization of the planet to 2050, when the world population will exceed nine billion, which will be made up mainly of the poor. The United Nations that organize these conferences and also manage the intellectual and industrial property of the inventions, have never replied to the undersigned who addressed to them and to the International Judges 25 open letters, including this one, in which I believe I have demonstrated with intellectual inventions and publications related to these inventions that thermodynamics in the production of energy on planet Earth, rich in water, air and gravitational force, is a useless and counterproductive process also from an economic point of view. This is even more evident, especially in transport systems, where in order to increase performance and reduce overall dimensions, it is possible to increase the air pressure which has no limits on planet earth, being the critical temperature of the air – 140.6 degrees centigrade and the critical pressure of 37.6 bar. This means that we can use very high pressures of compressed air if the operating temperature of the water and air does not drop. This is an immense advantage that science has underestimated since the advent of the industrial age, because the plants designed correctly on planet Earth are those that have never been built. Those who statically exploit the elastic pressure of the air which acts like a very powerful spring, which without expanding must transfer its force to the water. In fact, the mechanical energy to be transformed into electrical and electromagnetic is produced by the pressure (P) of the air by density of the fluid ( $\rho$ ) that circulates, which is water, by the flow rate of the same water (Q). Thermal plants are wrong because they produce energy with the pressure of combustion gases or steam which have an average density of 1000 times lower than water, while the maximum pressure that can develop in a combustion chamber of a cylinder, at most can reach forty bars and it decreases in the expansion phase. So the limits of the thermal system and thermodynamics are evident, besides the fact that the fuels are exhausted and are subject to charges. Including

hydrogen which has a high and unnecessary production cost. Furthermore, being very light, before being burned, it must be compressed at very high pressures. While water and air are energies ready for use. What does world science gain by persevering in these absurd solutions instead of admitting mistakes?

Figures 6 and 7 show the longitudinal cross section of a generic submarine transport vehicle, which is very similar to the aerospace system, in that it transports watertight containers to the ocean floor. The difference consists in the fact that also the external frame (T) which contains the lateral primary linear motors can be hermetically closed. Just keep the Newton and Lorentz thrusts separate, making the first with external propellers connected to the electric motors (17) located inside the frame. The submarines will not need to empty and fill the sealed chambers with water to adjust the depth of navigation because the weight will be balanced by the force of Lorentz and Newton according to the formula already mentioned  $P = m * (a - a_L - a_N)$ , where "AL" is the acceleration artificially produced with the Lorentz force and "aN" that produced by the reaction force of Newton. The submarines of the future will be much faster, cheaper and safer than the current submarines and will be able to descend to greater depths than the current ones.

The legend of figures 6 and 7, which is already reported in figures 2 and others used, to which the electric turbo fans which have been replaced by normal marine propellers (17) has not been reported. The electromagnetic thrust is produced entirely with the solenoids external to the fluid dynamic systems that also produce primary energy.

Fig. 8 shows that defense against high water with interactive linear global motors can also be carried out more efficiently.

Also in this case, the legend is not reported, which is already reported in figures 2 and others used, to which the

electric turbo fans have been eliminated which have been replaced by normal marine propellers (17). With the same components it will be possible to create fixed barriers long kilometers without carrying out large structural works. It will be sufficient to create sealed steel chambers containing electromechanical equipment, interspersed with open chambers in which water can freely enter and exit from the sea side. The entire structure can be placed on the seabed and will rise by the necessary meters with the thrust of Newton and Lorentz automatically, while remaining anchored to the seabed with sea anchors. The passage of water under the barriers will be avoided by thick seals of cloth rubber that will adhere to the seabed even when the barrier rises (18). These barriers will produce compressed hydroelectric primary energy, which will be used by the community instead of that currently produced by thermal power plants with lower costs and without producing pollution throughout the year, purifying the sea water which will be continuously recycled inside the pressurized system using Henry's principle. In fact, as can be seen from Fig. 8. in this case the water entering the pressurized tank (2) is taken from the sea via the filter 4 and returned to the sea with a greater percentage of oxygen at the outlet of the pump used as a turbine after the check valve (5). The marine propellers (17) and the currents induced in the solenoids external to the system and to the compressed air tanks and tanks (1.8) will be put into operation only when it is necessary to raise the barriers. Since the barriers are always submerged and full of water (apart from the sealed chambers that house the plants) they will not be much affected by the disturbances produced by sea waves, especially if the waters are deep enough.

AEROSPACE AND SUBMARINE TRANSPORT SYSTEM WITH INTERACTIVE PRIMARY AND INDUCTIVE LINEAR MOTORS.

DRAWINGS

<http://www.spawhe.eu> SISTEMA DI TRASPORTO AEROSPAZIALE E SOTTOMARINO CON MOTORI LINEARI GLOBALI INTERATTIVI PRIMARI E INDOTTI.

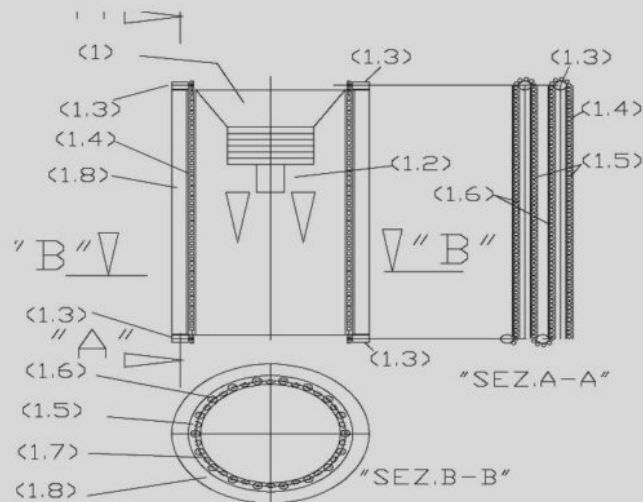


Fig. 1 Turboventilatore elettrico modificato con spinta di Newton e Lorentz:  
 FIG. 1: (1) Turboventilatore elettrico; (1.2) motore a giri variabili controllato da inverter; 1.3 motore a giri variabili controllato da inverter, per movimentazione magneti; (1.4) catena di trasmissione completa di magneti permanenti; (1.5) pista di scorrimento aperta per catena con magneti permanenti; (1.6) pista di scorrimento chiusa e isolata magneticamente per catena con magneti permanenti; (1.7) traferro; (1.8) solenoide esterno al turboventilatore in involucro metallico di contenimento;

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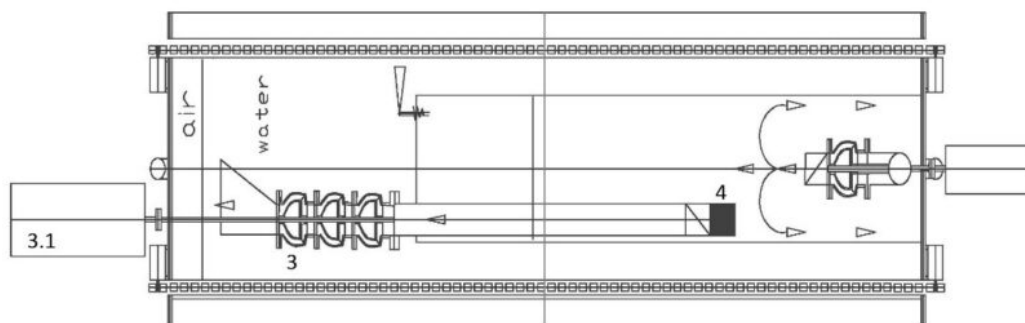


Fig. 3: Plant for the production of compressed hydroelectric primary energy with Lorentz electromagnetic thrust, modified for the tipper versions and the production of the horizontal electromagnetic thrust: it is possible to note the displacement from only one side of the pump used as a turbine (3) and of the generator current (3.1), so that no air bubbles enter the energy circuit, which is also protected by the suction filter and anti air bubbles (4);

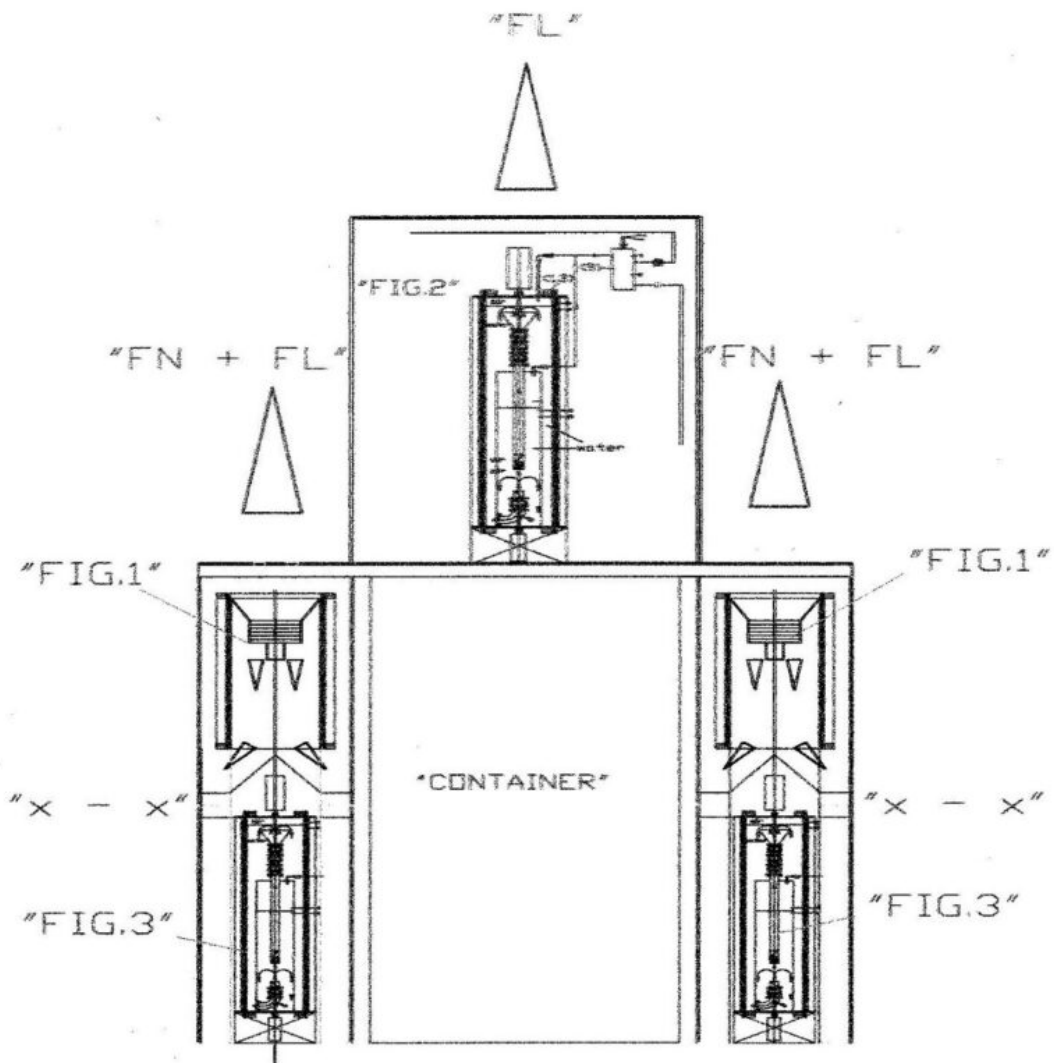


Fig. 4: Cross section of a generic land and space transport vehicle: This diagram shows the figures concerning the components used to make the Lorentz thrust (FL), the Newton thrust (FN) and the position of the containers interchangeable inside the transport frame (T) and the rotation axis of the primary and induced global linear motor (X - X)

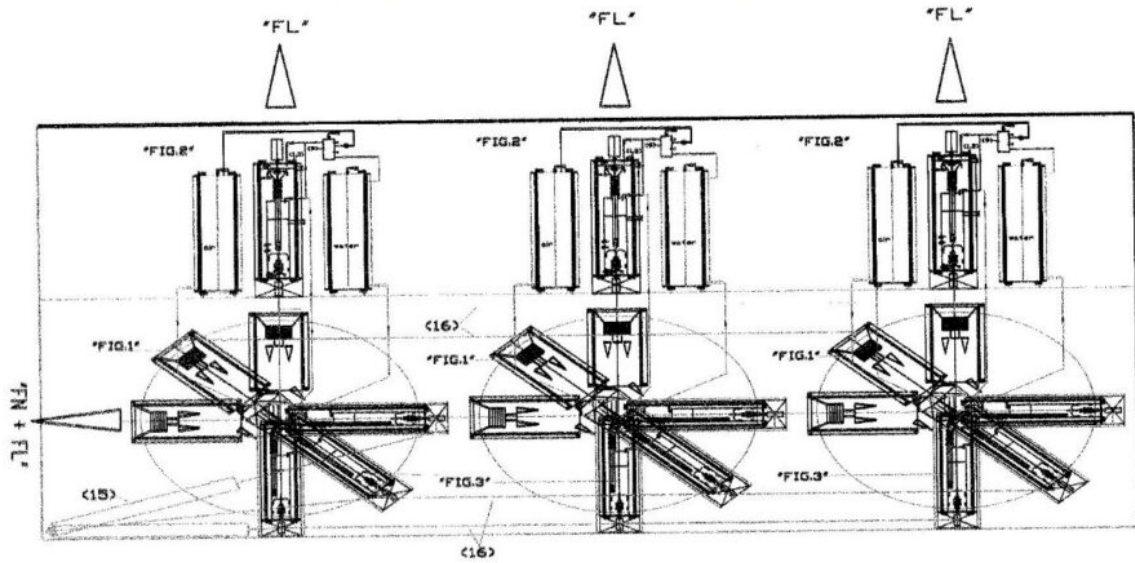
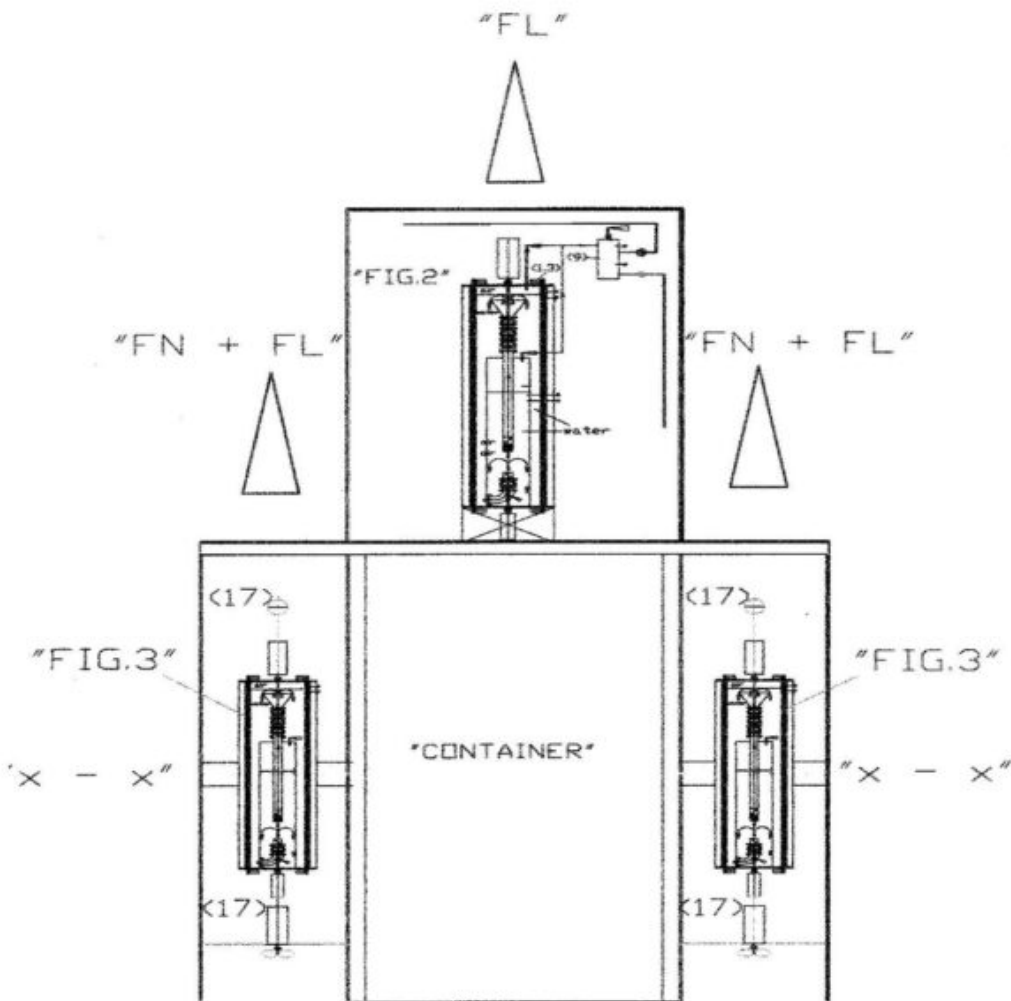


Fig. 5: Longitudinal section of a generic means of land and space transport: Cross section of a generic means of land and space transport: This diagram shows the figures concerning the components used to make the Lorentz thrust (FL, the Newton's thrust (FN), the position of the telescopic hydraulic cylinders (15) (one for each side of the global linear motor of fig1), which make the rotation of an arc of circumference of 90 degrees to an element, through the tie rods and articulated struts (16) pivoted at the end of the systems, make all the connected global linear motors perform the same degree of rotation.



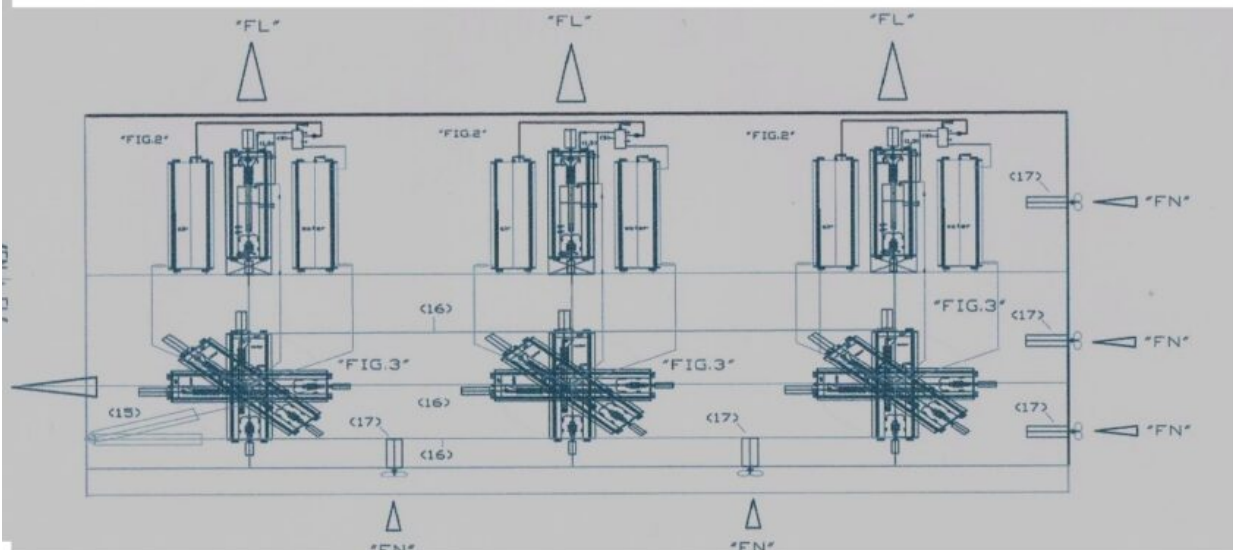
<http://www.spawhe.eu> AEROSPACE AND SUBMARINE TRANSPORT SYSTEM WITH INTERACTIVE PRIMARY AND INDUCTIVE LINEAR MOTORS



Figures 6 show the cross section of a generic submarine transport vehicle, which is very similar to the aerospace system, in that it transports watertight containers to the ocean floor. The difference consists in the fact that also the external frame (T) which contains the lateral primary linear motors can be hermetically closed. Just keep the Newton and Lorentz thrusts separate, making the first with external propellers connected to the electric motors (17) located inside the frame. The submarines will not need to empty and fill the sealed chambers with water to adjust the depth of navigation because the weight will be balanced by the force of Lorentz and Newton according to the formula already mentioned  $P = m * (a - aL - aN)$ , where "AL" is the acceleration artificially produced with the Lorentz force and "aN" that produced by the reaction force of Newton. The submarines of the future will be much faster, cheaper and safer than the current submarines and will be able to descend to greater depths than the current ones. The legend is not reported being it is already reported in figures 2 and others used, to which the electric turbo fans which have been replaced by normal marine propellers (17) has not been reported. The electromagnetic thrust is produced entirely with the solenoids external to the fluid dynamic systems that also produce primary energy.



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Figures 7 show the longitudinal section of a generic submarine transport vehicle, which is very similar to the aerospace system, in that it transports watertight containers to the ocean floor. The difference consists in the fact that also the external frame (T) which contains the lateral primary linear motors can be hermetically closed. Just keep the Newton and Lorentz thrusts separate, making the first with external propellers connected to the electric motors (17) located inside the frame. The submarines will not need to empty and fill the sealed chambers with water to adjust the depth of navigation because the weight will be balanced by the force of Lorentz and Newton according to the formula already mentioned  $P = m * (a - aL - aN)$ , where "AL" is the acceleration artificially produced with the Lorentz force and "aN" that produced by the reaction force of Newton. The submarines of the future will be much faster, cheaper and safer than the current submarines and will be able to descend to greater depths than the current ones. The legend is not reported being it is already reported in figures 2 and others used, to which the electric turbo fans which have been replaced by normal marine propellers (17) has not been reported. The electromagnetic thrust is produced entirely with the solenoids external to the fluid dynamic systems that also produce primary energy.

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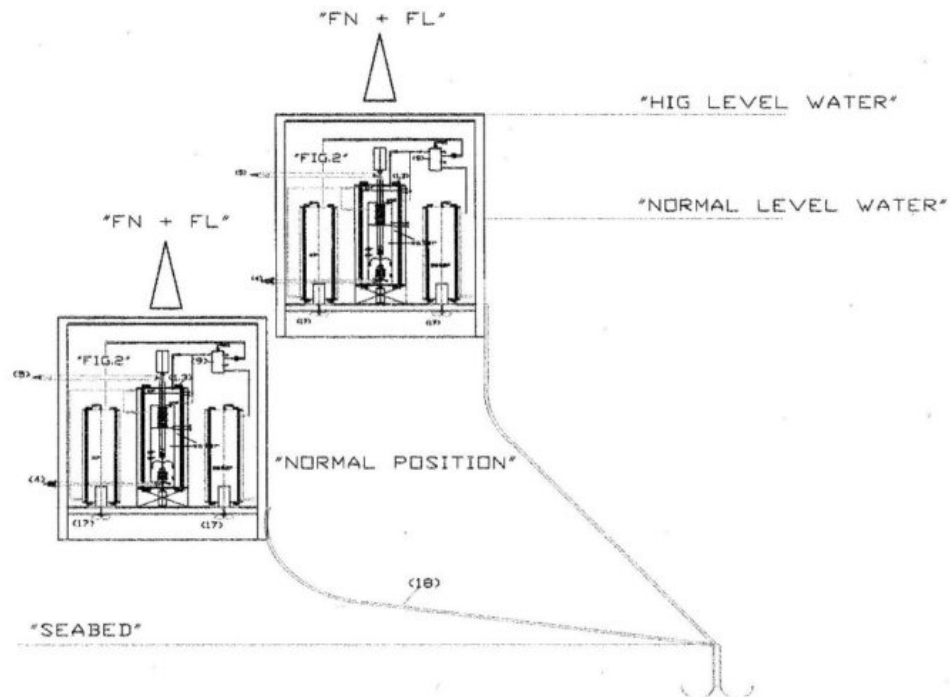


Fig. 8 shows that defense against high water with interactive linear global motors can also be done more efficiently. The legend is not reported, which is already reported in figures 2 and others used, to which the electric turbo fans have been eliminated which have been replaced by normal marine propellers (17). With the same components it will be possible to create fixed barriers long kilometers without carrying out large structural works. It will be sufficient to create sealed steel chambers containing electromechanical equipment, interspersed with open chambers in which water can freely enter and exit from the sea side. The entire structure can be placed on the seabed and will rise by the necessary meters with the thrust of Newton and Lorentz automatically, while remaining anchored to the seabed with sea anchors. The passage of water under the barriers will be avoided by thick seals of cloth rubber that will adhere to the seabed even when the barrier rises (18). These barriers will produce compressed hydroelectric primary energy, which will be used by the community instead of that currently produced by thermal power plants with lower costs and without producing pollution throughout the year, purifying the sea water which will be continuously recycled inside the pressurized system using Henry's principle. In fact, as can be seen from Fig. 8. in this case the water entering the pressurized tank (2) is taken from the sea via the filter 4 and returned to the sea with a greater percentage of oxygen at the outlet of the pump used as a turbine after the check valve (5). The marine propellers (17) and the currents induced in the solenoids external to the system and to the compressed air tanks and tanks (1.8) will be put into operation only when it is necessary to raise the barriers. Since the barriers are always submerged and full of water (apart from the sealed chambers that house the plants) they will not be much affected by the disturbances produced by sea waves, especially if the waters are deep enough.