AN INVESTIGATION INTO MAKING SHIPS CLEANER AND MORE ENERGY EFFICIENT

RENÉ PIERRE GUÉRAÇAGUEa, GERMAN DE MELO RODRÍGUEZb*, J.C. MURCIA-GONZÁLEZc

aInvertone Quantum Solutions, Milá y Fontanals 136, 08205, Sabadell-Barcelona Spain.
bDepartment of Science and Nautical Engineering, UPC-BarcelonaTech, NT1 Building, Pla de Palau 18, 08003, Barcelona, Spain.

*Corresponding author. Tel.: [(+34)93-4017777], e-mail: demelo@upc.edu

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Abstract

“Naval-fx” consists of the development of a novel device (diffuser-receiver) with memory effect connected to the Internet and ready on board the ship which allows through the use of the already know quantum theory the molecular reorganization of the matter applied to marine fuels. The principles of quantum physics studied and interpreted and applied in the right way allow the establishment of an algorithmic relationship between the magnetic field information of the material (in this case the fuel) to be treated and a series of sound frequencies that are emitted from a server. It allows the aforementioned molecular reorganization of the treated matter and thereby a reduction in the emissions on board CO, CO2, NOx and SOx among other advantages such as noise and vibrations reduction or longer engine life. This process has been called “Dynamization”.

The main effect (based on molecular reorganization) is based on returning to atoms and molecules their original properties (before extraction, transport, refinement, etc.) through activation as explained above of their Magnetic field information. The phenomenon of activation of the system realized through computer algorithms will allow to instantly alter the magnetic information field of an atom and molecule or particle set at any distance without any loss of power made which surpasses all the electromagnetic and chemical systems employed today.

1. THE BEGININGS OF “Naval-FX”

“Naval-FX” is an initiative which INVERTONE launched after the impressive results achieved following implementation of “Motor-FX” in automotive sector. The application of “Motor-FX” in cars, motorcycles, motorcycles, vans, buses and trucks have brought great benefits both individuals and transport companies. Without forgetting Automobile competitions and elite motorcycling.
1.1. RESULTS OF THE TESTS:

Curves analysis:

**Test 1:** After dynamizing, the obtained torque and power curves have considerably increased its maximum range (flat zone in the center, figure 1), which defines a more elastic engine, with less need to change gears, fact that directly represents a consumption reduction.

![Figure 1: Test 1](image)

Results: +54% Maximum Power Range; +104% Maximum Torque Range

**Test 2** After dynamizing, the obtained torque and power curves have considerably increased its maximum range (flat zone in the center, figure 2), which defines a more elastic engine, with less need to change gears, fact that directly represents a consumption reduction.

![Figure 2: Test 2](image)

Results: +206% Maximum Torque Range; -11% Maximum Power Range
1.2. EMISSION TESTING

Gas chromatography

**Vehicle**
- **Reference:** SEAT ALHAMBRA – 2012 – Diesel - 89.000km -
- **Time Dynamization:** Test after 42 days Dynamized
- **Ambience temperature:** 19º

<table>
<thead>
<tr>
<th>Test</th>
<th>Means: Gas Chromatography (CG). Test bags provided by the laboratory.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Conditions:</strong></td>
<td>The exhaust sample is taken after starting the vehicle for 3 minutes.</td>
</tr>
</tbody>
</table>

**Results:** -71% of CO

**Figure 3:** Gas chromatography

**Figure 3**

### OPACITY TESTS ON FOSSIL FUEL

Dynamization tests of various types of vehicles have been carried out with the following visual results:
2. MAIN INNOVATIVE ELEMENTS OF THE PROJECT

“Naval-FX” is a new technology that was decided to develop after 30 years of research in other areas (surgery, pests, etc.), by the engineer and physicist specializing in quantum physics René Pierre Guéraçague, on the basis of the quantum theories, principles of physics and cutting edge engineering and is born of interest in offering a complimentary response, scientific and necessarily novel to treat all those problems linked to the state of health of the human life whose origin are mainly:

1. The stressful life, under physical, moral and social pressure.
2. The electromagnetic pollution, emissions of polluting gases, noise pollution, etc.
3. The increasing biochemical incompatibility provoked by inadequate nutritive contributions.
4. The parasitic problems and bacterial (caused by the incompatibility biochemistry).

In a simple, effective and revolutionary through the provision on board the vessel of a diffuser-receptor quantum with memory effect connected to the Internet, this technology will be able to:

- Reducing the emissions of polluting gases (CO, CO₂, NOx, SOx and PM (Particulate Matter).
- Diminish the Noises and Vibrations.
- Increase the useful life of the Marine Engines
- Increase the engine torque and power.

In contrast to the technologies and methods applied at present, as we have described in the previous point, this innovative technology that will develop is primarily based on the principles of quantum physics and will provide a solution:
Without the need to intervene physically in the vessel or on engines; suffice with the provision on board a receiver-diffuser with memory effect and internet connection, figure 5, whose dimensions and characteristics are similar to a modem. In case of producing a loss of sign to him, the system will remain active, thanks to its memory effect during a period of 60 days from which there will be realized a reconnection that will allow to restore and preload automatically, without the presence of any of our technicians, those future briefings that are available.

Figure 5: Phenomenon of Investment of Frequency

- In a precise way; be already to individual way (on the matter) or for delimitation GPS, without importing the size or place of the surface to be treated.
- Without need for investments in machinery, occasionally in computer equipment.
- Without need to increase structure or hire specialized personnel.
- Without maintenance, everything is carried out through quantum servers located in our headquarters.
- Without the need to modify the internal logistics or means of storage and distribution.
- Without additional costs (energy, of personnel, transformation of the ship, etc.) to those of the contract of the service.

This innovative and efficient technology developed initially to end with one the main causers of respiratory and cardiovascular illnesses, the contamination by emission of pollutant gases, is based in:
René Pierre Guéraçague, German de Melo Rodríguez, J.C. Murcia-González

- Principle of quantum entanglement: This theory posed by Einstein, Podolsky and Rosen, describes the property that has two or more intertwined particles of sharing a same magnetic field of information.
- If one of the objects receives information, the rest of the interwoven perceive it in an instantaneous form, regardless of the space that separates them.
- Phenomenon of DNA phantom: The study carried out by Russian scientists, the doctor in Biophysics Vladimir Poponin and molecular biologist Pjotr Garjajev, on the DNA molecules, concluded in the demonstration of a characteristic effect called "DNA ghost".
- Phenomenon of investment of frequency: physics represents the frequency as a set of waves that are repeated in a period of time. Given a frequency, if you superimpose its inverse, the result is null.

Figure 6: Phenomenon of investment of frequency

3. OPERATING PRINCIPLES

From our researches, has been able to establish a relationship algorithmic between the information field magnet of the element to be dealt with and sound frequencies. From these frequencies, through our systems, are obtained their inverses, which are issued from our servers quantum. These frequencies are effective only for the receiver element, since it is with the only one with which it has established the entanglement. The quantum principle of interlacing makes it possible for the exchange of information between our quantum server and the receiver to be instantaneous and at any distance. Through the "dynamized", what is achieved is a controlled rearrangement of the molecules in order to modify their biochemical properties:
4. PRINCIPLES OF APPLICATION

The ship will have to take assigned an alphanumeric code of unequivocal identification which will turn him into the only receiving surface of the information sent from the quantum servant placed in our head offices; All of this by the employment of the receiver-diffuser NAVAL-FX" with memory effect and connection to internet, which located on board of the vessel will allow the activation molecular of the fuel and the exhaust gases from the combustion, giving rise to a molecular separation consistent that:

Will reduce the emission of polluting gases (CO, CO₂, NOx, SOx and MP (Particulate Matter). From the same moment in which the activation is carried out, there will take place a progress of the energy efficiency of the fuel. All this, it is a consequence of the best combustion of the fuel that we obtain after the dynamization of the same one.
Reduce Noises and Vibrations. The dynamization will optimize the fluency of the fuel, improving it the lubrication of the pieces of the engine in movement, of the transmission, etc. These improvements will provide crews and passengers on board during the navigation a greater comfort that will be reflected in the case of the onboard personnel in a better performance. In addition to be seen a decrease of the frequencies that affect the marine species, a direct consequence of the reduction of noise of narrow band (noise generated by machinery such as diesel engines of ships, generators or auxiliary machinery).

As a result of better fluidity of operation, is substantially reduces the sound level.

The propulsion engines will have a more homogeneous noise from the start of start-up if the activation is successful. After several hours stopped (engines in cold), on having produced the starter to him, the answer will have to be the same that if the above mentioned engines had finished of being stopped and a few seconds later, in hot, they would have been restarted. The intensity of the noises and vibrations will have diminished of notable form after the dynamization giving the sensation that the above mentioned engines are better greased. The consequence of the dynamization, it takes root in a better lubrication of the mobile parts of the engines (it diminishes the friction between the above mentioned mechanical elements), and as a result of it, we obtain a reduction in the level of noises and vibrations, as well as a better yield of the same ones.

Increase the useful life of the Marine engines on board. When there is no good combustion, as we know, it generates loss of power, increased fuel consumption, high production of polluting gases and an increased risk of damage to the motors or mobile elements that it has.

The dynamization, in this case of the fuel, will give rise to a stabilization of temperatures that improves the motor operation and decreases by direct consequence the alteration of the parts that make it up, getting longer its useful life.

Increase the torque and the power. In the naval sector and in particular with regard to the maritime traffic of goods, the optimization of costs is key to survival in the market. Therefore, when giving a step outside our borders, companies should not only consider conscientiously toward where they want to run their businesses, but also that resources need to achieve this. Then, delivery times can play against or in our favor.

As a result of the dynamization of the fuel, it produces a total combustion of the same increasing the power and the motor torque, since the whole fuel transformed in movement. With the employment of this innovative technology based principle on the beginning of the quantum physics, we might be speaking about an increase of potency of exit of helix of approximately in an environment of 8 % to 10 %.

The above information will remain active continuously acting at the sub-atomic level in the fuel molecules in that area of the engine in which the combustion phenomenon takes place and in the exhaust gases at its exit.

To proceed to the activation of the system, it will only be necessary to have a series of information that they convert to this ship into only one, and that allows that the dynamization process to be carried out over a distance, indistinctly of the place of the world in which the vessel will be.
5.-TEST ON VESSELS

Table 1: The main technical characteristics of the ship

<table>
<thead>
<tr>
<th>TYPOLOGY VESSEL</th>
<th>YEAR OF BUILDING</th>
<th>L(m)</th>
<th>B(m)</th>
<th>P(m)</th>
<th>T_{max}(m)</th>
<th>EFFECTIVE POWER (kW)</th>
<th>MAIN ENGINES FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>VESSEL 1</td>
<td>2009</td>
<td>29,50</td>
<td>11,00</td>
<td>4,00</td>
<td>6.95</td>
<td>2 x 2.400</td>
<td>2 x Rolls Royce Marine</td>
</tr>
<tr>
<td>VESSEL 2</td>
<td>2007</td>
<td>29,50</td>
<td>11,00</td>
<td>4,00</td>
<td>6.90</td>
<td>2 x 2.400</td>
<td>2 x Rolls Royce Marine</td>
</tr>
<tr>
<td>VESSEL 3</td>
<td>2016</td>
<td>31,50</td>
<td>11,20</td>
<td>5,40</td>
<td>4.40</td>
<td>2 x 2.350</td>
<td>2 x Caterpillar Engine</td>
</tr>
</tbody>
</table>

Table 2: Emissions of exhaust gases

<table>
<thead>
<tr>
<th>OPACITY</th>
<th>COMMENTS</th>
<th>EMISSION REDUCTION (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight seconds after motor starters</td>
<td>Brown-Yellow smoke and less dense</td>
<td>50%</td>
</tr>
<tr>
<td>Sailing</td>
<td>The smoke practically disappear</td>
<td>55%-75%</td>
</tr>
</tbody>
</table>

After the dynamization of the ship, the operations performed on board by the crew during their day-to-day activities have been facilitated by reducing the odors caused by the exhaust gases which were produce during combustion in more than 70% both in Engine Room as in the bridge of government.

The noise of the engine after the dynamization of the vessel is more homogeneous from the beginning of its commissioning. After 14-20 hours stopped, when the engines are started the response is the same as if those engines had run out of and a few seconds later, in hot, re-started.

Results: -75 % de Opacity
Table 3 Consumption

<table>
<thead>
<tr>
<th>YEAR BUILDING</th>
<th>CONSUMPTION BEFORE DYNAMIZATION (l/h)</th>
<th>CONSUMPTION AFTER DYNAMIZATION (l/h)</th>
<th>FUEL SAVINGS (l/h)</th>
<th>SAILING HOURS (h) (AUGUST)</th>
<th>AUGUST FUEL SAVINGS (l)</th>
<th>PRICE MDO ($/l)</th>
<th>MONTH PRICE SAVING ($/month)</th>
<th>YEAR SAVING ($/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>166,00</td>
<td>132,80</td>
<td>33,20</td>
<td>204</td>
<td>6,772</td>
<td>1,31</td>
<td>8,872</td>
<td>106,468</td>
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<tr>
<td>2007</td>
<td>225,00</td>
<td>189,90</td>
<td>35,00</td>
<td>228</td>
<td>7980</td>
<td>1,31</td>
<td>10,453</td>
<td>125,445</td>
</tr>
<tr>
<td>2016</td>
<td>244,70</td>
<td>223,00</td>
<td>21,70</td>
<td>217</td>
<td>4708</td>
<td>1,31</td>
<td>6,168</td>
<td>74,023</td>
</tr>
</tbody>
</table>

Results: 15-20% Fuel Savings

REFERENCES


