INERTIAL MASS REDUCTION DEVICE

Navy Case PAX 205

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Co-Inventors and Technical Paper

- No co-inventors
- Please refer to the imbedded invention-descriptive Concept Paper (double-click icon below):

PAX 205 - INERTIAL MASS REDUCTION DEVICE (IMRD) - S.C.PAIS

Adobe Acrobat Document

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Background

- **'NAVAIR's job is to ensure our Sailors and Marines are ready to fight tonight, and have the capability and capacity to win the future." - VADM Paul Grosklags, Commander, NAVAIR.** (11-19-2015)

- **Utilizing the INERTIAL MASS REDUCTION DEVICE our United States Warfighters will achieve Battlefield Supremacy, against all foes.** This Breakthrough Revolutionary technology bridges State of the Art Engineering Applications with the latest Advances in Theoretical and Applied Physics.

- Electromagnetic fields act as carriers for both energy and momentum, thus interacting with physical entities at the most fundamental level.
- Artificially generated, high energy, electromagnetic fields interact strongly with the Vacuum Energy State (an aggregate/collective state comprised of the superposition of all quantum fields' fluctuations permeating the entire fabric of Spacetime), thereby giving rise to Emergent Physical Phenomena (in other words revolutionary/new physics), such as Force and Matter Fields Unification. According to Quantum Field Theory, this strong interaction between the fields is based on the mechanism of transfer of vibrational energy between the fields, further inducing local fluctuations in adjacent quantum fields which permeate Spacetime (these fields may or may not be electromagnetic in nature). **Matter, Energy, Spacetime are all emergent constructs which arise out of the fundamental framework (structure) that is the Vacuum, Energy State.**

- Major contributions to the Vacuum Energy State are made by collectives of quantum fluctuations in fermionic fields (fields of matter), quantum fluctuations in bosonic fields (fields of force) and quantum fluctuations in scalar fields (Higgs field)).

- Everything that surrounds us, ourselves included, can be described as macroscopic collections of fluctuations, vibrations, oscillations in quantum mechanical fields. **Matter is confined Energy, bound in fields, frozen in a quantum of Time**. Therefore, **under certain conditions (such as the coupling of hyper-frequency axial spin with hyper-frequency vibrations of electrically charged systems) the rules and special effects of quantum field behavior also apply to macroscopic physical entities.**

Description of Invention

- **It is possible to reduce the inertial mass and hence the gravitational mass, of a system/object in motion, by an abrupt perturbation of the non-linear background of local Spacetime, equivalent to an accelerated excursion far from thermodynamic equilibrium (analogous with Symmetry-breaking induced by abrupt changes of state/phase transitions).** The physical mechanism which drives this diminution in inertial mass is based on the negative pressure (hence repulsive gravity) exhibited by the polarized local Vacuum Energy State (**local Vacuum polarization being achieved by a coupling of accelerated high frequency vibration with accelerated high frequency axial rotation (spin) of an electrically charged system/object**) in the close proximity of the system/object in question.
- **Inertial mass reduction can be achieved via manipulation of quantum field fluctuations in the local Vacuum Energy State, in the immediate proximity of the object/system**. Therefore, it is possible to reduce an air vehicle's/spacecraft's inertia, that is, its resistance to motion/acceleration by polarizing the Vacuum in the close proximity of the moving air vehicle/spacecraft. **Polarization of the local Vacuum is analogous to manipulation/modification of the local Spacetime topological lattice energy density. As a result, extreme speeds can be achieved.**
- **It is possible to envision a hybrid aerospace / undersea craft (HAUC), which due to the physical mechanisms enabled with the Inertial Mass Reduction Device (IMRD), can function as a submersible craft capable of extreme underwater speeds** (lack of water-skin friction) and enhanced stealth capabilities (non-linear scattering of RF and sonar signals). **This hybrid craft would move with great ease through the air/space/water mediums**, by being enclosed in a Vacuum plasma bubble/sheath, due to the coupled effects of EM field-induced air/water particles repulsion and Vacuum energy polarization. Energy flux values of **10^33 Watts/m^2** (and beyond) are possible.
- **Invention original date is 06/03/2015– this is a theoretical concept – no prototype in existence, as yet (Section 219 NISE funding for experimental investigation of inventive concept will be applied for).**

Potential Uses

- What is the Navy's potential use for this invention
- **It makes possible the design of a hybrid aerospace / undersea craft (HAUC),** which due to the physical mechanisms enabled with the Inertial Mass Reduction Device (IMRD), can function as a submersible craft capable of extreme aerial and underwater speeds (lack of air/water-skin friction) and enhanced stealth capabilities (non-linear scattering of RF and sonar signals). This hybrid craft would move with great ease through the air / space / water mediums, by being enclosed in a Vacuum plasma bubble/sheath, due to the coupled effects of electromagnetic (EM) field-induced air/water particles repulsion and Vacuum energy polarization. **Furthermore, it is possible to use the IMRD as an artificial gravitational wave generator (invention enables Gertsenshtein Effect), whose amplitude and frequency are a direct function of the accelerated masses involved. This has tremendous air and space military implications and applications (both offensive and defensive in nature). Local spacetime modification on a grand scale (planetary-size disruption) is thus feasible.** Gravitational waves detected 02.11.2016.

- Is there the potential for commercial use – **YES**
- **The design of energy generation machinery with power output levels much higher than those currently achievable by conventional means, is made possible with this invention.** The amplification in EM Energy flux comes as a result of accelerated high frequency spin coupled with accelerated high frequency vibration of electrically charged systems (which need not exhibit high voltages, but be ordinarily charged – thus making laboratory experimental investigations possible).

Costs

- What is the Navy's (future) investment in the invention.

  EXPERIMENT TRUMPS THEORY EVERYTIME!

  - Anticipated Labor hours- this is a theoretical concept – no prototype in existence, as yet (Section 219 NISE funding for experimental investigation (see slide 2 concept paper, page 16 for proposed experiment) of inventive concept will be applied for). – 250K USD
  - Anticipated NAWCAD facility cost – 250K USD
  - Estimated cost of any outside sources (i.e., drawings, labs, facilities) N/A

- Are there potential cost savings to the Navy. - **YES**
  - If yes, what is/are the potential cost savings to the Navy.

  The inventive concept (which may represent a breakthrough revolutionary technology) does reveal a novel, effective and expedient manner of assuring the battlefield supremacy of the United States warfighter for generations to come, thus addressing an urgent national and international area of concern, of primary national security importance.

  Therefore its potential **cost savings to the Navy are incalculably great (with respect to innumerable lives and assets saved).**