

Materials and Manufacturing Inventions

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Received: December 20, 2023; **Accepted:** December 25, 2023; **Published:** December 29, 2023

A portfolio of disruptive materials and manufacturing inventions has been accumulated after more than three decades of research and collaboration with numerous inventors, a few of whom are among the world's most productive.

Induction Coil Coating Increases Generator Output by One-Third

Coating the induction coils of generators with a proprietary material increases their output by one-third using the same amount of fuel. It has been demonstrated in a lab that when the induction coil of a common automobile alternator is coated with (deleted) impregnated in an epoxy resin the amount of watts output at the generator is increased by 35%-38%.

The practical implications of this finding are profound – it means, for example, that if all generators used to produce power were (deleted) impregnated using this simple application, the amount of fuel required to generate electrical power to the grid could be reduced by 1/3. One application is to increase the output of wind turbine generators by about a third.

The inventor was David G. Yurth.

Low-Temperature Diamond or Titanium Nitride Coating of Vehicle Parts

Non-destructively coating numerous vehicle parts such as shock absorbers with diamond or titanium nitride would enhance durability. The patent for the new low-temperature coating process is US 5,254,237 "Plasma Arc Apparatus for Producing Diamond Semiconductor Devices".

A multiple gun plasma arc deposition system allows controlled deposition of diamond and other diamond-like materials such as titanium nitride on a substrate. Deposition is controlled by controlling the time duration of pulses to a main gun, an acceptor gun and donor gun in a vacuum chamber that may contain a small amount of hydrogen. The deposition process is also enhanced with microwave temperature control and substrate dithering with a transducer. The diamond deposition system and process can also be used to manufacture diamond-based semiconductor devices.

The inventor was Alvin Snaper.

IPMS High-Temperature Gas Plasma Detonator

The I. N. Frantsevich Institute for Problems of Materials Science (IPMS), Kiev, Ukraine, has invented a high-temperature gas plasma detonator which can spray strategic metals and other commonly used materials onto the surface of other, previously incompatible materials. These high-temperature gas plasma detonation spray technologies make it possible to create permanent molecular bonds between materials which could never be married together before.

The IPMS has developed an extensive family of previously unknown technologies based on woven fibers made entirely of 100% pure basalt

fibers (lava rock). This totally new technology allows for the production of basalt/carbon fiber foam that is extremely strong yet lighter than fiberglass. The foam can be formed into a variety of monocoque (unibody) basalt/carbon fiber foam vehicle body/frame parts.

An experimental vehicle made with lightweight IPMS-manufactured basalt/carbon fiber foam body/frame parts was reportedly the only vehicle ever tested that can cut through a cast-iron London taxicab in a collision.

The researchers include David G. Yurth and Kiev, Ukraine's I.N. Frantsevich Institute of Problems of Materials Science.

Hawkings' Generator of Cold Electricity

The Hawkings' generator results from feeding high voltages oscillating at optimally 150,000 hertz to two 4-inch fluorescent lights. Each fluorescent tube has a strong permanent magnet attached to its center – north pole on one side, and south pole on the other side. The magnetic field between the two poles deflects the electrons in the tube off to one side. The tube is now no longer capable of generating hot electricity. Instead only cold electricity is extracted from the zero point energy field by the tube. The cold electricity emanates out the other end of the tubes which are each wired to a brass electrode. A 6 to 8-inch white spark of cold electricity 4 inches in diameter is produced between the two brass balls. An equivalent-sized spark generated by an arc welder would require thousands of amperes and volts.



Cold electricity is not measurable with ordinary voltmeters and ammeters since it strangely has no electrons. However, cold electricity can power lamps, etc. Totally different applications could result from the observation that materials inserted in a spark of cold electricity sometimes transmute to elements of higher density.

The inventor was Ken Hawkings. The image of the prototype Hawkings' generator circuit is a freeze-frame of Gary Vesperman's videotape received from an associate of Ken Hawkings. For more on cold electricity theory

see https://1stmuse.com/atlas/cold_electricity/?fbclid=IwAR1wu-17978xeS7wGt9BAOfhLcHiJWoCuGk9Sh2IiW13qXszSoYkh0cYR-U.

IPMS-Chernovitsky Super Ceramics

Kiev, Ukraine's I.N. Frantsevich Institute for Problems of Materials Science (IPMS) is one of more than 70 institutes founded after World War II. 6600 of the most brilliant theoretical physicists in the entire Soviet Union were commissioned to research materials for nearly 50 years. Because the Institute was forced to operate in a purely theoretical environment, with no pressure whatever to meet production or marketing deadlines, operating virtually isolated from any contact with the outside world, that the scientists were able to produce at least 7 whole new sciences, 30 technologies, and 130 materials unknown in the West.

One of the Institute's four sites, IPMS-Chernovitsky, developed moldable, machine-able, ultra-high temperature, super-hard, and strategic metal-alloyed ceramic substances. These ceramics can withstand operating temperatures of 1200 degrees centigrade. This is more than 400 degrees centigrade higher than can be tolerated by other known ceramic materials commercially available anywhere else in the world. In fact this is higher than the theoretical limit allowed by the quantum mechanics model relied on in the West.

These materials are being utilized in entirely ceramic internal combustion engines, high-speed jet turbines and self-lubricating bearing surfaces. The ceramics produced at the IPMS-Chernovitsky plant have been made harder by fully one factor of hardness than the hardest alloyed metal machine tools currently produced by any other known means of manufacture. They have been made harder by at least one full order of magnitude than either natural or synthetically produced diamonds.

Ceramic pistons manufactured for use in ceramic diesel engines will, when struck by a hard object, produce a clear resonant tone which persists for more than seventeen seconds. This is at least eight seconds longer than the resonant persistence produced by the finest glass or crystal ever manufactured.

The inventors were employees of the Chernovitsky branch of Kiev, Ukraine's I.N. Frantsevich Institute of Problems of Materials Science.

Refresher-Regenerator

A 'refresher-regenerator' reverses the order-to-disorder arrow in the second law of thermodynamics within a controllable radius. It could reverse all radioactive isotopes to relatively safe uranium in situ in twelve days of machine time. Positive side effects of the \$70 million or less machine's operation would be reverse aging adults to young adulthood, backing diseases out of existence, reversing all decay and pollution, providing a new means of food preservation, and disarmament in the active footprint of the machine.

The refresher-regenerator capitalizes on a new Grand Unification Theory employing the Electrino Fusion Model of Elementary Particles and the Electrino Hypothesis that fractons come in $\pm e$, $\pm e/2$, $\pm e/4$, and $\pm e/8$ – not in $\pm 2e/3$ and $\pm e/3$ of the Quark Hypothesis. Unique to this theory is that electrinos can fuse, but every time they do so, they switch from matter to antimatter or vice versa. The Refresher-Regenerator fuses positrons (antimatter) into the core particles of protons and neutrons (matter) with positive order energy, reversing the order-to-disorder arrow in the second law of thermodynamics in the machine footprint to disorder-to-order direction. The control of the Refresher-Regenerator machine is through controlling the effective beam currents to the collision chamber of the positrons through the timed gating of beam peaks.

This text is a summary of "Refresher-Regenerator" in "Radioactivity Neutralization Methods", pages 217-219. Links include padrak.com/vesperman and commutefaster.com/vesperman.html. The inventor was Gordon L. Ziegler.

Air Wells

Everywhere on Earth, even in deserts, the surrounding atmosphere contains at least some water. The quantity of water vapor contained within

the air is commonly reported as a relative humidity, and this depends on temperature – warmer air can contain more water vapor than cooler air. When air is cooled to the dew point, it becomes saturated, and moisture will condense on a suitable surface. An air well is a structure or device that collects water by promoting the condensation of moisture from air.

Designs for air wells are many and varied as reflected in that at least five dozen patents have been issued. Active collectors collect water in the same way as a dehumidifier. Although the designs work well, they require an inexpensive source of electricity to be practical. New, innovative designs seek to minimize the energy requirements of active condensers or make use of renewable energy resources.

Kiev, Ukraine's I. N. Frantsevich Institute of Problems of Materials Science has developed specially designed capacitors which absorb energy when subjected to a flow of electrical current – producing a cooling effect. All other known materials generate heat from electric current. Temperatures of -259 degrees Fahrenheit have been produced. The leads from a 9-volt battery are attached to the corners of a tarot card-sized flat black sample of this material. Within 20 seconds, a layer of ice crystals covers the top surface. Within 30 seconds, a continuous cloud of frozen ice crystals begins to pour off the upper surface of the suspended card. This material could be used to extract abundant water from air with small amounts of electricity.

Inventors are varied but do include the I.N. Frantsevich Institute of Problems of Materials Science, Kiev, Ukraine.

Method, System and Apparatus for Conditioning Electromagnetic Potentials, Fields and Waves to Treat and Alter Matter

This invention exploits the fact that all electromagnetic fields, potentials, and waves are composed of more fundamental electromagnetic structures.

To directly engineer spacetime and induce desired changes in matter – specifically the mass-energy of the body dielectric, in all parts and dynamics – the invention uses and applies these more fundamental electromagnetic structures, which constitute curvatures of spacetime capable of directly affecting and changing matter according to the exact pattern and dynamics of the internal structures.

This text is a summary of "Method, System and Apparatus for Conditioning Electromagnetic Potentials, Fields and Waves to Treat and Alter Matter" in "Radioactivity Neutralization Methods", pages 193-198. Links include padrak.com/vesperman and commutefaster.com/vesperman.html. The inventor was Lt. Col. (retired) Thomas E. Bearden.

Autogenous Impact Mill that Reduces Size of Friable Material

The impact mill would solve half the mining problem by not having to use water. In fact NO water is needed. This would eliminate a whole step which cuts mining costs drastically.

The autogenous impact mill reduces the size of friable material particles processed through operation of the mill. At least one impeller rotatable within an interior area of a housing of the mill produces one or more air jets. The air jets suspend material particles using the Coanda effect. Other particles moved by the air jets bounce off ricochet bars and impact suspended particles so as to break and reduce the particles to a suitable size to pass through a screen to an outlet opening.

US11045812B1 - Autogenous impact mill that reduces size of friable material - Google Patents. The inventor is Alvin Snaper.

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