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THE COUNTRY CODE AND NUMBER OF YOUR PRIORITY APPLICATION, TO BE USED FOR FILING ABROAD UNDER THE PARIS CONVENTION, IS ***US62/645,071***

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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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2	Provisional Cover Sheet (SB16)	USPTO_Cover_Sheet_2018-03-19.pdf	4877522 771b25913738558c34ddb6c89afae7e663f3b353	no	3
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3	Certification of Micro Entity (Gross Income Basis)	USPTO-Micro_Entity_2018-03-19.pdf	4058748 82855656f19d3ec54c3c57a404787c33963aa669	no	2
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4	Fee Worksheet (SB06)	fee-info.pdf	29032 308c3a5292a1d158eb0d0dd5633c159e532ce033	no	2
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National Stage of an International Application under 35 U.S.C. 371

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New International Application Filed with the USPTO as a Receiving Office

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SELF-POWERED MOTOR AND GENERATOR

INVENTOR JONATHAN BANNON MAHER

TECHNICAL FIELD

[0001] Embodiments of the invention relate to the fields of motors, generators, physics, engineering, and programming.

ABSTRACT

[0002] Systems, methods, apparatuses, and in some embodiments computer programs encoded on a computer storage medium, provide for clean continuous portable self-powered energy generation and propulsion, consistent with the laws of physics, by in some embodiments, including one complete embodiment, transferring force from force providing devices not limited to but including hydraulics and or pneumatics and or mechanical leverage and or motorized mechanical leverage, to provide rotational force to power an electricity generator, and or function as a motor, where energy may be captured in excess of that consumed as a result of the differential between input force required and output force provided by certain force providing device configurations. The invention permanently solves global warming, provides reduced cost of living and cost of goods to alleviate poverty, provides unlimited clean energy for evaporated water purification and atmospheric carbon dioxide splitting, and eliminates the need for every other method of energy production, including nuclear technology – thus reducing nuclear weapons technology proliferation.

REFERENCE TO RELATED DOCUMENTS

[0003] This application is provided the benefit and priority date of United States Patent and Trademark Office provisional patent applications 62/522,650, filed June 20th 2017 by inventor Jonathan Bannon Maher, and 62/596,826, filed December 9th 2017 by inventor Jonathan Bannon Maher, which are incorporated herein in their entirety.

BACKGROUND

[0004] The majority of the proceeds from the licensing of this patent will be going to causes that support the well being of humanity, and your support in ensuring the patent is forever in every way as strong as possible, will be providing a service to all the world.

[0005] This section is intended to introduce the reader to various aspects of the art that may be related to various aspects of the present techniques, which are described and or claimed. This discussion is believed to be helpful in providing the reader with background information to facilitate a better understanding of the various aspects of the present disclosure. Accordingly, it is understood that these statements are to be read in this light, and not a citation of any prior art.

[0006] Patent filings on structurally differentiated and fundamentally deficient disclosures may exist that may attempt to claim any invention that is self-powered, based on previously publicly known failed attempts to build such devices, however any such disclosures do not enable the purported inventions, with overly broad claims not supported by the disclosure that also fail to distinctly claim the invention, and any such patent filings are inherently invalidated by prior public disclosure, the enablement requirement, and the claims support requirement.

[0007] Known and proposed energy production, transmission, and storage systems have some or all of the following deficiencies:

[0008] 1. External fuel source required: an external fuel source is utilized such as oil, gas, coal, wind, sun, water currents, geothermal heat, hydrogen, or uranium, where the cost of providing fuel in the form of electricity or gasoline to a vehicle over its useful life potentially exceeds the cost of the vehicle, and about a quarter of airline costs are from fuel.

[0009] 2. Environmentally unfriendly: nuclear energy production, including fission, fusion, and cold (LENR), results in toxic waste and or materials, geothermal often circulates contaminants from the ground, fracking creates toxic water, hydroelectric dams decompose organic matter producing the potent global warming gas methane, solar panel manufacturing often releases toxic byproducts including greenhouse gases far more potent and long lived than those from fossil fuels, hydrogen takes substantially more energy to produce and transport than it provides, while clean energy sources may utilize slowly degrading flammable toxic batteries to store energy for when the sun is not shining, wind is not blowing, or water is not adequately flowing.

[0010] 3. Intermittent: wind, solar, and traditional water energy systems provide variable output, with average output often found to be around 20% of rated output, as a result of environmental conditions, meaning a 5 kilowatt system typically produces average output of only 1 kilowatt.

[0011] 4. Not portable: solar panels can only function in the sun, wind turbines in wind, water turbines in water currents, nuclear in a stable highly controlled environment, and carbon with the aid of an emissions pipe.

[0012] 5. Extremely expensive transmission costs: power lines are required for all forms of nuclear energy, including fission, fusion and cold, for farms of solar, wind, and water, and for fossil fuels plants, while pipelines are generally required for oil and gas, including natural gas, which is principally methane, a greenhouse gas more than twenty times more potent than carbon dioxide that may be leaked during extraction, transport, and consumption. Power line and fossil fuel pipe line cost of installation per 1 mile (1.6 kilometers) has been found to be up to around 20 times the average annual income in the United States, and lines must be replaced every 30 to 50 years, so in the United States alone, with 300 thousand miles (480 thousand kilometers) of power lines, and 200 thousand miles (320 thousand kilometers) of pipelines, replacement would require an expenditure around 25 times the national debt, passed on to consumers, and dragging down the economy, with every other developed nation in a similar situation. Power lines require environmental destruction during installation, leave visible blight, are forever vulnerable to cyber attacks, transmit power from central sites that are inherently more prone to failure and blackout than a decentralized system, dissipate power during transmission, with high voltage power lines having health consequences for those living nearby.

[0013] 6. High initial costs: in addition to previously cited expense of power lines, fossil fuel pipes, and ongoing fuel costs, clean energy farms require an allocation of land, and degrading batteries requiring periodic replacement, which is why tax credits are often required for clean energy systems to be affordable. In addition to those factors, comparing a 1 kilowatt rated clean energy system to a 1 kilowatt rated traditional system, may require multiplying the cost of the clean energy system by approximately 10 times, 5 times to account for enough electricity generation to be stored for the equivalent continuous output, and 5 times for the battery storage.

[0014] 7. Vulnerable to weather: wind turbines, hydroelectric dams, and solar panels, can be made ineffective by environmental conditions such as freezing temperatures, snow, and rain, and similar to power lines, may be taken down by extreme weather and lightning strikes.

[0015] 8. Vulnerable to black outs: power transmitted over power lines creates vulnerability for critical facilities such as hospitals and data centers.

[0016] 9. Vulnerable to cyber attack: utility scale energy systems often require a hackable computer to operate, and are therefore forever vulnerable to computer viruses able to take down and or destroy nuclear power plants and the electrical grid, even if such systems aren't connected to the Internet, as demonstrated by the Stuxnet virus.

[0017] 10. Causes deaths: plants, rigs, and pipes, for current and proposed forms of nuclear, hydrogen, gas, and oil energy can explode, and coal mines can collapse, while wildlife is killed by wind, ocean, wave, and river turbines, hydroelectric dams, solar condensers, solar panel and battery manufacturing byproducts, and nuclear waste.

[0018] 11. Encourage nuclear weapon proliferation: fission, fusion, and cold (LENR) nuclear energy are or can be one step from weaponizable, while hydrogen can be obtained by a terrorist at a hydrogen fuel station to create a powerful compressed hydrogen explosion, as verified by reviewing a video of a balloon filled with hydrogen being lit on fire. Fusion is particularly disturbing, as a fusion weapon could be created with the power of an exploding star, able to take out the planet, and resulting in an extinction level event for humans, a scenario even more likely when considering increasingly autonomous – and therefore inevitably hackable by individuals – weapons control.

BRIEF DESCRIPTION OF THE ILLUSTRATIONS

[0019] Illustrations are presented by way of example, and not by way of limitation, where some embodiments may not contain all components, may contain additional components, and may contain functionally similar components.

[0020] FIG. 1 is an illustration of an example of an embodiment, which utilizes the force from hydraulics and or pneumatics and or mechanical leverage and or motorized mechanical leverage to provide rotational force to power an electricity generator and or function as a motor.

[0021] FIG. 2, containing some components in FIG. 1, is an illustration of an example of an embodiment of an automated hydraulic pump and cylinder whose piston operates other hydraulic pump handles to operate their corresponding hydraulic cylinder pistons to improve system input output efficiency.

[0022] FIG. 3 is an illustration of an example of an embodiment of a traditional electric hydraulic pump and cylinder which in some embodiments may be used in place of the converted manual to automatic hydraulic pump and cylinder in FIG. 1.

[0023] FIG. 4 is an illustration of an example of an embodiment of hydraulic bottle jacks stacked in opposition between gear racks and automated to provide back and forth force for use by an embodiment which in some embodiments may be used in place of the converted manual to automatic hydraulic pump and cylinder in FIG. 1.

[0024] FIG. 5 is an example of an embodiment of a structure to transfer force through a medium.

[0025] FIG. 6 is an example of an embodiment of a pendulum structure to transfer force.

DETAILED DESCRIPTION

[0026] The disclosure is related to the field of clean continuous portable self-powered energy and propulsion. It is understood that any reference to a person skilled in the art, recognizes that at the time of filing, there is no one else skilled in the art of this particular field, or a closely related field. Given the extraordinary nature of the disclosure, regardless of how full, clear, concise and exact the disclosure in enabling the production and use of embodiments of the disclosure, what could be construed to be undue experimentation during production and use, is simply the ordinary effort required in the assembly and use of an embodiment of such a disclosure.

[0027] It is understood that, as in any engineering or design project, the development of any actual implementation will include numerous implementation specific decisions made to achieve the developers' specific goals, such as compliance with business related and system related constraints, which may vary from one implementation to another. It is understood that such a development effort might be complex and time consuming, but is nevertheless a routine undertaking of design, fabrication, and manufacture for those skilled in the art having the benefit of this disclosure. The disclosed steps may be read as prefaced by "In some embodiments, including one complete embodiment, ", may be executed or performed in other orders or sequences, and are not limited to the order and sequence shown and described, which are provided to enable ease in constructing an embodiment, and along with each components of each step, may be removed, modified, combined, or rearranged, and other steps and or step components may be added, without departing from the scope of this disclosure and or invention. Although embodiments of the invention have been described and illustrated in the disclosed implementations, it is understood that the present disclosed subject matter, including apparatuses, methods, specification, and illustrations, has been made only by way of example, not by way of limitation, and the methods and apparatuses may be used in other systems, and that numerous changes and optimizations in the details of implementation of the invention and or embodiment are made without such modifications departing from the spirit and scope of this disclosure and or embodiments of the invention. Although the disclosure has been shown and described with respect to one or more embodiments, features of the disclosed embodiments can be combined and rearranged in various ways, and changes including equivalent alterations, substitutions, modifications, and additional efficiencies will of course occur to someone of ordinary skill in the art without departing from the spirit and scope of this disclosure and or invention. In particular regard to the various functions performed by the described components, the terms used to describe such components are intended to correspond, unless otherwise indicated, to any component which performs the specified function of the described component, or is functionally equivalent to the described component, even though not structurally equivalent to the disclosed structure which performs the function in the implementations described in this disclosure. In addition, while a particular feature of the disclosure may have been provided with respect to only one of several embodiments, such feature may be combined with one or more other features of other embodiments as may be desired and advantageous for any given or particular application. In some instances, well-known circuits, structures and techniques have not been shown in detail in order not to obscure the understanding of this disclosure. Articles in this disclosure such as "a" "an" and "the" may allow for both singular and plural forms. Verbs in this disclosure such as "is" may be read as "may be". Conjunctions in this disclosure such as "or" as used herein may be interpreted as inclusive or meaning any one or any combination, where "A, B or C" means "any of the following: A; B; C; A and B; A and C; B and C; A, B and C". Relational terms in this disclosure, for example first and second, top and bottom, left and right, are to distinguish one entity or action from another, and may not necessarily require or imply a relationship, or order between, such entities or actions. The disclosure includes the best mode contemplated by the inventor, a completely described specific embodiment, along with optional components and alternative embodiments to best suit the implementer, measurements in imperial and metric units to support universal understanding, and dramatically exceeds claims support requirements and enablement requirements by allowing for selection and or construction of the required components to be carried out easily, quickly, and routinely by persons of ordinary skill in the art, who are provided the additional benefit of utilizing readily available commodity components whenever possible. The present disclosure includes material protected by copyrights, and the owner of the copyrights hereby reserves all rights, but with authorization for publication as required by government patent offices. Various embodiments of the present invention may provide all, some or none of the disclosed technical advantages.

[0028] The computer code descriptions disclosed, in order to provide comprehensive enabling disclosure, rather than utilizing flow charts, which according to Patent Cooperation Treaty 11.11a are prohibited from containing "text matter, except a single word or words, when absolutely indispensable, such as… a few short catchwords indispensable for understanding", are provided in a text only format where the number of arrows preceding a line indicate logical block level, semicolons indicate a new segment of a logical block, and periods indicate the closure of one or more logical blocks. It is understood that any computer code representations in this disclosure are merely illustrative, rather than restrictive. While code may be written in nearly any computer language, including Java and C++, the illustrative computer code descriptions were derived from code written the Python language, which may be run through the Python interpreter, with appropriate supportive libraries, which at the time of disclosure, may run on nearly any computer, for example one with an Intel or AMD processor, running a current version of Linux, Windows, or Mac OS. All code components may read as if prefaced by "In some embodiments, including one complete embodiment, ". In some embodiments, functionality may be modified, rearranged, excluded, and added. To provide more fundamental computer system details, in some embodiments, the functionality associated with the disclosed computer code descriptions may be referred to as a script, module, software, software application, or code, and can be written in any form of language, including compiled, interpreted, declarative, or procedural, able to be deployed in any form suitable for use in a computing environment, including as an independent or integrated program, module, component, or subroutine, for execution by the computer system, implemented on one or more independent or integrated computers, utilizing a central processing unit in the form of one or more general or special purpose microprocessors, in conjunction with digital electronic circuitry, which may include special purpose logic circuitry such as a field programmable gate array or application specific integrated circuit, with the computer controlled by and operatively coupled to tangibly embodied software and or firmware, which may include code that creates an environment for code execution, including individual or combined use of processor firmware, a protocol stack, a database management system, and an operating system, where such software and or firmware may exist in one or more parts in memory on one or more computers, and is encoded on one or more tangible non transitory software carriers, such as individual or combined use of a random or serial access device or substrate, a semiconductor memory device, transient or persistent random access memory, a magnetic, magnetic optical, or optical disk, or encoded on an artificially generated transmitted signal, for example, optical, electrical, or electromagnetic, transmitted using a sending and a receiving apparatus, where the interaction between the user and the software may be implemented by operatively coupling, to the local implementing computer, or a local computer connected to one or more remote computers through a local or wide area network, a display device which may implement liquid crystals or light emitting diodes, a keyboard, and a pointing device.

[0029] The inventor retains absolutely no liability for any implementation of this invention, and the invention is implemented exclusively at the risk and liability of the implementer.

[0030] Calculations, formulas, and specific units are not in any way restrictive, are not be relied upon, are not required as presented to produce an embodiment of the invention, are provided exclusively as a courtesy to enhance enablement for those resizing components and or constructing alternative embodiments, and may contain inaccurate assumptions easily modified during practice, with all calculations utilized to select and estimate components and unit output being rough estimates that may vary greatly based on factors that include the type and quality of purchased and or manufactured components and embodiment construction, where embodiments may be constructed utilizing an effectively endless range out output and component configurations and selection processes.

[0031] In some embodiments, for quality control purposes, all components may be manufactured from scratch.

[0032] Embodiments of the invention provide some or all of the following benefits over previously discussed predecessors:

[0033] 1. Self-powered for free output: embodiments provide the first energy and motor system in the history of the known universe to not require an external fuel source. Embodiments can produce endless energy, and provide endless transportation range, until there is a system failure, and therefore may potentially produce energy and propulsion until gravity driven orbital drift causes the Earth to be consumed by the Sun in a few billion years – assuming the units and humans are still on Earth. Embodiments reduce transportation costs by allowing implementing vehicles to operate without fuel, allowing for effectively free endless transportation range after purchase, and additionally allow for travel by supersonic jets and flying cars, which have been impractical principally as a result of fuel costs.

[0034] 2. Clean: the manufacture and use of embodiments produces no notable harmful environmental byproducts, nor the potential for deaths associated with predecessors.

[0035] 3. Continuous: embodiments produce electricity and propulsion that is continuous and stable.

[0036] 4. Portable: embodiments are able to function as well in a basement closet as in a car.

[0037] 5. Cyber attack proof: embodiments are self-contained thus require no hackable computer to operate and are therefore immune to computer viruses.

[0038] 6. Blackout proof: embodiments are designed to be kept indoors and on-site, and are thus ideal for critical facilities such as hospitals and data centers that can't afford a blackout from failed power lines or plants.

[0039] 7. Inexpensive: embodiments can be manufactured and operated at the lowest cost total cost possible, because they don't require fuel, installation and maintenance of power lines, an allocation of land, or degrading batteries.

[0040] 8. Weatherproof: embodiments are self-contained for indoor use and therefore aren't vulnerable to environmental factors such as freezing temperatures, snow, rain, lightning strikes, or extreme weather events.

[0041] 9. Eliminates energy output storage: because additional embodiments of this system can be utilized at peak times with limited cost, storage of energy is no longer relevant, for either utilities or homes, even for peak output needs.

[0042] 10. Eliminates expensive power lines and fossil fuel pipe lines: because embodiments are designed to be kept on site, and any number of units can be utilized to meet peak power needs, power and fossil fuel transmission lines and their associated costs are now rendered irrelevant, thus substantially unburdening all economies globally of associated costs. Land currently holding power lines, as well as arrays of solar panels, wind turbines, and hydroelectric turbines, can be reclaimed to reduce visual pollution and make space for a growing population. Roofs of solar panels can be removed to allow for roof tiles that reflect heat to maintain a cool house in summer. No thinking person will ever want, nor could a functional government allow, any type of nuclear reactor – fission, fusion, cold (LENR) – in a car or home, leaving only now irrelevant power lines for transmission, thereby making those sources wholly irrelevant.

[0043] 11. Potentially profitable: in a standard home use scenario, embodiments may be the only way for a unit owner to make a profit from selling energy back to the utility at wholesale rates.

[0044] 12. Alleviates poverty: because energy is effectively free after embodiment purchase, and the purchase price is less per unit of output than other energy systems, embodiments reduce the cost of living and the cost of goods for every person on Earth, thus reducing poverty.

[0045] 13. Powers water purification and pumping: 1 in 10 people live without access to clean water, while climate change driven droughts fuel conflicts. Because embodiments make energy nearly free over their useful lives, the energy intensive nature of evaporated water purification — which removes nearly every contaminant with a higher boiling point than water, and potentially all others can be removed with a standard carbon filter and ultraviolet light – is no longer a barrier, nor is pumping, thus embodiments provide for the global resolution of clean water needs for individual consumption and agriculture.

[0046] 14. Powers reduced water consumption: effectively eliminates the energy cost of operating electricity powered showers that require only a cold water pipe, and recirculate, filter to potentially cleaner than direct from pipe, and heat water, to provide exact continuous temperature and pressure control, as well as powering low voltage electric showerheads that mix air with water to provide the effect of the same output using dramatically less water.

[0047] 15. Powers atmosphere cleaning: because an existing specialized laser can disassociate atmospheric carbon dioxide molecules into carbon molecules and oxygen molecules, and because embodiments can provide effectively unlimited and continuous clean energy, a power source is now available to reduce carbon dioxide in the air, and potentially other greenhouse gasses, if corresponding devices are developed.

[0048] 16. Reduces nuclear and hydrogen weapon proliferation: because embodiments eliminate any need for any type of nuclear energy, including fission, fusion, and cold (LENR), each of which is or may be weaponizable and one step from nuclear weapons technology, and also eliminate the need for hydrogen, which a terrorist can obtain at a hydrogen fuel station to create a powerful compressed hydrogen explosion verifiable by watching a video of a balloon filled with hydrogen being lit on fire, I have provided us all a fundamentally safer world.

[0049] 17. Therefore, a few applications of embodiments include powering: all transportation vehicles including automobiles, trains, jets, spaceships, cargo ships, cruise ships, tugboats, boats, submarines, hover boards, jet packs, including in vertical take off and landing configurations; powering electrical grids as well as homes, offices, factories, hospitals, and data centers that would like to disconnect from external power sources to end their recurring bill, be permanently immune from blackouts, use clean energy, and save money; televisions, washing machines, dishwashers, showers, and water pumps; portable consumer electronics, such as phones and laptops, through an internally installed miniaturized embodiment eliminating the need to recharge; personal rapid transport; home hydroponic production systems, including light, temperature control, and nutrient water circulation; spaceship electro magnetic ion drives using a fraction of the fuel of traditional rockets; high intensity laser powered solar sails, with the laser powered by a large number of these energy units on the surface of any space based body with a limited atmosphere; space tourism; video streaming planetary sampling probes journeying an unlimited number of years into the universe; space colonies; and inter galactic travel.

[0050] Additionally, some embodiments may make use of an embodiment of a custom torque converter which allows a turbine or functional equivalent connected to the motor to spin at a high consistent speed, in a transferrable medium filled container, with an opposing moveable turbine or functional equivalent connected to an output axle, with the rotational force of the output axle determined by the proximity of the turbines.

[0051] **In some embodiments, including one complete embodiment, determine desired output of generator and or motor, then identify corresponding force providing device(s), not limited to but including hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, or functionally equivalent device(s), where such a force providing device may be in the form of a unified unit or connected components, and acquire generator and force providing device(s).** In some embodiments, because the size of the unit is driven primarily by the generator and force producing device(s), and their size is driven primarily by their output, the desired unit output is first decided, then corresponding components purchased, with the embodiment built around those components. In some embodiments, which may include one complete embodiment, the generator selected outputs the volts, amperes, and hertz of the desired final output, with a converter utilized of the appropriate specifications to power internal embodiment components. In some embodiments, where an existing generator is to be powered as part of the embodiment, for example, when replacing a wind or water turbine to power an existing generator, the force providing device(s), gears, and other components may be selected that correspond to the force and speed required to power such a generator, and where the rotational force provided by the embodiment is connected by means which may include an axle coupler or a gear mounted on the axle of the generator that matches a gear on the axle of the unit. In some embodiments, when used as a motor, a generator may be left out, with the power for the unit provided by an external source.

[0052] Commodity hydraulics and pneumatics are available at the time of disclosure that may each provide force up to 2,000,000 pounds (907,000 kilograms), and may be powered by means including an electric motor, which may be in the unit or in an external pump, which compresses a substance such as a liquid or gas to provide force to the hydraulics, pneumatics, or functional equivalents. Commodity hand operable hydraulic bottle jacks are available at the time of disclosure that may provide 100,000 pounds (45,400 kilograms) of force with a 14 inch (35.6 centimeter) piston extension length moving at roughly 1 inch (2.5 centimeters) every 5 seconds. Commodity hand operable hydraulic pumps and cylinders are available at the time of disclosure that may provide force of up to 190,000 pounds (86,200 kilograms). A double acting cylinder in conjunction with a double acting pump provides both push and pull force. Commodity mechanical leverage devices such as a screw jack are available at the time of disclosure that may provide up to around 8,000 pounds (3,630 kilograms) of force each, and may implement an electric motor to utilize the leveraged force provided by certain mechanical structures. In some embodiments, a hydraulic screw jack may be used, where the motor on the traditional screw jack is replaced with a hydraulic device operating in its place. In some embodiments, rotational force may be provided by one or more hydraulic motor(s).

[0053] In some embodiments, which may include one complete embodiment, given horsepower and revolutions per minute are often specified as the measurement of input required to power a generator, and the measure of the output of a motor, to determine the pounds of input force to be provided by the force providing devices, in order to provide a specific output horsepower at a specific number of revolutions per minute, horsepower is equal to pounds of force multiplied by revolutions per minute with the result divided by the horsepower constant of 5252. In some embodiments, which may include one complete embodiment, to convert pounds of force from the previous calculation to pound feet of force, as used in the standard calculation of horsepower, a gear may be placed on the generator and or motor axle, which is coupled to the force providing gear immediately before it, where each of those gears have a radius of 1 foot, while maintaining all gear ratios in the system. In some embodiments, after determining the number of pounds of force and revolutions per minute required of the generator and or motor, a calculation may be made to determine the number of times the speed of the hydraulic cylinder piston(s) will have to be increased to provide that output speed in revolution per minute, which can be done utilizing gears which increase speed in proportion to a reduction in force corresponding to the gears' teeth ratio, and then multiplying the determined speed differential by the force required by the generator and or to act as a motor, to identify the required original input force. In some embodiments, including one complete embodiment when including a generator and providing the functionality of a motor, once the horsepower and revolutions per minute have been implemented as required by the generator, an additional gear may be added that interconnects with a gear providing rotational force to the generator axle, where such a gear has a teeth ratio that provides for a change in speed to match the desired revolutions per minute to function as a motor, while more powerful hydraulics may be used to offset the reduction in force resulting from the change in speed, where the output force required by the motor is multiplied by the total geared speed differential in the system, and added to the force required by the generator after it is multiplied by its corresponding speed differential, to determine the required initial input force.

[0054] In some embodiments, including one complete embodiment, a 10,000 watt output commodity generator is purchased, which may require 1800 revolutions per minute at 13.3 horsepower, while a commodity manual hydraulic pump and cylinder may be used to provide force moving at approximately 1 inch every 5 seconds, which is 15 inches (38 centimeters) per minute, that when rotating a 1 inch (2.5 centimeters) diameter gear with a circumference of 3.14 inches (8 centimeters), provides 4.8 revolutions per minute, where the optimal rotation of the axle of the 10,000 watt generator is provided at 1,800 revolutions per minute with 13.3 horsepower, resulting in a ratio of the piston speed to desired generator axle speed of 1:375, meaning to provide the required 1,800 revolutions per minute, the force will have to be passed through gears having a total teeth ratio of 1:375, while the force is also decreased by a factor of 375, where the horsepower specified requires force of 38.8 pounds (17.6 kilograms) of force ((13.3 = n pounds of force * 1800 revolutions per minute))/5252 horsepower constant), and therefore the force providing device to rotate the 10,000 watt generator for maximum output is to provide force of around 15,550 pounds (7,030 kilograms) – 38.8 pounds (17.6 kilograms) of force required by the generator multiplied by the 375 times speed differential. For validation through comparative reference, a wind turbine typically provides optimal rotational force at around 20 revolutions per minute which is then passed through gears to increase speed while reducing force to power a generator, so for example, the previously determined 15,500 pounds of force at 4.8 revolutions per minute converted to 20 revolutions per minute, would provide rotational force of approximately 3,720 pounds (15,500 pounds of force / (20 revolutions per minute / 4.8 revolutions per minute)) (1,687 kilograms). For further validation, the set of factors required to fully validate the embodiment as providing a self-powered generator, are the principle that gears will increase speed in proportion to reduction of force, along with the speed and power consumption of the input force, and the speed and force required to produce maximum output by the generator. For further validation, using an example to assess power consumption, the previously calculated required input force of 15,550 pounds may be around twice the force provided by a commodity electric hydraulic jack used to raise and lower a car, which may consume a maximum of 180 watts (12 volts x 15 amps) before blowing the car outlet's fuse, thus the total consumption by a pair of such commodity electric hydraulic car jacks to provide required force consumes 360 watts, deducted from the 10,000 watt generator output, resulting in a dramatically net positive energy production system.

[0055] In some embodiments, including one complete embodiment, where a motor is implemented, given the average car engine may provide about 250 horsepower at a maximum of 7,000 revolutions per minute, the previously provided 1,800 revolutions per minute may be increased about 4 times utilizing gears with a teeth ratio of 1:4, and by solving for pounds of force required for 250 horsepower finds around 343 pounds (156 kilograms) of force are required ((250 = n pounds of force * 7200 revolutions per minute))/5252 horsepower constant), therefore with a total speed increase ratio of 1500 (375 times generator geared speed increase * 4 times motor geared speed increase) and corresponding force decrease, output requires an initial force of 514,500 pounds (343 pounds of force * 1,500 times force reduction) (234,000 kilograms), plus about 15,500 pounds (7,260 kilograms) for the generator that powers the hydraulics, for a total input force of around 530,000 pounds (241,000 kilograms).

[0056] In some embodiments, including one complete embodiment, to determine the force providing cylinders(s) and pump(s) to select corresponding to the determined specifications, the manufacturer's product guide is used. In some embodiments, to determine the force providing cylinders(s) and pump(s) to select corresponding to desired specifications, calculations may be made, where a cylinder may be selected based on factors including being rated to support the previously determined force, while a corresponding pump may be selected based on its output of pounds (kilograms) of pressure per square inch (centimeter) which provides force, flow in gallons (liters) per minute which provides speed, and reservoir gallons (liters) which must adequately fill the cylinder, where the internal area of the cylinder to determine pump gallons (liters) required may be calculated as the constant Pi of 3.14 multiplied by the diameter of the piston multiplied by the extension length of the piston, while the speed of the piston in inches (centimeters) per minute may be calculated as the internal area of the piston divided by the gallons (liters) per minute provided by the pump, and pounds (kilograms) of pressure per square inch (centimeter) required of the pump may be determined by setting the pounds of output force required equal to piston diameter multiplied by the constant Pi 3.14 multiplied by pounds (kilograms) of pressure per square inch (centimeter), where if such calculations call for a more powerful pumps and cylinders than can be operated in a net positive energy system, pumps and cylinders may instead be used that provide required force but at a slower transition speed so as to consume less energy than produced in the system. For example, to provide 10,000 pounds (4,535 kilograms) of force moving at 1 inch per second over 12 inches (30 centimeters), using a cylinder with a piston of the corresponding extension length of 12 inches (30 centimeters) with a 2 inch (5 centimeter) diameter and thus an internal area of 0.33 gallons (2 inch diameter * 3.14 Pi * 12 inches) (1.23 liters), requires a hydraulic pump with a corresponding tank size of 0.33 gallons (1.23 liters) that provides flow of 3.96 gallons per minute (0.33 gallons * (1 inch piston extension per second * 12 inches)) (15 liters) at 1,592 pounds of pressure per square inch (10,000 pounds of required output force = (3.14 Pi * 2 inch piston diameter) * pounds of pressure per square inch)) (10.98 megapascals). In another example, to provide 100,000 pounds (45,350 kilograms) of force otherwise utilizing the same specifications requires 15,923 pounds of pressure per square inch (100,000 pounds of required output force = (3.14 pi * 2 inch piston diameter) * pounds of pressure per square inch)) (109.76 megapascals). However, in another example, to reduce the input pounds (kilograms) of pressure per square inch (centimeter) required in the previous example by 10 times, the diameter of the piston is increased 10 times, resulting in a requirement of 1,592 pounds of pressure per square inch (100,000 pounds of required output force = (3.14 pi * 20 inch piston diameter) * pounds of pressure per square inch)) (10.98 megapascals). In some embodiments, which may include one complete embodiment, the gain in efficiency provided by certain force providing device configurations, which may include reducing input force required relative to output force, may contribute to energy being captured in an embodiment in excess of that consumed by the embodiment.

[0057] In some embodiments, including one complete embodiment, in reference to FIG. 1, the pistons of rear flange mounted double acting hydraulic cylinders 1100 1102 1104, are coupled to gear beam 1200, by means which may include welding or bolting, and are powered by commodity double acting hand operable manual hydraulic pumps 1101 1103 1105, converted to run automatically, where motors control the pump handles and directional valves, and motor 1402 is supported by beam 1405, axle of motor 1402 is coupled to one end of rod 1403, by means which may include welding, with rod 1403 coupled in a manner that allows it to rotate beam 1411, which has affixed to it, by means which may include welding, cuffs 1412 1413 1414, where the cuffs may be created by slicing pieces of metal pipe of sufficient diameter and strength to allow the handles of their corresponding hydraulic pumps to move full cycles to allow all hydraulic pump handle cuffs to work together to operate the hydraulic pump handles through their range of motion, where motor 1402 is positioned and connected in such a way that when provided power it continuously takes the pump handles through their range of motion, while linear actuators 1408 1409 1410 are coupled to the directional valves of hydraulic pumps 1101 1103 1105, with the coupling method determined after reviewing the directional valves of the acquired pumps, or if more appropriate the directional valves may be instead operated directly with electric motors, with linear actuators 1408 1409 1410 wired to later described repeat cycle timers or functional equivalents to change the direction of directional valves on hydraulic pumps 1100 1002 1004 on a timed loop to maintain effectively continuous motion of the pistons of hydraulic cylinders 1100 1102 1104. In some embodiments, which may include one complete embodiment, pistons of hydraulic cylinders 1100 1102 1104 each have an extension length of up to 1 foot (0.3 meters) and the previously identified diameter, with each pair of pump and cylinder providing 190,000 pounds (86,200 kilograms) of force, providing a total of 570,000 pounds (258,500 kilograms) of force, exceeding the previously determined required 514,500 pounds (241,300 kilograms) of force, and the motor to operate the pump handles may consume at peak load 120 watts (12 volts at 10 amperes), providing force of 225 pounds (102 kilograms), substantially more than is required to operate the hydraulic pump handles to continuously power the embodiment. In some embodiments, which may include one complete embodiment, in reference to FIG. 1, instead of handle motor 1103, a linear actuator is coupled to operate the pump handles in back and forth cycles through beam 1411, controlled with a pair of repeat cycle timers in a nearly identical configuration as described for the pump directional valve linear actuators and corresponding repeat cycle timers.

[0058] In some embodiments, which may include one complete embodiment, in reference to FIG. 1, instead of hydraulic cylinders 1100 1102 1104 and pumps 1101 1103 1105, in reference to FIG. 4, pairs of single acting hydraulic bottle jacks 1100 1102, where the number of pairs is determined based on providing force that meets or exceeds the required force in the embodiment, are attached to and mounted in opposition on either side of gear rack 1200 1201 1202 4000, where gear rack bottom 1200 and gear rack top 4100 are extended to accommodate the additional pistons, with the inverted hydraulic cylinders mounted by means which may include welding to metal support beam 4100 held in place by metal support beam 4101 extending from the base support structure, where to provide force in both directions, the hydraulic jack being pushed upon by the hydraulic jack currently providing force, has its release valve opened the entire time so it doesn't resist, and such hydraulics are operated in an automated manner using the components disclosed to convert a manual hydraulic pump to an automated hydraulic pump, where operating each jack handle is a motor, such as handle motor 1402, providing rotational force through the rod and cuff previously described for converting a manual hydraulic pump to an automatic hydraulic pump, and connected to each release valve is a linear actuator, such as directional valve linear actuator 1412, or if more appropriate the valves may be instead operated directly with electric motors, which are powered by a connection to repeat cycle timers 1400 1401 or relay board 1701 that are timed to operate the linear actuators or motors to ensure continuous back and forth force to the gear rack 2100 1201 1202 4100. In some embodiments, which may include one complete embodiment, six pairs of hydraulic bottle jacks 1100 1102, with each bottle jack rated to provide force of 100,000 pounds (45,400 kilograms), provide for total bi-directional force of 600,000 pounds (272,160 kilograms), which exceeds the previously calculated requirement of 530,500 pounds (241,300 kilograms) of bi-directional force.

[0059] In some embodiments, including one complete embodiment when reduced embodiment power consumption is desired, rather than directly utilizing an electric motor to operate pump handles, force providing device(s) including but not limited to hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and or functional equivalents, instead provide the force required to operate the pump handles. In some embodiments, including one complete embodiment when reduced embodiment power consumption is desired, in reference to FIG. 2, which utilizes some components previously labeled in FIG. 1, hydraulic cylinder 2000 is powered by hydraulic pump 2001 with directional valve of hydraulic pump 2001 controlled by linear actuator 2100 powered by and wired to repeat cycle timers 2200 2201 or relay board 1701 in a similar manner as disclosed for other hydraulic pump directional valve linear actuators, and timed to ensure continuous back and forth motion of piston of hydraulic cylinder 2000, with repeat cycle timers 2200 2201 or relay board 1701 wired to power switch 1501, with the handle of hydraulic pump 2001 operated by motor 1408, for the piston of hydraulic cylinder 2000 to operate the handles of the selected hydraulics such as hydraulic pumps 1101 1103 1105, or hydraulic bottle jacks in FIG. 4, where when such a force providing device is providing the amount of force to operate one or more other force providing device(s), and that force providing device is in turn powered by a motor providing the amount of force required to operate it, the energy consumption in the system is further reduced, where either elevating supports are added under the pumps and cylinders operated by piston of hydraulic cylinder 2000 with appropriate adjustments to impacted components, or hydraulic cylinder 2000 is mounted with additional appropriate supports in an inverted position above the handles it will operate so that the cylinders corresponding to the handles rest on the previously detailed support structure. If the speed of the hydraulic pistons operating the handles is n times slower than the speed of the motor previously operating the handles, the force and gear ratios may be adjusted by a factor of n to compensate, with n being best obtained by timing the relevant hydraulics operating cycle. For example, in reference to FIG. 2, if piston of hydraulic cylinder 2000 and corresponding hydraulic pump 2001 are pump handle operating hydraulics providing 1,000 pounds (453 kilograms) of force, where hydraulic pump 2001 has its handle powered by motor 1408 providing 10 pounds (4.5 kilograms) of force while consuming 60 watts, while the handle operating hydraulic piston in turn provides 1000 pounds (45 kilograms) of force to operate the pump handles of the thirty 190,000 pounds (86,200 kilograms) of force providing hydraulic cylinders or hydraulic motors, with a corresponding 30 pumps used instead the 3 pumps, to compensate for a factor of 10 reduction in speed, while a gear ratio change increases speed 10 times, the approximate energy consumption would be a continuous 60 watts, while the output would be either a continuous 633,000 watts (10,000 watts previously calculated as provided per 8,000 pounds of force) or 250 horsepower, thus operating with a near perfect input output efficiency ratio. In some embodiments, which may include one complete embodiment, in reference to FIG. 2 derived from previously labeled components in FIG. 1, a piston of a single hydraulic cylinder 2000 or hydraulic motor with a corresponding automated manual hydraulic pump 2001 providing 100,000 pounds (45,360 kilograms) of force, automated through wiring of corresponding motors which may be in the form of linear actuators wired to repeat cycle timers and or relay boards in the manner provided in this disclosure, piston of hydraulic cylinder 2000 provides force to operate the handles of not only the previously identified hydraulics but also to the handles of roughly 10,000 force providing pumps (100,000 pounds of output force / 10 pounds of input force required) with corresponding cylinders or hydraulic or pneumatic motors, or bottle jacks, providing 100,000 pounds (45,360 kilograms) of force each, with the force from the hydraulic cylinder pistons interconnected by means which may include metal bars, with appropriately adjusted and replicated supporting components, with those pumps directional valves also operated by linear actuators and repeat cycle timers in a manner similar to that provided for in this disclosure, or where all directional valves are interconnected and operated by another automated hydraulic cylinder piston on an appropriately timed cycle, providing roughly 1,000,000,000 pounds (10,000 hydraulics * 100,000 pounds of output force each) (454,000,000 kilograms) of continuous force using the limited watts consumed by the hydraulic pump directional valve linear actuators and repeat cycle timers, and the 110 watts of energy consumed by relatively small hydraulic pump handle electric motor 1408, to produce continuous output up to roughly either 62,500,000 watts (1,000,000,000 pounds of force / 10 times speed reduction / 16,000 pounds of force previously calculated as required per 10,000 watts) or 48,450 horsepower (1,000,000,000 pounds of force / 10 times speed reduction / 516,000 pounds of force previously calculated as required per 250 horsepower), while operating with a near perfect input output efficiency ratio. In another example of input output efficiency, a hydraulic device, provided 10 pounds (4.5 kilograms) of input force, to provide 100,000 pounds (45,360 kilograms) of output force, over a pump handle cycle time of 25 seconds when using hydraulics and 1 second when using an electric motor, layered 3 times, where the pistons of a layer operate the handles of the following layer until the last layer provides output force, not including the first hydraulic device as a layer, provides for a total of 100 million output providing units ((100,000 pounds of output force / 10 pounds of input force) ^ layers) which provide 10 trillion pounds of output force

(100,000,000 units providing output force * 100,000 pounds of output force per unit), completing a cycle in a little over 10 minutes ((25 seconds ^ layers) + 1 second), all while utilizing only 10 pounds (4.5 kilograms) of input force. Archimedes is recorded as having stated "Give me a lever and a place to stand and I will move Earth." Utilizing this system, braced against a celestial body of appropriate mass and trajectory, Archimedes could have moved Earth with the force of his hand. Such an embodiment may be made possible by an additional law of physics discovered by the inventor, where layered leverage provides efficiency gains as a result of gains in layer output force (total output = (unit output force / unit input force) ^ layers) exceeding gains in layer cycle time (total cycle time = unit cycle time ^ layers). In some embodiments, including one complete embodiment, if any utilized commodity component, such as the force providing devices and or operating motors, doesn't perform with the force or speed expected, simply add units of that component and or adjust gear ratios. In some embodiments, such layered force providing device arrangements may be built directly into other force providing devices. Therefore, embodiments can provide for a self-powered generator and or motor that can easily be brought up to any level of output, allowing for clean continuous electricity generation and the fastest possible and fuel free transport, all at a cost that is effectively zero when amortized over time.

[0060] In some embodiments, which may include one complete embodiment, in reference to FIG. 1, double acting manual hydraulic pumps 1101 1103 1105 are replaced by, in reference to FIG. 3, a double acting electric hydraulic pump 3001 matched with hydraulic cylinder 3000 or hydraulic motor to support the desired speed and force. In some embodiments, which may include one complete embodiment if an electric double acting hydraulic pump is used, the amperage drawn by the electric hydraulic pump may be a function of the load that the electric motor is indirectly raising and lowering. For example, where the pump operates its cylinder piston at one inch per second, and therefore requires 5 times less force than the previously cited manual hydraulic pumps, where gear ratios are adjusted accordingly for the speed increase, the correspondingly reduced required force of 106,100 pounds (530,500 pounds / 5 times speed increase) (49,000 kilograms), may be provided by a 12 volt pump, which at full load provides 2,900 pounds of pressure per square inch (20 megapascals) at 13 gallons per minute, while according to a manufacturer, drawing 795 amperes for a total maximum consumption of 9,540 watts.

[0061] In some embodiments, force is instead provided by screw jacks to provide force in the system. In some embodiments, which may include one complete embodiment, force providing devices offer more force than is required, to reduce input force required, and increase system efficiency. In some embodiments, variable pressure hydraulic pumps may be used to precisely control the force provided by the hydraulics or pneumatics. In some embodiments, pairs of alternating force providing devices may be used to generate motion in the system. In some embodiments, other means of mechanical or hydraulic or pneumatic leverage, controlled electronically or manually, may be used. In some embodiments, multiple force providing devices may be used to support the maximum output capacity of the generator, or for redundancy to enhance reliability. In some embodiments, a traditional steam or car engine crankshaft may transfer rotational force from the hydraulics to the gears.

[0062] In some embodiments, when designed for small devices, such as portable consumer electronics, micro hydraulics, micro pneumatics, or miniaturized mechanical leverage devices such as a miniaturized screw jack, or functional equivalents, may be used. The simplicity of scissor screws jacks compared to hydraulics, may make them easier to miniaturize through three dimensional printing, where a screw jack may be constructed with components including a top and bottom that connect the gear beam and the support base, two blocks that allow a threaded screw to rotate through them, and 8 identical supports, two connecting to the top and the left screw block, two connecting to the bottom and the left screw block, two connecting from the top to the right screw block, two connecting from the bottom to the right screw jack, with a reversible motor connected to the screw, and the reversible motor connected to timers in the manner later described, to endlessly extend and retract the screw jack. Given the continuous movement of the screw jack, it may be best to have the screw in the screw jack rotate through a threaded block with a center that contains a reservoir of lubricant, so that each stroke of the screw jack is lubricated to allow for greater durability, where the screw and the threads it passes through may be made out of a durable metal such as high grade steel or titanium.

[0063] **In some embodiments, including one complete embodiment, obtain gears with corresponding gear racks and axles, to provide unidirectional force at an increased speed.** Gears increase speed in proportion to a decrease in force, as a ratio of teeth per gear pair. Ratchet gears are designed to allow force to be applied in a single direction, by using a structure called a pawl, which disengages from gear pickup points when the gear is not rotated in a specific direction. A gear rack is effectively a flattened gear, in the shape of a beam, with teeth that allow it to use linear force to engage and rotate a gear. Depending on the application, and the pounds (kilograms) of pressure per square inch (centimeter) provided to the gears, automotive or aerospace quality gears may be used, or gears may be custom manufactured including with extended widths to distribute pressure, and where gear types may include simple traditional spur gears, helical gears that may be smoother at high speeds, or others.

[0064] In some embodiments, including one complete embodiment, gear racks, gears, and supporting components are chosen or designed that are of adequate thickness at every point, and are rated and or produced of sufficiently high grade material, so as to never deform under applied forces, where the gear racks height may be determined by the components, and other dimensions may be determined to support the width of the teeth of the gears being powered. In some embodiments, including one complete embodiment, the specified gears and supporting components are made of a material such as high strength steel, which may have a yield strength of around 80,000 pounds of pressure per square inch (550 megapascals). In some embodiments, a metal such as titanium may be used, which may have a yield strength rating of 128,000 pounds of pressure per square inch (880 megapascals), and is substantially lighter than steel, but may be more brittle, and may currently trade for many times more, due to difficulties in extracting the element despite its abundance. In some embodiments, any materials may be used that provide adequate resilience.

[0065] In some embodiments, including one complete embodiment, in reference to FIG. 1, a dual gear rack is created by welding two gear racks 1201 1202 to a steel support beam 1200, where the gear racks are those designed to support the diameter and number of teeth of gear rack gears 1203 1204, where all components are of an adequate width to sustain the previously determined forces without deforming, with the gear racks welded to the support base 1200 in such a way that they precisely and snugly connect with the left sides of gears 1203 1204, with the steel support beam 1200 secured to pistons of hydraulic cylinders 1100 1102 1104 through welding or corresponding bolt ports and bolt holes in the support beam, to transfer the force provided.

[0066] In some embodiments, including one complete embodiment, in reference to FIG. 1, gear rack 1200 1201 1202 is aligned to operate gear rack gears 1203 1204, gear rack gear 1203 is coupled back to back to ratchet gear 1205, by means which may include welding, gear rack gear 1204 is coupled back to back to ratchet gear 1206, by means which may include welding, ratchet gear 1205 engages support gear 1209 through pawl 1207 bolted in place through a drilled hole, and ratchet gear 1206 engages support gear 1210 through pawl 1208 bolted in place through a drilled hole, with the pawls allowing the gears to engage in only one direction, resulting in bidirectional rotational force converted to unidirectional rotational force, where support gears 1209 1210 and have an increase in teeth relative the gears providing them force in order to increase speed, and interlock with each other and with gear 1211, which is coupled back to back to ratchet gear 1212, by means which may include welding, and engages through pawl 1213 bolted in place through a drilled hole in weighted steel momentum wheel 1214, which may be omitted or may weigh any amount including that corresponding to the force required by the generator, or the generator and the motor, to maintain continuity during force providing device transition, and is coupled back to back, by means which may include welding, to gear 1215, which provides a teeth ratio relative to the gear providing it force in order to further increase speed, and interlocks with generator axle gear 1216, with the the ratios of teeth of gear pairs selected to achieve the desired speed increases at each point to provide the final desired unidirectional speed.

[0067] In some embodiments, including one complete embodiment, in reference to FIG. 1, to convert the input force to unidirectional force at the previously determined 375 times speed increase, gear rack gears 1203 1204 each have 5 teeth, ratchet gears 1205 1206 each have 5 teeth, support gears 1209 1210 each have 100 teeth, where 5 teeth of the previous gear in proportion to 100 teeth on this gear provides a speed increase of 20 times, gear 1211 has 5 teeth, ratchet gear 1212 has 5 teeth, gear 1215 has 95 teeth, where 5 teeth of the previous gear in proportion to 95 teeth on this gear provides a further speed increase of 19 times, generator axle gear 1216 has 95 teeth, which therefore together achieve unidirectional speed at around the overall 1:375 previously determined teeth ratio (1:(20*19) = 1:380), converting the input speed to around 1800 revolutions per minute. If layered force providing devices are utilized, gear ratios may be additionally adjusted, and or gears may be added, as previously discussed, to provide appropriately adjusted speed. In some embodiments, instead of a momentum wheel, additional force providing devices may be added and timed with the repeat cycle timers to ensure there is never a stop in force. In some embodiments, including one complete embodiment, the generator is attached in such a position that its axle is rotated in the designed direction for electricity generation, or an additional gear may be added if necessary before the generator axle gear to change the rotational direction.

[0068] In some embodiments, including one complete embodiment, in reference to FIG. 1, when implementing the system to rotate an axle to function as a motor, to additionally gear the motor axle to achieve the desired revolutions per minute, motor axle 1218 has passing through its center generator axle gear 1216 which connects to gear 1217, where the gears have a teeth ratio that achieves the revolutions per minute desired of the motor.

[0069] In some embodiments, including one complete embodiment, in reference to FIG. 1, when implementing the system to rotate an axle to function as a motor, to additionally gear the motor axle, which requires as determined by previous calculations increasing the speed by 4 times, to around the previously determined 7,000 revolutions per minute, generator axle gear 1216 has 95 teeth and gear 1217 has 24 teeth, approximately providing the previously determined 1:4 ratio of teeth, thereby rotating the motor axle 1218 at around 7,200 revolutions per minute. In some embodiments, which may include one complete embodiment, any number of gear and gear rack teeth and ratios may be used that allow for the desired force and speed to be achieved.

[0070] The rotational speed of the gear powering the generator should match the optimal speed of the generator for maximum output, and if the speed doesn't match, given the inability to control in advance the precise speed of the purchased commodity force providing devices, the gear providing rotational force may be switched to one whose teeth provide for an appropriate speed adjustment. In some embodiments, to accurately measure the output of the embodiment, a torque gauge may be used to measure pound feet of force, and a tachometer may be used to determine revolutions per minute, or alternatively a dynamometer may be used which measures pound feet of force as well as revolutions per minute, and then horsepower may be calculated as pound feet of force multiplied by revolutions per minute with the result divided by the horsepower constant 5252.

[0071] In some embodiments, where the unit is not guaranteed to operate in a continuously upright manner, such as for vertical takeoff and landing, or in a reduced or zero gravity environment, ratchet pawls are to be pushed down to compensate for gravity to ensure desired engagement, by means which may include mounting to each pawl one or more springs, opposing magnet pairs, or small electric motors.

[0072] In some embodiments, any other method of converting linear force to rotational force may be used, including other systems of gears, which may utilize gears of assorted number, size, arrangement, and teeth. In some embodiments, which may include one complete embodiment, rotational force is provided by one or more hydraulic motor(s) and corresponding pump(s), requiring no linear to rotational force conversion, whose pump operation may be automated using the electric motors, linear actuators, repeat cycle timers, layered force providing devices, and or functional equivalents, all as provided for in this disclosure.

[0073] In some embodiments, a traditional steam or car engine crank shaft 1200, may replace the gear racks 1201 1202, and be connected by means which may include bolting directly from the top of the hydraulic cylinders pistons gear rack bar 1200 to a gear added between gear rack gears 1203 1204 so it can provide force in either direction, or directly to gear 1204, where the connected gear may be adjusted in diameter to support a full piston cycle, and where if connecting to gear 1204 to ensure the system provides rotational force in only one direction gear 1214 functions as a weighted momentum wheel providing adequately weighted momentum to ensure continuous motion in a single direction, with additional initial input force added to power the momentum wheel, or may have another connected gear providing the weighted momentum after the speed has been reduced and the gear can provide the required momentum at a reduced weight, or may require the additional component or functional equivalents of a starter motor, and where the rear flange mounted hydraulic cylinder may be mounted at its base to an intermediary joint that may allow the cylinder to move with the crank shaft. In some embodiments, instead of a hydraulic piston a bi-directional hydraulic gear motor 1100 connects with and provides rotational force to a gear added between and interlocking with gear rack gears 1203 1204, operating in place of removed gear rack 1200 1201 1202, where the hydraulic motor can provide rotational force in either direction, in accordance with the flow of connected automated hydraulic pump 1101 as provided for in this disclosure, with adjustments made to gears and gear ratios to provide the speed and force required. In some embodiments, the hydraulic motor operating hydraulic pump 1101, is operated by another force providing device, as provided for in this disclosure, increasing its input output efficiency. In some embodiments, the hydraulic motor may be coupled directly to the generator axle or torque converter or motor axle or a rotational force output device such as a turbine or tire. In some embodiments, multiple hydraulic motors are interconnected to provide rotational force, by means which may include connecting the hydraulic motors through additional gears interlocking with gear rack gears 1203 1204.

[0074] In some embodiments, a gear beam may be used that has folding teeth that engage in only one direction, with individual gear teeth each attached to the beams by a bolt that passes through a gear beam hole, with each tooth extending beyond the length of its underlying support, where the teeth connect with the teeth of the gears, so when the force providing devices go up, the teeth are engaged, and when the force providing devices go back down, the teeth disengage by folding themselves in, thereby allowing alternating hydraulics or equivalents to provide the continuous application of force to the generator and or motor axle, so that each properly engages the teeth of the corresponding gear, or providing such beam structures on each side of the force providing devices in vertical opposition to capture force in both directions.

[0075] In some embodiments, in reference to FIG. 1, instead of using gear racks 1200 1201 1202, in reference to FIG. 5, force from the hydraulics is transferred through a pressurized medium such as liquid or gas 5001, in conduit or container 5000, which may be made of adequate thickness and of a material of adequate strength so as to not deform under applied forces, for example titanium or high strength steel, where the substance container has one hole connected to pipe t-joint 5100 and another hole connected to pipe t-joint 5102, with pipe 5101 connecting the two t-joints, and turbine 5200 passes through pipe 5102, and through a hole drilled in t-joint 5102, sealed by elastomer seal 5201, with the axle of turbine 5200 having a gear 5202, that connects between, in reference to FIG. 1, initial force transfer gears 1203 and 1204, where when the piston of hydraulic cylinder 1100 is connected to, in reference to FIG. 5, container piston 5002 which operates plate 5003 back and forth in container 5000, with the piston sealed in the container by elastomer seal 5001, turbine 5200 is spun back and forth.

[0076] In some embodiments, which may include one complete embodiment, in reference to FIG. 1, instead of using gear racks 1200 1201 1202, in reference to FIG. 6, force from the hydraulics is transferred through a weighted pendulum 6000, where the pendulum may be made of a heavy material, for example steel or iron, and of a weight that exerts force that meets or exceeds that required by the generator and or momentum wheel and or to function as motor, which is raised for release by hydraulic cylinder piston pendulum bar 6100 which is coupled to piston of hydraulic cylinder 1100 by means which may include welding or bolt 6101, with hydraulic cylinder mounted horizontally on an additional support beam, with piston pendulum bar 6100 moving in back and forth cycles pendulum wheel 6000, with pendulum wheel 6000 having on each side support bars 6200 6201 coupled together by bolt 6202 utilizing lubrication and or a bearing to minimize friction, with the other end of support bars 6200 6101 coupled together by bolt 6203 which also passes through pendulum weight support beam 6204, and utilizes lubrication and or a bearing to minimize friction, where pendulum bar 6100 provides rotational force to the axle generator 1300, after being passed through any necessary gears to increase speed, where the disclosed repeat cycle timers or functional equivalents are wired and timed to push piston of hydraulic cylinder 1100 into a position for release to complete a cycle, then timed to wait for the cycle to complete, then pull it into a position and release it to repeat the cycle, where the pendulum can be of any weight supported by the hydraulics, with the pendulum motion rate of decay driven by factors which may include the resistance of the generator, gravity, and rotational friction, where the heavier the pendulum the longer it will take to be stopped each cycle. In some embodiments, the pendulum speed may be driven by gravity at 9.8 meters per second per second and it may achieve a peak oscillation speed of around the 22 miles (35.4 kilometers) per hour.

[0077] In some embodiments, any other method of transferring and or increasing input speed may be used.

[0078] **In some embodiments, including one complete embodiment, construct a support structure around, and appropriately connect, the force providing devices, gears, gear racks, axles, and generator.** In some embodiments, including one complete embodiment, in reference to FIG. 1, in order to support components, a load bearing support structure is constructed of adequate thickness and of a material of adequate strength so as to not deform under the pressures in the embodiment, for example high strength steel or titanium. In some embodiments, including one complete embodiment, in reference to FIG. 1, the structure consists of base beams 1000 1001 1002 1003, connected together in a rectangle, an inside base beam 1004 to support and connect to the hydraulic cylinders, an inside base beam 1005 to support the generator, gear support beam 1007, extending from base beam 1000 and supported by beam 1006 extending from beam 1003 and beam 1008 extending from beam 1001, and having welded to it gear support rods 1009 1010 1011, where in order to ensure the gears precisely align as previously described, the gears may be mounted on the gear support rods before the support rods are fixed into place by means which may include welding. In some embodiments, including one complete embodiment, the exact dimensions of each support structure components are matched to support the corresponding components.

[0079] In some embodiments, the method of connecting the beams and rods may be bolting or welding or any other means that may secure the beams. In some embodiments, the support structure, or parts thereof, may consist of solid components created rather than connected, by means that may include molds or 3D printing.

[0080] In some embodiments, including one complete embodiment, in reference to FIG. 1, generator 1300 is attached firmly to the support structure beam 1007, by means which may include its built in bolt mounts, with corresponding holes drilled in the support beam, or by welding, at a location the ensures generator support gear 1215 is securely engaged with generator gear 1216 mounted on the generator axle.

[0081] In some embodiments, in reference to FIG. 1, if the potential for even the smallest discontinuity in force can't be allowed, gears 1203 1204 may each have their own force providing device and beam, operating in opposition on the appropriate sides of gears 1203 1204, with the force providing devices precisely timed to overlap to prevent any discontinuity in force.

[0082] **In some embodiments, including one complete embodiment, implement a timer based control system.** A repeat cycle timer is a commodity device used to open and close power circuits to operate systems such as a water sprinkler, turning it on for a fixed interval, turning if off for a fixed interval, and then repeating the cycle. The instructions for configuring the timers, when purchased from a quality supplier, will be in the manual accompanying the timers. For example, some timers may have positive and negative terminals for each the power source and the device, along with a knob to set the seconds on per cycle, and a knob to set the seconds off per cycle. In some embodiments, including one complete embodiment, motors including those driving linear actuators may be utilized that have two wires and are operable in both directions, driven by a reversible brushed direct current motor, though other types of motors may be utilized which may have additional wires to be wired in the manner corresponding to their accompanying instructions.

[0083] In some embodiments, including one complete embodiment, in reference to FIG. 1, repeat cycle timers 1400 1401 are set to run on intervals timed to allow the force providing devices attached gear teeth beams to move approximately one length in a back and forth cycle while minimizing any discontinuity in force during directional transition, with the repeat cycle timer settings implemented as explained by the manufacturer in included instructions. The repeat cycle timers are attached to support beam 1000, by means which may include bolts through drilled corresponding bolt holes, straps, or any other method that doesn't damage the timers. In some embodiments, including one complete embodiment, in reference to FIG. 1, repeat cycle timers 1400 1401 operate linear actuators 1408 1409 1410 affixed respectively to the directional valves of hydraulic pumps 1101 1103 1105, where positive wire of each linear actuator is attached to both repeat cycle timer 1400 positive terminal, and repeat cycle timer 1401 negative terminal, and negative wire of each linear actuator is wired to repeat cycle timer 1400 negative terminal and repeat cycle timer 1401 positive terminal, with repeat cycle timers 1401 and 1402 each wired to the corresponding positive and negative terminals of on off switch 1501 which provides power through a connection to battery 1500, in order to operate the hydraulic pump directional valves as required by the embodiment. In some embodiments, where an electric force providing device pump is used, repeat cycle timers 1400 1401 open and close circuits that are wired to and cause, in reference to FIG. 3, electric pump 3100 operating switch motor 3200, or the exposed wires from the operating switch, to raise and lower the piston of cylinder 3000, on a fixed interval, and for a fixed interval, as required by the embodiment. In some embodiments, which may include one complete embodiment, in reference to FIG. 4, where force providing devices are mounted in opposition to each other, to provide both push and pull force for continuous motion, components including repeat cycle timers and wiring are repeated with appropriately adjusted timing.

[0084] In some embodiments, which may include one complete embodiment, the functional equivalent of a repeat cycle timer may instead be used, including a relay board 1701 controlled by computer 1700, operated by computer software that opens and closes the circuits as previously described, to produce the same effect, and or to turn the units on and off to meet peak demand at specific times or based on current consumption, with code and components utilized as disclosed in the later step describing creation of unit operation software code.

[0085] In some embodiments, the repeat cycle timer may be excluded if the hydraulics are to be manually operated.

[0086] **In some embodiments, including one complete embodiment, to transfer electricity to power embodiment components, wire the generator through any necessary adapter or converter to the battery and an on off power switch.** In some embodiments, including one complete embodiment, in reference to FIG. 1, battery 1500 allows the unit to start by providing initial power to pumps handle motor 1402 and repeat cycle timers 1400 1401 which power the pumps' directional valve linear actuators, where the battery has the capacity to simultaneously power the required components. In some embodiments, including one complete embodiment, in reference to FIG. 1, output wires of generator 1300 are connected to on off power switch 1501 and battery 1500, and if there is a mismatch of current type, amperes, volts, or hertz, or the strength of the electrical output from the generator would damage the repeat cycle timers, hydraulic pump operating motor, and or battery, they may be wired to pass through a corresponding electrical converter and or overcharge controller. In some embodiments, including one complete embodiment, in reference to FIG. 1, in order for the battery to be replaceable, it may be attached to support beam 1000 by means including metal brackets bolted through corresponding drilled holes. In some embodiments, including one complete embodiment, in reference to FIG. 1, on off power switch 1501 is externally accessible to the operator, and may be coupled to the unit, by means including welding or bolts.

[0087] **In some embodiments, including one complete embodiment, attach power output connector.** In some embodiments, including one complete embodiment, in reference to FIG. 1, the output wires of generator 1500 are connected to power connector 1502, which provides the outlet or wire connectors that provide electricity to the end user, and is externally accessible after any protective enclosure is mounted. In an embodiment where the generator does not provide output as desired including current type, amperes, volts, and hertz, generator 1500 may be wired to a power converter which is then wired to output connector 1502.

[0088] **In some embodiments, including one complete embodiment, if implementing the unit as a motor, optionally mount Continuously Variable Transmission or Torque Converter, or construct and mount a Tube Torque Converter.** A traditional torque converter spins an engine connected impeller opposing an axle connected turbine, inside a container filled with fluid, allowing the output axle and the motor axle to operate at different speeds, engaged by the force transferred through the fluid, however, at high levels of force, traditional torque converter seals may fail. A Continuously Variable Transmission, is a commodity system that transfers force from an engine to a motor axle while allowing an engine and the motor axle to operate at different speeds, by varying the circumference of opposing wheels connected through a belt, though these devices may provide uneven engagement. In some embodiments, which may include one complete embodiment, a traditional torque converter or Continuously variable transmission may be used. In some embodiments, a hydraulic motor is used in conjunction with variable force hydraulic pumps and a torque converter may not be required.

[0089] In some embodiments, which may include one complete embodiment, a new type of torque converter is constructed, named a Tube Torque Converter, which is less concerned with maintaining force transference efficiency than existing systems, because embodiments where it is implemented, may not utilize an external fuel source and can therefore be easily made more powerful to compensate in proportion to the loss of efficiency, where embodiments allows the motor's connected force transference device to spin at very high speeds while fixed in place, with an opposing force transference device operating at any level of speed, determined by moving the opposing force transference device back in forth in a transferrable medium filled container, of adequate dimensions so as to not generate compressive force that damages seals, therefore providing completely smooth acceleration with fewer parts and at a lower construction and maintenance cost than traditional torque converters and gear trains, and without the jump of gear shifting or traditional Continuously Variable transmission.

[0090] In some embodiments, including one complete embodiment, in reference to FIG. 1, the torque converter is produced by having motor axle 1218 spin an attached high strength fixed pitch propeller turbine 1602, or another fluid rotational force transference device such as an impeller, at a constant speed, inside high pressure rated pipe 1600, where the additional diameter of the container relative to the turbine allows for continuous flow around the turbine, with turbines each set to not come closer on all sides of the pipe and the compartment seal caps than would cause to damaging pressure from accumulating on the elastomer seals, with the pipe containing commodity torque converter fluid 1601, with a high strength fixed pitch propeller turbine 1603, or another fluid rotational force transference device such as an impeller, attached to axle 1604, which spins inside the pipe at the rate controlled by how close it is to opposing turbine 1602, with engagement controller 1607 controlling axle 1604 as a steel rod with a hole that fits the axle secured to push and pull the axle by a divot fitting the engagement controller in the axle or by metal holders on either side surrounding the axle, with the pipe 1600 having two threaded ends over which threaded end caps of the same thickness as the pipe will be placed, with holes in each cap for the axles sealed by commodity heavy duty torque converter elastomer seals 1605 1606, attach the turbine component to the axle such that it is able to move back and forth, with two caps, and a hole of the diameter of the axles, made in each cap, with the axles passing through. In some embodiments, which may include one complete embodiment, pipe

1600 has pressure reduction chambers on either side of the pipe, through which the axle passes on either side, also filled with torque converter fluid, created by sealing the inner compartment with two circular high strength plates whose diameter matches the diameter of the inside of the pipe, and whose center hole diameter matches that of the axles, is cut from an additional pair of caps using a welder or metal cutting machine, which are welded into place, to form a physical barrier to reduce the force on the elastomer seals. In some embodiments, which may include one complete embodiment, fixed pitch propeller turbines 1602 1603 have a 12 inch diameter and are made of high strength steel, and high strength steel pipe 1600 is of 24 inch diameter by 36 inch length 0.5 inch thick, where the distance from the turbines to the pipe may be 6 inches, with turbine pitch selected, and distances and dimensions adjusted to optimize efficiency.

[0091] In some embodiments, including one complete embodiment, in reference to FIG. 1, the engagement of this torque converter may be controlled by means including a linear actuator 1702, connected to the torque converter engagement controller 1607 handle by means which may include welding or bolting, and able to provide adequate force to smoothly transition the engagement controller 1607 over its full range, or mounted to the support structure, or a double acting rear flange mounted hydraulic cylinder in place of linear actuator 1702 with an extension length able to take engagement controller 1607 through its full range of motion, and controlled by hydraulic pump and corresponding switch where the switch moves forward at the press of the gas pedal, and the switch moves backwards when pressed by the brake pedal, or with the switch connected to a computer controlled relay board, either directly by cutting off the switch and connecting the wires to the computer controlled relay board, or by using a motor that press the hydraulic pump switches. In some embodiments, software to control the hydraulic cylinder piston and pump engagement, or the stepper motor engagement, may be implemented as described in a later step, and may have pre-determined engagement distances for each level of output, to account for non-linear distance to force transfer. In some embodiments, which may include one compete embodiment, when the embodiment is providing force to a fixed object such as a tire, the primary unit may move back and forth rather than the output turbine of the torque converter axle providing force to the tire.

[0092] **In some embodiments, when implemented as a vehicle motor for vertical take off and landing, allow for dynamically angling of the unit with a hydraulic cylinder with hydraulic pump controller and optional high strength encasement.** In some embodiments, an optional force providing device, including but not limited to hydraulic, pneumatic, motorized mechanical leverage, or functional equivalent, is attached between the support structure and a vehicle that allows the engine to be dynamically angled, for applications such as the vertical take off and landing of a car, airplane, or space ship. In some embodiments, in reference to FIG. 1, force providing device cylinder 1106 is operated by pump 1107, with cylinder 1106 mounted to the support structure and the vehicle in a manner that allows it to move the engine through a range of motion providing for vertical take off and landing as well as forward motion, where electronically controlled pump switch 1108 either has mounted on it reversible motor 1406 with button pressing rod 1405 held in place by metal clamp 1407, or has its switch cut off with the control wires wired to replay board 1701 for back and forth control as provided for in this disclosure in a similar manner as reversible motor 1406. If a cylinder is added, it can be connected to a support structure beam 1000 with the other end connected to the vehicle, and support structure beam 1002 attached to the vehicle through a jointed bracket, to allow for the motor to rotate in a manner that allows for vertical takeoff and landing. In some embodiments, where extreme force is applied, and used in life or death situations, such as airplanes, cylinders may be enclosed in high strength encasement made of a material such as titanium in the exceptionally unlikely event of a pressurized cylinder explosion, and embodiments may be redundant, in case of a failure. In embodiments where fluid utilized by the pump and piston would be exposed to freezing temperatures, the fluid must be prevented from freezing by means which may include thermal insulation and or an anti-freeze agent added to the fluid.

[0093] **In some embodiments, including one complete embodiment, optionally write software and implement supporting components to control unit operation and or an array of units.** In some embodiments, which may include one complete embodiment, where computer control of the unit is desired, to operate the force providing devices, and or to operate the torque converter, and or to operate the unit angling for vertical take off and landing, software may be written and supporting components implemented, where a computer may be embedded in the unit, running custom software on startup, and may be connected through a network connection to a network accessible relay board. In some embodiments, where one or more variable pressure force providing device pumps are used, pressure levels corresponding to output levels may be stored for use by the software which sets the pumps operating levels by controlling relay board attached motors, including in the form of standard, stepper, linear actuator, or hydraulic, that control pressure level valves and or handles according to desired output. In some embodiments, where a tube torque converter is used, force transference distances corresponding to output levels may be stored for use by the software which sets the distance corresponding to the desired output level by operating a motor, including in the form of standard, stepper, linear actuator, or hydraulic, connected to the torque converter engagement handle. The software code to operate the computer connected relay board, may resemble that disclosed below. In some embodiments, the computer may be a Raspberry Pi, connected through an Ethernet controlled relay board through an Ethernet crossover cable, that is set on startup to run software developed in the Python language from the disclosed description, where the software is installed by connecting to the computer through telnet or secure shell, then at the command prompt typing "nano run.py" and adding and saving the software code, then at the command prompt typing "nano /etc/rc.local" and adding and saving the line "python /$location/run.py", where $location is the path to the directory containing the previously created software file.

[0094] In some embodiments, the software code for unit control, provides functionality comprising:

> import a library for connecting to the relay;

> import a library for system resource access;

> create variables holding relay on off values;

> initialize variables for each relay state, including force providing device up and down, torque converter forward and backward, and unit forward and backward;

> create a variable holding force providing device cycle seconds;

> create variables holding the relay board connection, IP address, username, and password.

> create a function to update the relay board;

>> initialize a connection to the relay board, if the connection has not been initialized, or has been dropped

>> create a string holding the states of the relays;

>> send the current relay states to the relay board.
> create a function that when called listens for computer input from the operator;
>> read in any user key press;
>> if the key pressed is forward, set the torque converter control device relay state to forward;
>> if the key pressed is backward, set the torque converter control device relay state to backward;
>> if the key pressed is up, set the unit position control device relay state to forward;
>> if the key pressed is down, set the unit position control device relay state to down;
>> if the key pressed is the spacebar, set all torque converter and unit positioning relay states to off.
> create the function called on program start;
>> record the program initialization time;
>> run a continuous loop;
>>> if the seconds elapsed are divisible without remainder by the force providing device cycle seconds switch the force providing device direction by changing corresponding relay states;
>>> check for user input;
>>> call the function to send the current relay states to the relay board.

[0095] In some embodiments, where a large number of generator units are being operated concurrently, to turn the units on and off at specific times and or based on current power consumption, network accessible relay boards may be installed in the units, and wired in place of or in addition to the power switch to be able turn the units on and off, and may be controlled by a computer running software provide functionality comprising:
> import a library for accessing the relays;
> import a library for system resource access;
> initialize and set variables holding relay on and off values;
> create an array of IP addresses of unit on off relay boards;
> initialize an array of unit relay board connections;
> create an array of unit output watts;
> create an array of unit on off states;
> create variables holding the default unit relay board username and password;

> create variables to hold the total watts available across all units, the current watts being consumed, and whether or not time based watts are to be used;

> create an array of pairs of times and time desired watts;

> create a variable indicating whether or not unit power consumption meters are to be used;

> create and array of power consumption meter IP addresses;

> create variables holding the power consumption meter's username and password;

> create variables holding the minimum and maximum power consumption to be allowed before switching units on or off.

> create a function to send a command to a unit at a specified index in the unit IP address array;

>> create a connection to the unit on off relay board, at the IP address at the provided index in the unit IP address array, if the connection has not been initialized, or had been dropped;

>> create a variable holding the command string to be sent to the unit based on whether the unit is to be turned on or off;

>> send the command the unit relay;

>> wait for the command to go through, then turn off all relays.

> define a function to run on script execution;

>> iterate through each unit IP address and call the function to switch the unit on;

>> run a continuous loop;

>>> create variables to hold a unit index iterator, an output display message, and the current action;

>>> proceed if power consumption meters are being used;

>>>> create variables to hold average and total consumption of unit power, and add up total possible power output;

>>>> loop through each power consumption meter IP address;

>>>>> retrieve the current power consumption number;

>>>>> calculate the average consumption;

>>>>> add the current consumption to the total;

>>>>> add the unit maximum capacity to the total consumption capacity;

>>>>> increment the index;

>>>> calculate the consumption percentage as the consumption total divided by the total unit capacities;

>>>> create a message to display the states the currently consumed watts and the current watt capacity;
>>>> if the average consumption is greater than the maximum consumption level before more unit should be turned on, then set the unit action equal to on;
>>>> if the average consumption is less than the minimum consumption level before more unit should be turned off, then set the unit action equal to off;
>>>> iterate through unit states until one is found that is either off, if looking to turn a unit on, or on if looking to turn a unit off, then send the command to switch the unit state;
>>> proceed if power consumption meters are not used, and instead the total watts to be provided by the units are determined by the current time;
>>>> iterate through each time watts pair, and if the current time is equal to the specified time, send commands to turn units on or off, until the desired level of output is produced, and display each action on the command line;
>>> sleep for a moment before looping again.

[0096] **In some embodiments, including one complete embodiment, attach protective enclosure.** In some embodiments, including one complete embodiment, in reference to FIG. 1, enclosure 1900 protects the electronic components from external elements and the operator from the utilized forces as well as the extraordinarily rare event of a cylinder explosion, where the enclosure is shaped to fit around the support structure and all components, and may be made of sheets a strong lightweight environmentally resistant material, for example high strength steel, aluminum, or carbon fiber, formed by means which may include fabrication or welding of sheets in the dimensions of the unit, with the enclosure coupled to the support structure by means which may include bolts through corresponding drilled holes, where there may be holes in the enclosure allowing the power connector 1502 and power switch 1501 to be externally accessible to the operator. In some embodiments, many of the embodiment components may be 3d printed from a single model, including the support structure, protective enclosure, gears and supports, and potentially the force providing device(s).

[0097] **In some embodiments, including one complete embodiment, enjoy clean continuous self-powered energy and or propulsion.** In some embodiments, turn the unit's power switch to on, and allow the unit to run for a full cycle to validate structural stability, and once the unit is verified as correctly constructed, turn it off. In some embodiments, including one complete embodiment, if implemented as a generator, the embodiment is then ready to have an experienced licensed electrician connect it to a power grid, and turn on the unit's power switch to on, or if implemented as a motor, be appropriately connected in an engine compartment.

CLAIMS

What is claimed is:

1. An apparatus capable of powering a generator and or functioning as a motor, with the invention comprising:

   force providing devices(s) including but not limited to hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and or functional equivalents;

   said force providing device(s) able to be powered or operated, directly or indirectly, by a generator and or another source;

   said force providing device(s) force able to be transferred directly or indirectly by means that provide rotational force to said generator axle and or to function as a motor.

2. Further comprising claim 1, gears, a crankshaft, or functional equivalent(s), able to convert multidirectional force to unidirectional rotational force.

3. Further comprising claim 1, a weighted structure, which may be of any shape, including circular or spherical, attached to an axle, able to maintain momentum.

4. Further comprising claim 1, said force providing device(s) able to be operated by force providing device(s) including but not limited to hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and or functional equivalents to optimize input output efficiency.

5. A method performed by an apparatus comprising:

   transmitting electricity to operate directly or indirectly one or more force providing device(s) including but not limited to hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and functional equivalents;

   said force said force providing device(s) force transferred directly or indirectly by means that provide rotational force to a generator axle and or to function as a motor;

   transmitting electricity from the generator directly or indirectly to operate directly or indirectly said force providing devices;

6. Further comprising claim 5, converting multidirectional force to unidirectional rotational force through gears, a crankshaft, or functional equivalent, with supporting components.

7. Further comprising claim 5, a weighted structure, which may be of any shape, including circular or spherical, attached to an axle, maintaining momentum.

8. Further comprising claim 5, said force providing device(s) operated by force device(s) including but not limited to hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and or functional equivalents to optimize the input output efficiency ratio.

9. A method for constructing an apparatus comprising:
obtaining a power source including but not limited to a generator, repeat cycle timers or functional equivalents, force providing device(s) including but not limited to hydraulic, pneumatics, mechanical leverage, motorized mechanical leverage, and or functional equivalents;
ensuring the attachment to a support structure of said force providing device(s), said repeat cycle timers or functional equivalents, and said power source;

10. Further comprising claim 9, attaching directly or indirectly gears, a crankshaft, or functional equivalent with supporting components to convert multidirectional force to unidirectional rotational force.

11. Further comprising claim 9, attaching a weighted structure, which may be of any shape, including circular or spherical, to an axle, to maintain momentum.

12. Further comprising claim 9, operatively coupling said force providing device(s) to force providing device(s) including but not limited to hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and or functional equivalents to optimize the input output efficiency ratio.

13. A force transference device, with the invention comprising:
a turbine or functional equivalent;
a means for holding a transferrable medium;
individual or combined implementation of force providing device(s) including hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and functional equivalents;
said force providing devices able to cause the flow of a medium through said means for holding a transferrable medium past said turbine.

14. A force transference device, with the invention comprising:
a pendulum;
a generator axle or motor axle;

individual or combined implementation of force providing device(s) including hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and functional equivalents;

said pendulum connected directly or indirectly to said generator axle or motor axle;

said pendulum able to be operated by said force providing device(s).

15. A torque controller, with the invention comprising:

a pair of opposing rotational force transference devices;

a container capable of enclosing a transferrable medium and said rotational force transference devices;

said rotational force transference devices adjustable in proximity.

16. A manually operable force providing device including hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and or functional equivalents, converted to an automatic force providing device, with the invention comprising:

a motor or motorized device able to provide the input force required by a force providing device;

a motor or motorized device able to control the force providing device direction;

a connection between said force providing device input force receiver and corresponding motor able to take said input force receiver through a cycle;

a power source;

one or more repeat cycle timer(s) or functional equivalents;

said repeat cycle timer(s) able to be powered by said power source able to control said motor(s) to control said input force receiver and or said valve.

17. An apparatus comprising:

one or more force providing device(s) including but not limited to hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and or functional equivalents able to operate one or more force providing device(s) including but not limited to hydraulic, pneumatic, mechanical leverage, motorized mechanical leverage, and or functional equivalents to improve input output efficiency.

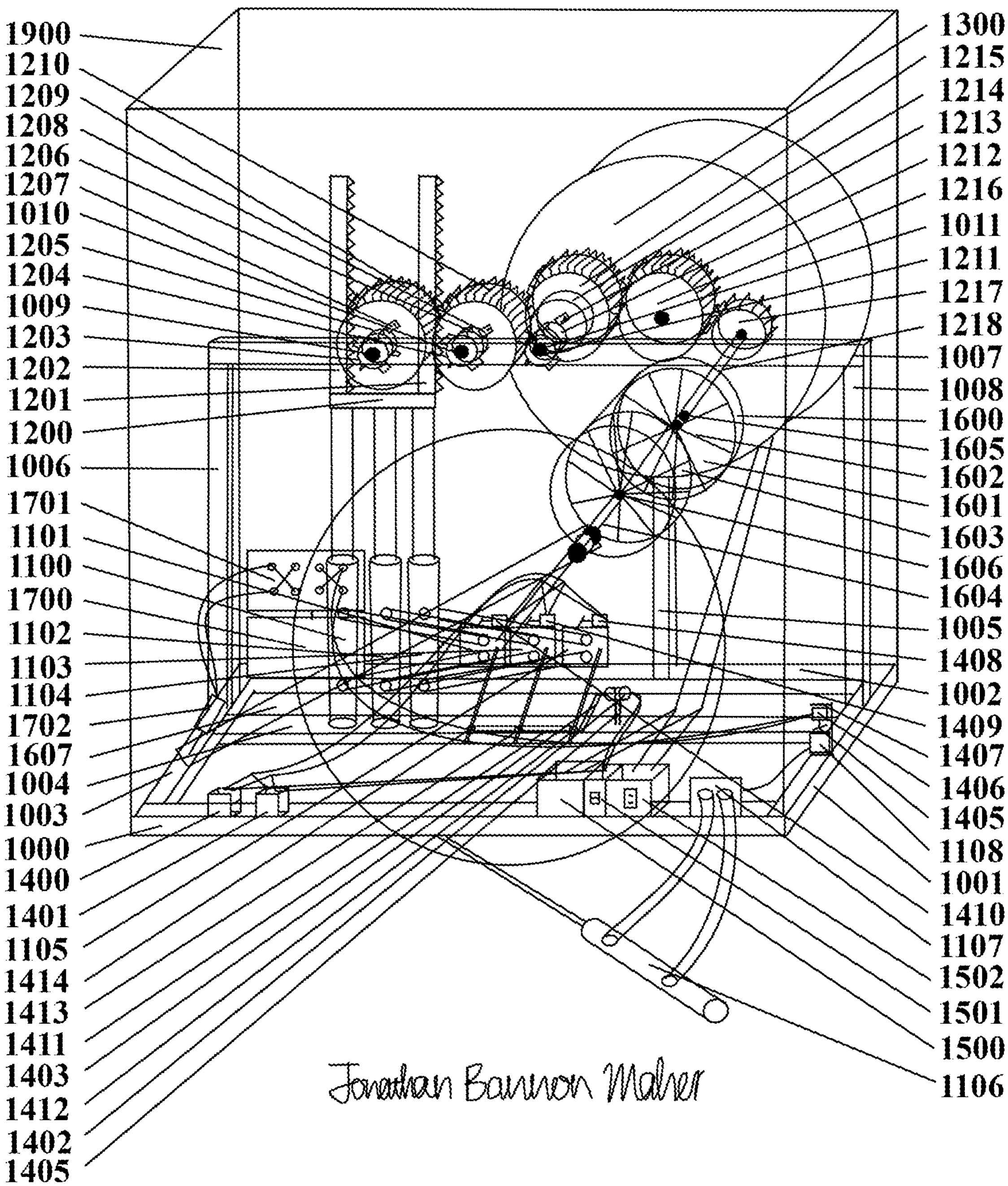
18. A non-transitory computer-readable recording medium holding stored instructions, which when executed by one or more processing devices, cause the one or more processing devices to implement a method comprising:

turning power producing units on and off to meet desired power output, either or both at specific times, or by reading the power consumption meter of one or more units, and if the average power being consumed is above a certain threshold, additional units are turned on, and if power being consumed is below a certain threshold, units are turned off.

19. A non-transitory computer-readable recording medium holding stored instructions, which when executed by one or more processing devices, cause the one or more processing devices to implement a method comprising:

adjusting engagement of a torque converter controller or hydraulic pressure controller(s), utilizing a computer controlled motor or motorized device, adjusted according to user input and or stored engagement to output levels, to control output.

FIG. 1


1900
1210
1209
1208
1206
1207
1010
1205
1204
1009
1203
1202
1201
1200
1006
1701
1101
1100
1700
1102
1103
1104
1702
1607
1004
1003
1000
1400
1401
1105
1414
1413
1411
1403
1412
1402
1405
1300
1215
1214
1213
1212
1216
1011
1211
1217
1218
1007
1008
1600
1605
1602
1601
1603
1606
1604
1005
1408
1002
1409
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1405
1108
1001
1410
1107
1502
1501
1500
1106
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FIG. 2

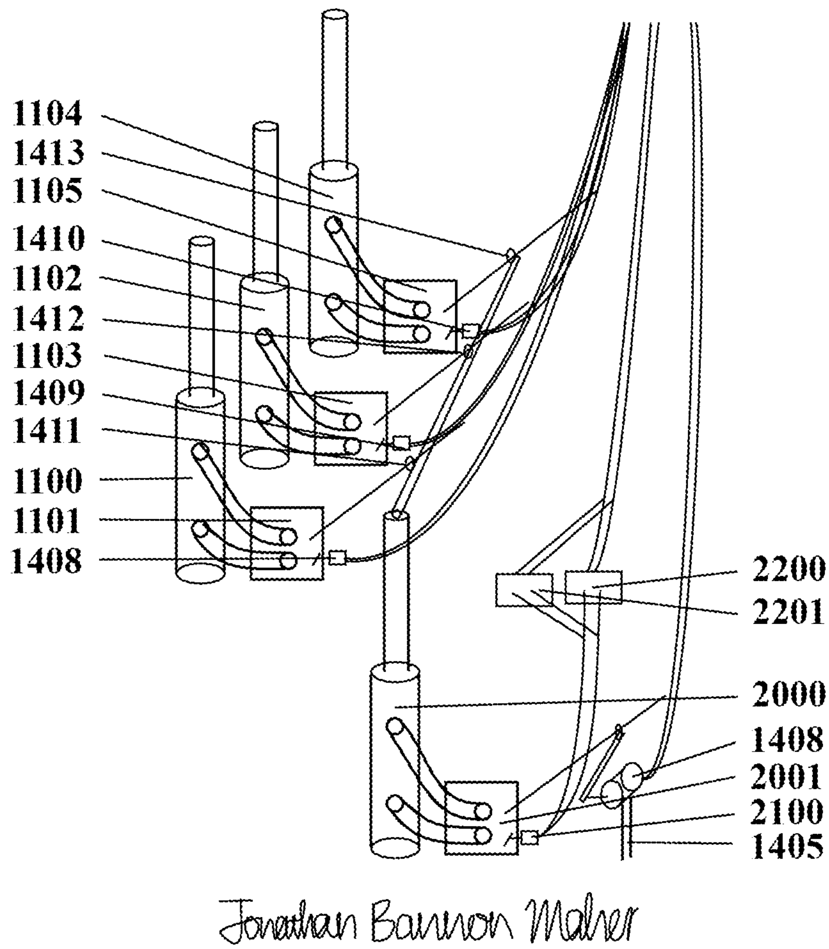
1104
1413
1105
1410
1102
1412
1103
1409
1411
1100
1101
1408
2200
2201
2000
1408
2001
2100
1405
Jonathan Bannon Maher

FIG. 3

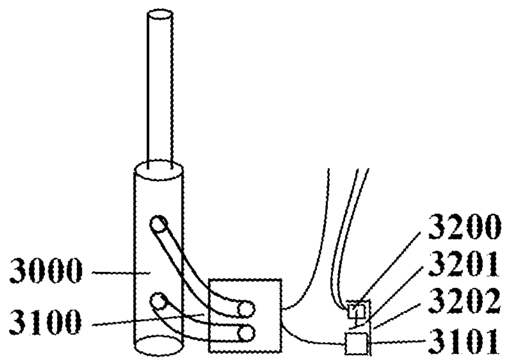

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FIG. 4

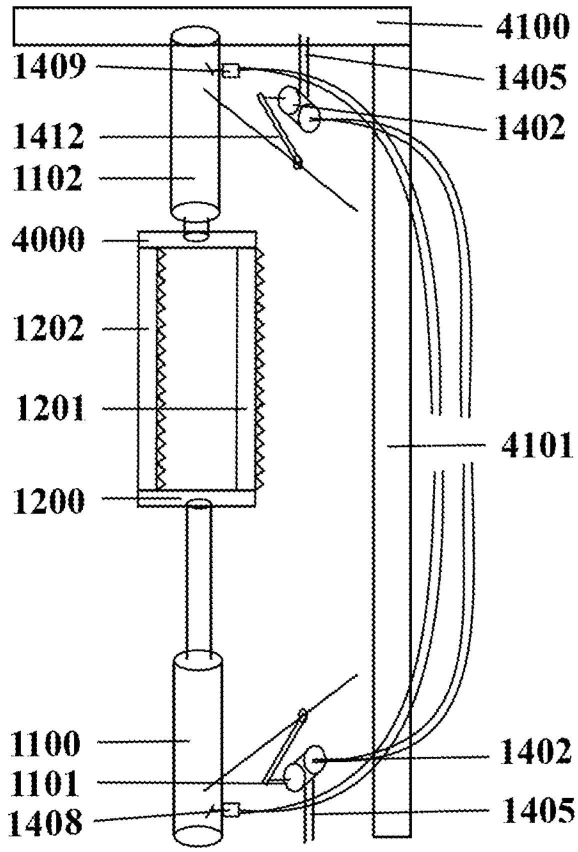

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FIG. 5

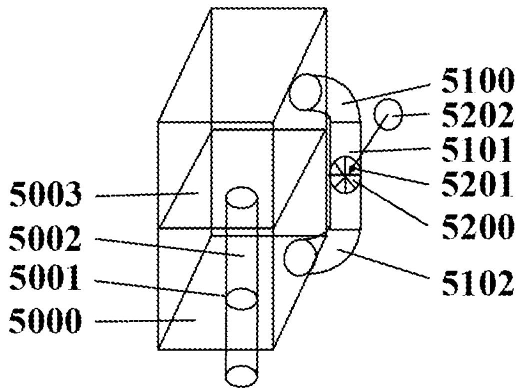

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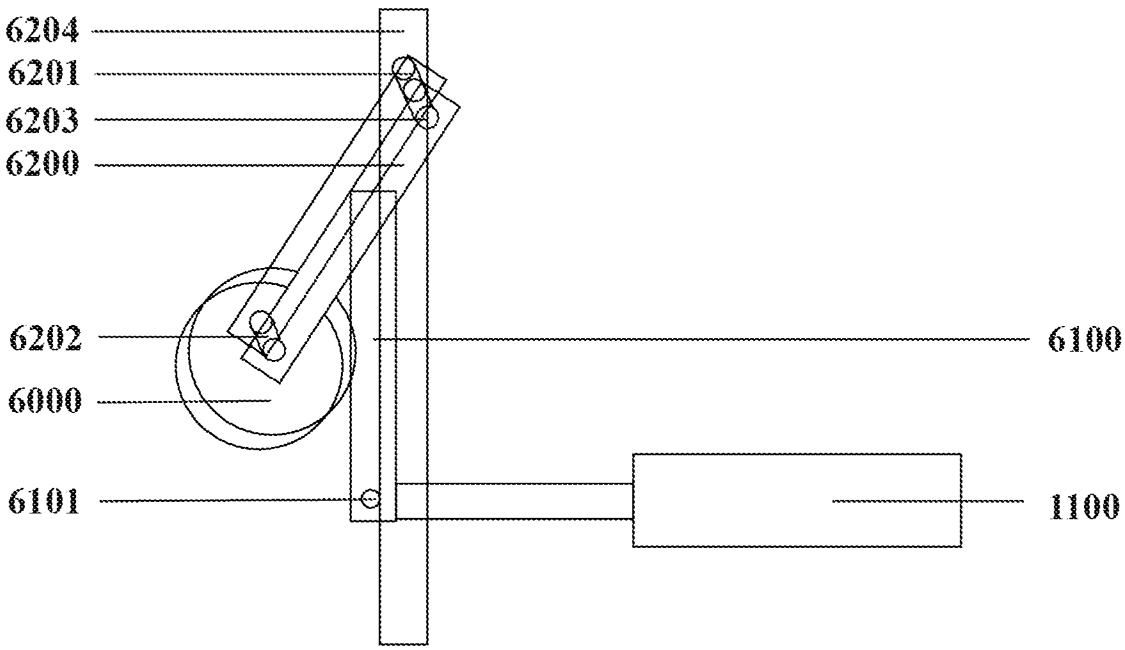
FIG. 6



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PTO/SB/16 (03-13)
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PROVISIONAL APPLICATION FOR PATENT COVER SHEET – Page 1 of 2

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No. ____________________

INVENTOR(S)

Given Name (first and middle (if any))	Family Name or Surname	Residence (City and either State or Foreign Country)
Jonathan Bannon	Maher	Ridgewood, N.J.

Additional inventors are being named on the ____________ separately numbered sheets attached hereto.

TITLE OF THE INVENTION (500 characters max):

SELF-POWERED MOTOR AND GENERATOR

Direct all correspondence to: **CORRESPONDENCE ADDRESS**

☐ The address corresponding to Customer Number:

OR

☑ Firm or Individual Name Jonathan Bannon Maher Corporation

Address 143 East Ridgewood Avenue, 262

City Ridgewood State N.J. Zip 07450

Country United States of America Telephone 212-399-9146 Email bannonmaher@bannon maher .com

ENCLOSED APPLICATION PARTS (*check all that apply*)

☐ Application Data Sheet. See 37 CFR 1.76.

☐ CD(s), Number of CDs ____________

☑ Drawing(s) *Number of Sheets* ____________

☐ Other (specify) ____________

☑ Specification (e.g., description of the invention) *Number of Pages* ____________

Fees Due: Filing Fee of $260 ($130 for small entity) ($65 for micro entity). If the specification and drawings exceed 100 sheets of paper, an application size fee is also due, which is $400 ($200 for small entity) ($100 for micro entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

METHOD OF PAYMENT OF THE FILING FEE AND APPLICATION SIZE FEE FOR THIS PROVISIONAL APPLICATION FOR PATENT

☐ Applicant asserts small entity status. See 37 CFR 1.27.

☑ Applicant certifies micro entity status. See 37 CFR 1.29.
Applicant must attach form PTO/SB/15A or B or equivalent.

☐ A check or money order made payable to the *Director of the United States Patent and Trademark Office* is enclosed to cover the filing fee and application size fee (if applicable).

☑ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the filing fee and application size fee (if applicable) or credit any overpayment to Deposit Account Number: ____________

TOTAL FEE AMOUNT ($)

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

PROVISIONAL APPLICATION FOR PATENT COVER SHEET – Page 2 of 2

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

- [x] No.
- [ ] Yes, the invention was made by an agency of the U.S. Government. The U.S. Government agency name is: ____________
- [ ] Yes, the invention was made under a contract with an agency of the U.S. Government. The name of the U.S. Government agency and Government contract number are: ____________

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SIGNATURE Jonathan Bannon Maher DATE 03/19/2018

TYPED OR PRINTED NAME Jonathan Bannon Maher REGISTRATION NO. ____________ (*if appropriate*)

TELEPHONE 212-399-9146 DOCKET NUMBER ____________

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The information provided by you in this form will be subject to the following routine uses:

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8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
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