INTERVIEW SUMMARY WITH THE EXAMINER ON MARCH 23, 2021

GRAVITATIONAL TURBINE ENGINE

- **Application No.:16/384,875**
- **Applicant: YANJUN CHE**
- **Art unit: 3649**
- **Examiner: ZARROLI, MICHAEL C**

In patent examination, there are technical Prejudice against devices that use the energy of the gravitational field, and the evidence and facts provided by the applicant are often ignored.

Technological prejudice refers to the understanding of a certain technical issue of the technical personnel in a certain period of time and in a certain technical field that is wide spreading and deviating from objective facts.

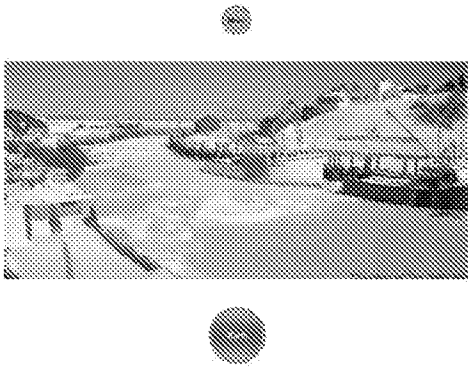
It prevents people from considering other possibilities, thereby hindering people's research and development in that technical field.

Technical Prejudice 1

For a long time, people believed that the device that obtains energy from the gravitational field is a perpetual motion machine, but this is actually wrong.

Tides is a perpetual natural power engine.

Objectively, judging from the infinite alternating process of the rising and falling of the ocean, tides is a natural engine driven by the universal gravitation of the earth and the moon. Judging from its operation for millions of years, this is a perpetual natural power engine.

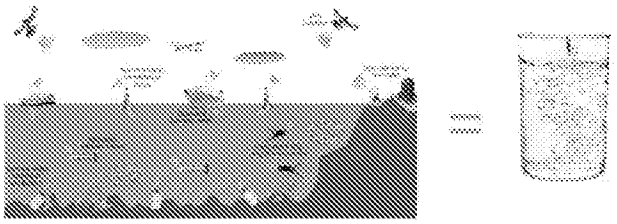


There is inexhaustible energy and inexhaustible power

The tides proves that *sea* water is static water that cannot move by itself (*sea* water is not a perpetual motion machine)

On a large scale, the ocean floor and continental shelf have become a huge container.

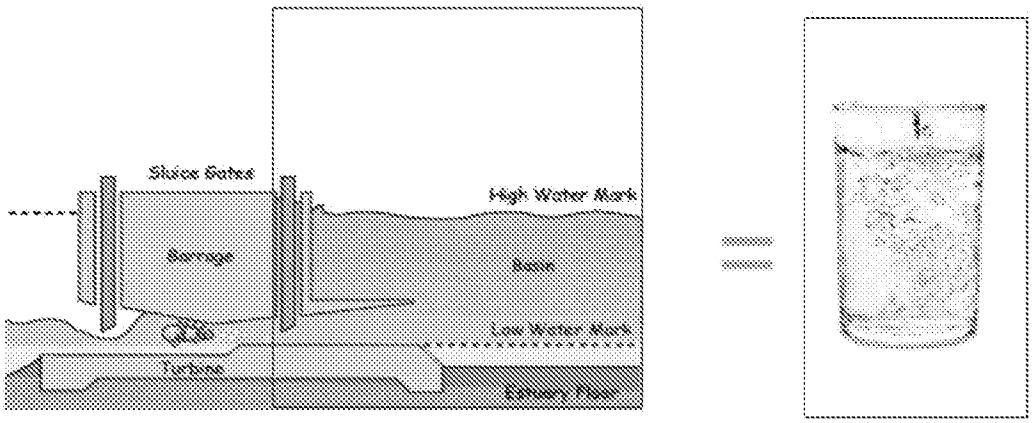
If there is no gravitational field of the moon, sea water is static water in the seabed.



The seabed and the continental shelf are the containers for the ocean to hold the sea water on the earth. On a much larger scale, the sea water is the same as the water in a water bottle, which is both static and constrained to stay in the container.

In other words, the water in the container cannot generate motion or energy by itself. The gravity of the earth and the moon drives the static seawater up and down for billions of years, causing tidal phenomena.

Tidal power generation is a device that obtains unlimited energy from the gravitational field using sea water (static water). It is not a perpetual motion machine.

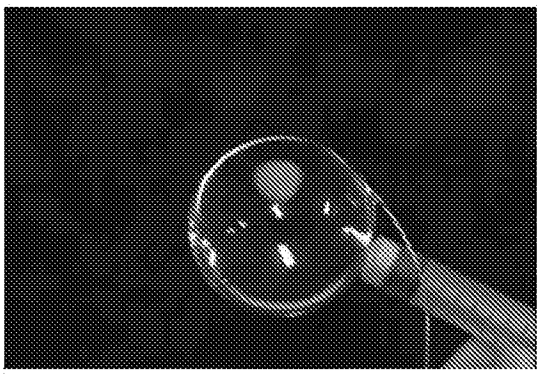


Technical Prejudice 2

For a long time, people believed that there is no infinite pressure energy in the water of a container, but this is actually wrong.

Experiments show that in space, the water in the container has no potential energy and no pressure.

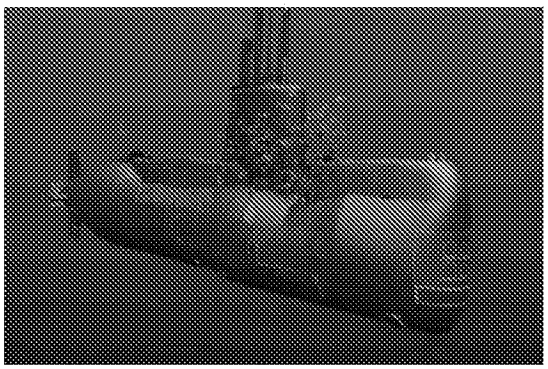
In space, water has no potential energy and no pressure.



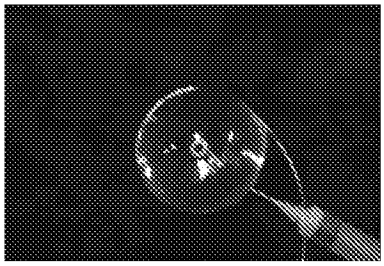
In space, objects have no potential energy.

Experiments have proved that the pressure in water exists infinitely and continuously.

The static pressure in water is unlimited energy because the energy of the gravitational field is unlimited. The infinite transmission of this "pressure energy" follows the law of conservation of energy.

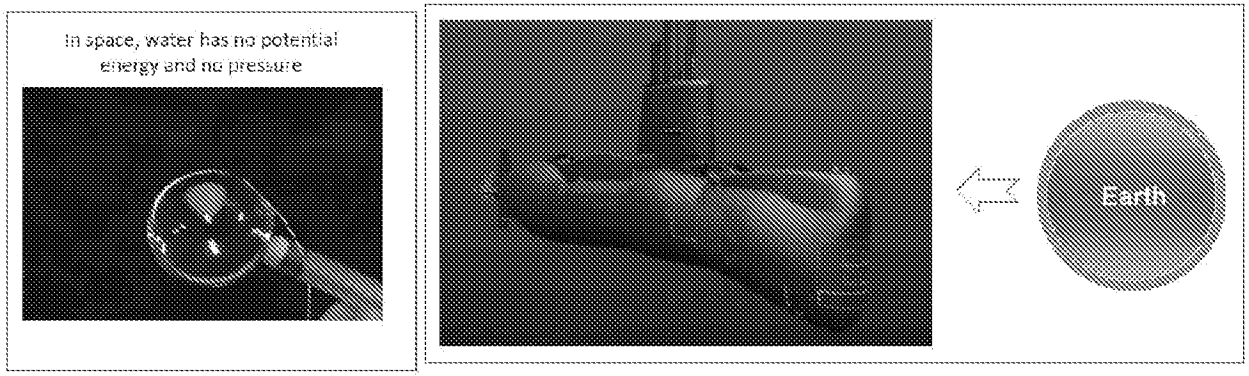


In space, water has no potential energy and no pressure.



Proof by contradiction:

Assuming that the pressure in water is not infinitely continuous, then there should be no pressure in it for even just a second, just like the water is in space.



Facts have proved:

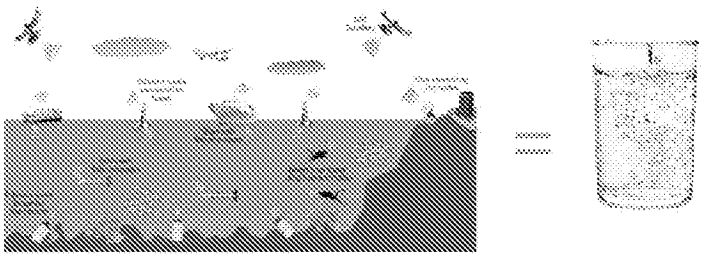
- The boats sailing on water and our experience in swimming have proved that the pressure in water has never disappeared for even 1 second.
- The pressure in water and the gravitational field in it are of an energy conservation relationship, whether the water is in a container or in a swimming pool.

Technical Prejudice 3

For a long time, people have always believed that the water in a container has no external force input. In fact, this is wrong.

The tides proves that sea water is static water that cannot move by itself (sea water is not a perpetual motion machine)

On a large scale, the ocean floor and continental shelf have become a huge container.
If there is no gravitational field of the moon, sea water is static water in the seabed.



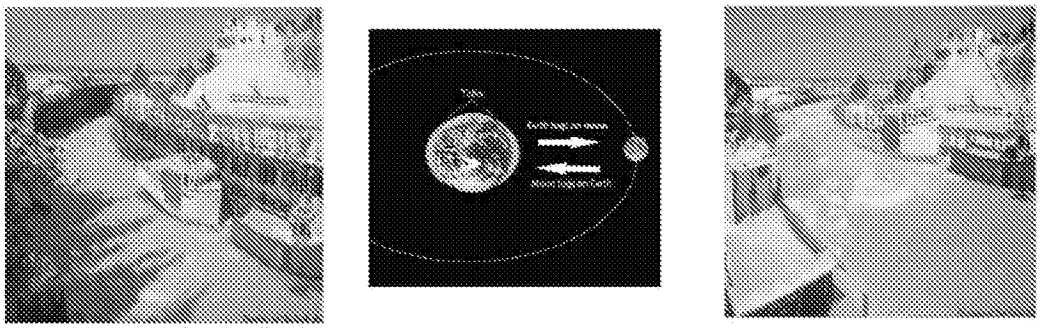
The seabed and the continental shelf are the containers for the ocean to hold the sea water on the earth. On a much larger scale, the sea water is the same as the water in a water bottle, which is both static and constrained to stay in the container.

In other words, the water in the container cannot generate motion or energy by itself. The gravity of the earth and the moon drives the static seawater up and down for billions of years, causing tidal phenomena.

The tides proves :

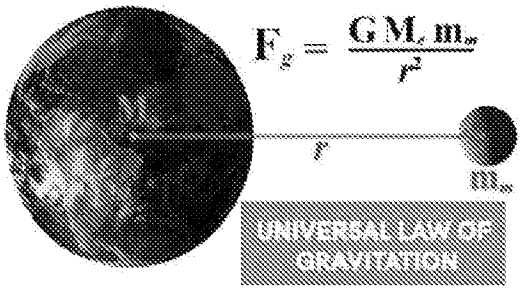
The moon's gravity field drives the rise of sea water through the universal gravitation.
The tides have proved: The moon's gravitational field drives the rise of sea water by means of universal gravitation.
The rise and fall of sea water prove that universal gravitation is the invisible external force.

The energy converting device claimed in this application use universal gravitation as an external force.

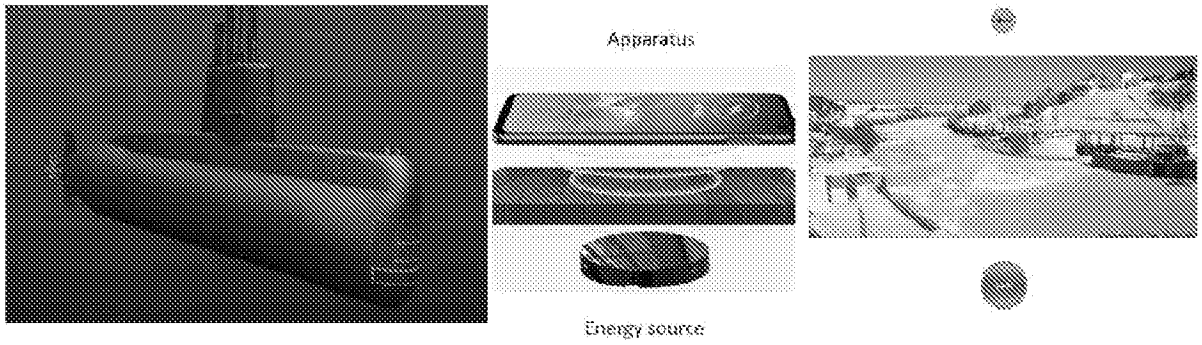


The earth's gravitational field pulls the fall of sea water through universal gravitation.

The energy converting device claimed in this application use universal gravitation as an external force.



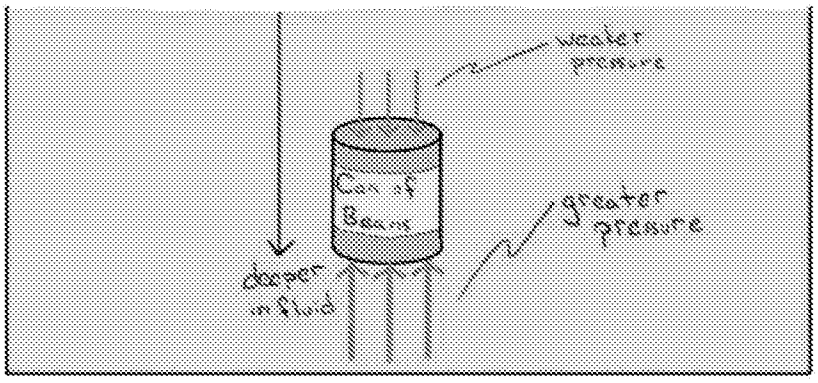
The tides prove that the pressure in the water is transmitted to the water by the gravitational field and it is infinite.



Technical Prejudice 4

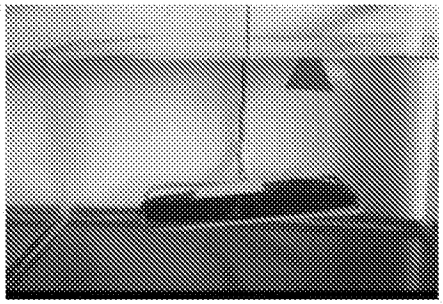
The people have had a kind of understanding over a long time that is, a floating body definitely floats in water. In fact, this is wrong.

The name of this upward force exerted on objects submerged in fluids is the buoyant force.

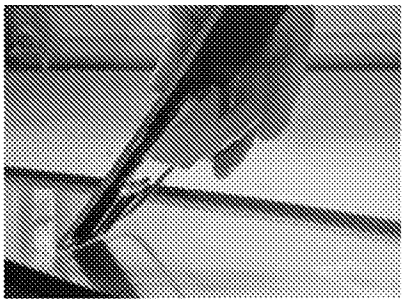


Experiments have proved that the floating body cannot move upwards without the upward pressure of the water.

The floating body cannot float due to the absence of water at the bottom.



The floating body can float due to the buoyancy at its bottom



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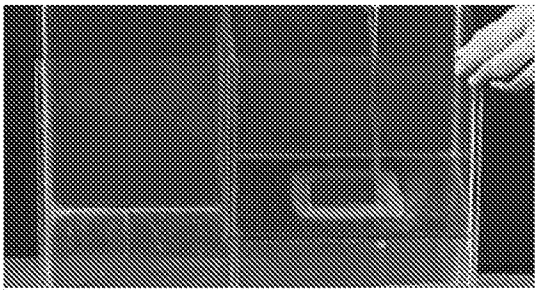
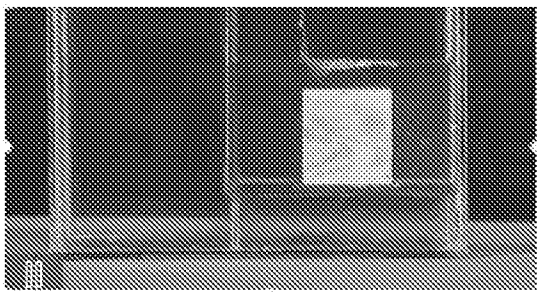


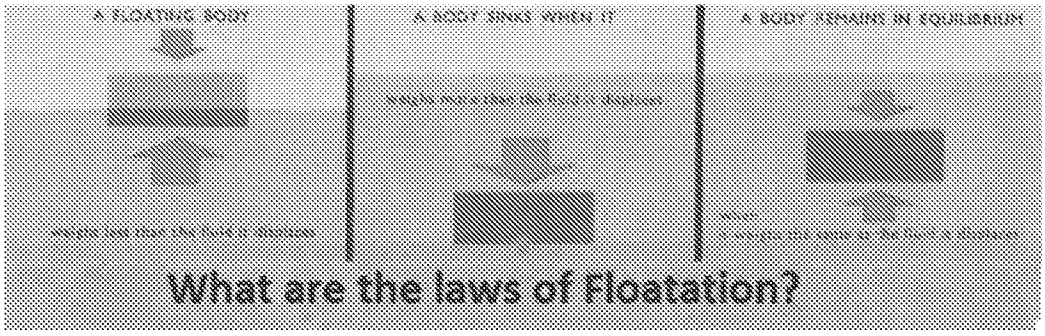
The floating body can float due to the buoyancy at its bottom



Technical Prejudice 5

The same object can only move in one direction in a fluid. This is actually wrong.

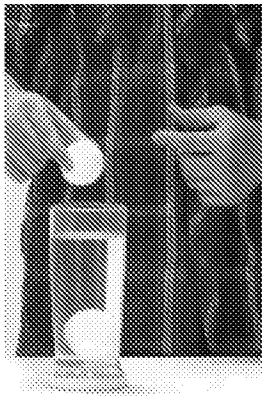
Floatation depends upon the density. If an object has density less than the density of water, it floats; Instead, it sinks.

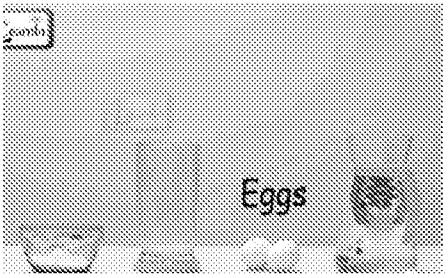


The law of nature: The same object obtains the downward and upward movement power by means of different densities of the fluid.

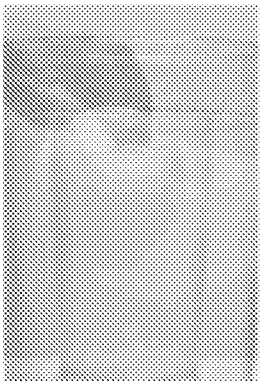
This principle allows the same egg to be a floating body or a sinking body in fluids of different densities (water and salt water). The applicant has proved by experiments that a floating body can realize an upward or a downward movement according to the method arranged in this application, so that the total entropy of the system remains unchanged.

The eggs move downward

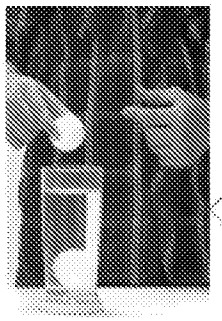




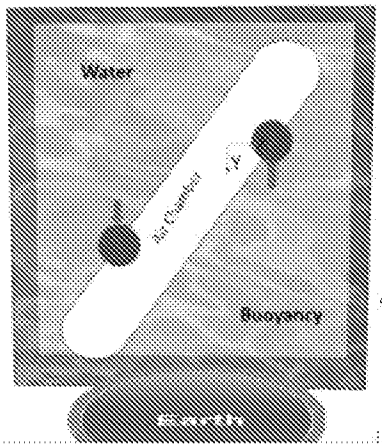
The eggs move upward



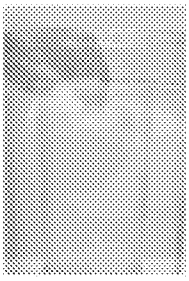
If the density of the fluid is different, the direction of movement will be different.



The density of the object is greater than the density of air/water



The density of the object is less than the density of water (salt water)

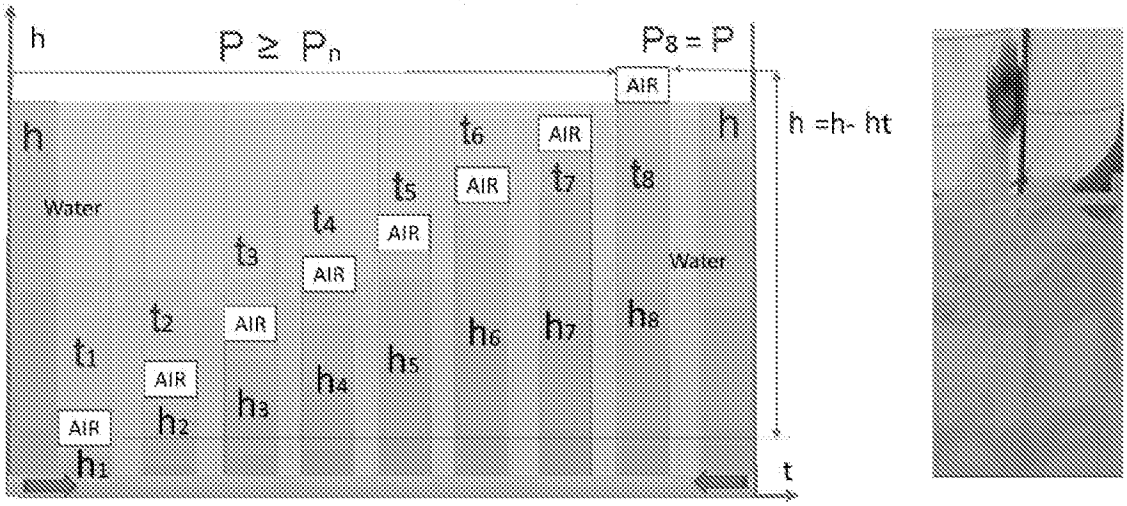


Technical Prejudice 6

People think that the floating body in a container floats spontaneously, instead of under the influence of water movement. In fact, this is wrong.

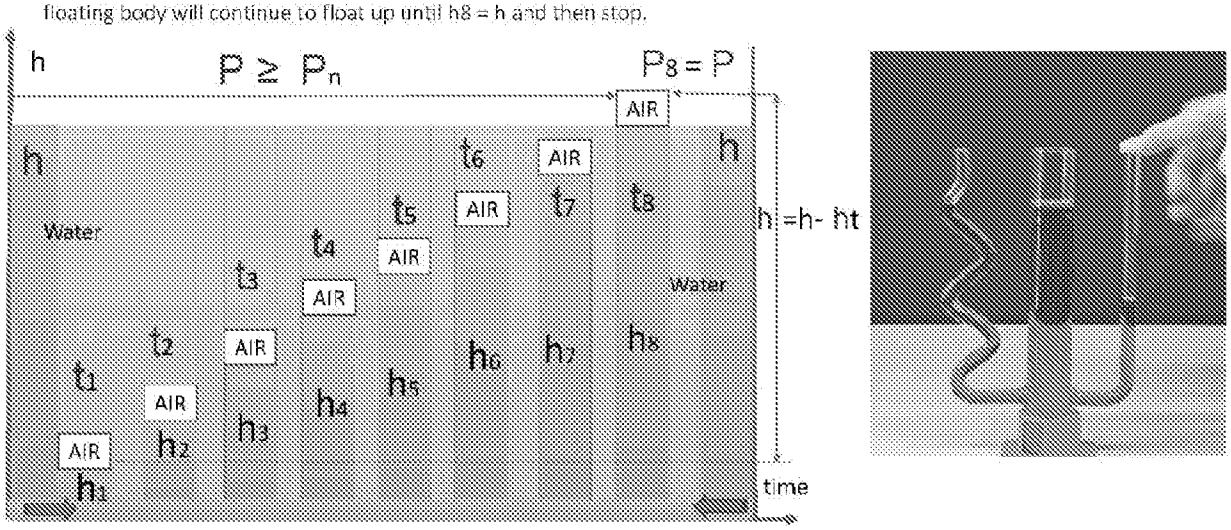
The upward movement of a floating body driven by water

A schematic diagram of a floating body (with air inside) floating up along an angle of inclination, where h is the height of the liquid column, and p is the effect of pressure.



The upward movement of a floating body is the result of the autonomous upward movement of water

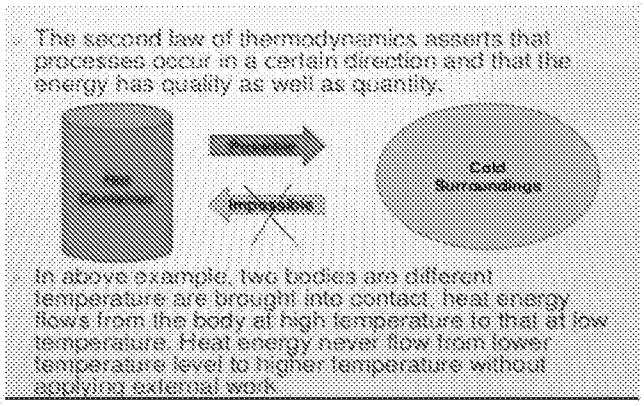
At time t1~t7, since the height of the liquid column below the floating body is h1 <h2 <h3 <h4 <h5 <h6 <h7 <h8, the floating body will continue to float up until h8 = h and then stop.

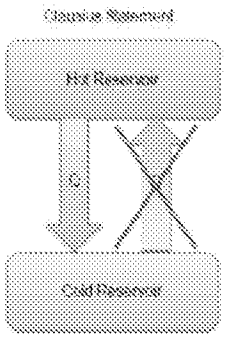


Technical Prejudice 7

The second law of thermodynamics can be widely applied in all fields.

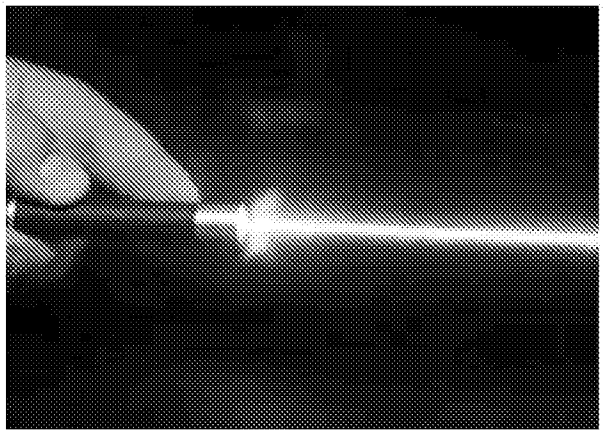
Experiments show that the second law of thermodynamics is not applicable to an isolation system with a reversible natural process.



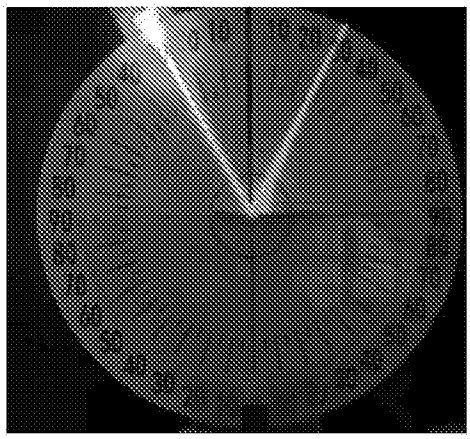


Experiments show that the second law of thermodynamics does not apply to an isolation system with a reversible natural process.

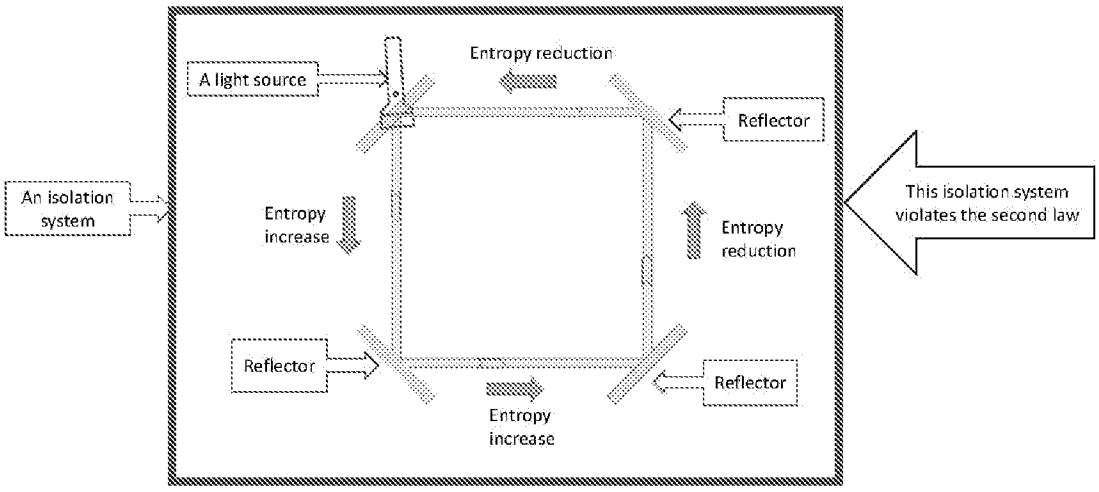
Light travels in a straight line and increases entropy.



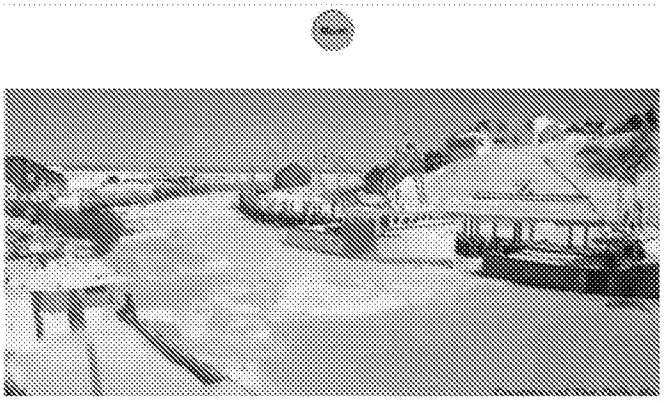
The reflected light is a reversible straight line of light, and the entropy remains unchanged.



Prove: The second law of thermodynamics is not applicable to a system with natural circulation

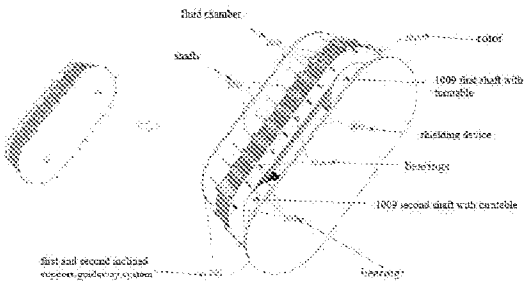


The second law of thermodynamics is not applicable to a system with natural circulation.

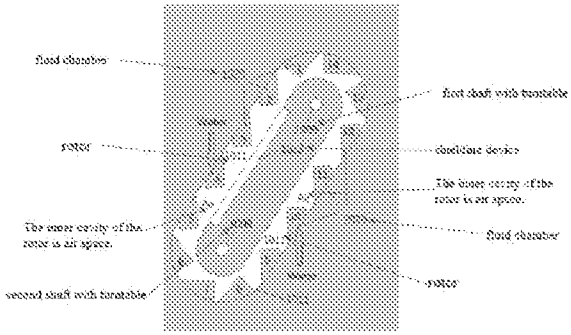


The energy source

In this application, the rotor in a container filled with water continuously **obtains energy and external force from the universal gravitation emitted by the earth's gravity field.** In the energy conversion device claimed in this application, the function of the shielding device is to shield one side of the rotor so that this side is not affected by the buoyancy potential energy, but only by the gravitational potential energy, and that the water in the container is divided into two kinds of energy fluid fields, the fluid gravitational potential energy and the buoyancy potential energy.

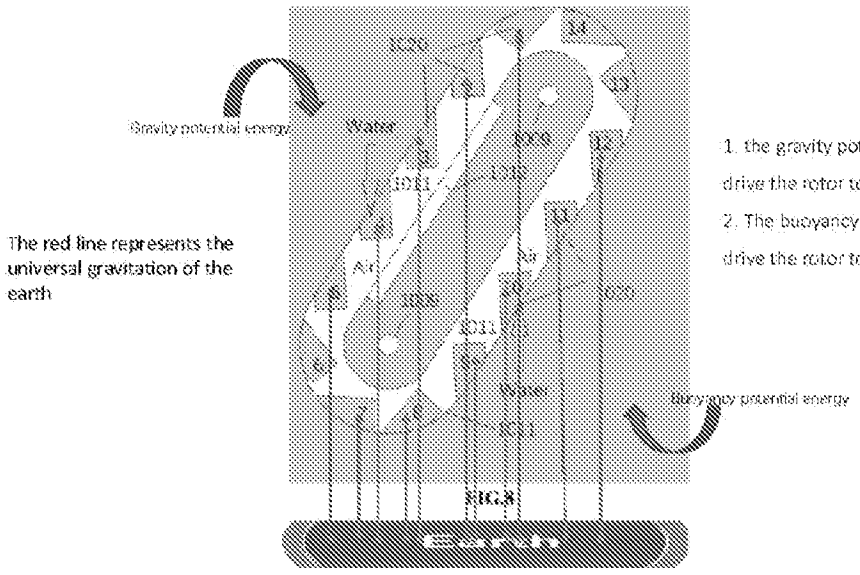


Annotated Fig. 7



Annotated Fig. 8

According to the principles of conservation of energy and mechanical energy, the rotor continuously converts the two kinds of fluid potential energy (the gravity potential energy and the buoyancy potential energy) of the gravitational field into kinetic energy.



The red line represents the universal gravitation of the earth

1. the gravity potential energy of water: drive the rotor to move downward.
2. The buoyancy potential energy of water: drive the rotor to move upward.

Respectfully submitted by Applicant

YANJUN CHE

/YANJUN CHE/

March 23, 2021

AMENDMENTS TO THE DRAWINGS

Applicant has added the annotated sheet showing changes of FIGS 1, 3, 5, 9,10 and 11.

Attachment: Annotated Sheet Showing Changes are attached.

REMARKS/ARGUMENTS

In the Notice of Non-Compliant, the amendment document filed on 12/22/2020 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4.

Applicant responds to the office action as follows:

Applicant has marked the amended paragraphs, and has deleted the underline for the added new paragraphs.

Applicant has added New paragraphs of [0050], [0051], [0053] and [0054] to further clarify the invention in the detailed description section. A substitute specification with a marked-up copy and a substitute specification with a clean copy is attached. No new matter is added.

The following remarks herein are considered to be responsive thereto.

Objections to the claim

In the previous response, claims 1-22 were presented for examination were pending in the present application before this amendment. By the amendment, claims 1-22 are canceled. Claims 23-28 are newly added to define the claimed invention. Support can be found all through the specification, for example, in FIGS. 7 and 8 of the present application. Support can also be found all through the specification, for example, in paragraphs [0032]-[0039] of the present application. No new matter is added.

Reconsideration and withdrawal of the objections to the claims are respectfully submitted.

Objections to the drawings

Applicant has added the annotated sheet showing changes of FIGS 1, 3, 5, 9,10 and 11.

The annotated sheet showing changes is provided in response to this Office Action.

Reconsideration and withdrawal of the objections to the drawings are respectfully submitted.

NEW CLAIMS 23-28

Claim 23 is illustrated with FIG. 7 and 8.

Present claim 23 recites an energy conversion device for converting fluid pressure energy into mechanical energy, comprising:

a container filled with fluid;

a first inclined support-guideway system having a racetrack;

a second inclined support-guideway system having a racetrack, being in parallel to the first inclined support-guideway system and being opposed to the first support-guideway system;

a first shaft with turntable;

a second shaft with turntable;

a shielding device, comprising:

at least one rotating element and lubricant are arranged to a shielding substrate; the elastic sealing element surrounds the shielding substrate; the shielding device is fixed on the support-guideway system;

a transmission device comprising:

a rotor is connected to the first shaft with turntable and the second shaft with turntable so that the rotor rotates on it, and the rotor and the shielding device form a dynamic seal to block the fluid pressure;

at least one first fluid chamber attached to and located above the inner cavity of the rotor;

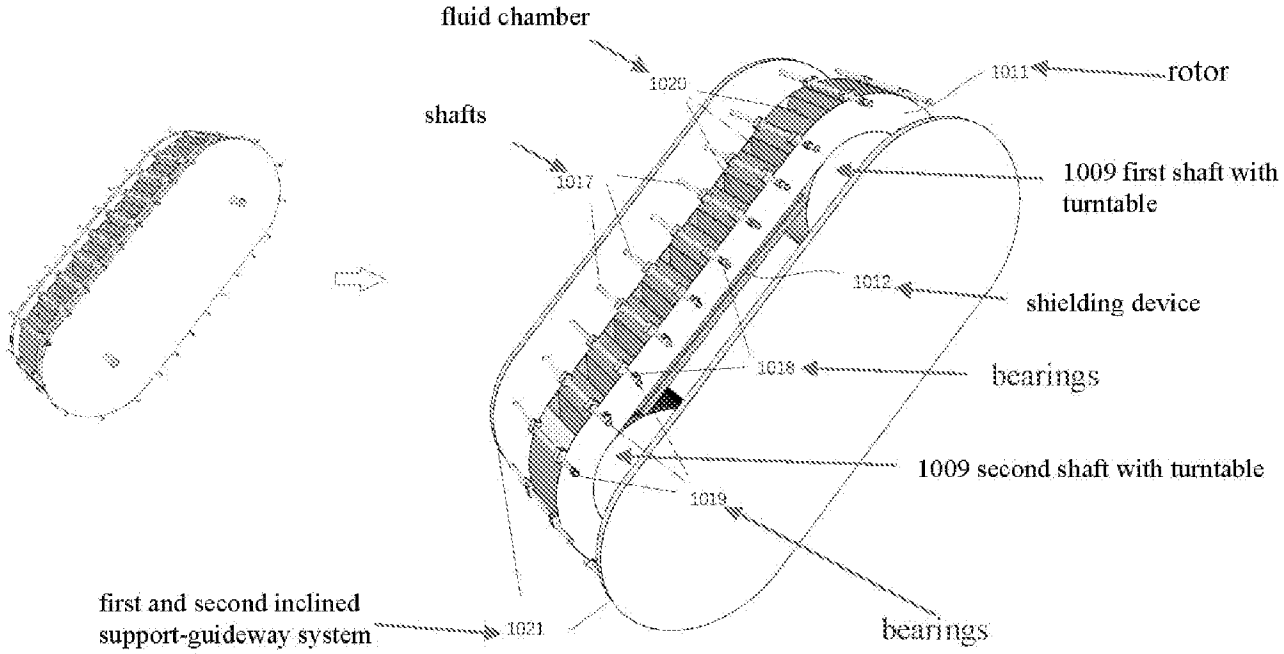
at least one second fluid chamber attached to and located below the inner cavity of the rotor;

a plurality of shafts attached to the rotor, wherein

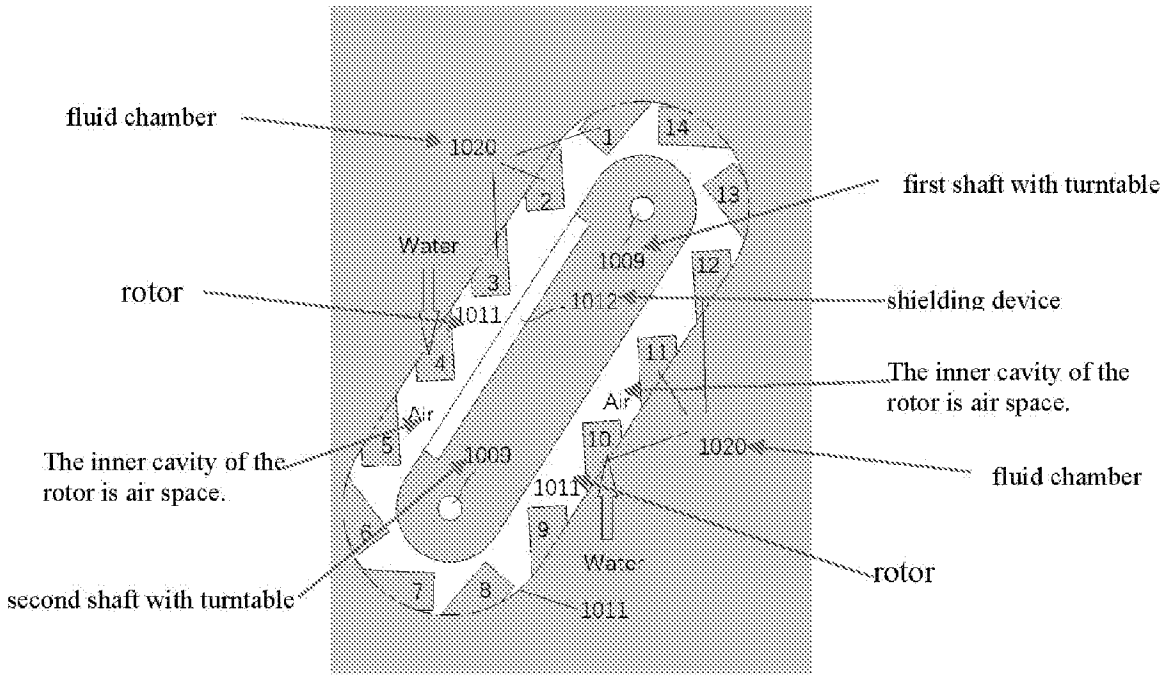
the first inclined support-guideway system and the second inclined support-guideway system are separated by the rotor; each shaft has two bearing on each end of the shaft and the two bearing are disposed into one of the support-guideway system having a racetrack so that the transmission device rotates along the first inclined support-guideway system having a racetrack and the second inclined support-guideway system having a racetrack; and

an energy output shaft attached to and rotating with the rotor, wherein each end of the energy output shaft has a bearing that the bearing is arranged on the side of the support-guideway system to guide the rotor;

wherein the upper part of the rotor shields the pressure of the fluid on the at least one first fluid chamber from the bottom using shielding device so that the at least one first fluid chamber is moveable under the gravity force in a downward direction, and the lower part of the rotor is subjected to the pressure of the fluid on the at least one second fluid chamber so that the at least one second fluid chamber is movable under the buoyance force in an upward direction, thereby the at least the first fluid chamber and at least one second fluid chamber rotating along the first inclined support-guideway system and the second inclined support-guideway system and the energy conversion device outputting energy through the energy output shaft.



Annotated Fig. 7



Annotated Fig. 8

[0032] FIG. 7 is a schematic diagram illustrating a turbine engine with an opening on the outer surface of a rotor in accordance with aspects of the present technology. In certain embodiments, the turbine engine comprises a rotor 1011 with an opening on the surface and a plurality of fluid chambers 1020 are installed inside the rotor 1011. The surface of the rotor 1011 comprises shaft 1017 and bearings 1018 and 1019. The turbine engine further comprises a support-guideway system 1021 and a shielding device 1012. Wherein the bearing 1018 is rotated on the support-guideway system 1021. Figure 8 is a graphical representation of the induced fluid pressure of the rotor fluid chamber in a static fluid in accordance with aspects of the present technology.

[0033] FIG. 8 illustrates a schematic diagram of the fluid pressure induced by the rotor fluid chamber in a static fluid in accordance with aspects of the present technology in Figure 7. As shown, water enters all of the fluid chambers 1020 through the rotor 1011:

[0034] The fluid chamber 1020 (1, 2, 3, 4, 5, 6) is located above the shielding device: since the rotor 1011 at this position is not subjected to the upward pressure of water, the water and the fluid chambers 1020 have gravitational potential energy with respect to the bottom of the rotor, and the gravity of the water and fluid chamber 1020 generates a gravitational torque based on the shaft 1009; the water begins to move downwards;

[0035] Fluid chamber 1020 (8, 9, 10, 11, 12, 13): since the rotor 1011 at this position is subjected to upward pressure of water, these fluid chambers 1020 are subjected to buoyancy, and thus the gravity of these fluid chambers 1020 is reduced, and the fluid is based on the shaft 1009 generates a buoyancy torque (the buoyancy potential energy is generated when the fluid chamber 1020 is a floating body); the water begins to move upwards;

[0036] Therefore, the gravity torque and buoyancy torque of the fluid will be converted into rotational torque based on the shaft 1009 to drive the turbine engine to start rotating output;

$$\sum W = \sum W \text{ left} - (-\sum W \text{ right}) = (\Delta P \text{ down} \times \Delta h) - (-\Delta P \text{ Up} \times \Delta h) = (\Delta P \text{ down} + \Delta P \text{ up}) \times \Delta h .$$

Where P is the fluid pressure and h is the height of the relative axis of the fluid chamber.

[0037] It is, therefore, to be understood that the power of the turbine engine, ie the potential energy, is proportional to the depth of the fluid and to the spatial height of the rotor. With the turbine engine in the same volume, installing the turbine engine at the bottom of the container and increasing the height of the fluid can increase the power of the output.

[0038] It is, therefore, to be understood that the interaction of the fluid in the outer space of the rotor and the interior of the rotor produces reciprocating power while the fluid chamber is self-driven to circulate up and down.

[0039] It is, therefore, to be understood that the cross-sectional shape of the rotor is trapezoidal/triangular/arc shaped to effectively utilize the horizontal fluid pressure.

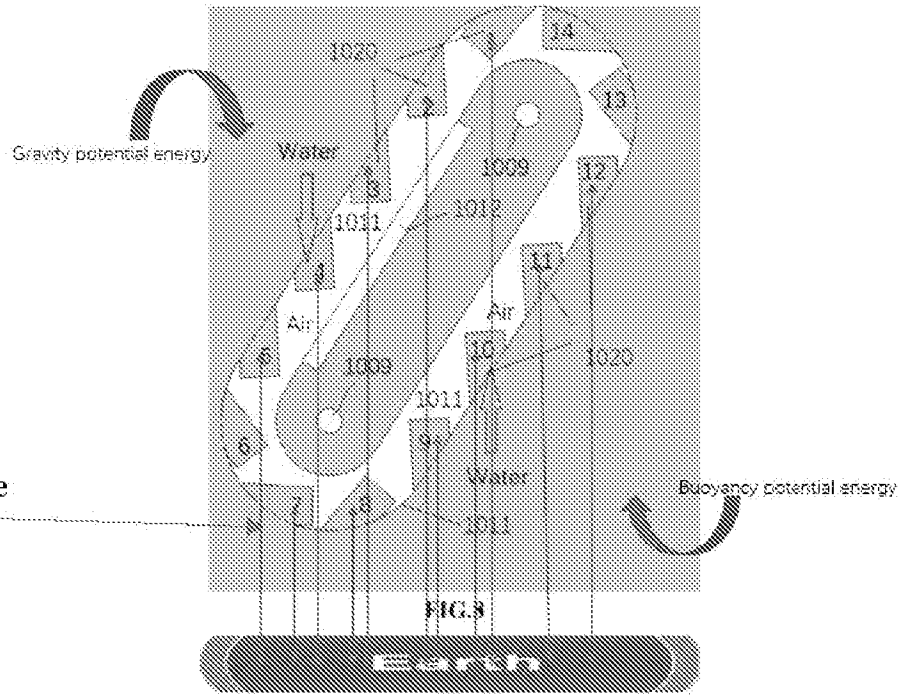
The following is the applicant's further explanation that this application is not a perpetual motion machine.

1. **The energy source:**

1.1 In this application, the rotor in a container filled with water continuously **obtains energy and external force through the universal gravitation emitted by the earth's gravity field.** The claimed energy conversion device in this application, wherein, the function of the shielding device is to shield one side of the rotor so that this side is not affected by the buoyancy potential energy, but only by the gravitational potential energy, so that the water in the container is divided into two kinds of energy fluid fields, fluid gravitational potential energy and buoyancy potential energy.

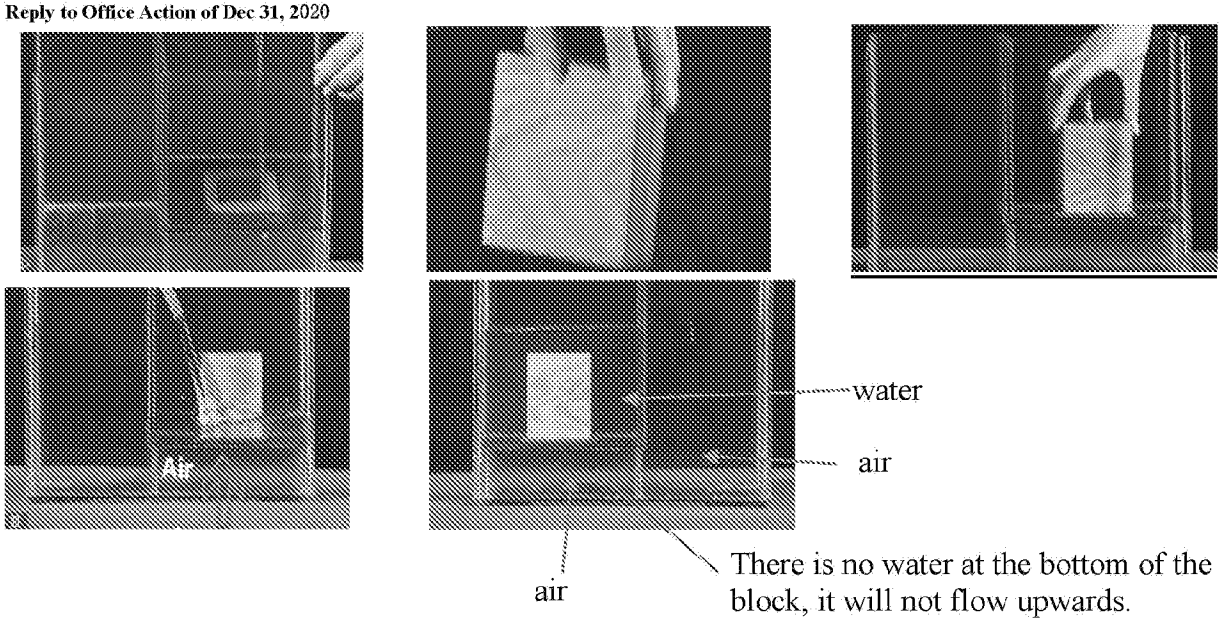
1.2 According to the principles of conservation of energy and mechanical energy, the rotor continuously converts the two kinds of fluid potential energy (the gravity potential energy and the buoyancy potential energy) of the gravitational field into kinetic energy.

The gravity potential energy of water: drive the rotor to move downward;
The buoyancy potential energy of water: drive the rotor to move upward.

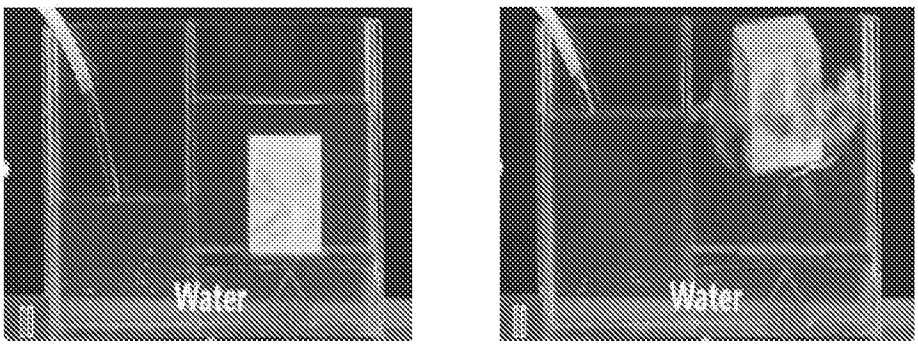


The red line indicates the universal gravitation

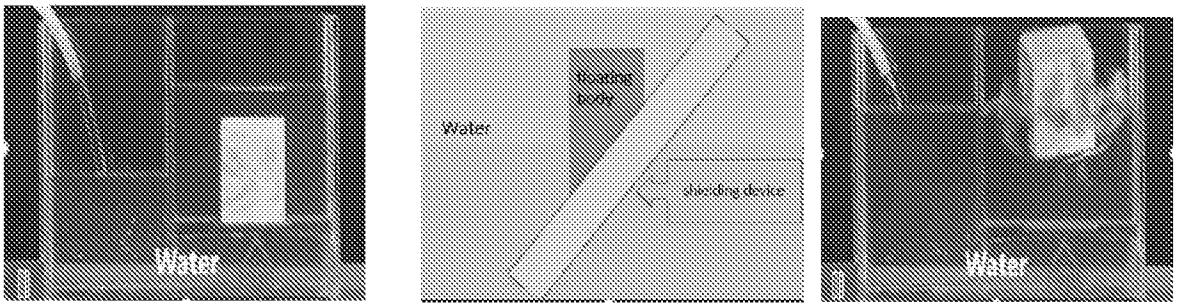
2. **The shielding device:**
    - The principle that the shielding device shields the buoyancy of the floating body
      There is no water (buoyancy) below the floating body, so that the floating body loses its buoyancy and it cannot move upwards.
      The experiment has shown that when the floating body shielded from buoyancy, it cannot float.



- The following exprinment shows that the floating body is subjected to buoyancy and flows up.



2.1 The shielding device plays the role of shielding buoyancy: one side of the rotor is shielded by the shielding device and this side is not subjected to the buoyancy and loses the power to move upward.



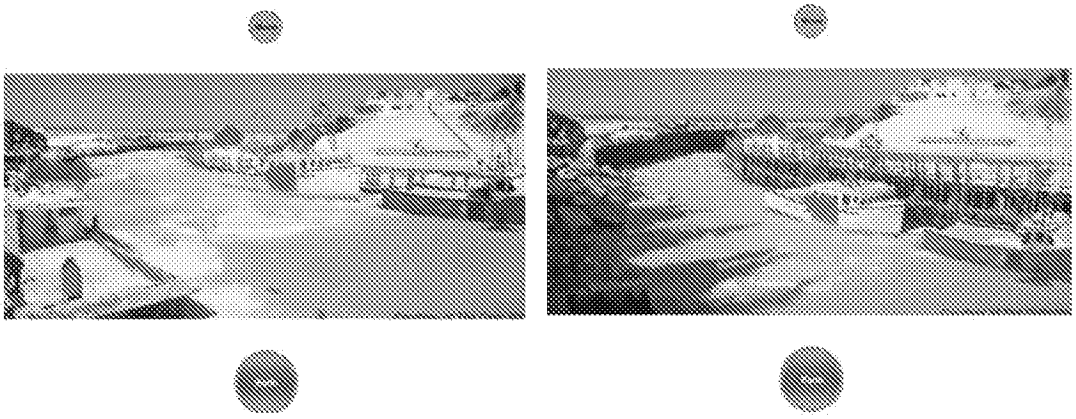
3. Technology bias

It is mistaken to think that the water in a container does not have unlimited energy.

Water is the medium through which the gravitational field transmits energy, and the gravitational field is an energy source, an infinite energy source.

3.1 Tides is a perpetual natural power engine.

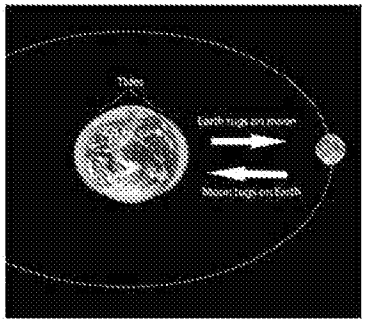
Objectively, judging from the infinite alternating process of the rising and falling of the ocean, tides is a natural engine driven by the universal gravitation of the earth and the moon. Judging from its operation for millions of years, this is a perpetual natural power engine.

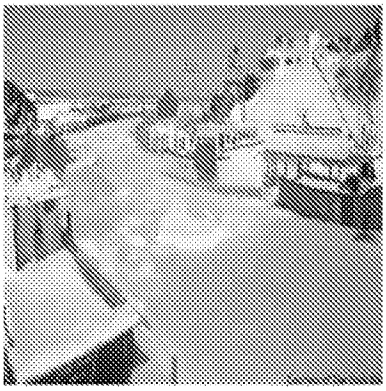


4. Tides proves that the energy of the gravitational field drives the movement of sea water.

The rise and fall of sea water prove that universal gravitation is an invisible external force, and it is also an external force of the energy converting device in this application.

The moon's gravity field drives the rise of sea water through the universal gravitation.
The earth's gravitational field pulls the fall of sea water through universal gravitation.

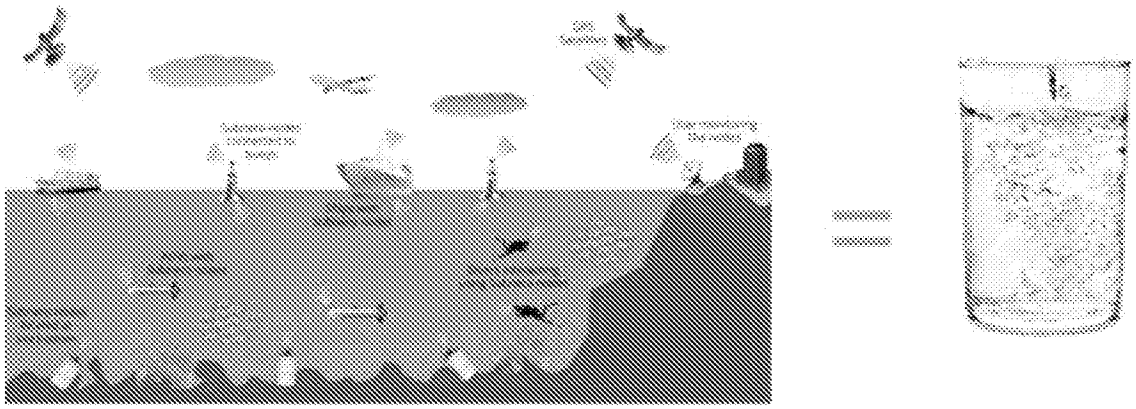




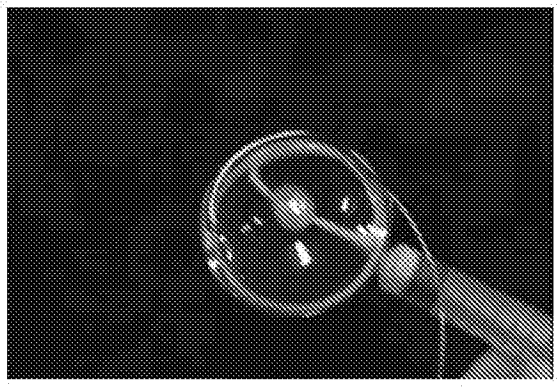
4.1 The tides proves that sea water is static water that cannot move by itself (sea water is not a perpetual motion machine)

On a large scale, the ocean floor and continental shelf have become a huge container. If there is no gravitational field of the moon, sea water is static water in the seabed.The seabed and the continental shelf are the containers for the ocean to hold the sea water on the earth. On a much larger scale, the sea water is the same as the water in a water bottle, which is both static and constrained to stay in the container.

In other words, the water in the container cannot generate motion or energy by itself. The gravity of the earth and the moon drives the static seawater up and down for billions of years, causing tidal phenomena.



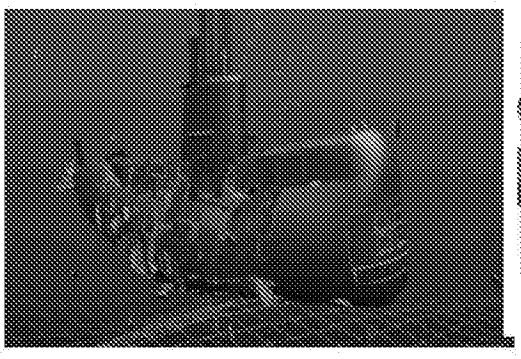
5. Recognized scientific principle: In space, the water in the container has no potential energy and no pressure.

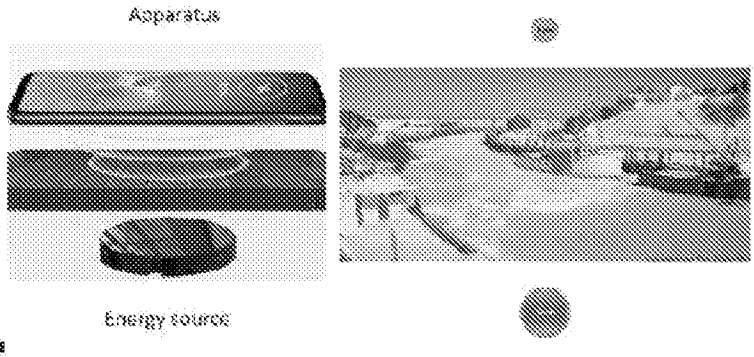


6. Tides proves that the pressure is transferred to the water by the gravitational field and it is infinite.

The static pressure energy in the water is provided by the gravity field, which is the same as the energy used by the tides.

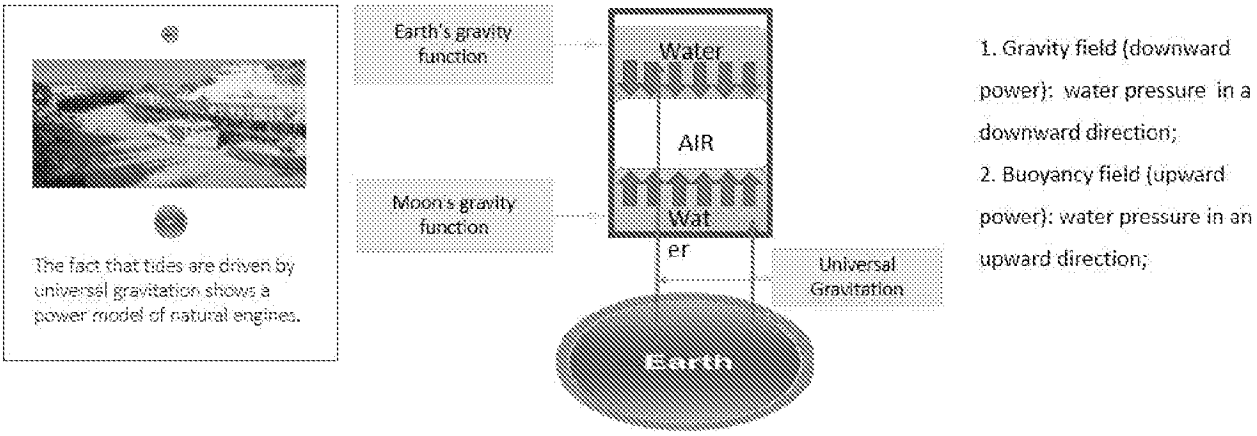
The static pressure in the water is unlimited energy because the energy of the gravitational field is unlimited. The infinite transmission of this "pressure energy" follows the conservation of energy.





7. Application of tidal dynamics principle in this application

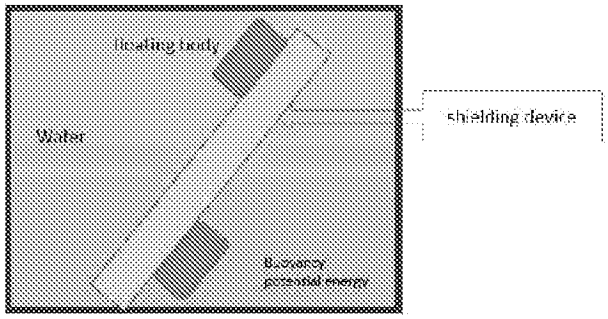
The energy conversion device claimed in this application powered by universal gravitation to obtain power similar to the tidalower.



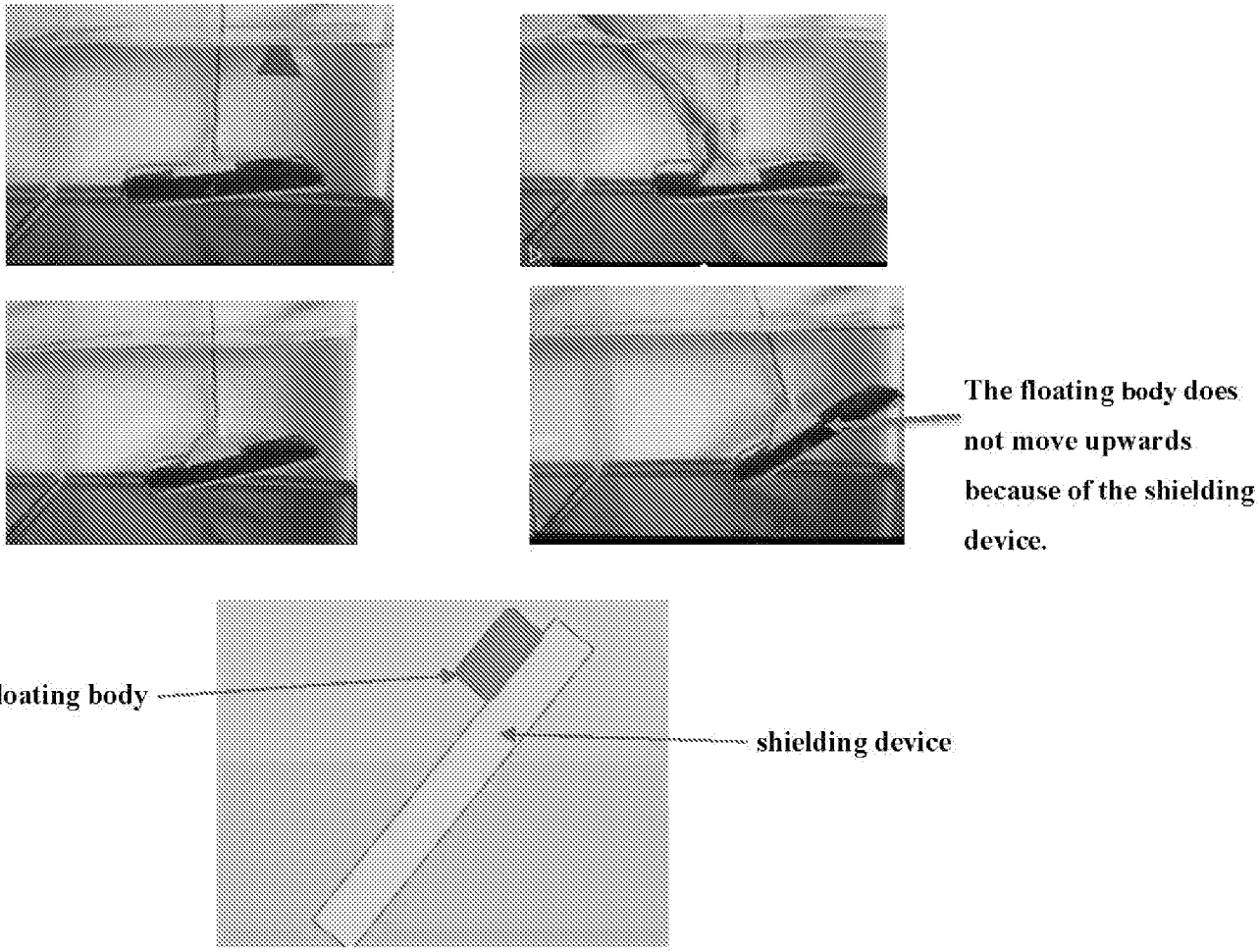
The water in a container is divided into a gravitational fluid field and a buoyant fluid field.

7.1 Apply the principle of tides: use water in a container to obtain energy, like tidal energy.

The use of shielding device to obtain fluid power in two directions in water.



<u>The role of the shielding device: allow the rotor that has lost its buoyancy to slide down on the shielding device. After the shielding device shields the buoyancy, the floating body cannot move upwards.</u>



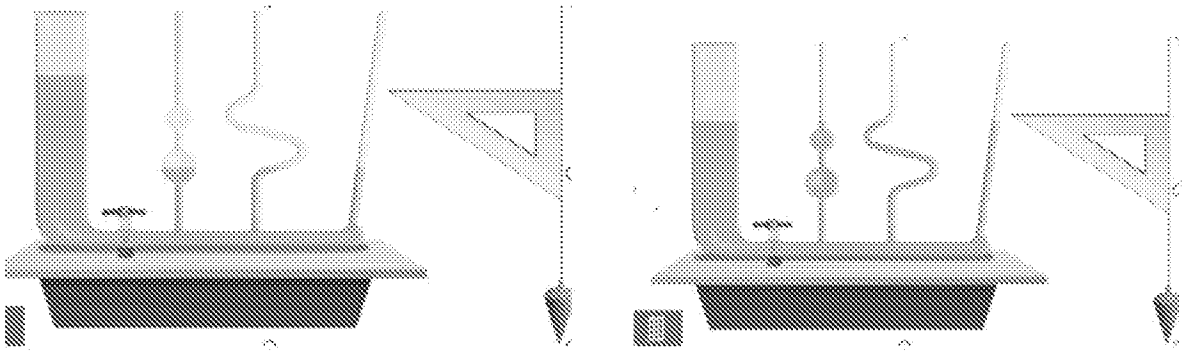
8. Proof: In this application, the water in the container moves like a tide. In the area of buoyancy potential energy, water moves autonomously under the action of the gravity field.

8.1. Principles of Pascal and Communicating vessels

Communicating vessels or **vases**[1] are a set of containers containing a homogeneous fluid and connected sufficiently far below the top of the liquid: when the liquid settles, it balances out to the same level in all of the containers regardless of the shape and volume of the containers. If additional liquid is added to one vessel, the liquid will again find a new equal level in all the connected vessels. This was discovered by Simon Stevin as a

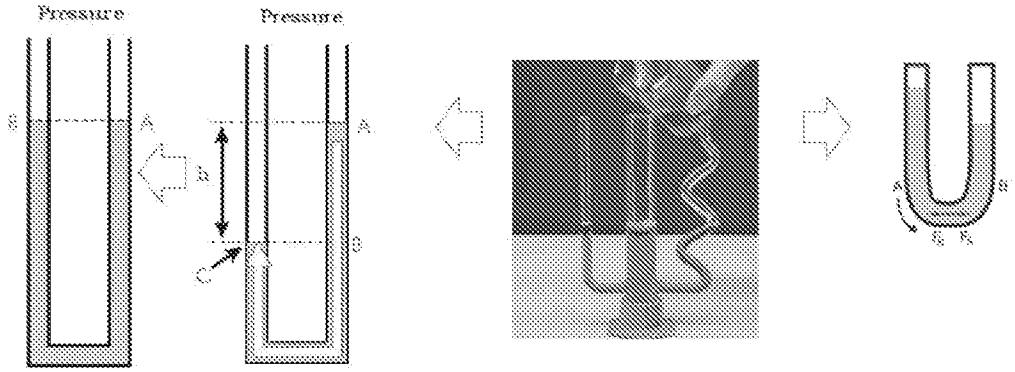
consequence of Stevin's Law.[2] and occurs because gravity and pressure are constant in each vessel (hydrostatic pressure).[3]

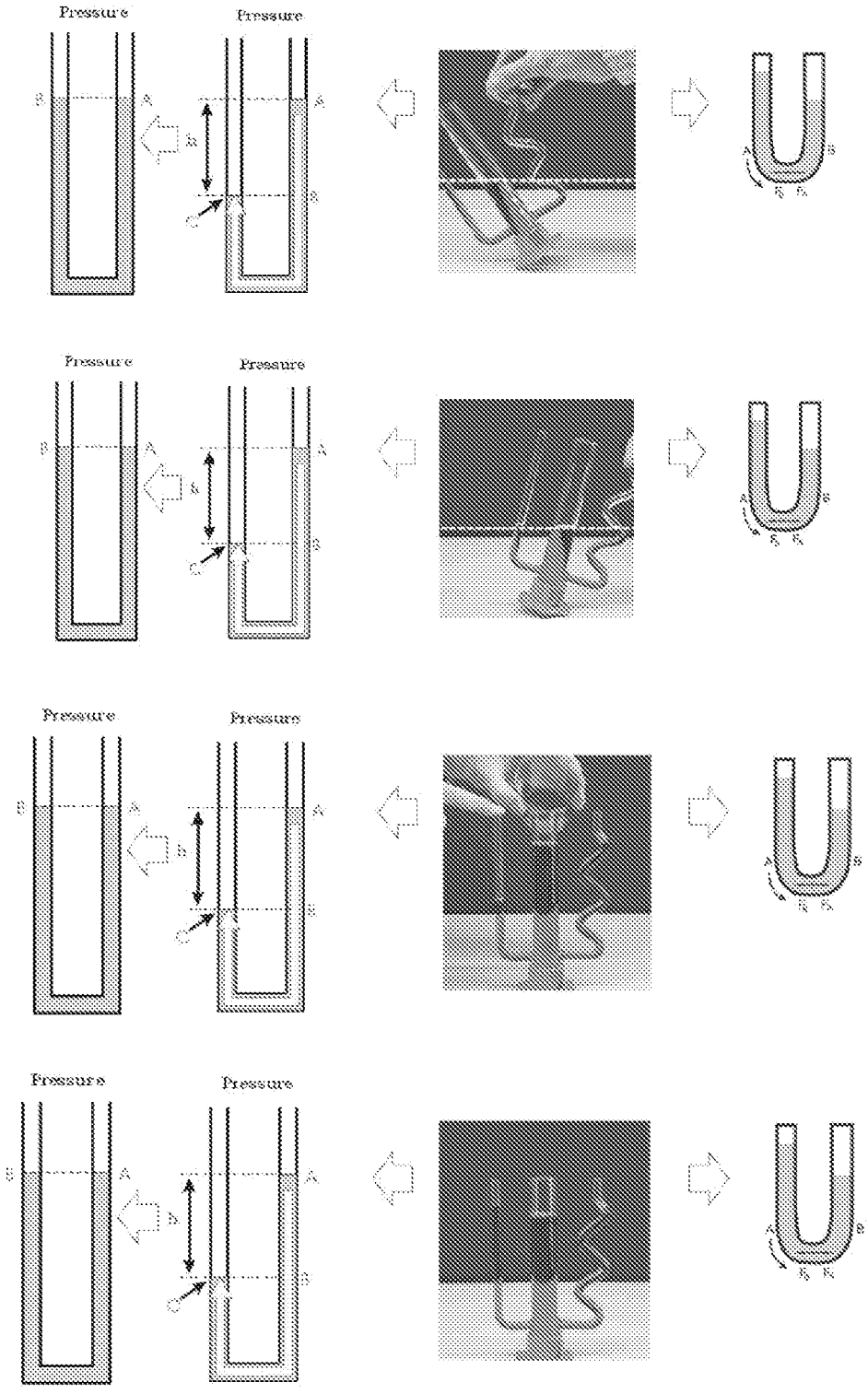
The height of the liquid in the two branches of a U-shaped tube must be the same, independently of the shape of each one of the tubes.



8.2 The energy conversion device claimed in this application, the flowing water is constructed in the lower part of the rotor according to the principle of Pascal and Communicating vessels. The liquid column pressure enables the water chamber to obtain buoyancy potential energy and upward movement power (see the yellow arrow).

As shown in the figure: According to the principle of the communicating container, if the liquid in the communicating container is regarded as a whole, when the pressure at the same depth is the same, the liquid will remain stationary. If the pressures at the same depth are different (as shown on the left), the liquid will flow to the low pressure and flow until A and B reach equilibrium.




Pressure
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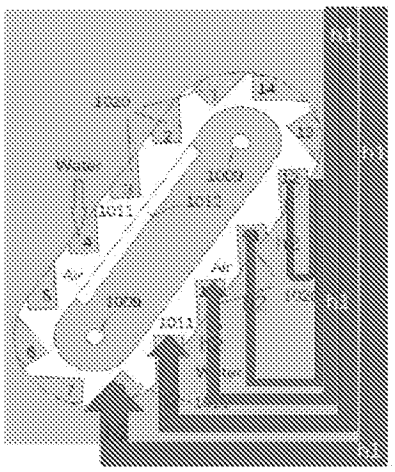
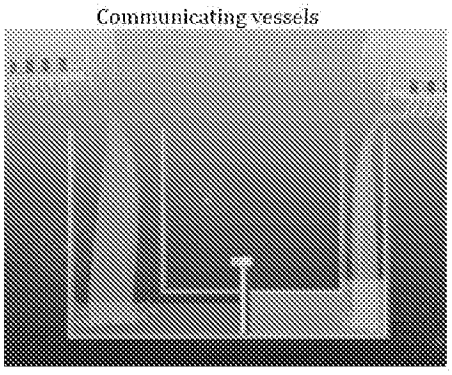
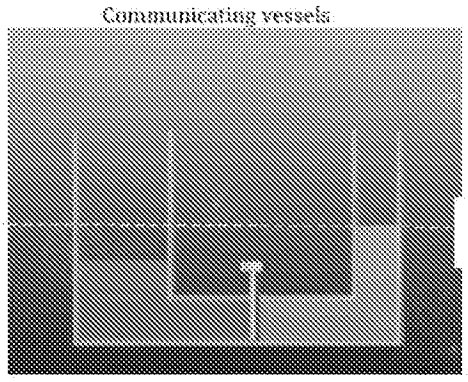
8.3 The energy conversion device claimed in this application, water is flowing in the lower part of the rotor according to the principle of Pascals and communicating vessels.

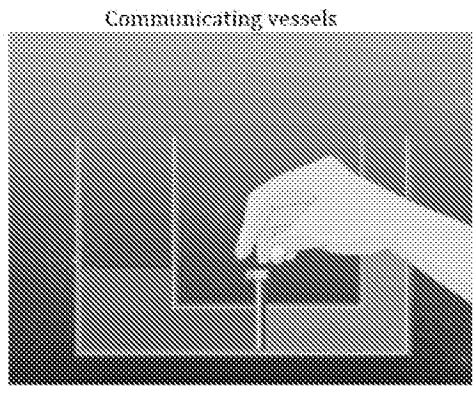


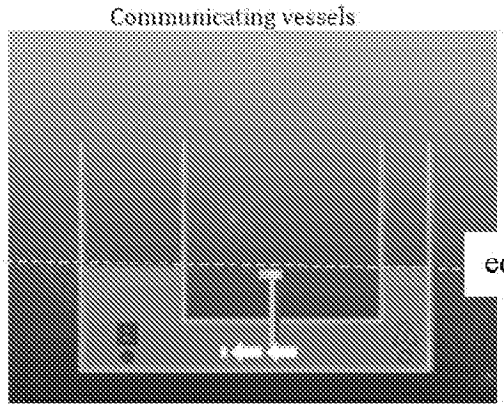
Water flows from h1 to h2





unequal

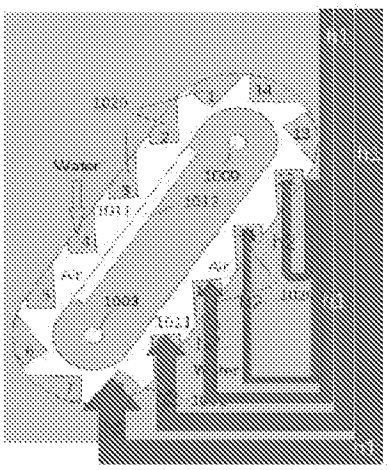


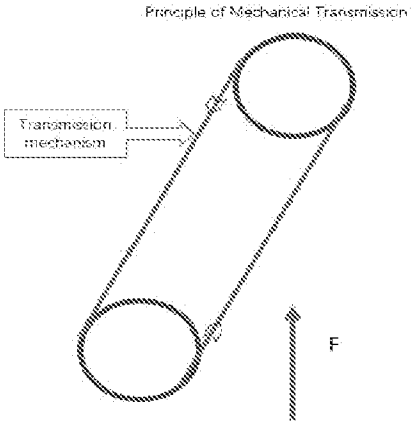


equal

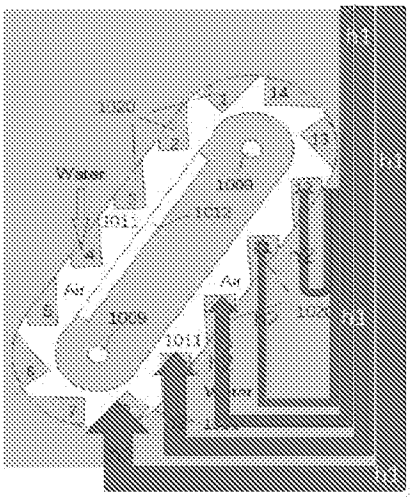
Water flows from point A to point B

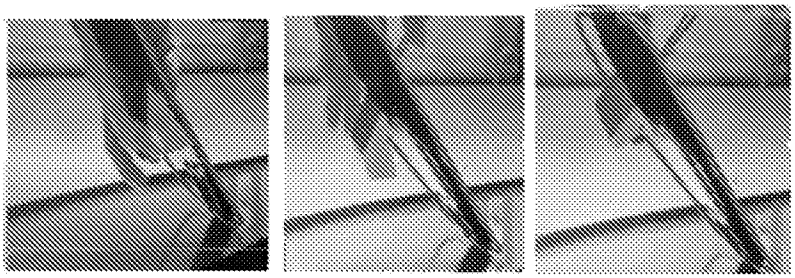
8.4 Since the height of the water column below the water chamber in the lower part of the rotor is not equal to the height of the water column in the container, the water column below the water chamber must rise to find pressure balance, which will cause the liquid column pressure at the lower part of the rotor to continuously push the water chamber to move upward, thus the upward movement of the water column makes the lower part of the rotor unable to remain stationary.





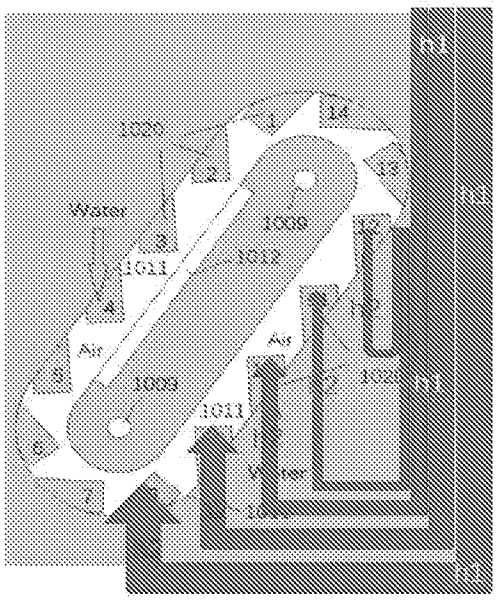
8.5 Under the action of the gravity field, the buoyancy potential energy produced by water drives the floating body to float up.



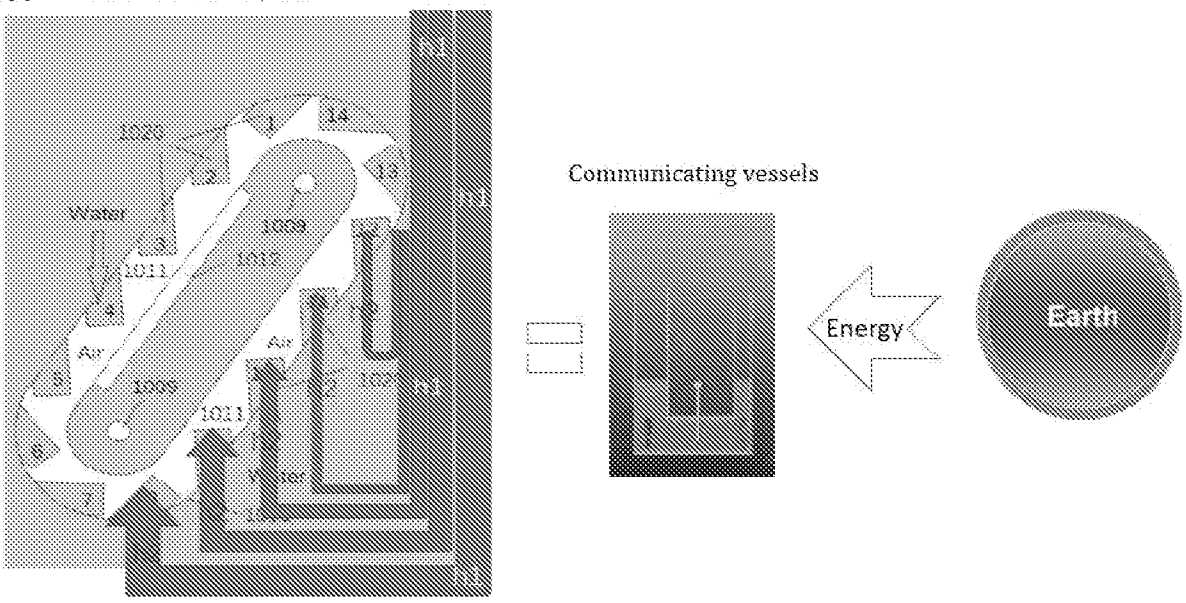


8.6 In the energy converting device claimed in this application, according to the principle of Pascal and Communicating vessels, the process in which the pressure of the water column at the lower part of the rotor transmits the pressure to the water chamber on the rotor is the process of inputting gravitational field energy.

As shown in the picture, the height of the water column in the container is h1; the height of the water column at the lower part of the rotor is h2, the pressure h1 is greater than pressure h2. according to the principle of Pascal and Communicating vessels, h1 transmits pressure to h2, that is, the rotor can obtain energy and move upward.



8.7 The energy conversion device claimed in this application, the rotor will not remain stationary in a container filled with water.



If the examiner believes that the water column pressure at the lower part of the rotor cannot move upwards, then this will mean that the communicating device and the Pascal principle are not true.

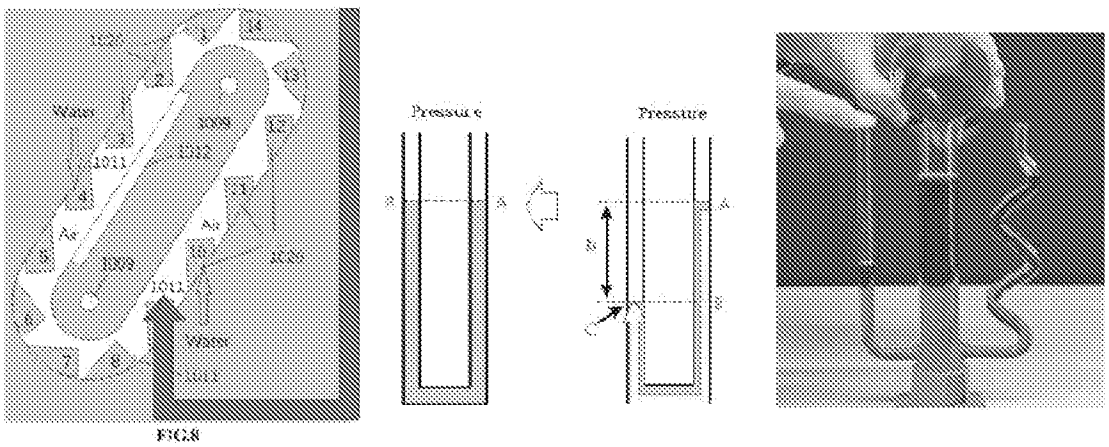


FIG.8

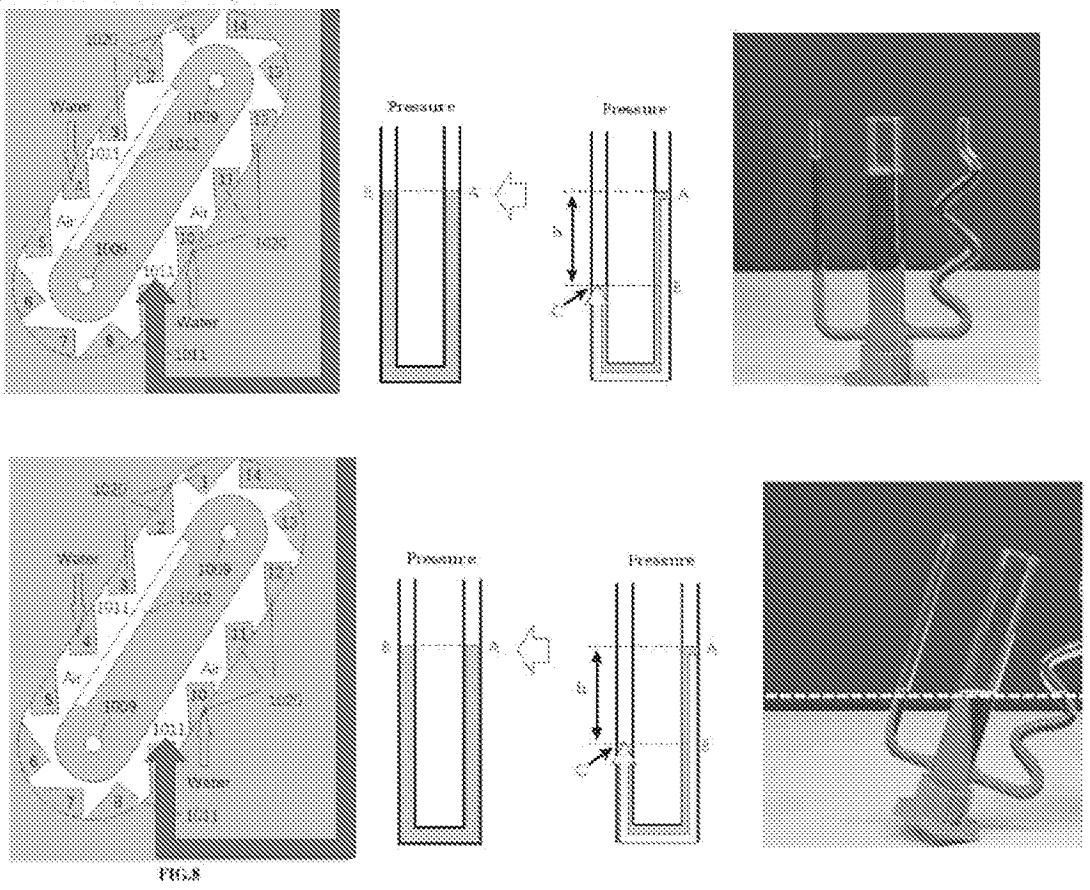
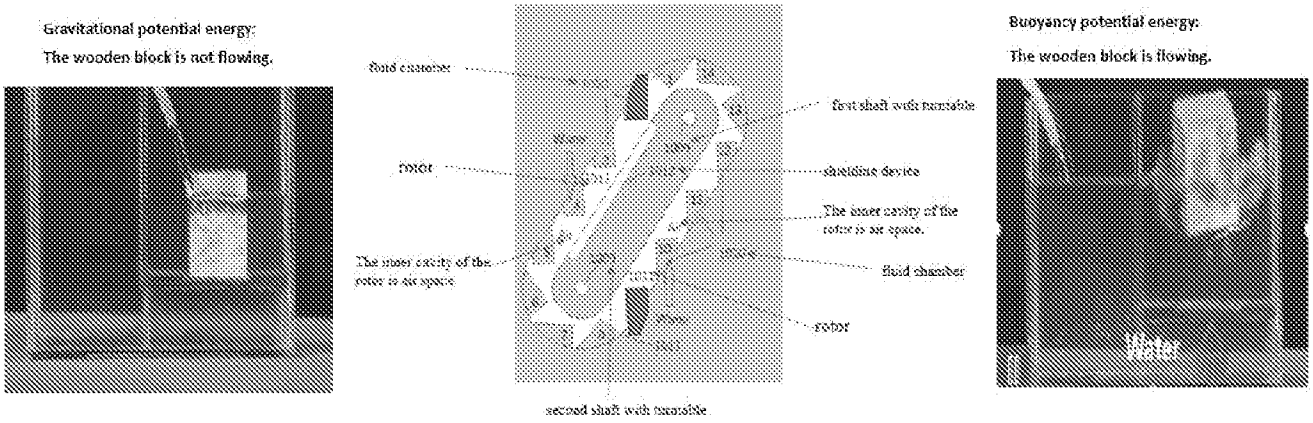


FIG.8

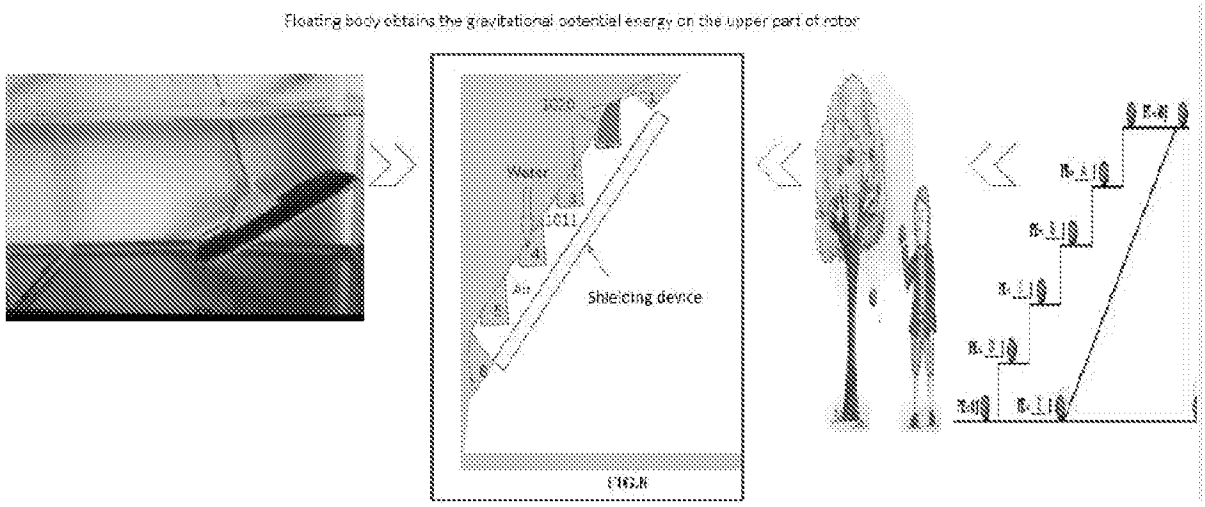
9. The upper part of the rotor: the water's gravitational potential energy drives the water chamber to move downwards.

9.1 The energy conversion device claimed in this application,when the water is on the side of the upper part of the rotor, the water is located above the air cavity of the rotor, generates gravitational potential energy on the rotor, and drives the rotor to move downward. When the water is on the side of the lower part of the rotor, the water is located below the air cavity of the rotor and generates buoyancy potential energy and drive the rotor to move upward.



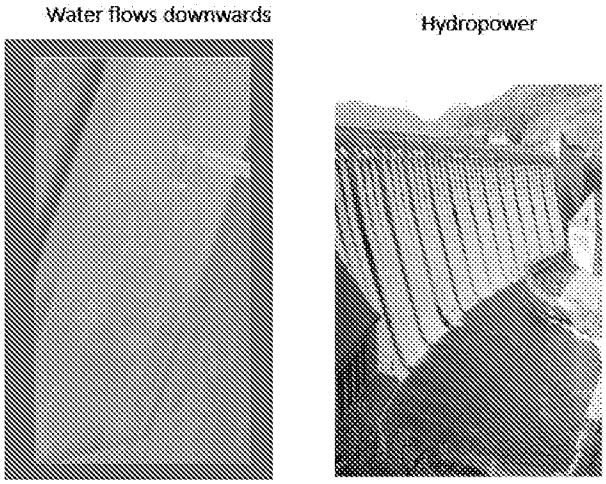
Annotated Fig. 8

9.2 The role of the shielding device: The shielding device shields the buoyancy of the upper part of the rotor, so that the rotor on this side is not affected by buoyancy, thereby breaking the influence of buoyancy on the entire rotor system.



9.3 In the gravity field: water moves downwards

Recognized scientific principle: the use of space can release the gravitational potential energy of water bodies.



9.4 On the upper part of the rotor: the water located above the air cavity of the rotor is subjected to the gravity and moves downward.

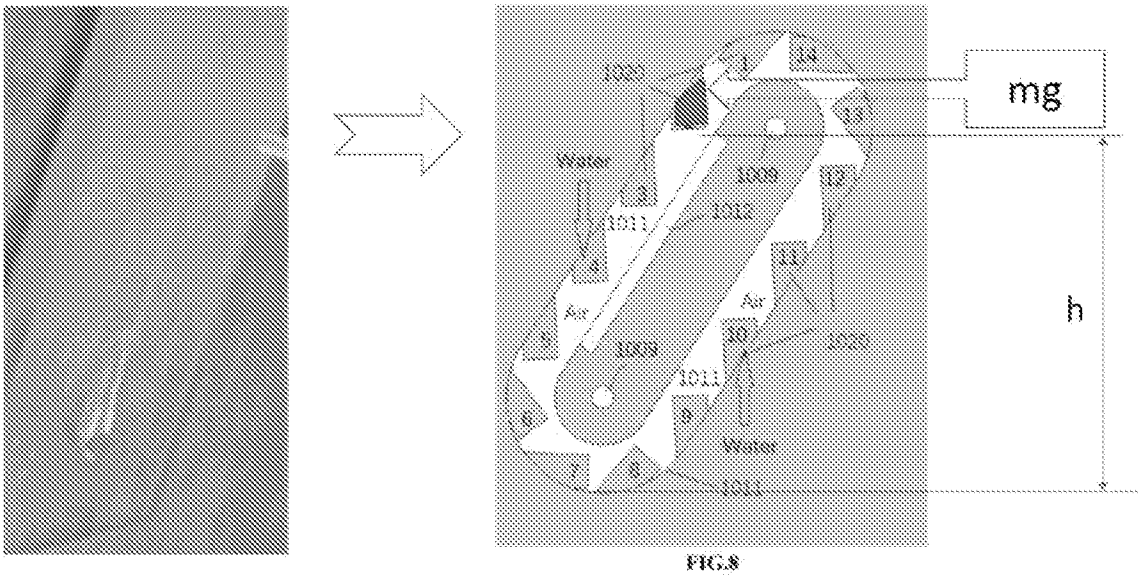
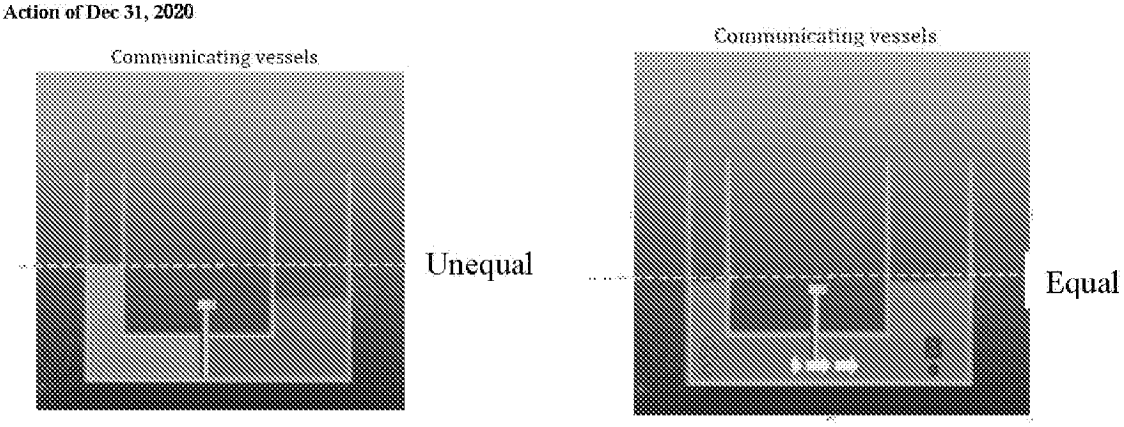


FIG.8

9.5 The height and pressure of the water column h2 above the water chamber of the rotor are smaller than the height and pressure of the water column h1 in the container.

According to the principle of Pascal and the communicating device, each water column above the water chamber will move downward to find the position where the height of the water column is equal to the pressure.



Water flows from point A to point B

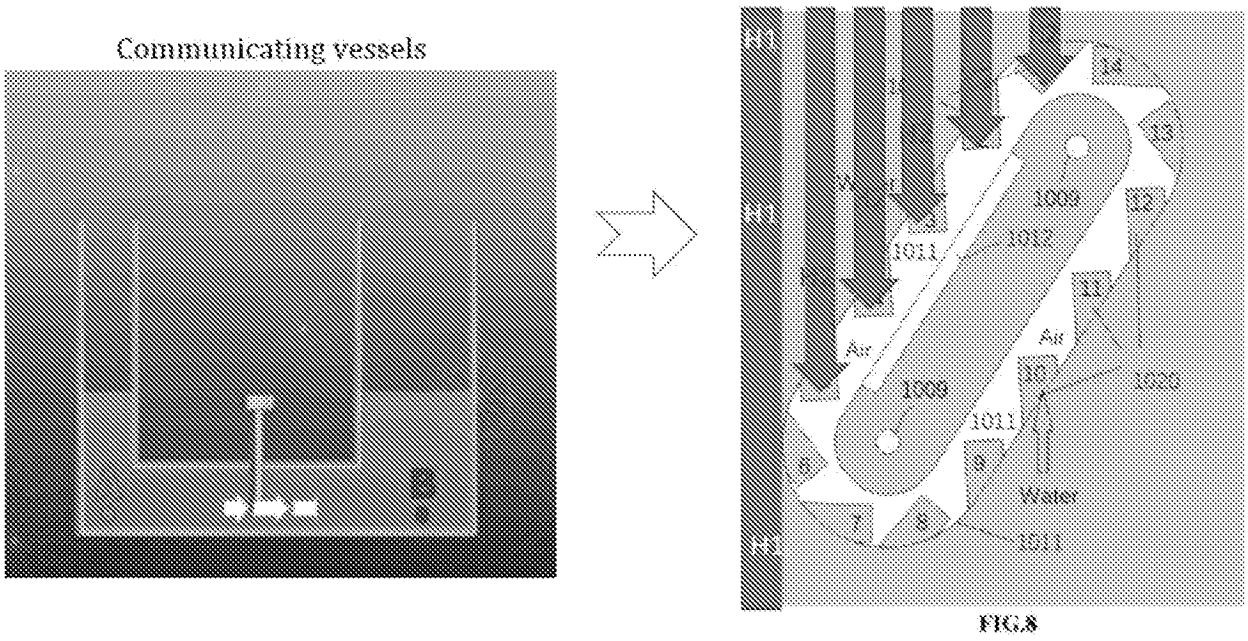


FIG.8

9.6 According to the principle of conservation of mechanical energy, on the upper side of the rotor, the water body and the rotor cannot stand still.

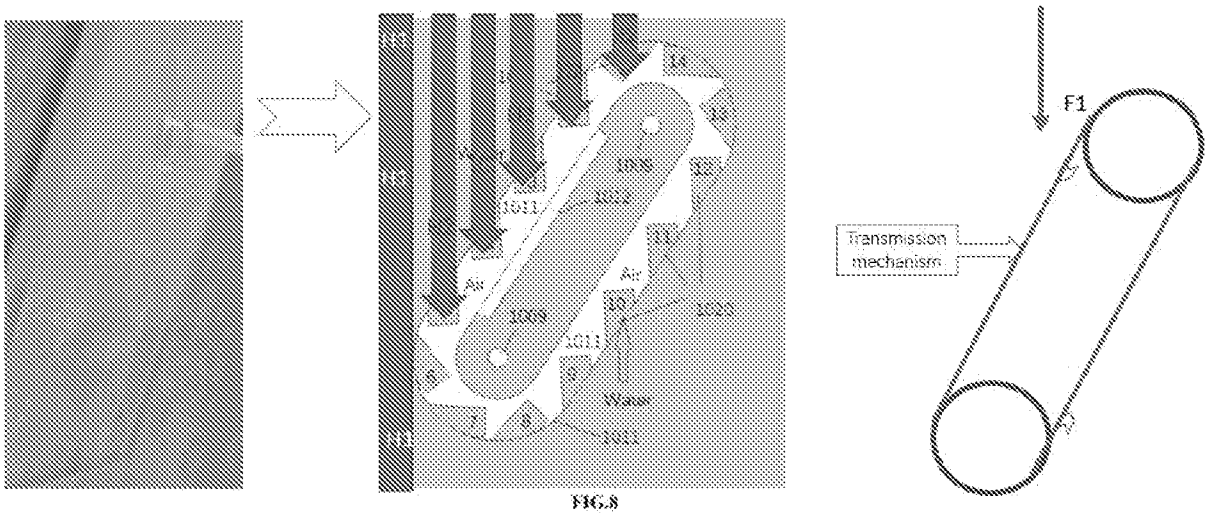


FIG.8

If the examiner believes that the water column above the water chamber on the upper side of the rotor cannot move downwards, it will mean that the gravity of the gravitational field disappears, and the communicating device and the Pascal principle are not true.

10. The experiment proves that the rotor cannot stand still.

Gravity field continuously inputs pressure into the water through universal gravitation.

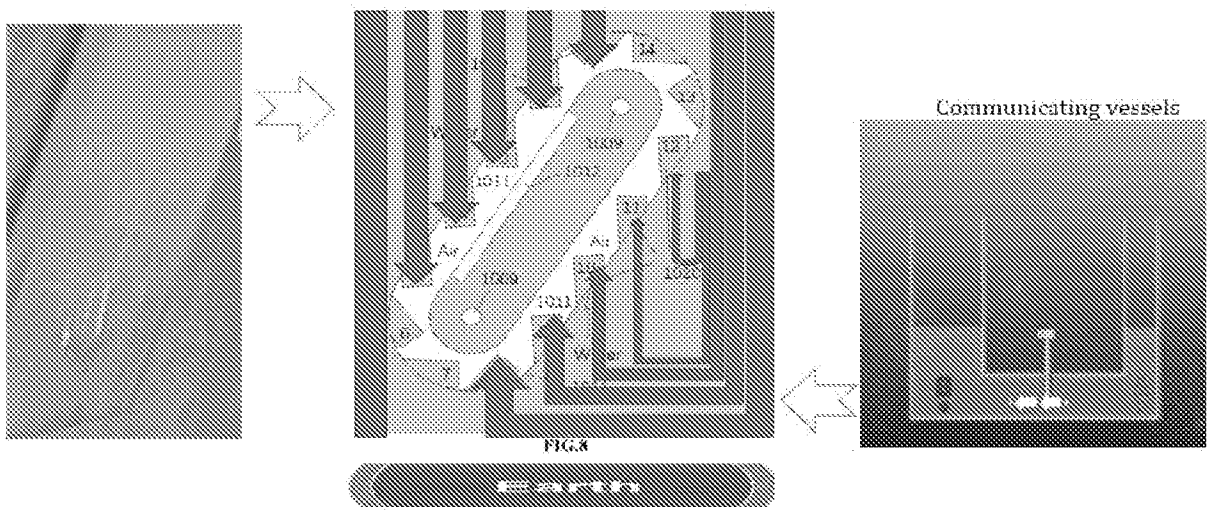
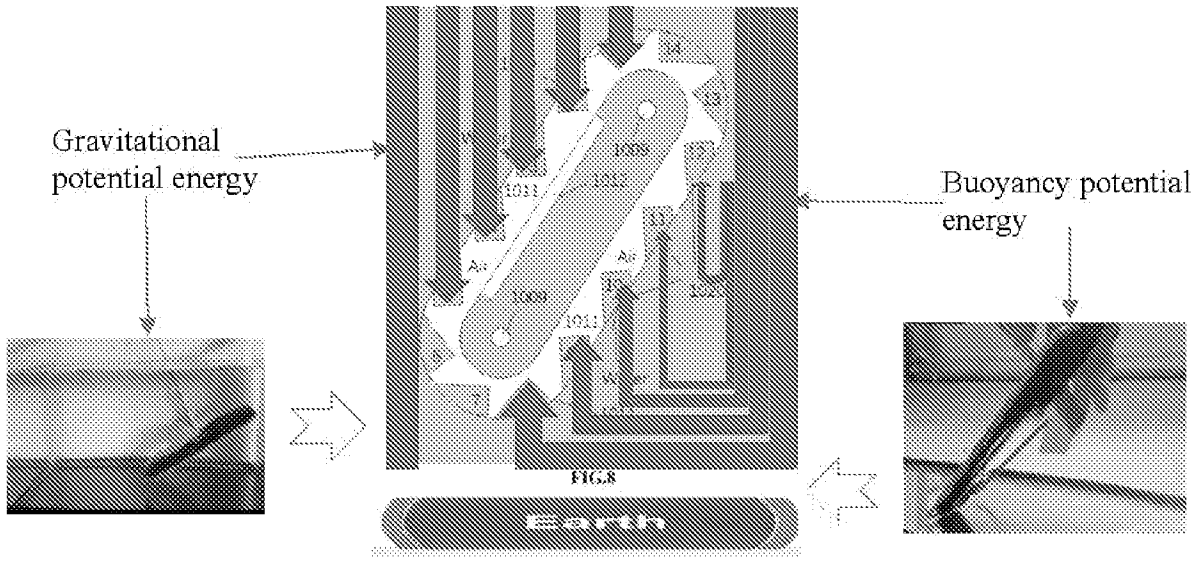


FIG.8

10.1 The experiments prove that the total external force of the rotor under fluid pressure is not zero.



11. <u>The energy conversion device in this application obeys the first law of thermodynamics. It is not a perpetual motion machine. The proof is as follows:</u>

According to Euclid's axiom:

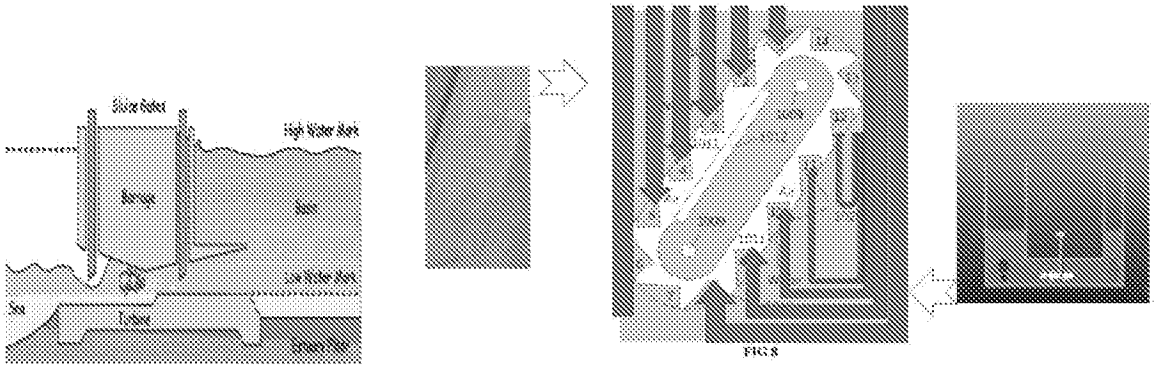
- **Things which are equal to the same thing are also equal to one another.**
- **Things which coincide with one another are equal to one another.**

Tidal power generation is the use of water flow to generate electricity, which does not violate the first law of thermodynamics.

The energy conversion device in this application uses water flow to convert energy, which obeys the first law of thermodynamics.

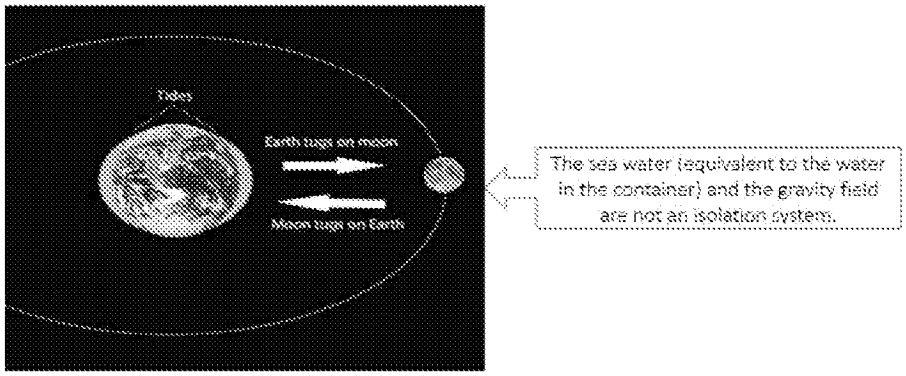
In conclusion:

- Sea water is static water like the water in the container;
- The water in the container is driven by the energy of the gravity field like sea water;
- The tides obeys the first law of thermodynamics, it is not a perpetual motion machine;
- According to Euclid's axiom, this application also obeys the first law of thermodynamics, it is not a perpetual motion machine.



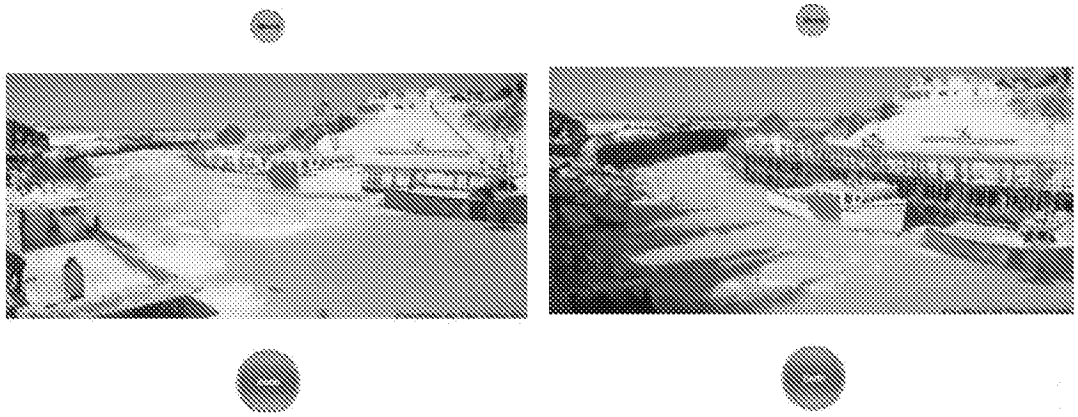
12. The second law of thermodynamics is not applicable to all fields, including this application.

The second law of thermodynamicsis concerned with the direction of natural processes. It asserts that a natural process runs only in one sense, and is not reversible.



12.1 The second law of thermodynamics does not apply to such natural power engines:

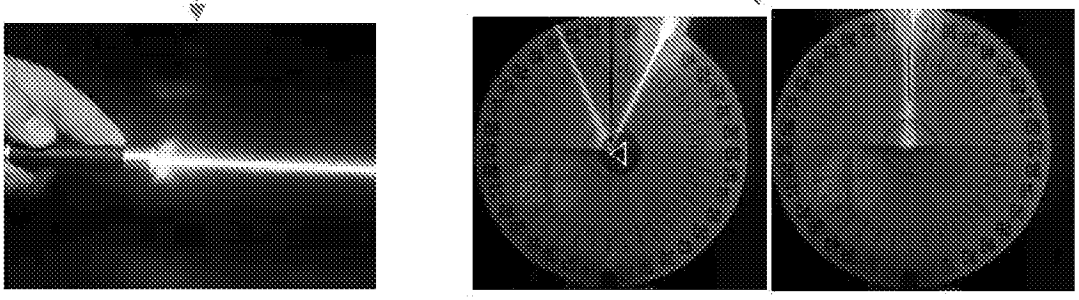
The second law of thermodynamics applies to natural and irreversible energy sources. Although the gravitational work of the gravitational field is also an irreversible energy source in a natural process, the energy field composed of a gravitational field and an anti-gravity field has forces in two directions and performs work in the form of reversible natural processes. Therefore, the second law of thermodynamics does not apply.



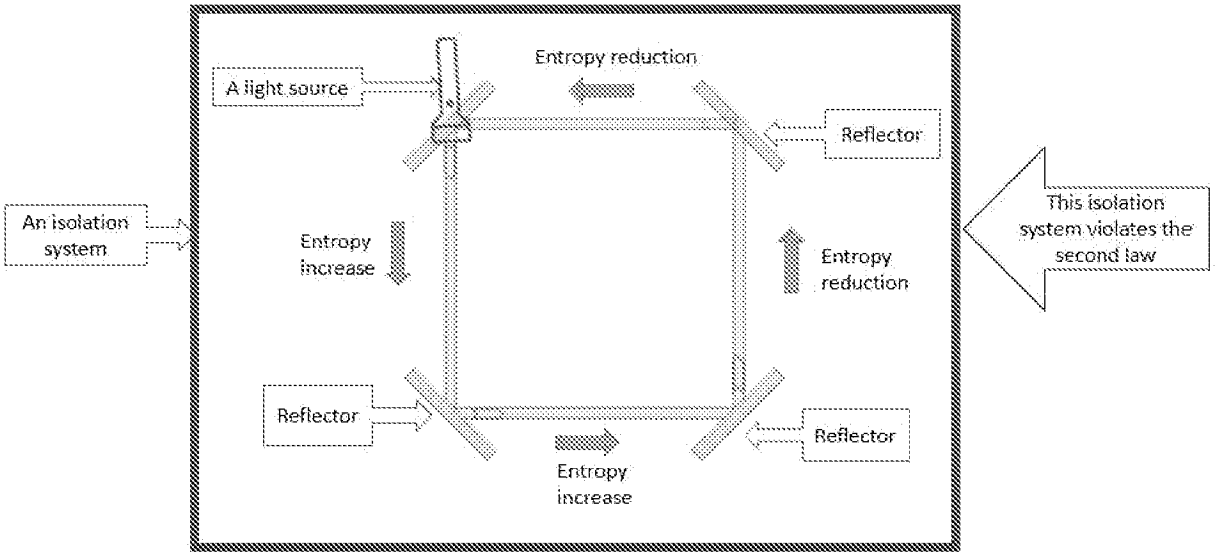
12.2 Experiments show that the second law of thermodynamics does not apply to an isolation system with a reversible natural process.

Light travels in a straight line and increases

The reflected light is a reversible straight line of light, and the entropy remains unchanged.



12.3 Prove: The second law of thermodynamics does not apply to a system with natural circulation (including tidal power generation).

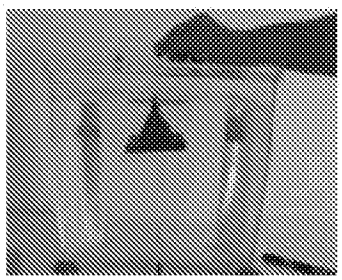
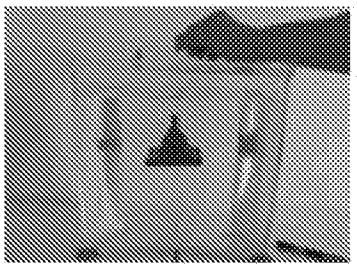
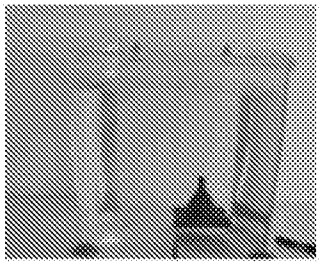


12.4 The second law of thermodynamics does not apply to a floating body whose natural process is reversible.

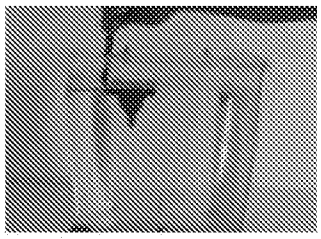
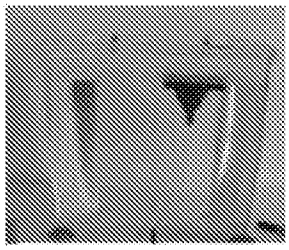
The second law of thermodynamics: thermal work is directional, and work is always spontaneous from high temperature to low temperature, not vice versa.

Common sense: A floating body always moves upward spontaneously in a fluid.

Violation of common sense: When a floating body in the water can move downwards, it not only violates the Archimedes principle, but also violates the definition of irreversibility of natural processes stipulated by the second law.

Turn the object over, the object floats, does not sink.

12.5 Experiments have proved that the second law does not apply to the "water and air space integrated" system and method arranged in this application.

In the water and air space integrated system, the table tennis achieves a natural upward and downward reciprocating motion process, which violates the irreversible definition of the directionality of thermal work of the second law.

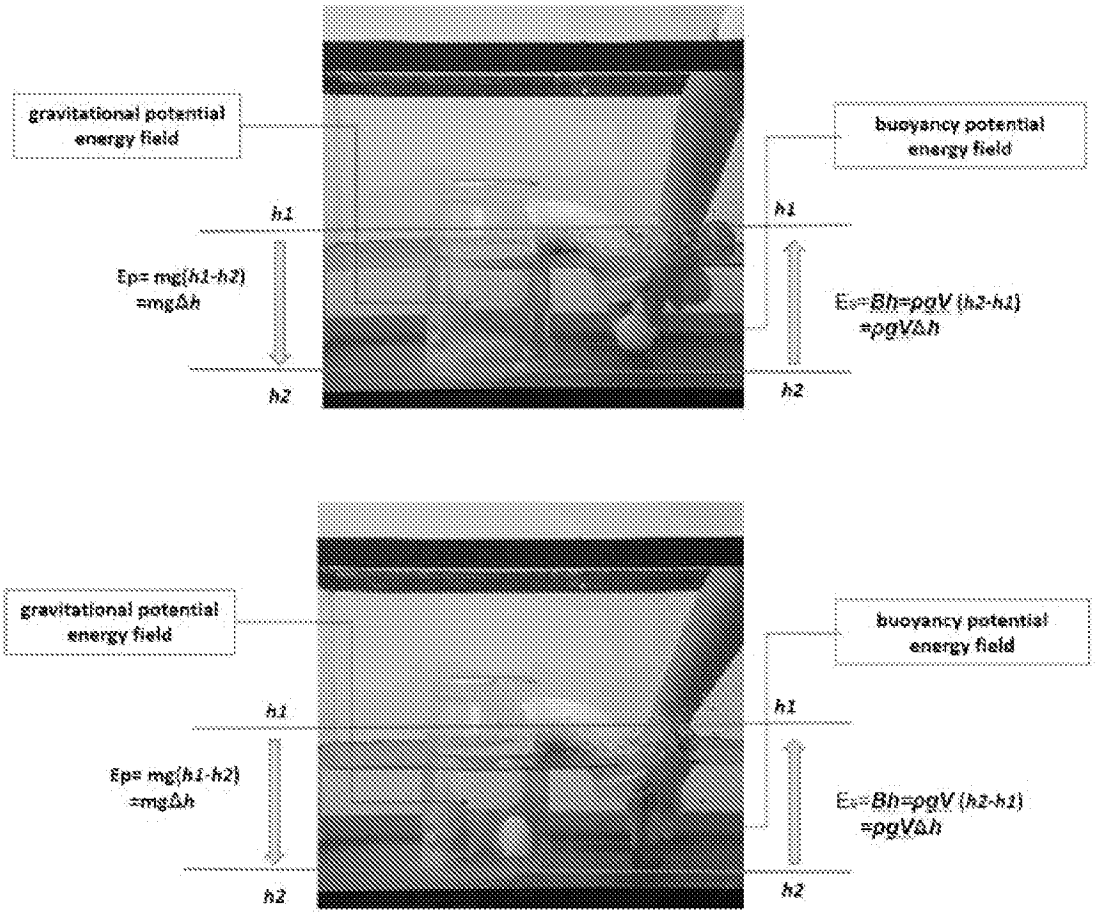


Table tennis reciprocating experiment

- In "water and air space integrated" system , the ping-pong ball as a floating body can naturally use buoyancy to move upwards and reach the top of the air chamber;
- Then, because the density of the ping-pong ball is greater than the density of the air, the ping-pong ball is under the action of gravity to move downward;
- In the reciprocating process, the ping-pong ball violates the irreversible definition of the second law of natural processes.
- **Conclusion: the second law does not apply to the "water and air space integrated" system and method arranged in this application.**

Those skilled in the art can understand the technology described in this application. Well-known universities in the United States are discussing technical cooperation matters with applicants, and they do not think that the technology is a perpetual motion machine. They believe that the applicant has proved that water pressure energy can be used by humans.

Extraction of gravitational field energy, 14/252,778 is another application of the applicant that has been revived and can be used as a reference for this application.

CONCLUSION

Applicant respectfully submits that the foregoing Response place this application in condition for allowance. If the Examiner believes that there are any issues that can be resolved by a telephone conference, or that there are any informalities that can be corrected by an Examiner's amendment, please call the undersigned at 1-647-706-6678 or email to Jack.che@outlook.com.

Respectfully submitted by Applicant

YANJUN CHE

February 27, 2021

/YANJUN CHE/

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Annotated Sheet Showing Changes

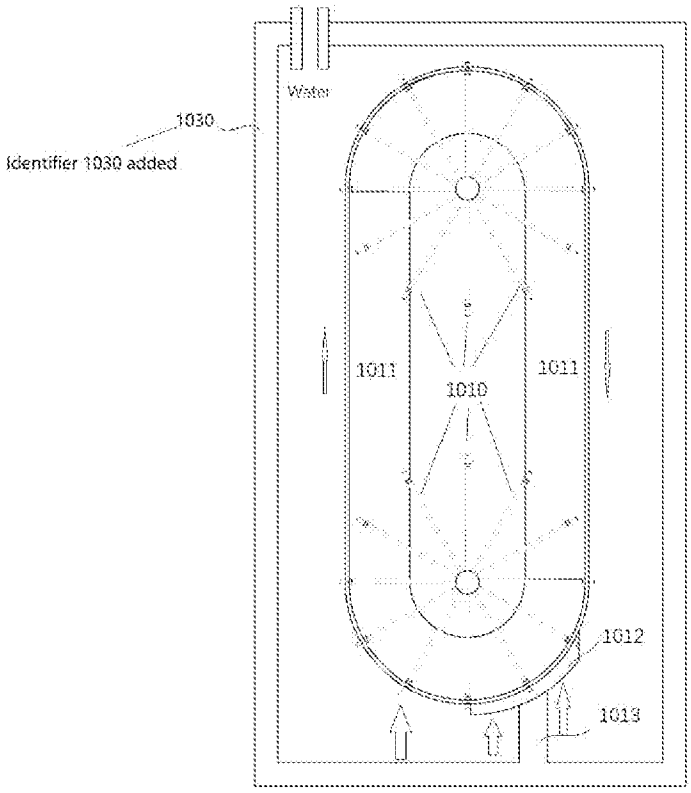


FIG.1

Annotated Sheet Showing Changes

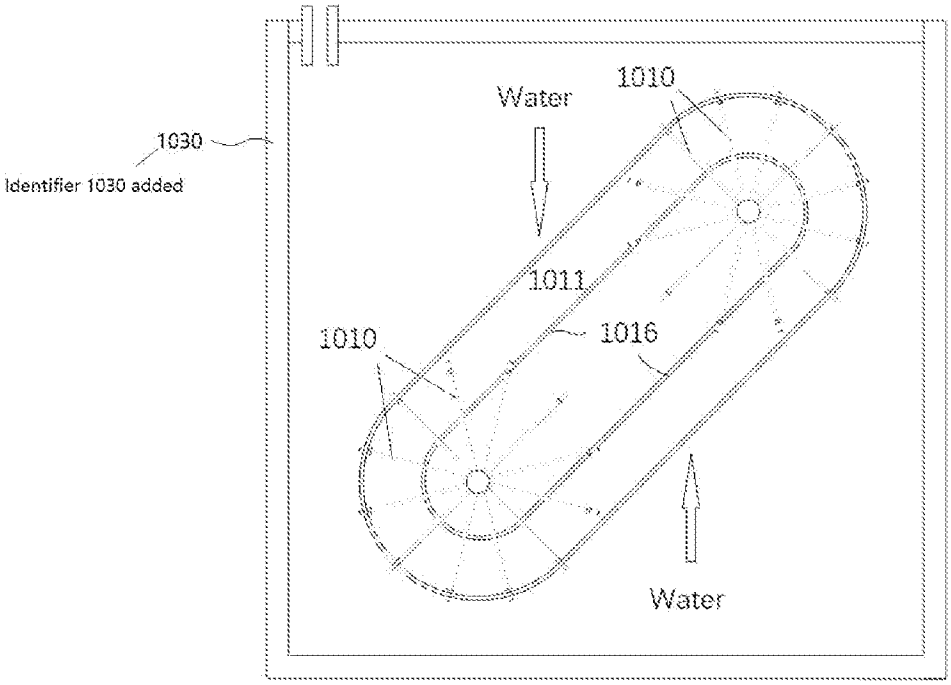


FIG.3

Annotated Sheet Showing Changes

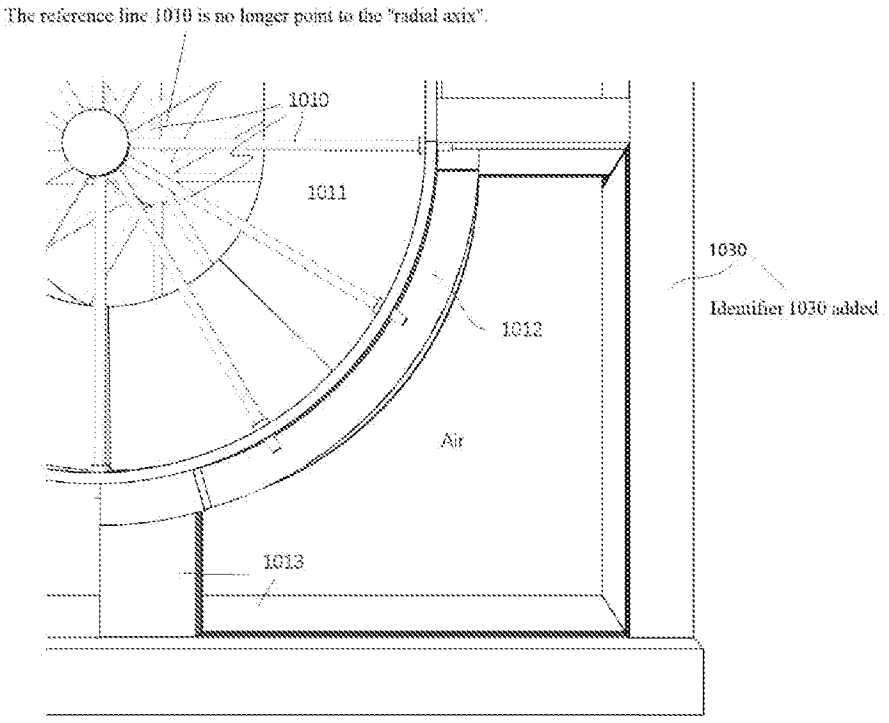


FIG.5

Annotated Sheet Showing Changes

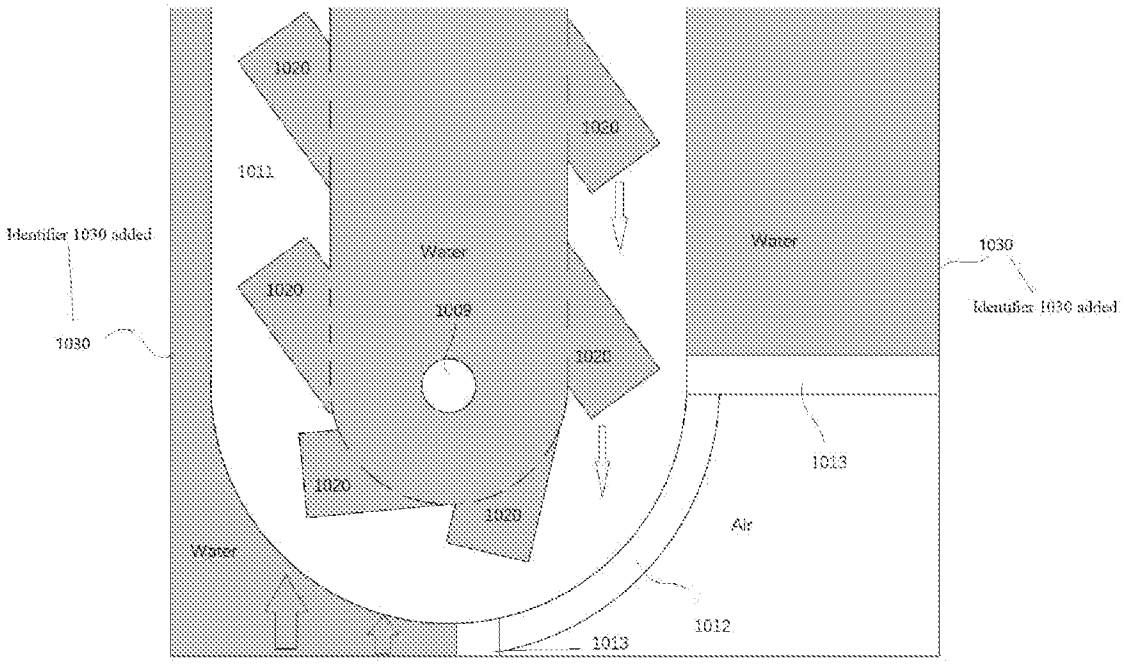


FIG.9

Annotated Sheet Showing Changes

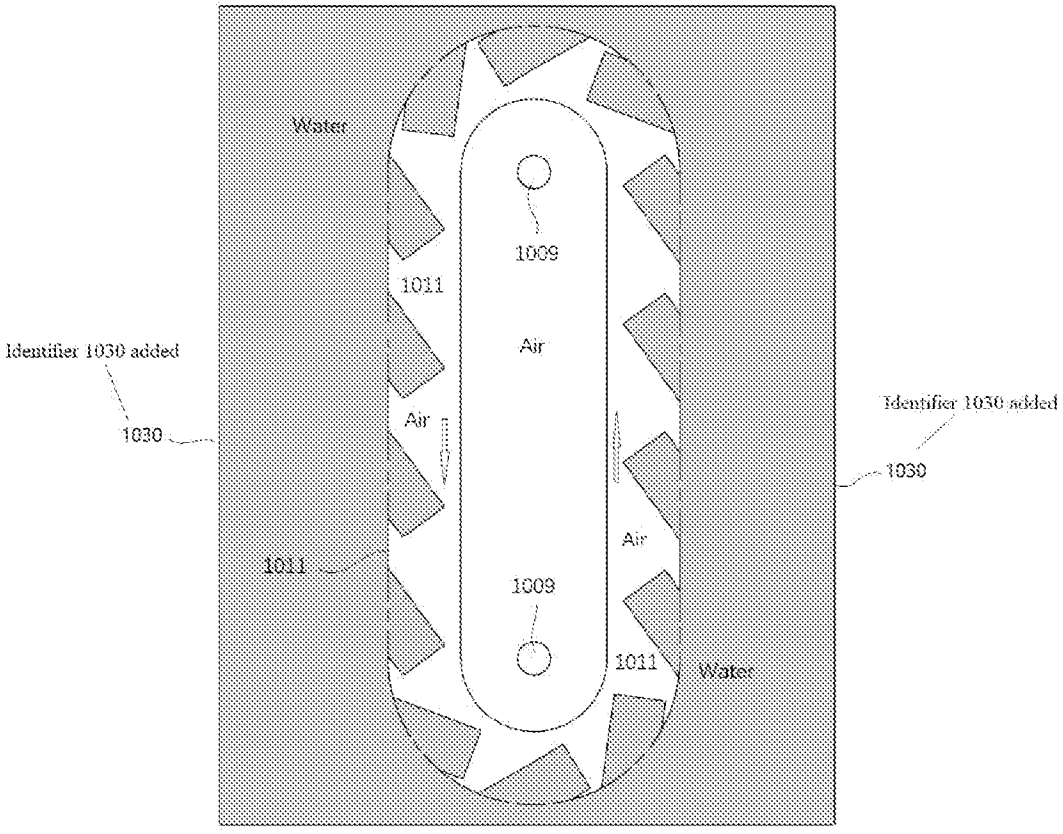


FIG.10

Annotated Sheet Showing Changes

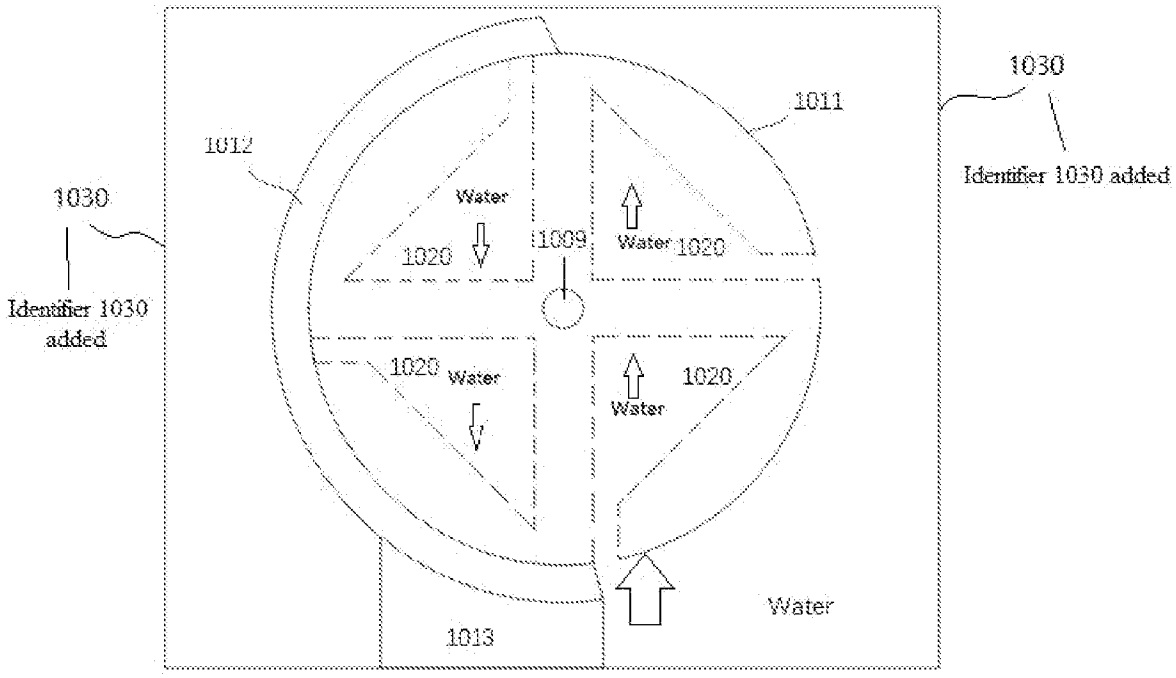


FIG.11

SUBSTITUTE SPECIFICATION-MARKED UP

GRAVITATIONAL TURBINE ENGINE

DESCRIPTION

The present application claims priority to the earlier filed provisional application having serial no. 62/658,797, and hereby incorporates subject matter of the provisional application in its entirety.

BACKGROUND

The present invention relates to a kind of renewable energy, and, in particularly, to a turbine for obtaining energy from a static fluid. The use of kinetic energy for water generation is a common way to obtain clean electricity, but it is subject to natural conditions and requires flowing water resources. US Patent application 14/252,778, indicates a method of object that losses buoyancy for extracting gravitational field energy using static fluid. The fluid contains unlimited gravitational field energy anywhere. Therefore, converting the static fluid energy on the earth into electricity can turn buildings and communities into a green power plant, allowing anyone to produce their own green energy in their homes, offices and factories.

A turbine is a rotary mechanical device that extracts energy from a fluid flow and converts it into useful work. The work produced by a turbine can be used for generating electrical power when combined with a generator. A turbine is a turbomachine with at least one moving part called a rotor assembly, which is a shaft or drum with blades attached. Moving fluid acts on the blades so that they move and impart rotational energy to the rotor. For example, a fan blade with a central axis, which is placed in a fluid (such as air or water), the asymmetric force exerted on the blade when the fluid passes will drive the entire rotor to start rotating, thereby allowing the axial torque to be output from the central axis

Therefore, there is a need for an improved turbine that utilizes the pressure in the static fluid

to apply an asymmetrical force to the rotor to obtain a difference in gravity or buoyancy that is obtained by the entire rotor, and the torque generated by the difference in gravity or buoyancy drives the entire rotor to begin to rotate and increase the output power at the same time.

BRIEF DESCRIPTION

Briefly, in accordance with one aspect of the present invention, a method is provided for obtaining fluid gravitational potential energy and buoyant potential energy by utilizing an internal space of a rotor on turbine engine. The method includes allowing a fluid to act on the outer space of the rotor to form a reciprocating power with the interior of the rotor through utilizing a spatial structure of rotor. The method further includes the rotor on the turbine obtaining a rotational torque of the turbine engine in response to fluid transient action at a desired location. The method further includes increasing turbine engine power based upon shielding hydrostatic pressure and increasing fluid depth. The method further includes reducing friction between the shielding device and the rotor based upon the use of rolling elements or lubricating sealing materials. The method further includes obtaining a fluid power based on a rotor on the turbine engine and the support-guideway system and the rolling member. The method further includes obtaining a fluid pressure in a horizontal direction based upon a sectional shape of the rotor on the turbine engine.

In another aspect, the present invention provides a static pressure turbine engine having a rotor with an air space structure inside, a number of shafts and bearings can be mounted on the outside of the rotor to correspond to the support-guideway system; a plurality of objects installed in the inner space of the rotor or fluid chambers installed for loading the fluid, the rotor is drivingly connected to the generator. The static pressure turbine engine comprises a shielding fluid device to shield fluid pressure at a desired location of the static pressure turbine engine in a certain direction. The shielding fluid device further includes ball transfer units or pulley or a self-lubricating sealing material, the shielding device is configured at the location where obtains the fluid pressure or the gravity of the object based upon the rotor in a

certain direction to drive the turbine fluid power generator rotation. Several small shafts and bearings can be mounted on the outside of the rotor to correspond to the guide rails.

DRAWINGS

These and other features, aspects and advantages of the present invention will become better understood when the following detailed descriptions are read with reference to the accompanying drawings, where the same symbols in the accompanying drawings represent the same parts throughout the accompanying drawings, wherein:

FIG. 1 illustrates a vertically mounted turbine engine in accordance with aspects of the present technique;

FIG. 2 illustrates a schematic diagram of an internal spatial mechanism for realizing a rotor induced fluid pressure in accordance with aspects of the present technology;

FIG. 3 illustrates a tilted-mounted turbine engine in accordance with aspects of the present technique;

FIG. 4 is a schematic diagram illustrating a support shield track of FIG 3;

FIG. 5 is a schematic diagram illustrating a shielding method variation during shielding a fluid, in accordance with aspects of the present technique;

FIG. 6 illustrates a schematic diagram of improving output power of a turbine engine in accordance with aspects of the present technology;

FIG. 7 is a schematic diagram illustrating a turbine engine with an opening on the outer surface of a rotor in accordance with aspects of the present technology.

FIG. 8 illustrates a schematic diagram of the fluid pressure induced by the rotor fluid chamber in a static fluid in accordance with aspects of the present technology in Figure 7;

FIG. 9 illustrates a schematic diagram of an opening on the inner surface of the rotor to sense fluid pressure in accordance with aspects of the present technology;

FIG. 10 illustrates a schematic diagram of the inner surface of a rotor entirely shielded by a shielding device in accordance with aspects of the present technology;

FIG. 11 illustrates a schematic diagram of one side of a rotor completely shielded by a shielding device in according to aspects of this technology;

FIG. 12 is a schematic diagram illustrating the internal structure of the rotor in Fig 10;

FIG. 13 illustrates a schematic diagram of a shielding device; and

FIG. 14 illustrates a schematic diagram of structural variation of shielding device in FIG 13.

DETAILED DESCRIPTION

The following description presents a novel technique for a turbine engine and increased power output in a static fluid environment, such as, creating a novel rotor with air structure inside in which objects are placed to gain a potential energy, and the rotor can convert the potential energy of object and fluid into kinetic energy by shielding fluid action based on axisymmetric asymmetry so as to drive the turbine engine. Embodiments of the present technology provide a sensing fluid pressure methodology for a rotor and an internal object that uses a shielding device and a spatial structure of the rotor to obtain driving force generated by the static fluid. Embodiments of the present technology provide a shielding device capable of achieving a reduction-resistance shielding effect by using a rolling member, a sealing member, and a lubricating grease when the shielding device is in close contact with a moving member to shield fluid pressure. Figure 1-14.

Turning now to the drawings, FIG. 1 illustrates a vertically mounted turbine engine in accordance with aspects of the present technique. The turbine engine comprises a support-guideway system having two of radial axis vertically mounted on container 1030 filled with water. The support-guideway system is drivingly connected to an electrical generator (not shown). The turbine engine further comprises the rotors 1011 mounted on radial axis 1010,

the rotors 1011 having holes fitted with the radial axis 1010 that allows the rotor 1011 to rotate on the guideway system.

The turbine engine further comprises a bracket 1013 mounted on the container and a shielding device 1012 mounted on top of the bracket 1013. The shielding device 1012 is mounted on the right side of the radial axis 1010 and in close contact with the lower surface of the rotor 1011 to shield the upward water pressure at this position. The rotor 1011 on the other side of the radial axis 1010 is subjected to upward pressure of water (arrow indicated).

FIG. 2 illustrates a schematic diagram of an internal space for realizing a rotor induced fluid pressure in accordance with aspects of the present technology. FIG. 2 illustrates the rotor 1011 is in the shape of an annular belt with air inside. The interior of the rotor 1011 further comprises a plurality of support frames 1015 and a plurality of objects 1014 (not all shown) thereon.

The container filled with water, the turbine engine under hydrostatic pressure: on the left side, the rotor 1011 and the object 1014 on this side are subjected to buoyancy, the total gravity of the object 1014 is reduced by the upward pressure; the shielding device 1012 shields the buoyancy that the rotor 1011 is subject to at this position, and the total gravity of the rotor 1011 and the object 1014 is the same as in the air, therefore, the total gravity does not decrease; at this point, all the objects 1014 on the two sides generate a gravity difference (buoyancy difference) around the radial axis 1010, and the gravity difference is converted into a rotational torque around the radial axis 1010, and the rotor 1011 begins to move under the driving of the rotational torque, which is further transformed into electrical energy via an electrical generator.

FIG. 3 illustrates a tilted-mounted turbine engine in accordance with aspects of the present technique. The turbine engine comprises a support-guideway system having two of radial axis 1010 aslant mounted on container filled with water. The turbine engine further comprises the rotor 1011 that is in the shape of an annular belt with air inside. The rotor 1011 further comprises a plurality of support frames 1015 and a plurality of objects 1014 (not all

shown) thereon. The turbine engine further comprises a support-shield track 1016. 1030 is the container.

FIG. 4 is a schematic diagram illustrating a support-shield track as illustrated in FIG. 3. In the illustrated embodiment, the support-shield track is configured as an annular surface bracket 1021 to act as a moving track for the bearing 1018. The support-shielding track 1016 further comprises a shielding device mounted on both side end faces of the rotor 1011 (not shown) to construct an air space with the annular bracket 1021. The bearings 1018 are mounted at both ends of the shaft 1017.

The container filled with water, the turbine engine under hydrostatic pressure: due to the action of the support-shield track 1016, the rotor 1011 and the plurality of objects 1014 located under the annular support 1021 are subjected to buoyancy, and the total gravity is reduced; the plurality of objects 1014 located in the rotor 1011 above the annular support 1021 are not subjected to buoyancy, and the total gravity is the same as in the air, and is not reduced; in this case, all objects 1014 on both sides will be caused to surround the radiation axis 1010, always producing a gravity difference (buoyance difference), which is converted around the radiation axis 1010 into a rotating torque.

FIG. 5 is a schematic diagram illustrating a variation of shielding method during shielding a fluid, in accordance with aspects of the present technique. In certain embodiments, the shielding device 1012 is configured to be mounted on the bracket 1013 using a gas permeable, water impermeable material that will prevent the rotor 1011 at the shielding device from being subjected to buoyancy. 1030 is the container.

FIG. 6 illustrates a schematic diagram of improving output power of a turbine engine in accordance with aspects of the present technology. In certain embodiments, the turbine engine is configured with the shielding devices 1012 on upper and lower of the inner ring surface of the rotor 1011 for shielding fluid pressure. The two shielding devices 1012 are fixedly mounted on the container so that the fluid can only act in one direction on the inclined section or the lower surface of the rotor 1011, and the effect is to increase the

potential energy of the rotor 1011 located in the section to improve the turbine engine outputs power.

FIG. 7 is a schematic diagram illustrating a turbine engine with an opening on the outer surface of a rotor in accordance with aspects of the present technology. In certain embodiments, the turbine engine comprises a rotor 1011 with an opening on the surface and a plurality of fluid chambers 1020 are installed inside the rotor 1011. The surface of the rotor 1011 comprises shaft 1017 and bearings 1018 and 1019. The turbine engine further comprises a support-guideway system 1021 and a shielding device 1012. Wherein the bearing 1018 is rotated on the support-guideway system 1021. Figure 8 is a graphical representation of the induced fluid pressure of the rotor fluid chamber in a static fluid in accordance with aspects of the present technology.

FIG. 8 illustrates a schematic diagram of the fluid pressure induced by the rotor fluid chamber in a static fluid in accordance with aspects of the present technology in Figure 7. As shown, water enters all of the fluid chambers 1020 through the rotor 1011:

The fluid chamber 1020 (1, 2, 3, 4, 5, 6) is located above the shielding device: since the rotor 1011 at this position is not subjected to the upward pressure of water, the water and the fluid chambers 1020 have gravitational potential energy with respect to the bottom of the rotor, and the gravity of the water and fluid chamber 1020 generates a gravitational torque based on the shaft 1009; the water begins to move downwards;

Fluid chamber 1020 (8, 9, 10, 11, 12, 13): since the rotor 1011 at this position is subjected to upward pressure of water, these fluid chambers 1020 are subjected to buoyancy, and thus the gravity of these fluid chambers 1020 is reduced, and the fluid is based on the shaft 1009 generates a buoyancy torque (the buoyancy potential energy is generated when the fluid chamber 1020 is a floating body); the water begins to move upwards;

Therefore, the gravity torque and buoyancy torque of the fluid will be converted into rotational torque based on the shaft 1009 to drive the turbine engine to start rotating output;

$$\sum W = \sum W \text{ left} - (-\sum W \text{ right}) = (\Delta P \text{ down} \times \Delta h) - (-\Delta P \text{ Up} \times \Delta h) = (\Delta P \text{ down} + \Delta P \text{ up}) \times \Delta h .$$

Where P is the fluid pressure and h is the height of the relative axis of the fluid chamber.

It is, therefore, to be understood that the power of the turbine engine, ie the potential energy, is proportional to the depth of the fluid and to the spatial height of the rotor. With the turbine engine in the same volume, installing the turbine engine at the bottom of the container and increasing the height of the fluid can increase the power of the output.

It is, therefore, to be understood that the interaction of the fluid in the outer space of the rotor and the interior of the rotor produces reciprocating power while the fluid chamber is self-driven to circulate up and down.

It is, therefore, to be understood that the cross-sectional shape of the rotor is trapezoidal/triangular/arc shaped to effectively utilize the horizontal fluid pressure.

FIG. 9 illustrates a schematic diagram of an opening on the inner surface of the rotor to sense fluid pressure in accordance with aspects of the present technology. In certain embodiments, the rotor 1011 is configured with inner surface openings through which water enters the fluid chamber 1020. The water in the fluid chamber 1020 on both sides of the rotor generates gravitational potential energy and buoyancy potential energy respectively due to the effect of shielding device 1012. Therefore, the gravitational potential energy and buoyancy potential energy will be converted into rotating torque to drive the turbine engine to rotate. 1030 is the container.

FIG. 10 illustrates a schematic diagram of the inner surface of a rotor entirely shielded by a shielding device in accordance with aspects of the present technology. In certain embodiments, shielding means (not shown) are disposed on the end surfaces of the two sides of the rotor 1011 such that the inner surface of the rotor 1011 forms a fluid-free space,

thereby effecting gravity of the fluid chamber 1020 relative to the shaft 1009, respectively. The effect of potential energy and buoyancy potential energy. 1030 is the container.

FIG. 11 illustrates a schematic diagram of one side of a rotor completely shielded by a shielding device in according to aspects of this technology. In certain embodiments, the turbine engine is configured as a cylindrical rotor 1011 mounted on a shaft 1009 that is mounted to the vessel. The turbine engine further comprises a shielding device 1012 mounted on the bracket 1013 that shields the surface of all of the rotors 1011 on the left of the shaft 1009. 1030 is the container.

FIG. 12 is a schematic diagram illustrating the internal structure of the rotor in Fig 10. The interior of the rotor 1011 comprises four fluid chambers 1020 through which water enters.

Two fluid chambers 1020 located on the left side of the shaft 1009: since the rotor 1011 on this side is not subjected to the buoyancy of water. As a result, water produces a "object gravity" in the fluid chamber 1020, therefore, the water in the two fluid chambers 1020 generates a gravitational torque based on the shaft 1009;

Two fluid chambers 1020 on the right side of 1009: since the rotor 1011 and the two fluid chambers 1020 are subjected to the buoyancy of water. As a result, the water generates buoyant torque on the two fluid chambers 1020 based on the shaft 1009;

Therefore, the gravitational torque and buoyant torque of the fluid will be converted into rotational torque based on the shaft 1009 to drive the turbine engine to start rotating.

FIG. 13 illustrates a schematic diagram of a shielding device. The shielding device 2012 comprises a shielding substrate 2010. The shielding substrate 2010 comprises moving parts 2011 (e.g. spherical rolling parts), sealing part (e.g. silicone rubber strips) 2013 and lubricants (not shown).

FIG. 14 illustrates a schematic diagram of structural variation of shielding device in FIG 13. The shield substrate 2010 is configured to be hollow in the middle to reduce the surface contact with the moving parts. The shielding substrate 2010 comprises a rotating part 2011, a

sealing part 2013, and a lubricating oil (not shown). The shielding substrate 2010 may be a material such as surfacing cobalt chromium tungsten/cast iron/impregnated graphite/bronze/phenolic plastic, but is not limited thereto

It is, therefore, to be understood that a turbine fluid power generator, comprising: a plurality of objects or fluid chambers mounted on the interior of a rotor, the rotor drivingly coupled to an electrical generator; the supporting and rolling system are consisted of a plurality of shafts and bearings on the surface of the annular guideway and is configured on the annular guideway to support the volume and shape of the rotor; an annular guideway fixed to the bracket to determine the cyclic rotation of the rotor; a shielding device fixed to the bracket and configured to shield a unidirectional fluid pressure at a distance required by the turbine fluid power generator on one side of the shaft; an object or a fluid chamber is configured to sense the change of fluid pressure, determine potential energy and moment based on the dynamic position between the shielding device and the rotor in response to the sensed change in fluid pressure, and superimpose the potential energy and torque on the shaft to obtain a collective blade rotor torque; the shielding device is fixed on the support and is configured to shield the one-direction fluid pressure at the distance required by the turbine fluid power generator on one side of the shaft.

It is, therefore, to be understood that a shielding device, comprising: a shielding substrate arranged on the bracket in close contact with the moving member to shield the fluid; rotating the original piece configured to be installed on the shielded substrate to reduce friction between the moving component and the shielded substrate; and a shielding device which is arranged on the shielded substrate in close contact with the moving member to shield the fluid. The elastic sealing element is arranged on the shielded substrate; and will have a certain hardness of grease covering the shielded substrate to rotate the original piece, the clearance of the elastic sealing element to prevent the inflow of the fluid.

The above-described techniques thus facilitate optimum use of turbine engine. For example, the shape and installation angle of the rotor 1011; for example, the structure and shape of the shielding device 2012, as well as the location of the installation and the number of

installations, may be determined by reference to the size of the container or the environmental conditions used. For example, the shielding substrate 2010 may have a surface shape or structure that may be determined with reference to the shape or structure of the moving part, and the rotating part may be determined based on the material of the shielding substrate and the rotor surface to reduce the friction between the moving part and the shielding substrate. The shielding device 2012 can be a shielding substrate 2010 with special material nature, however, it is better to use sealing part 2013 and grease with certain hardness to cover the shielding substrate than the shielding device with only shielding substrate 2010.

While only certain features of the invention have been illustrated and described herein, many modifications and changes will occur to those skilled in the art. It is, therefore, to be understood that the appended claims are intended to cover all such modifications and changes as fall within the true spirit of the invention.

Claims (20)

1. A method for driving a turbine engine by fluid pressure and a method for enhancing its power, comprises:

constructing a space and object within a rotor to obtain potential energy;

determining a location of shielding fluid device based upon the fluid pressure required by the shaft and rotor of turbine engine;

determining the location of objects based upon hydrodynamic torque of shaft of the turbine engine, in response to the sensed fluid pressure, and coupling the torque of all objects in the rotor at the dynamic position to the shaft to obtain a total rotational torque based upon the entire rotor; and

installing ~~the said~~ a turbine engine at the bottom of a vessel to obtain maximum fluid pressure.

2. The method of claim 1, wherein sensing fluid pressure is through a rotor with a rotating disk/bell-shaped object.

3. The method of claim 1, wherein sensing fluid pressure comprises sensing fluid pressure direction at least one specific portion of rotor based upon contribution of that section to dynamics torque on the inner of rotor.

4. The method of claim 1, wherein the inside of the rotor can be configured as a fluid chamber or object.

5. The method of claim 1, wherein the cross-sectional shape of rotor is polygon/triangle/arc.

6. The method of claim 1, wherein a support-guideway system is installed on a container, determining the rotor motion pattern based upon the shape of the support-guideway system.

7. The method of claim 1, wherein there are shafts and bearings on the rotor.

8. The method of claim 1, wherein using the rotation of a fluid to drive the rotor motion.

9. The method of claim 1, wherein comprising increasing hydrodynamic torque via increasing the height of the fluid.

10. The method of claim 1, wherein determining the dynamics moment of the object is based upon the height of the internal space of the rotor.

11. The method of claim 4, wherein there is an opening on the surface of the rotor through which the fluid enters the fluid chamber.

12. The method of claim 6, wherein the support-guideway system comprises a baffle or a radiation shaft.

13. A turbine fluid power generator, comprising:

a rotating disk/a rotor with a belt shape, the inside structure is configured as a space and a plurality of objects or fluid chambers are mounted for sensing fluid pressure;

a support-guideway system is configured on the bracket for use as a rotor motion track;

a shielding device is configured on the bracket to shield a fluid pressure at the desired position of the rotor; and

the object in the rotor obtains hydrodynamics torque based on the shaft of the turbine engine, and rotor responds to the sensed change in fluid pressure and coupling the torque of all objects in the rotors at the dynamic position to the shaft to obtain a total torque of rotation based on all the rotors.

14. The fluid pressure turbine engine of claim 13, wherein there are a plurality of shafts on the rotor, and bearings are mounted on the two ends of the shaft.

15. The fluid pressure turbine engine of claim 13, wherein there are springs or support frames or support rods to support the internal space of the rotor.

16. A shielding device, comprising:

determining the shape of a shielding substrate to shield the fluid based upon the surface shape of the moving component at where the fluid needs to be shielded;

determining ~~a~~ the material of surface of rotating component based on the shielding substrate to reduce friction between the moving component and the shield substrate;

a sealing component is determined based upon the rotating component or the shielding substrate, and the lubricant ~~grease~~ is applied to the shield substrate to prevent the inflow of fluid.

17. The shielding device of claim 16, wherein the shielding substrate or sealing element is a self-lubricating material or an elastic material or a nano material, but is not limited thereto.

18. The shielding device of claim 16, wherein the rotating parts are spherical transfer parts/pulleys/bearings, but is not limited thereto.

19. The shielding device of claim 16, wherein shielding fluid pressure is achieved only through the shield substrate.

20. The [shielding device of] claim ~~1, 13,~~ 16, wherein said fluid can be water or artificial liquid.

21. A turbine fluid power generator of claim 13, wherein said fluid can be water or artificial liquid.

22. A method for driving a turbine engine by fluid pressure and a method for enhancing its power of claim 1, wherein said fluid can be water or artificial liquid.

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to FIG 1, 3, 5, 9,10 and 11.
A set of replacement sheet replaces the original sheet including FIG 1, 3, 5, 9,10 and 11.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

In the Office Action, the drawings are objected to under 37 CFR 1.83(a) because they fail to show the "container" as described in the specification.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "1010" has been used to designate both "radial axis" and "radiation axis".

Claim 20 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only.

Claims 1-20 rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a credible asserted utility or a well-established utility.

Claims 1-20 also rejected under 35 U.S.C. 112(a) or pre-AIA 35 U.S.C. 112, first paragraph. Specifically, because the claimed invention is not supported by either a credible asserted utility or a well-established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Claims 1-20 rejected under 35 U.S.C. 112(b) or 35 U,S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor (or for applications subject to pre-AIA 35 U.S.C. 112, t e applicant), regards as the invention

Applicant responds to the office action as follows:

Applicant amends specification to add the description of the drawing identifier.
A substitute specification with a marked-up copy and a substitute specification with a clean copy are attached. No new matter is added.

The following remarks herein are considered to be responsive thereto.

Objections to the claim 1, 16, 20

Claims 1-20 were presented for examination were pending in the present application before this amendment as set forth above. By the amendment, claim 1, 16, 20 is amended. New claim 21 and 22 are added. No new matter is added.

Reconsideration and withdrawal of the objections to the claim 1,16 and 20 are respectfully submitted.

Objections to the drawings

Drawings are amended to add the identifier of container. The reference line 1010 has been corrected and no longer point to the "radial axis".

A new set of replacement sheet is provided in the formal response to the Office Action.

Reconsideration and withdrawal of the objections to the drawings are respectfully submitted.

Claim rejections under 35 U.S.C. 112 (a) and (b)

In response, Applicant responds to the questions in the section: Reply to office action.

Reconsideration and withdrawal of the rejection of claims 1-20 under 35 USC 112 are respectfully requested.

Claim rejections under 35 U.S.C. 101

In response, Applicant responds to the questions in the section: Reply to office action.

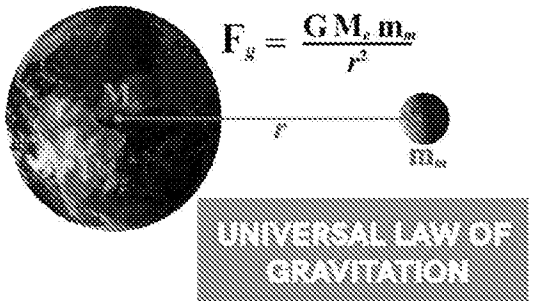
Reconsideration and withdrawal of the rejection of claims 1-20 under 35 USC 101 are respectfully requested.

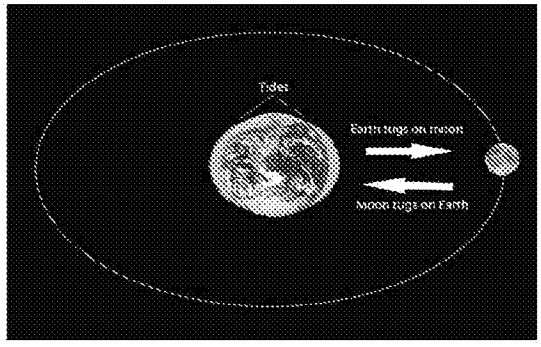
REPLY TO OFFICE ACTION

In response to examiner's report, the applicant provides following facts, the law of nature and experiments of applicant for your review.

1. The energy source of the claimed turbine engine in this application is universal gravitation from earth, which is the external force to start and keep the claimed turbine running.

Taking tides as an example, the gravity field of the earth and the moon drive the sea water to reciprocate for millions of years. This fact shows that the gravity field is an energy source and universal gravitation is the driving force to drive the static sea water up and down. That is, two driving forces in opposite directions cause seawater to reciprocate.





The fact that tides are driven by universal gravitation shows a power model of natural engine.

- Sea water is static water in a container on the earth: The seabed and the continental shelf are the containers for the ocean to hold sea water on the earth. On a large scale, sea water is the same as the water in a water bottle. They are both static and constrained to stay in the container. In other words, the water in the container cannot generate motion and energy by itself.
- Question: Why does the seawater in the seabed produce tidal phenomena and move up and down? Can the static seawater in the seabed move by itself?

- Answer: The gravity of the earth and the moon drives the static seawater up and down for billions of years, causing tidal phenomena.
- Obtaining the dynamic model: Based on the above facts, we will obtain a perpetual dynamic model, that is, Universal Gravitation between the two energy fields drives the static sea water rise and fall naturally.

The law of nature 1:

Two opposite forces drive sea water to rise and fall naturally.

The law of nature 2:

1. There is infinite energy, there is infinite motion.
2. As long as there are two gravitational fields in opposite directions, the object can be driven to reciprocate...Like tidal power generation...forever!

In the present application, the gravitational field generates fluid gravity and fluid buoyancy in the water by universal gravitation; therefore, downward driving force and upward driving force can be obtained by turbine engine in a container filled with water.

Principle of the present application: According to the above-mentioned the laws of nature, we can obtain a dynamic model using the earth's gravity field in which the gravitational potential energy and the buoyancy potential energy respectively in opposite directions drive the machinery reciprocating motion in a container filled with water.

The energy source used in the turbine engine claimed in this application is the gravity field. The shielding device divides the water into a gravity zone and a buoyancy zone in a container filled with water. The side of the rotor shielded by the shielding device obtains fluid gravity because the rotor is not subjected to the buoyancy, while the other side without the shielding device obtains fluid buoyancy. The gravity of the fluid gravity zone and the buoyancy of the fluid buoyancy zone drive the turbine to reciprocate. Since universal gravitation always exists between the earth and

water in the container, the turbine will continue to obtain universal gravitation to keep running and output power.

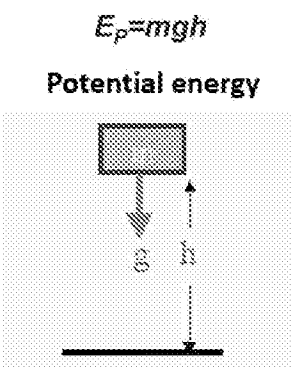
Please note: The turbine itself is a receiver of force, not an energy source, and does not work by itself. No matter how many turns it turns, its output work is zero. What really does work is the universal gravitation between the earth and water, which acts as an external force to push the turbine, and the work output is not zero.

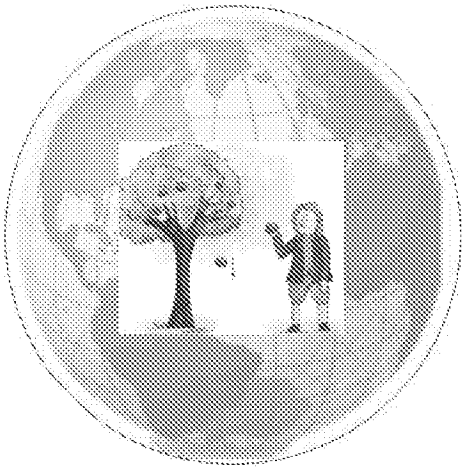
How the turbine obtains the gravity field in the water: the side of the rotor, a shielding device is set to shield the upward pressure of water on one side of the turbine engine, so that the turbine engine can obtain the downward water pressure action; that is: the gravitational field drives the turbine to move downwards.

How the turbine obtains the buoyancy field in the water: the other side of the rotor, the turbine engine obtains the upward water pressure (buoyancy). That is: the buoyancy potential energy drives the turbine to move upward.

How the turbine realizes the reciprocating motion: using the opposing forces of the two potential energy to drive the turbine to perform reciprocating motion naturally, outputting earth energy...like tidal power generation...forever.

<u>Law of Nature 3</u>: In the earth, gravitational field energy is everywhere.



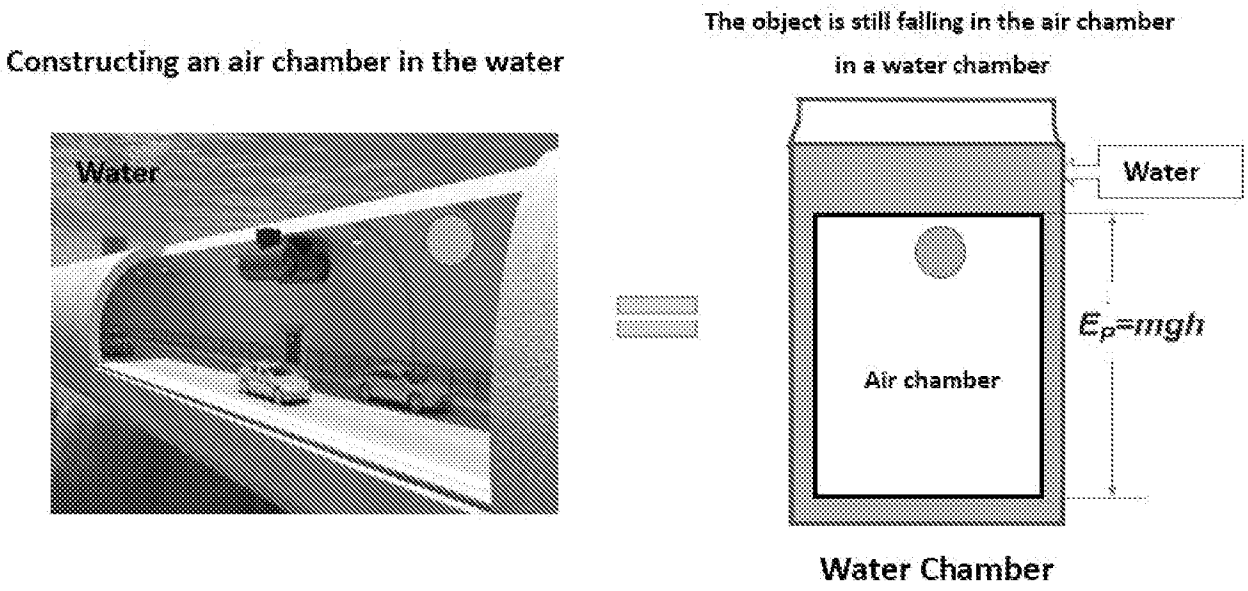


Potential Energy is defined as the energy stored by a body by virtue of its position relative to others, stresses within itself, electric charge, and other factors.

- When you (or a rock) are standing at the top of a hill, you possess more potential energy than when standing at the bottom. This is because your position relative to the Earth's center of gravity can exert potential energy upon you to bring you closer to that center.

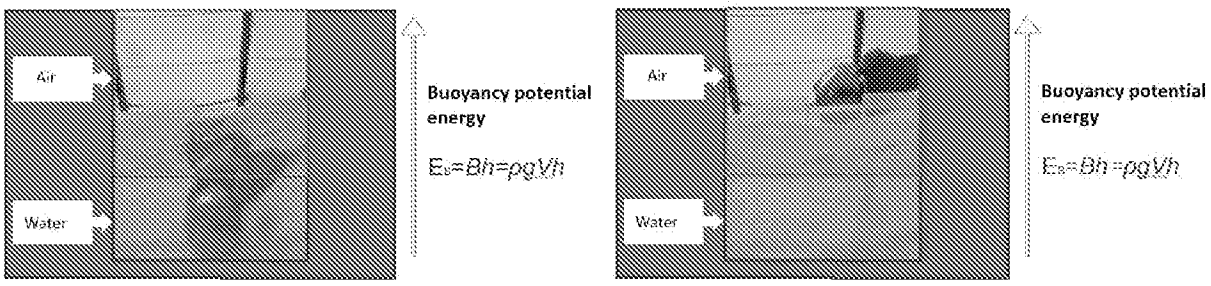
The law of nature 4:

In the gravitational field, universal gravitation tells an object how to move.

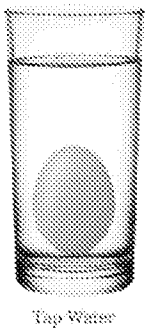


Law of Nature 5:

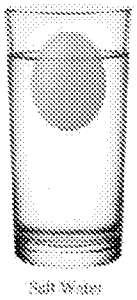
On the earth, universal gravitation tells objects how to move in the buoyancy potential energy zone through water.



Method of reciprocating motion: different fluid density, different motion direction

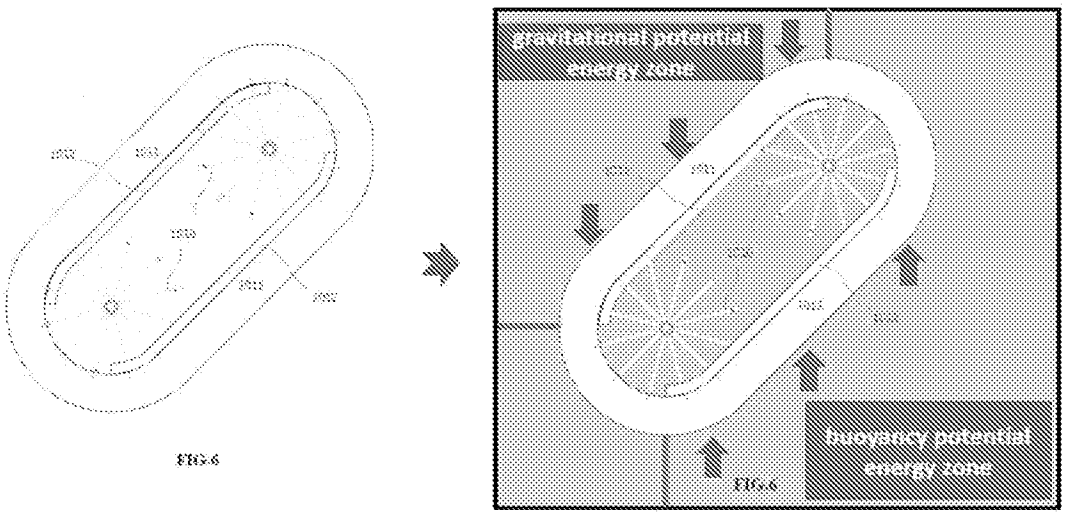


Eggs in tap water: sinking



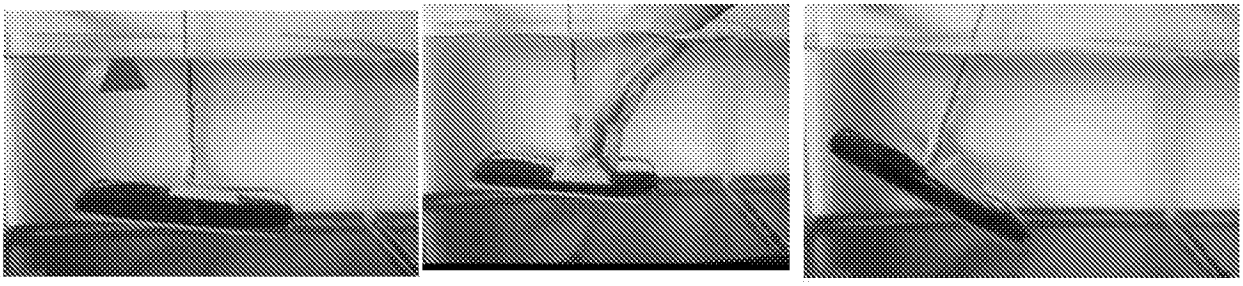
Eggs in salt water: floating

The schematic diagram of the formation of gravitational potential energy zone and buoyancy potential energy zone by setting the shielding devices.

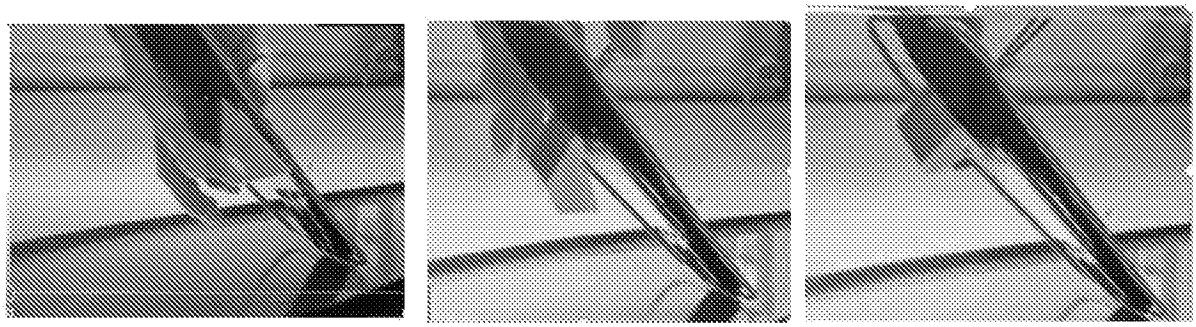


The application for extracting the gravitational field energy (14/252,778**) reveals the basic method of using the earth's energy.**

Gravitational potential energy zone: the floating body (wooden block) does not float because the buoyancy is shielded on its bottom. (see the experimental videos in the PowerPoint)



Buoyancy potential energy zones : the floating body floats because it is subjected to buoyancy.



<u>Analysis of the fluid chamber driven by universal gravitation in the diagram below,</u>

<u>See the fluid chamber 3 (blue color) and the fluid chamber 11(blue color)</u>

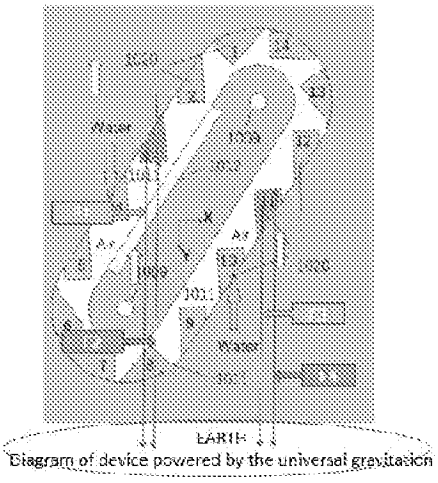


Diagram of device powered by the universal gravitation

Description:

1. The shielding device 1012 shields the buoyancy of water.2. The friction between the shielding device 1012 and the turbine is negligible.

3. The red line is the universal gravitation of the earth, where F2 and F4 are the gravitational force of the earth on the turbine components.

4. Blue 3 is the water mass m1 and the gravity of the earth F1=m1g.

5. Blue 11 is the buoyancy generated by the water mass m2 F3=B=ρgV.

6. The upward yellow arrow represents buoyancy.

Tidal force ∑F= ∑F(left) - ∑F(right)=F1+F2 - (F4-F3)= F1+F2-F4+F3

Because: F2=F4

Then: ∑F = F1+F3>0;

According to Newton's second law of motion ∑F=ma

F1+F3=(m1+m2) a

a= (F1+F3)/(m1+m2) > 0

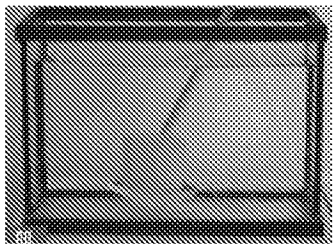
Conclusion: 1. The fluid chamber 3 moves downward;

The fluid chamber 11 moves upward.

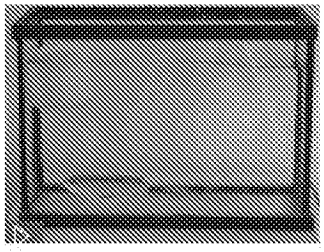
2. The fluid chamber 3 and 11 produce reciprocating motion.

The experiment has proved: (see the experimental video in the PowerPoint)

The object (wax) loses its buoyancy to move downwards.



The object is subjected to buoyancy to move upwards.



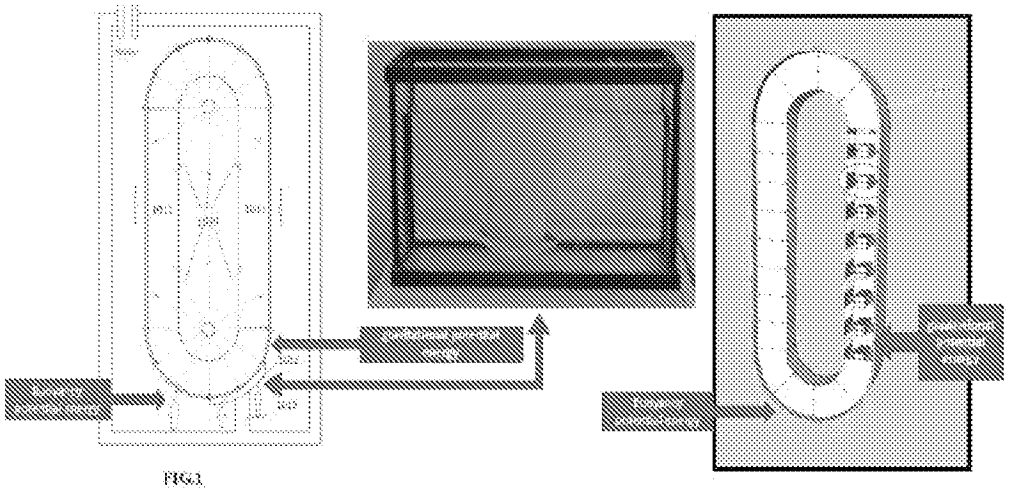


FIG3

The experiment has proved (see the experimental video in the PowerPoint):

The air is below the object and the object moves downward.

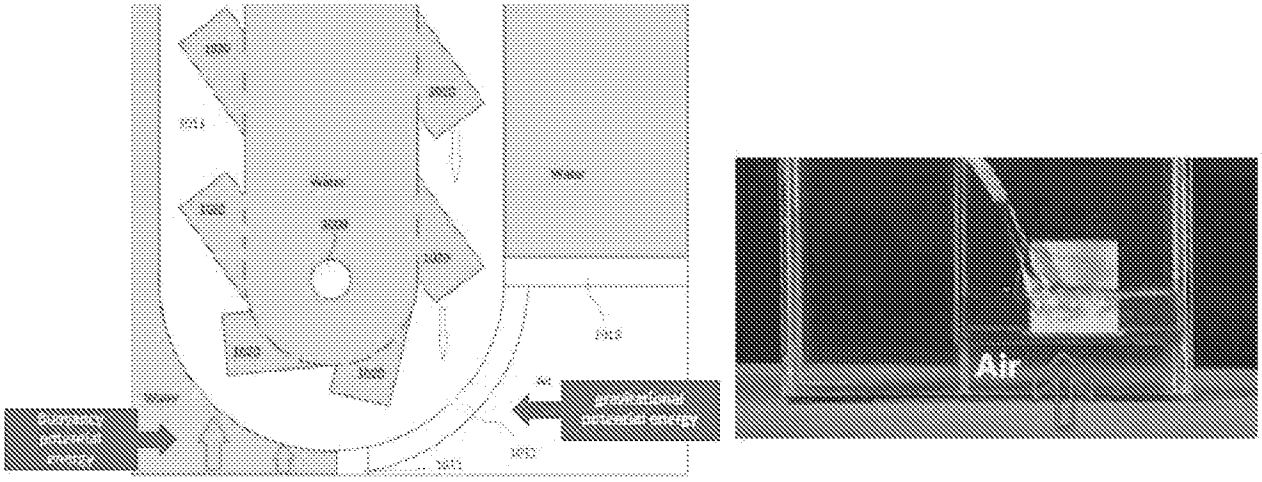


FIG.9

The water is below the air and the object moves upward.

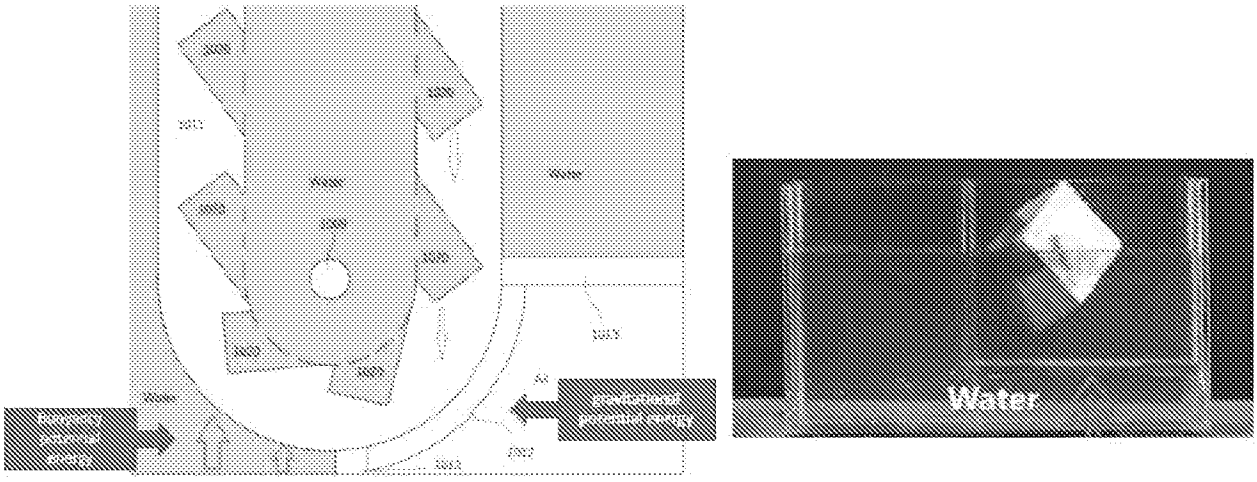
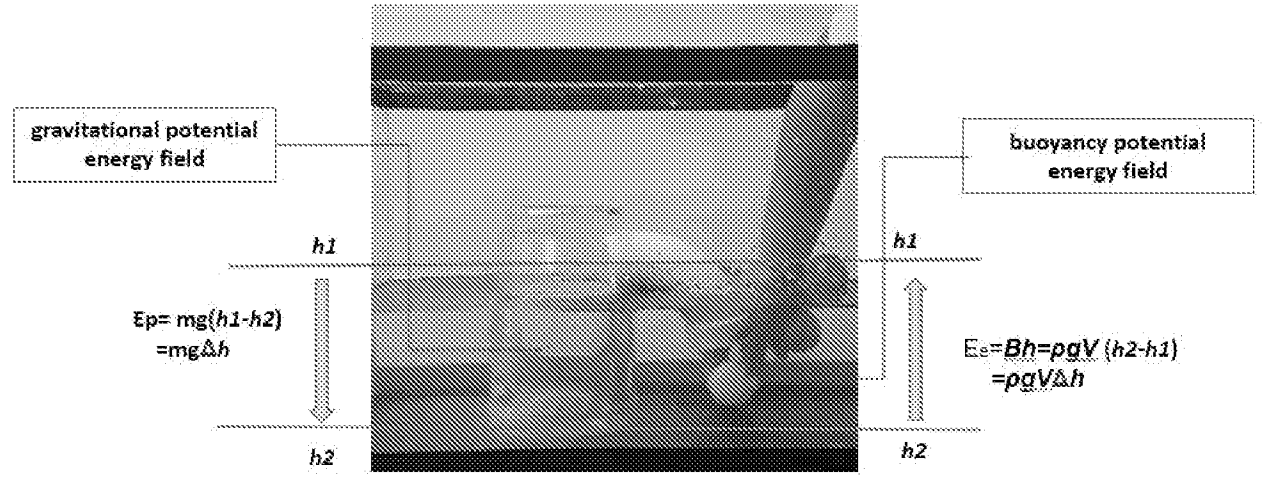
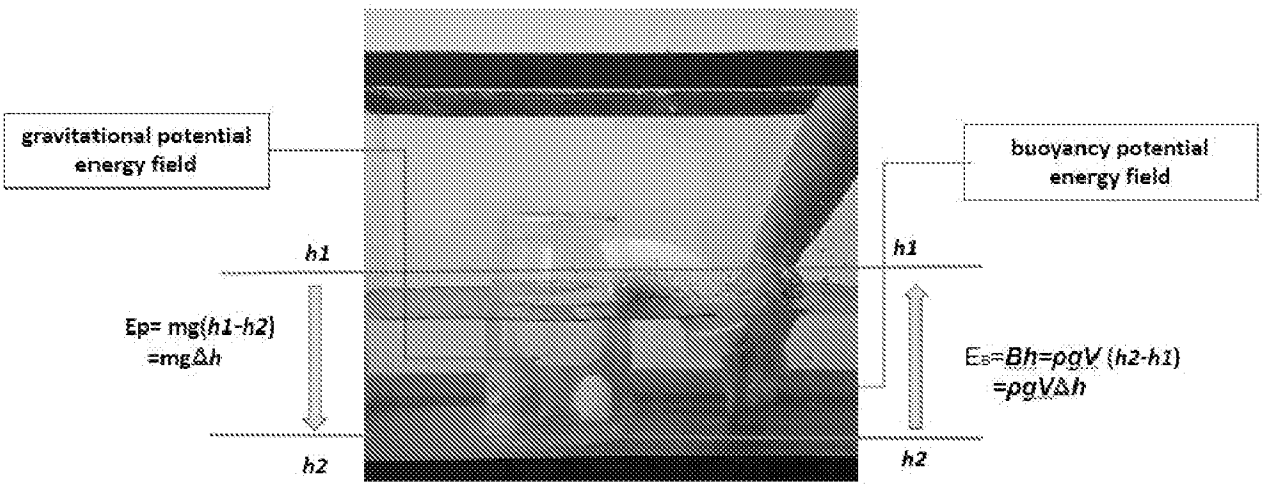


FIG.9

The experiment has proved that three table tennis balls (objects) are used to realize reciprocating motion in an energy field composed of a gravitational potential energy field and a buoyancy potential energy field built in a container according to the method and arrangement described in this application. It needs to be clearly pointed out that the

movement direction of these table tennis balls is a natural reversible, not irreversible (see the experimental video in the PowerPoint).





The claimed turbine engine in this application are not perpetual motion machines, thus it has utility.

- **The claimed turbine engine in this application** obeys the first law of thermodynamics: According to the law of conservation of energy, a mechanical device driven by inexhaustible energy must be capable of infinite motion. Therefore, it obeys the laws of physics.

- **The second law of thermodynamics does not apply:** The second law of thermodynamics applies to natural and irreversible energy sources. Although the field force of the gravitational field or the anti-gravity field is irreversible in a natural process, the energy field composed of a gravitational field and an anti-gravity field will have two field forces in opposite directions. The process is reversible to do work. Therefore, the second law of thermodynamics does not apply to such mechanical devices.
- **If the tide is not considered a perpetual motion machine, then the claimed turbine engine in this application is not a perpetual motion machine either.**

Answer the questions to the examiner's report:

In the examiner's report, examiner has raised some questions as follows:

1. What exactly is inside the shielding device 1012? Is this device hollow and filled with air or liquid? Is 1012 a self-contained section? If so then what is the interface with the rest of the loop? If 1012 is filled with, air then is the rest of the loop filled with liquid?

What is the crucial device that separates 1012 from the rest of the loop? This device must be some kind of gate apparatus that would decidedly affect the energy flow around the loop.

The transition between the shielding device 1012 and the rest of the loop is crucial but is unknown.

Paragraph 0030 in conjunction with the shielding device 1012 mentions "a gas permeable, water impermeable e material that will prevent the rotor 1011 at the shielding device from being subjected to buoyancy." The examiner questions if this material is the shielding substrate?

Applicant answers above question as follows:

The operation and function of shielding device. The applicant has described the installation and function of the shielding device in the detailed description of FIG. 5 and FIG 6 of this application.

FIG. 5 is a schematic diagram illustrating a variation of shielding method during shielding a fluid, in accordance with aspects of the present technique. In certain embodiments, the shielding device

1012 is configured to be mounted on the bracket 1013 using a gas permeable, water impermeable material that will prevent the rotor 1011 at the shielding device from being subjected to buoyancy.

FIG. 6 illustrates a schematic diagram of improving output power of a turbine engine in accordance with aspects of the present technology. In certain embodiments, the turbine engine is configured with the shielding devices 1012 on upper and lower of the inner ring surface of the rotor 1011 for shielding fluid pressure. The two shielding devices 1012 are fixedly mounted on the container so that the fluid can only act in one direction on the inclined section or the lower surface of the rotor 1011, and the effect is to increase the potential energy of the rotor 1011 located in the section to improve the turbine engine outputs power.

The shielding device 1012 a self-contained section, which is fixedly installed on the bracket or container. Its important function is to shield the upward power of the water so that one side of the rotor is not affected by buoyancy, but only by gravity. The lubricant between the rotor and the shielding device on this side, without water between them, the rotor can slide along the shielding device, and the other side of the rotor has no shielding device and is affected by buoyancy. As a result, the rotor is driven by these two opposite forces to run. This special structure of the rotor causes these two forces to always exist, therefore the rotor will always be driven by these two forces and continue to reciprocate.

In certain embodiments, the shielding device 1012 is configured to be mounted on the bracket 1013 using a gas permeable, water impermeable material that will prevent the rotor 1011 at the shielding device from being subjected to buoyancy. This material is the shielding substrate. The breathable and impermeable material is a universally used waterproof material. The shielding device 1012 made of this material can play a role in shielding water when it is in close contact with the rotor.

The rotor is hollow and filled with air. Its function is to make the fluid generate gravitational potential energy and buoyancy potential energy in the internal space of the rotor. The entire movement process of the rotor in the water relies on the gravity and buoyancy generated by the universal gravitation and water to drive the rotor movement without the need for additional

apparatus.

Law of buoyancy: buoyancy is an upward force exerted by a fluid on an immersed object in a gravity field. In fluids, pressure increases with depth; hence, when an object is immersed in a fluid, the pressure exerted on its bottom surface is higher than the pressure exerted on its top surface. This difference in the pressure leads to a net upward force (buoyancy force) which opposes the gravity force and is equivalent to the weight of the fluid that would otherwise occupy the volume of the object.
Take buoyancy on one side of the rotor as an example: According to the above law, buoyancy is the pressure difference between the upper and lower surfaces of the object exerted by the fluid, thus we can obtain an equation:

Buoyancy = Force 2 (upward pressure) - Force 1 (downward pressure)

In this application, the pressure on the upper surface of the rotor is shielded by the shielding device so that the upper surface of the rotor is in a pressure-free state,
that is, Force 1 (downward pressure) = 0; while the lower surface is still subject to upward fluid pressure, Force 2 (upward pressure) remains unchanged, that is, B2= F2- 0=F2. Therefore, the rotor is only subjected to buoyancy, which has the effect of increasing buoyancy to the rotor.

2. In figure 5 the air section within the bracket 1013 how does this impact the section of the loop shielded by the shielding device?
Answer: The function of the air section within the bracket 1013 is to prevent the buoyancy generated by the water when the rotor rotates above the air, so that the rotor can obtain gravitational potential energy.

3. About viscosity of the liquids and system friction would affect the process.

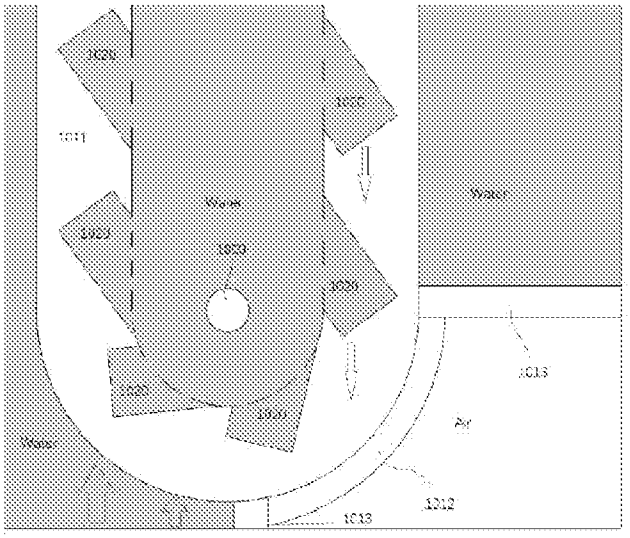
The applicant does not agree with the examiner's point of view. It is true that liquid has viscosity, and any object in the liquid will be affected by viscosity. However, this is not a factor that determines whether the rotor is able to move. The factor that determines the

movement of the rotor is whether the rotor receives an external force whose resultant force is not zero. If the rotor gets an external force with a resultant force of zero, then the rotor will not be able to move while the viscosity will not work.

4. Regarding figure 9 and paragraph 0041 sentence:

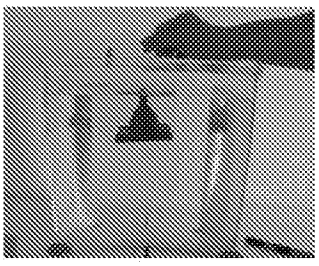
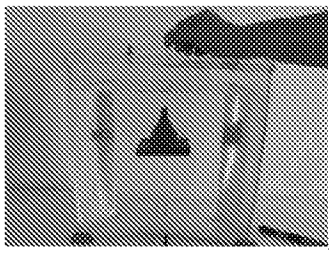
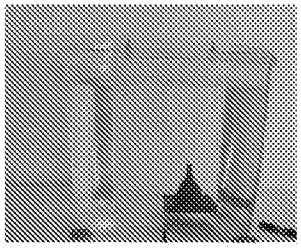
"The water in the fluid chamber 1020 on both sides of the rotor generates gravitational potential energy and buoyancy potential energy respectively due to the effect of shielding device 1012." What is in 1011? What is gravitational potential energy at least in this situation? 1020 is filled with water and spinning in the rotor space; gravity would be consistent and not effected by buoyancy.

Answer: 1011 is rotor filed with air inside. As shown in the figure, there is a shielding device on the right side of the rotor bottom, this side will not be affected by buoyancy; on the left side of the rotor bottom, there is no shielding device, this side will be affected by buoyancy. Therefore, the rotor will be subjected to an asymmetric fluid pressure based on the shaft, so that the resultant external force of the system will never be zero, which drives the rotor to reciprocate.

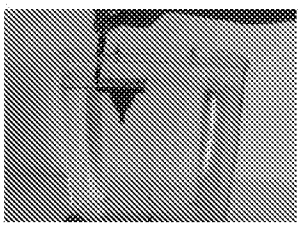
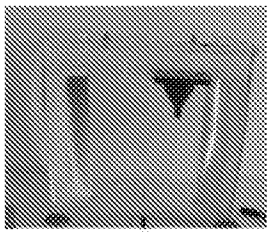


5. Figure 10 is not understood. Where is the shielding device 1012? The central oblong is labelled "air" so where is the rotor?

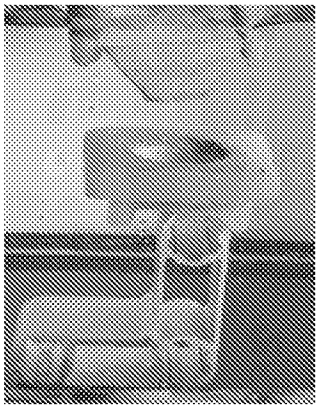
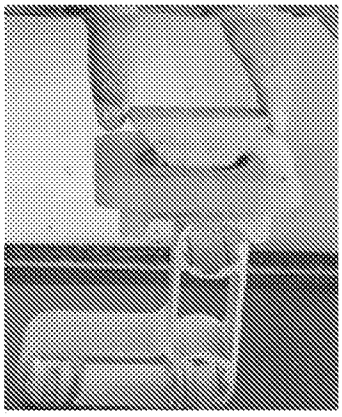
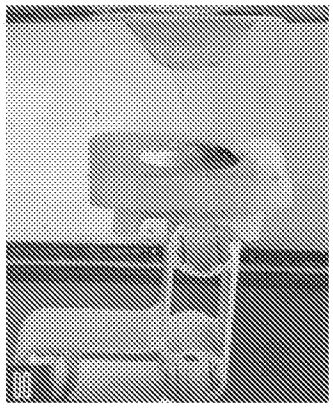
Answer: The applicant's experiments have proved that the buoyancy of an object is related to its shape. Through the asymmetric arrangement of the internal structure of the rotor in the present application, the interior of the rotor will be subjected to asymmetric buoyancy, so that the resultant force of the buoyancy on the fluid-free space of the rotor is never be zero. (see the experimental videos in the PowerPoint)

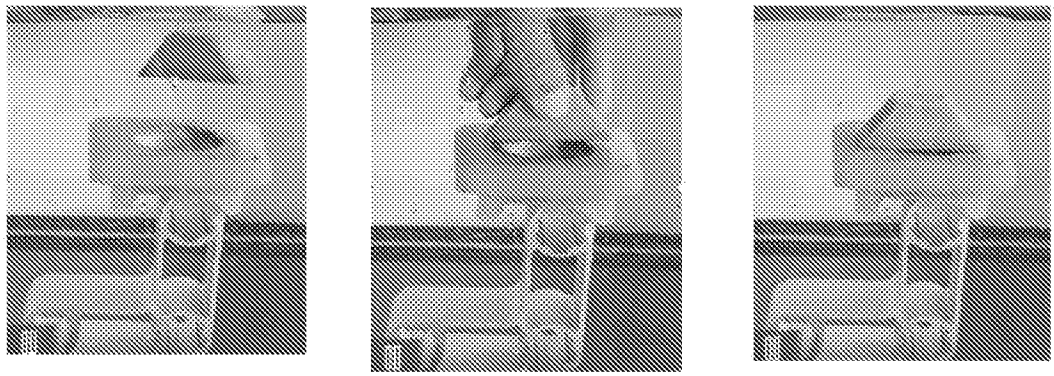
Turn the object over, the object floats, does not sink.

Experiment 2:

Turn the wooden block over, it stays, does not float.



6. Regarding the question in claim 1:

In the gravitational field, the precondition for releasing potential energy is the existence of space. According to the positional relationship between shielded and unshielded in the rotor, it can be determined that the rotor has obtained the gravitational potential energy or buoyancy potential energy of the fluid. Based on this axis, the gravitational potential energy and buoyancy potential energy of the fluid generate hydrodynamic torque.

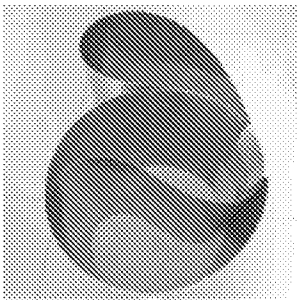
The pressure in the fluid is related to the depth of the fluid. Therefore, the turbine engine is installed at the bottom of the container to receive the maximum fluid pressure.

7. Regarding the question in claim 13:

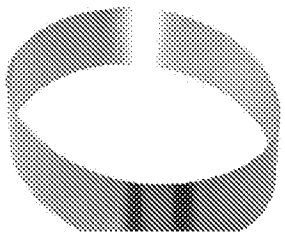
The rotor with belt shape can be made of steel.

The advantage of steel belt is:

- Dimensional stability. steel belt remains accurate because they do not stretch.
- A high strength-to-weight ratio. Belts of high tensile strength alloys have low mass and inertia.



- Easily cleaned. Solid metal belts are inert, non-absorbent and suitable for corrosive environments.
- Steel belt has very high melting points and very low thermal expansion coefficients. This vital advantage never allows the metal belts to lose their shape or deviate from their original dimensions.



In the present application, universal gravitation is generated between the water used by the turbine engine and the earth, and the universal gravitation is used as an external force that drives the turbine engine to perform reciprocating motion.

According to the method and arrangement claimed in this application, the shielding device as a component in the turbine engine divides the water in the container into a gravitational potential energy field and a buoyancy potential energy field. The experiments have proved that the turbine engine can be driven to reciprocate by the forces of these two fields. This fact shows that the claimed turbine engine in this application can be used as a power engine anywhere on the earth, therefore the present application has utility.

According to the description in this application, those skilled in the art can understand that the water used by the turbine and the earth can generate universal gravitation, so that the turbine can obtain unlimited energy or external force anywhere on the earth. By installing a shielding device on one side of the turbine, any object can lose its buoyancy on that side, so that the object can obtain a gravitational field in the water and moves downward; any object on the other side of the turbine is subjected to buoyancy, thereby obtaining the buoyancy potential energy and move upward in the water. Therefore, the turbine engine can be driven to reciprocate in any container filled with water by two field forces in opposite directions. The principle of the claimed turbine in this application is easy to understand, thus those skilled in the art can easily manufacture it. The applicant respectfully requests the reconsideration and allowance of this application.

CONCLUSION

Applicant respectfully submits that the foregoing Response place this application in condition for allowance. If the Examiner believes that there are any issues that can be resolved by a telephone conference, or that there are any informalities that can be corrected by an Examiner's amendment, please call the undersigned at 1-647-706-6678 or email to Jack.che@outlook.com.

Respectfully submitted by Applicant

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December 22, 2020

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