Equipment of power generator

An equipment of power generator comprises a starting device, a control device, a rotating mechanism, a power generating apparatus and a power storage apparatus. When the power generator needs to be operated, the starting device is instructed by the control device to initiate the operation of the rotating mechanism, which is kept in constant manner due to the repulsive interaction in same magnetic poles of eccentric magnetic objects, then the power generating apparatus is driven to produce electric energy for being stored in the power storage apparatus so that it is accessible by users in usage. The user can oversee the operational status of the power generator as said control device receives all signals from the rotating mechanism, power generating apparatus and power storage apparatus. Thus, through synergistic structure of all the components, the pollution accrued and energy consumed by the power generator can be effectively reduced.
Description

TECHNICAL FIELD OF THE INVENTION

[0001] The present invention relates to an "equipment of power generator", particularly for one that can be effectively kept in continually operation to produce electrical energy by means of the contrivance of a pair of repulsive magnetic objects such that both of which face each other in eccentric manner.

BACKGROUND OF THE INVENTION

[0002] In daily life, people constantly consume various kinds of energy resources all the time for examples taking bus or train can consume the petrochemical or electric energy, using air conditioner for regulating the temperature needs electrical power supply, taking a shower needs coal gas or electricity to water heater too. So, how to effectively use limited energy resources becomes a critical issue to be overcome and solved now. However, following the gradual deficient with global resource in addition to the increasing global warming issue, how to create substituting energy through other resource for replacing present limited electric power generated by thermal power, nuclear energy generating electricity and the like has already become the vital problem to be urgently overcome presently. In order to solve foregoing issues to meet the demand of generating electricity, many ways such as hydroelectric generating and wind-power generating electricity and so on are now employed. Although these hydroelectric generating and wind-power generating electricity can continuously supply the energy undoubtedly, they have a serious intrinsic problem in unstable sources, which are unable to effectively replace current thermal power and nuclear energy generated electricity with possibility in worsening the destruction of the environment and global warming issues incurred. Accordingly, hydroelectric generating and wind-power generating electricity are still served as a complementary power generating way up to now.

[0003] Therefore, the power generators described above are not good designs, which need to be improved urgently, as some drawbacks still exist therein. Having realized and addressed the foregoing drawbacks incurred in the conventional power generators, the applicant of the present invention is eager to improve it in innovative way. After having proceeded painstaking research and development for many years, the contrivance of the present invention is successfully worked out eventually.

SUMMARY OF THE INVENTION

[0004] The "equipment of power generator" of the present invention comprises a starting device, a control device, a rotating mechanism, a power generating apparatus and a power storage apparatus, wherein said starting device, which receives the controlling signal from the control device, is connected with rotating mechanism and functioned to initiate the accelerating rotation of the rotating mechanism in the starting stage; Said rotating mechanism includes at least a pair of repulsive magnetic objects, each of which is connected with a distance regulator via a spindle respectively, such that both of which face each other in eccentric manner; When the magnetic objects is initiated to rotate by the starting device, it will keep constant rotation by the repulsive interaction of magnetic poles between the pair of eccentric magnetic objects; If relative rotation speed of the pair of magnetic objects goes too fast or too slow, the distance between both of magnetic objects is adjusted to larger or to smaller for reducing or increasing the magnetic repulsive interaction and relative rotation speed; Thereby, the relative rotation speed of the magnetic objects can be maintained in constantly stable and steady manner to provide the kinetic energy required by the power generating apparatus by means of the reciprocal adjustments of the distance regulator; Said power generating apparatus, which is connected with and directly driven by the rotating mechanism, converts the kinetic energy of the rotating mechanism into electrical energy to be transmitted to and stored in the power storage apparatus; Said power storage apparatus, which is also connected to starting device for supplying the electrical energy required to initiate the rotating mechanism, receives and stores the electrical energy from the power generating apparatus for relaying it to other external equipments; And said control device receives and processes all the feedback signals from the rotating mechanism, power generating apparatus and power storage apparatus into monitoring and controlling information to oversee the integral operational status of the power generator.

[0005] Moreover, other than the function to initiate the accelerating rotation of the rotating mechanism in the starting stage, the additional feature of the starting device is capable of supporting the retention of stable and steady relative rotation speed of the magnetic objects while the distance regulator functions as the major role in this coordinating operation due to aging abrasion and natural wearing off of carbon poles of the magnetic objects; Namely, when the relative rotation speed of the magnetic objects goes too slow, the starting device is called for assisting the distance regulator to adjust the distance between both of magnetic objects to smaller for increasing the magnetic repulsive interaction and relative rotation speed while the relative rotation speed of the magnetic objects goes stable normally, the starting device is instructed to stop such assisting function; Thus, the integral operation of the power generator is effectively kept in normal proper condition; For the carbon powder, which is dropped off from the carbon poles of the magnetic objects, can be collected for recycling usage.

[0006] The primary object of the present invention is to provide an "equipment of power generator", which can be effectively kept in continually operation to produce
electrical energy by means of the repulsive reaction of a pair of same magnetic objects such that both of which face each other in eccentric manner.

The other object of the present invention is to provide an "equipment of power generator" which can be effectively kept in continually stable and steady operation by means of the contrivance of a pair of distance regulator to adjust the distance between both of magnetic objects such that the interactive force between both of magnetic objects can be kept in constant manner.

**BRIEF DESCRIPTION OF THE DRAWINGS**

[0008] FIG. 1 is the schematic view of block diagram showing the equipment of power generator for the present invention.

FIG. 2 is the planar schematic view of structural drawing showing the rotating mechanism for the equipment of power generator in the present invention.

FIG. 3 is the perspective schematic view of structural drawing showing the rotating mechanism for the equipment of power generator in the present invention.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

[0009] Please refer to FIGS. 1 through 3, which are the block diagram, planar schematic view of structural drawing and perspective schematic view of structural drawing respectively showing the equipment of power generator for the present invention.

[0010] The equipment of power generator 10 of the present invention comprises a starting device 1, a control device 2, a rotating mechanism 3, a power generating apparatus 4 and a power storage apparatus 5, wherein:

Said starting device 1, which receives the controlling signal from the control device 2, is connected with rotating mechanism 3 and functioned to initiate the accelerating rotation of the rotating mechanism 3 in the starting stage either by tapping power source or said power storage apparatus 5;

Said rotating mechanism 3 includes at least a pair of repulsive magnet or electromagnet magnetic objects 31, each of which is connected with a distance regulator 32 via a spindle respectively, such that both of which face each other in eccentric manner; When the magnetic objects 31 is initiated to rotate by the starting device 1, it will keep constant rotation by the repulsive interaction of magnetic poles between the pair of eccentric magnetic objects 31; If relative rotation speed of the pair of magnetic objects 31 goes too fast, the distance between both of magnetic objects 31 is adjusted to larger for reducing the magnetic repulsive interaction and relative rotation speed while the relative rotation speed of which goes too slow due to abrasion of the magnetic objects 31, the distance between both of magnetic objects 31 is adjusted to smaller for increasing the magnetic repulsive interaction and relative rotation speed; Thereby, the relative rotation speed of the magnetic objects 31 can be maintained in constantly stable and steady manner to provide the kinetic energy required by the power generating apparatus 4 by means of the reciprocal adjustments of the distance regulator 32;

Said power generating apparatus 4, which is connected with and directly driven by the rotating mechanism 3, converts the kinetic energy of the rotating mechanism 3 into electrical energy to be transmitted to and stored in the power storage apparatus 5; the power generating apparatus 4 can be a motor-generator, namely a motor acting reversibly as generator when being driven by the external kinetic energy;

Said power storage apparatus 5, which is also connected to starting device 1 for supplying the electrical energy required to initiate the rotating mechanism 3, receives and stores the electrical energy from the power generating apparatus 4 for relaying it to other external equipments; the power storage apparatus 5 can be a lithium battery; and

Said control device 2 receives and processes all the feedback signals from the rotating mechanism 3, power generating apparatus 4 and power storage apparatus 5 into monitoring and controlling information to oversee the integral operational status of the power generator 10; a display panel can be additionally disposed thereon to display the relevant information for observation by the user; and an arithmetic unit 21 can also be additionally disposed therewith to compute and convert the relative rotation speed of the magnetic objects 31 in the rotating mechanism 3 into governing signals for supplying to the distance regulator 32 and indirectly regulating the distance between the pair of magnetic objects 31 to achieve the stable and steady operation of the power generator 10; Thus, through the synergistic structure of all the components, the pollution accrued and energy consumed by the power generator 10 can be effectively reduced without sacrificing the production of the electrical energy thereof.

[0011] Moreover, other than the function to initiate the accelerating rotation of the rotating mechanism 3 in the starting stage, the additional feature of the starting device 1 is capable of supporting the retention of stable and
steady relative rotation speed of the magnetic objects 31 while the distance regulator 32 functions as the major role in this coordinating operation due to aging abrasion and natural wearing off of carbon poles of the magnetic objects 31; Namely, when the relative rotation speed of the magnetic objects 31 goes too slow, the starting device 1 is called for assisting the distance regulator 32 to adjust the distance between both of magnetic objects 31 to smaller for increasing the magnetic repulsive interaction and relative rotation speed while the relative rotation speed of the magnetic objects 31 goes stable normally, the starting device 1 is instructed to stop such assisting function; Thus, the integral operation of the power generator 10 is effectively kept in normal proper condition.

[0012] All the disclosure heretofore is only one of the exemplary preferred embodiments for the present invention, which is not intended for limiting the range for the claims of the present invention. Therefore, any equivalent embodiment or change, which does not depart from the essence and spirit of the technology in the present invention, should be reckoned as in the scope of the claims in the present invention.

[0013] In conclusion, the present invention not only originates an innovation in the morphology but also adds certain new practical functions over the conventional generator, which possesses basic criterion of the patentability in the novelty and obviousness beyond the prior arts with practical usage; Accordingly, we submit the patent application for your perusal and examination with expectation for being granted a related patent as an encouraging spur to the invention and our application, which will be highly appreciated by us.

Claims

1. An "equipment of power generator" comprises a starting device, a control device, a rotating mechanism, a power generating apparatus and a power storage apparatus, wherein:

Said starting device, which receives the controlling signal from the control device, is connected with rotating mechanism and functioned to initiate the accelerating rotation of the rotating mechanism in the starting stage;
Said rotating mechanism includes at least a pair of repulsive magnetic objects in same pole magnetism, each of which is connected with a distance regulator via a spindle respectively, such that both of which face each other in eccentric manner;
Said power generating apparatus, which is connected with and directly driven by the rotating mechanism, converts the kinetic energy of the rotating mechanism into electrical energy to be transmitted to and stored in the power storage apparatus;

2. The "equipment of power generator" is recited and claimed in the claim 1, wherein said magnetic object is magnet.

3. The "equipment of power generator" is recited and claimed in the claim 1, wherein said magnetic object is electromagnet.

4. The power generator equipment is recited and claimed in the claim 1, wherein said power generating apparatus is a motor-generator.

5. The power generator equipment is recited and claimed in the claim 1, wherein said power storage apparatus is a lithium battery.

6. The power generator equipment is recited and claimed in the claim 1, wherein a display panel is additionally disposed on said control device to display the relevant information thereon.

7. The power generator equipment is recited and claimed in the claim 1, wherein an arithmetic unit is further additionally disposed with said control device to compute and convert the relative rotation speed of the magnetic objects in the rotating mechanism into governing signals for supplying to the distance regulator and indirectly regulating the distance between the pair of the magnetic objects to achieve the stable and steady operation of the power generator.
### DOCUMENTS CONSIDERED TO BE RELEVANT

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- H02P
- H02J
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The present search report has been drawn up for all claims.

**Place of search:** The Hague  
**Date of completion of the search:** 2 February 2009  
**Examiner:** Segaert, Pascal

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**CATEGORY OF CITED DOCUMENTS**

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