Wind tube power generation patent application

Can a wind turbine harness high winds for power production?
Conversely,by way of non-limiting example,the device disclosed in U.S. Pat. No. 5,391,926 to Staley et al.can harness high winds for power production,but is not capable of generating adequate torque for continual,reliable power generation in low or moderate winds.

What is a vertical axis wind turbine (VAWT)?
A vertical axis wind turbine (VAWT) withimproved and optimized wind-directing,wind-shaping,and wind-power conversion featuresis disclosed. The shapes of these features directly affect the ability of the VAWT to use the power of moving air,such as wind,to spin a rotor and create torque on a rotor shaft to generate electricity.

What is a Holter wind turbine?
Holter describes acoaxial wind turbine apparatusincluding a pair of rearward-mounted,spring-loaded fins to orient the air inlet opening to face the direction of the oncoming wind and close a damper panel or shutter array at the air inlet opening during very high wind conditions.

What is a diffuser augmented wind turbine?
U.S. Patent Application Publication No. 2014/0227092, entitled "Diffuser augmented wind turbines," published 14 Aug. 2014 to Wood ("Wood II"). Wood II describes a wind turbine diffuser with an expanded outlet area in which the diffuser outlet area is greater than its cross sectional area.

What is a cross flow wind turbine?
U.S. Pat. No. 7,347,660, entitled "Cross-flow wind turbine," issued 25 Mar. 2008 to Taylor et al. ("Taylor"). Taylor describes cross-wind turbines wherein an airfoil stator causes wind to accelerate along its surface and creates a low pressure area on the leading face of the rotor blade during the power stroke.

Can a vertical wind turbine be used as a horizontal wind turbine?
Conventional vertical wind turbines, despite being capable of operating from wind coming from any direction, have not been as widely used in generation of energy as have horizontal turbines, due to one or more of the above referenced problems.

The invention discloses a wind power generation system suitable for a roof, which comprises: an external airflow channel which is surrounded by the top plate, the bottom plate and the side wing plates and is provided with an air inlet and an air outlet; an internal airflow channel formed by a U-shaped pipeline and a fan pipeline, wherein the U-shaped pipeline is provided with an opening, ...

A combined power generating device using solar and wind energy is provided, which comprises a generator

and an airflow generating device. The airflow generating device comprises a wind gathering cylinder(1), a solar heat collecting tube(2) and a wind cylinder (3) which are sequentially arranged from bottom to top. A turbo-type wind driven generator (4) is arranged in the wind ...

Equipment for power transmission and distribution adopts copper cable or rectangular aluminium bus groove structure more in the existing wind turbine generator tower tube: the cost of copper cable is higher, and per 5 years needs of designing requirement are changed once; Defectives such as rectangular aluminium bus groove structure exists that heating is many, complex ...

Tower tube is an important structural form of high-rise structure, and has been widely used in fields such as transmission towers, television towers, and cooling towers. Especially in the field of wind power generation, towers can be used to support upper impellers and generators. ... This application claims priority from Chinese patent ...

A vertical axis wind turbine (VAWT) with improved and optimized wind-directing, wind-shaping, and wind-power conversion features is disclosed. The shapes of these features ...

This application is a continuation-in-part application of the U.S. application Ser. No. 14/142,856, filed Dec. 29, 2013, entitled "Power Generation from Atmospheric Air Pressure," which claims priority to U.S. provisional patent application No. 61/747,240, filed Dec. 29, 2012, the entire contents of both are hereby incorporated by reference ...

The invention relates to a man-made wind power plant which comprises a fan motor, a fan generator, a storage battery, a wind box, a switch and leads, etc. The plant is formed by that strong air current produced by the fan motor operating at high speed in the wind box drives the fan generator into rotation at high speed to generate electric power.

PATENT PROSPECTION IN WIND POWER GENERATION TECHNOLOGIES FOR USE IN URBAN AREAS. ... The third patent application, also by PCT, is a patent granted in our national territory, under .

2008-09-17 Publication of CN101265881A publication Critical patent/CN101265881A/en 2010-06-30 Application granted ... the semicircle of pylon 9, the diametric(al) of pylon 9 has two fan sliding doors, so the people who rises in the tower tube can enter at any time in the Y frame ... H-type wind power generator serving as tail rudder of three ...

A wind-tunnel wind power generation device 10 with improved power generation consistency, efficiency and device maintainability, said wind power generation device comprising a wind ...

The power generation system 1 includes: a power generation unit including a wave power generator 11; a power storage unit 40 accumulating electric power obtained by the power generation unit; a production unit 51

producing at least one of hydrogen and an organic hydride based on the electric power obtained by the power storage unit; and a tank 53 located ...

The invention discloses a welding technology of a wind power generation tower. The bonding technology comprises the steps of: cleaning impurities such as oxide layers, greasy dirt and the like on two sides of a welded junction and a weld groove before welding, then polishing, providing asymmetric grooves on a longitudinal joint welding steel plate of which the thickness is more ...

A wind power generation system according to the invention includes: blades configured to receive wind to rotate; a nacelle supporting a load from the blades; a tower supporting the nacelle; a hub supporting the blades and configured to be rotated with the blades; a rotary main shaft configured to be rotated with the rotation of the hub; a gearbox connected ...

1994-02-01 Publication of US5282442A publication Critical patent/US5282442A/en 1994-02-01 Application granted granted Critical ... Spiral tube wall furnace seismic/wind tube stop Applications Claiming Priority (1) Application Number Priority Date ... Babcock & Wilcox Power Generation Group, Inc. Link type seismic tie for boilers Also Published As.

The method provides an alternative to existing methods for power generation from wind energy or solar energy, such as natural wind farms, photovoltaic cells and solar-thermal systems. ... 2014-06-23 Priority to US14/311,350 priority Critical patent/US20140375057A1/en ... resulting in generation of wind flow in said tube. ...

A tube-type wind power generator includes an intake tube, an exhaust tube and a wind power generation device. The intake tube has a first end, a second end and an intake air channel, ...

the seawater flowing into the first heat exchanger 20 is heated through the generator and cooler 7 of the wind power generator 10 through the first low-temperature water flow pipe 9, and then discharged through the first high-temperature water flow pipe 19. 1 After returning to the heat exchanger 20, it flows into the seawater desalination device 30 through the second high ...

A portable wind power generator capable of being stored in a folded manner includes a storage case and a power-generating system. The power-generating system is disposed in the storage case. ... 2006-11-14 Priority to US11/559,682 priority Critical patent/US7339286B1/en 2008-03-04 Application granted granted Critical 2008-03-04 Publication of ...

Abstract: The present disclosure provides a cooling control method and a cooling control apparatus for a generator of a wind turbine. A cooling device of the generator and an intermittent operation device are connected to a frequency converter, the frequency converter controls the cooling device and the intermittent operation device to start up at different times, ...

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Justia Patents Air Condensers US Patent Application for ATMOSPHERIC WATER GENERATOR SYSTEM Patent Application (Application #20140138236 ... the tank 12 above the heating-cooling unit 80 and inside a clear tube ... generation machines. Most significant is when using wind or solar power as a power source, in combination with the Flyback ...

A tube-type wind power generator includes an intake tube, an exhaust tube and a wind power generation device. The intake tube has a first end, a second end and an intake air channel, wherein the first end has a plurality of air inlets. A narrow portion is formed between the first and second ends. The exhaust tube surrounds the intake tube and has an opening end and a ...

14. The Sub-Terranean Updraft Tower for generating power according to claim 13, wherein a second array extends over a vertical section of the outer downdraft shaft, the section does not extend the entire length of the outer downdraft shaft, and at least one vertical length of the shaft between the first array and the second array is free of airflow partitions.

Two on-board computers (204 and 91) control and monitor all operations executed by the wind generator. Power Generation Computer 204 is primarily responsible for optimal power generation functionality through Supervisory Control and Data Acquisition (SCADA) 201, utilizing a multitude of power metering sensors 202, positioning sensors and actuators.

A wind power current generator has an arrangement of bearings (2) and a stator (3) fixed to the arrangement of bearings. ... 2016-10-26 Publication of EP2230750A3 publication Critical patent/EP2230750A3/en 2019-10-30 Application granted ... while the tube section of the rotor within the tube section of the stator also runs bell-shaped ...

The present invention provides a wind and wave power generation system including a platform (12) and a wind turbine (16) rotatably mounted on a tower (32) and provided with an actuator (34) for changing the yaw angle of the turbine blade (38) relative to said tower (32). The system further includes a sensor (118) for detecting at least yaw motion of the platform and a ...