TYPES OF TURBINE GENERATORS AND METHODS.

OMNI-DIRECTIONAL TURBINE MACHINES.

[0305] An omnidirectional turbine machine can be made with a plurality of vertical and horizontal axis rotors coaxially rotating in contra direction or in the same direction. Mounted operable in roller bearings and guided raceway tracks, suspended operable in electromagnetic tracks and copper rotor parts. For turbine motors the rotor comprises coper rings and other electric conductive material that is levitated and propelled by a rotating magnetic field by the stator coils and solenoids. The turbine rotors can be combined having a perpendicular rotor and ring rotor coaxial arranged with a spatial gap for rotation. With two or more coreless rotors with a common geometric axis and an axial exhaust or vice versa. Axial rotor with a shaft in the axial cavity and fluid duct.

[0306] The omnidirectional turbine machine comprises dual matrix of omnidirectional vane assembly coaxially around the turbine rotor. The dual concentric omnidirectional arranged matrix of concentric vanes are mounted stationary, or adjustable vanes in preprogrammed patterns. With omnidirectional rotor having blades arrangement in a convex defining omnidirectional rotors opposing arranged on the opposing rotors, the said turbine rotor is connected with rods and beams to its center axis or made as ring turbine rotor. The rotor can be nested horizontal rotor mounted at the center on a fork with at least one vertical rotors rotating around the horizontal rotor in guiding tracks and convex rotor vanes. And arranged vice versa.

[0307] An omni-directional intake made of bend ducts. At least one duct with three 90° bend intake ramps arranged in delta formation and connect merged with the vertical duct. The ramps capture the horizontal flowing fluid and conducts this fluid vertically down or upward trough the duct wherein at least one horizontal or vertical rotor is operable mounted including electric generating components, fluid exits through the lower duct. The example may concern a building with a round or hexagonal structure comprising windows as air intakes and a turbine rotor at the central portion. Or ducted to a chamber below or horizontal beside the chamber. The omnidirectional flow can be captured and conducted in any direction.

[0308] The vertical axis omnidirectional turbine without a nacelle combined with at least three additional turbine rotors of equal length and with half the wideness of the first main rotor. The three additional turbine rotors are mounted operable and adjacent to the main rotor in a delta arrangement. The additional turbine rotors are the size of the rotor blade and shield one rotor half of the main turbine rotor which are the return blades. The tree rotors shield the return blades and form an omnidirectional formation for operating the main turbine rotor and generating electricity. The additional turbine rotor comprises a shielding for their return blades.
An omnidirectional formation can be obtained with Unidirectional and Dual-directional horizontal and vertical axis fluid turbine generators. Taken for example three dual directional wind turbine generators comprising a rectangle or longitudinal cube wherein the horizontal turbine rotor is suspended in the defined interior with a minimum spatial gap with the upper and lower casing wall. Mounted Therrien, in operable bearing on the axis mounted with the side casing comprising ferromagnetism and opposing matrix of coil phases outputting an electric current when the turbine rotor is operating. The front and rear of the rectangle casing remains open with a mirror cover on both sides (lower and upper rotor shielding). The turbines are 120° apart with connected with one side together at the center. Fluid flows in two wind turbines from each direction of fluid flow into two dual directional wind turbines.

Semi Omni-directional turbine in the form of an egg or honeycomb. A Horizontal, and vertical omnidirectional wind, steam or hydroelectric turbine machine comprises a discharge and omnidirectional intake vane assembly for capturing enlarger mass of fluid from all direction around the turbine generator that the rotor vanes and diffuse fluid angular vertically through the throat and in the collection chamber, and on the horizontal turbine generator rotor defined push blades suspended operatively in ball bearings. The turbine nacelle comprises the geometry of an egg, partial egg with open upper or lower exhaust portion. A partial honey comb with circular apertures defining the intakes that guide and deflect fluid to the collection chamber wherein the turbine rotor is suspended at the center or adjacent to the exhaust. The intake is a shroud made below or above having downward curved vanes extending inward into the interior curling toward the turbine rotor.

The shroud comprises a plurality of circular intakes with curved intake vanes that curve the flow of fluid 90°, vertically, which are similar to wedges. The wedge is tapered with tin edges The inner upper ceiling comprises a round triangle pointed toward the rotor which deflects fluid from the upper first intake. The second, third and fourth intake in sequence below the first intake conduct fluid to the horizontal push blade portion of the plurality of rotor blades and exits vertically through the exhaust. Vertical axis rotors are also applied in the device comprising radial vertical fins and sloping vanes and sloping trialing edges extending radially from the rotor hub generator or for driving an electric generator mounted in the nacelle or at the exterior coupled by the gear assembly. More types of intake are provided in this speciation of multiple coaxial intake ramps with one central duct or throat.

The turbine generator with complete egg shell or honeycomb structure or other of different spatial figure and of related geometry. The shell comprises exhausts shrouds opening extending outward from the shell such that flowing fluid flows around the circular outward extending ramps and generate an suctional flow at the extended outward ramps generating an internal circulation and discharge. Comprising a turbine, an electric motor, a stator nacshell, An elevated stand and base extending pads and mount. The turbine shaft extends vertically in
support bearings and connected rotatable with the motor drive shaft in concentric mode. The motor is arranged on the motor stationary fixed frame in the base. Comprising electric wiring ferromagnetism of Nano carbon and coper wiring of coil phases on the high electric permeable stator armature electrically connected with the external lead of the machine output terminal.

[0313] An Omni-directional formation can be obtained on an elevated structure such as a roof in particular a flat roof having concrete side supporting concrete walls or made of steel and closing panels. The elevated structure is rectangle or square of shape for this example. The four sides extended upward are the shielding of the four, dual directional horizontal axis turbine rotors and having a lower cover opposing so that the lower front and back are shielded. The turbine is mounted operatively with the frame bearing mounts and with the lower frame bolted in the roof. The turbine rotor shaft ends comprise cams or pulley connected by a belt or chain to the electric motor. The structure can be A tetragon, hexagon, or triangle and so on. Turbine rotor or unidirectional machines to form a omnidirectional electric generating apparatus.

UFO, WIND TURBINE GENERATOR

[0314] The turbine machine comprises Dual turbine rotors, vertical suspended by dual coaxial aligned shafts, operable suspended in the nacelle suspensions and mounts having the geometry of an UFO or flying saucer. Which is an oval shaped nacelle spanning horizontally or erected in the horizontal plain, with to demi cover for each rotor. The upper and lower mounted turbine rotors in the nacelle can be completely enclosed with extending intakes and exhausts. The partial shielding serve as deflectors and can contain pitch adjustable vanes to conduct air in to the turbine instead of deflecting air from the turbine.

[0315] The turbine generator comprising a mast or tower on which the turbine generator inner components and machines are rigidly and stationary mounted in the upper tower internal cavity located at the exact center of the tower, made internal tower cavity is provided the machine and compartment chamber where around the outer surface the yaw drive and races are mounted in interlocking tracks connected with the upper tower surface and bolted or welded with the tower steel iron flange mounts. The lower nacelle is operable mounted in bearings roller or magnetic bearing, bolted with the tower flanges of the concrete structure. The nacelle top is operable mounted in bearing around the shaft holder. The shaft steel casing comprises a race and perpendicular extensions. The extensions connected with the nacelle track which is bend with a minimum clearance around the extension of the shaft track. The water tight bearing is placed in the race of the locked circular track. The bearing mount can be made of plain bearings.
[0316] The upper part of the mast comprises a Centre cavity which serves as component chamber wherein the dual driven automated pumping gearbox is connected with the dual shaft of the dual rotor. The gearbox output is below which connect with the electric generator in the mast cavity. The cavity is closed by the yaw bearing which adjusts the nacelle in 360 degree around. The yaw drive is mounted with the nacelle in track and break mechanism locking with the track. The nacelle is mounted water tight on the component compartment, an electronic wind vane mounted on top of the nacelle, an electric generator with dual rotors, coupled with a dual coaxial shaft is aligned in a shaft holder the inner shat connecting with the fist turbine rotor (upper rotor). and outer shaft with the second turbine rotor (lower Rotor).

[0317] The wind turbine tower comprises adjusting means to level the tower vertically on the exact vertical axis. A tower is adjusted with the turbine rotor by this, a vertical axis on which the turbine rotor is operating. By misalignment of the tower the turbine generator rotor is misaligned with the vertical exact, and is submitted to drag and wear. Aldo the turbine machine is also vertically aligned and leveled on top of the tower, on the upper surface of the tower.

[0318] Tower geometry is adapted to the to the turbine machine aerodynamic smooth shape. The tower outer shape, comprises a smooth oval inward curve toward the center vertical axis of the tower and expending smoothly at its distal ends. The lower tower end comprises a circular steel plateau that extends perpendicular and with a smooth curvature from the mast outward for mounting the tower on a base or platform. The inner center of the tower is bearing mounted by means of a partial circular adjusting mechanism that adjusts the vertical sway of the nacelle, manually adjusted at installation and monitored tower by sensing systems of the turbine machine.

[0319] The upper rotor is mounted on the inner shaft which is extended from the outer shaft. The inner shaft is connected to the upper turbine rotor, in bearings operable suspended with the shaft for ration therewith. The outer shorter shaft is coupled to the lower turbine rotor beneath the upper and lower rotor are separated by a separation plate between the turbine rotors having a minimum spatial gap for rotation in opposite directions in their cavity. Both shaft ends at the lower part are extended in the lower tower compartment connected by gears from which the high torque output shafts merge with the two generator rotors rotating also in contra direction in the lower housing by bearings and at the upper end of the lower rotor shaft. The electric generator comprising a three four or more stator winding and connecting formation. The generator may comprise a center stator or no stator in the electric machine.

[0320] The wind turbine is equipped with a LIDAR wind sensing system, auxiliary power supply like solar energy and hydroelectric energy and external electric supply, A clutch pack and a electronic brake system provided on the shaft in the lower compartment. With Electromotor or hydraulic actuators made in the lower mast compartment
The yaw drive only actuates the nacelle or the UFO shaped body. The two rotors rotate in opposite directions and are driving a dual vertical shaft, which in turn is driven by wind or water. Preferably, connected on the other ends two separate internal generator rotors, and gears connected to shaft by clutches to connect either generator rotors. Rotors are preferably substantially of the same diameter and of the same height and shape. The two rotors have an identical unchangeable or fixed blade pitch. The wind turbine are made to function autonomously with an automated computer system.

Which may be pitched with an additional pitch system. The device includes a gear comprising a stationary housing having disposed therein an epicyclic gear-set including sun, idler, and ring gears. The sun gear includes an input shaft extending therefrom, and the ring gear includes a first output shaft extending therefrom. A bull gear having a second output shaft extending therefrom is also provided and is operatively connected to a pinion gear, which pinion gear is fixedly connected to an idler shaft extending from said idler gear. In accordance with a preferred embodiment of the invention, the gears are predetermined sized for obtaining equal and opposite rotation of the first and second output shafts during operation. Comprising;

The dual turbine rotors are also applicable for Atmospheric propulsion and marine propulsion with different possibilities in arrangement and flowing directions of linear flow of angular fluid passageway, or of axial flow flowing through the center axis. Axial flow rotor and nonaxial rotor are combined where fluid congregate perpendicular against the rotor blades. Whereby the turbine rotors applied as axial flow rotor for fluid flowing parallel along the hub through the intake in longitude toward the opposing end. And with perpendicular curves through an angular exhaust. The dual rotor comprises centrifugal blades that capture the amount of fluid in cubic meters in the blade curvature and displaces the fluid by the blade curves into the curved direction of the blade.

The turbine machine is driven by the electric motor and can be made open without shielding or nacelle and/or arranged in a cowl with combustion components. The dual turbine rotor for axial flow turbine rotor where through fluid flows linear along the axis and the blades extending along the axis and through the second turbine rotor. The turbine rotor comprises a pitch setting for adjusting the propulsive force. The blades are mounted with the rotor hub with three short extending rods protruding through the rotor hub.

The pins are located at the lower end and the pitch mounted rod is located at the exact center of the blade and hub connecting side of the rotor blade. The hub mounted pitch consists of a circular rack in a partial closed metal holder screwed with anti-vibration and locking bolts with the hub or casted with the holder. The circular pinion comprises upward extending teethes that mash with the cams mounted with the blade treaderd rod by locked from both sides by the nuts and washers. The hydraulic actuator or electric motor is also connected with the rack teethes mounted with the inner hub side wall. The upper and lower pins move in a oval aperture and are
locked with the hub from the inside moving in plain journal bearings. Pins are interconnected in the rotor-hub in plain bearing. Pins are all connected by gears actuated by the pitch motor.

[0325] Propulsion force is obtained by the blade pitch and aerodynamic curvature of the rotor blades wherein the fluid travels through the rotor indicating that the leading edge and trailing edge is located at the parallel blade ends. The leading edge is smoothly and slightly bend forward. Forward meaning into its rotational direction. The trailing edge is smoothly and slightly bend backward of its rotational forward direction. The second rotor is also provided with these blade features in opposite direction for rotating in contra direction of the first turbine rotor. The rotors can function in assemble inhaling air perpendicularly and exhaling air or water axially and vice versa.

SATURNBINE.

[0326] An example of combinations of turbine machines of certain spatial figure which can be merged qua geometry and qua fluid circulation with merged intakes and exhausts. The example given is taken from the planet Saturn which is a sphere with a orbital ring at its horizontal center axis. The outer ring turbine body is mounted connected with the Spherical turbine body welded or bolted with the connected frames. The Sphere comprises an aperture at the horizontal center that correspond with the circular air exhaust duct at the inner ring connecting side.

[0327] The intake of the ring turbine generator is at the outer circumferential wherein wind enters horizontally into the rotor. The frontal face or the ring comprises omnidirectional matrix of arranged deflector and short shielding vanes. The ring rotor is mounted in the ring body operable in circular pairs of bearings guided races and both supported sides of the disc and inner casing. The ring turbine rotor comprises a plurality of magnet poles in groups for inducing the opposing pairs and groups of coils rotatable with a minimum spatial distance for rotation of the ring turbine rotor.

[0328] The electric generator functions as ring exciter for the electric generator of the sphere which is located up or below the sphere shaft. Horizontal or vertical alignment of axis diagonal or in any angle. A mast connected with the base foundation at the lower end of the mast. At the upper end of the mast is mounted on a short extended beam with flange mounts the spherical nacelle on the beam with a disc at the horizontal center, fixedly mounted with the sphere. The round nacelle consists of an inner frame of two demi spheres mounted together which are connected at their horizontal open center for sharing the plenum with the disc exhaust.

[0329] The sphere comprises omnidirectional oriented matrix of wind directing vanes which are a prolongment of the ring turbine vanes. The spherical rotor is operable suspended in the interior of the stator sphere with a center
hub and round blades stretching radially and perpendicularly in the stator sphere with a minimum spatial distance for rotation in the stator. The ring turbine exhaust connect with the sphere and exhales air into the rotor plenum of the main round turbine. The turbine body containing guides obtained by vanes, Omni-directional oriented fixed on the upper and lower bearing plateau which is rotationally suspended having at least three rounded airfoil blades containing an inner curvature for accommodating fluid within.

[0330] The shaft extends at the lower part of the body mashing with gears for rotational transfer and stepping up RPM. The gear output shaft is the generator shaft mashing with gears and suspended by bearings in the generator body having electro magnets arranged parallel on the shaft having busses or wireless electrical connection supplied to the electro magnet of the generator. The electric supply is generated by the ring turbine which mate on the body of the main turbine at the horizontal Centre comprising, an enclosed body mounted on the ball turbine body. The square ring turbine body contains an upper and power part and the outer side connecting the lower and upper surfaces by vanes and the inner side is opening having a 90 degrees turn for bolting or welding the turbines.

[0331] The outward ring side vanes are omnidirectional arranged. wherein the two connected body sides containing openings that serve for the exhaust of the ring turbine and from which the exhaust fluid enters the ball turbine and mixes with fluid flow, exiting from the opposite or angular wise. The rind turbine rotor is a ring with airfoils the lower blades are made on two rings. The rings containing ball bearings which mate with the opposing tracks on the lower interior housing of the ring turbine.

[0332] In different embodiment the upper portion of the ring turbine housing contains flattened coil windings of electric conductive material in a matrix with a minimum spatial gap with the rotor blades which contains permanent magnet strips upon the upper blade edges for generating an electric current in the stator coils which are electrically connected by wires and conveyed to the generator terminal for connecting as input current for the electric magnet. The electric output can be connected through electric wiring connecting with the electric magnet generator input terminal. In a different embodiment a vertical and horizontal ring turbine can be made combined on the round turbine body. One may even place the ring turbine in a different angle like diagonally. Comprising;

LEVER AND CANTILEVER ROTARY GENERATOR.

[0333] Cantilever turbine machine can be made with a cantilever functioning as turbine rotor. The cantilever rotor center of mass is displaced by the two masses suspended at the lever ends which is the principle of a cantilever. The cantilever rotor consists of a mass at one shaft end and a wind or water driven component at the opposing rotor end. The weight of the mass depends on the function of the cantilever rotor that can be brought upward by
the mass for maintain the wind blade upward or a bucket filled below is balanced upward rotatable by the mass. Which indicated that the mass overcomes the bucket or ton filled with water. And vice versa when the filled bucket is rotated and discharged below. Wind on the wind blade surface must overcome the mass suspended on the lower rotor end. The shielding is provided below the horizontal center for eliminating drag or without shielding.

[0334] For example the Cantilever rotor shaft is mounted in the lever horizontal and rigidly in bearing, mounted by shaft locking means to be rotated by the cantilever rotor by transferring rotation of the gearbox and electric generator for generating a pulsing electric current. The horizontal shaft is suspended in a solid steel alloy frame with one shaft end mounted in roller type load bearing, whereby the opposing shaft end protrudes through the frame bearing and can have pulleys connected or a cam or gearwheel mashing with a gear assembly or the shaft mechanically connected to an automated gearbox. protrude the lever shaft aperture extending from the side of the rotor. Wherein coupled to a gearbox and electric generator for producing pulsing electric current. The at least one cantilever rotor comprises a bucket mounted at longer lever end, and a mass, at the shorter lever side, a mass is mounted form which the weight is less than when the filled bucket is filled with water at opposing lever end, 180 degree in a straight line.

[0335] The turbine rotor blade is a large inward curved bucket or demi round solid-state receptacles, Barrel, container, vessel, cask, vat, keeve, tub, bin, tank, ton, and bowl or cup for smaller devices. The mass on the short lever and the bucket on the longer cantilever section. The bearing mounted lever metal beam rotates the horizontal connected shaft. The bucket is filled by falling water into the rotor bucket whereby the mass of the bucket overcomes the lower mass and rotates downward where the bucket is emptied and rotates upward and completes a rotational cycle.

[0336] The wind blade which at the top impinges with fluid, or is filled with water at the top or at the bottom and rotates the mass from its lowest point to the top, whereby the smaller blade goes in freefall downward because of its mass and the cycle repeats itself providing a stable rotation wherein kinetic energy is conserved and released by the turbine rotor which transfers rotational motion to the gearbox mechanically coupled to the electric generator for producing a sinusoidal electric current. Applicable with or without rotor shielding. A flywheel is also applied for stabilizing rotational motion. The bucket can be filled below and emptied above. The wind blade is rotated down by wind and upward by the mas. The Cantilever turbine generator is a stable generator which can also be driven by steam or vapor pulses. The cantilever generator can move in a partial circular motion not completing a cycle by moving up and down, like a pumpjack.
AT LEAST ONE; Lever bladed turbine rotor. Turbine rotor interconnected by at least one lever, extending perpendicular from the turbine rotor and intercalating with a second and third and a plurality of turbine rotor of different sizes rotating all turbine rotors when one rotor is rotated coupled by the extending levers like gears not mashing, but pushing the rotors in rotating direction. Coupled to at least a second turbine rotor rotatable by the at least one lever mated on the turbine blades. Plurality of turbine rotor blades connected by levers like gears. Rotor intercalate with a second or more turbine rotors by inward fitted rotor blades like gears which can mash by male and female connection like rotor in the shape of stars mashing with one and other arrange in a formation or assembly. Turbine rotor connected to a second turbine rotor at the intake machine and compressing fluid inwardly. A plurality of fluid turbine rotor blade functioning like a compressor or fluid pump and fluid motor.

AT LEAST ONE; WIND SEEKER or Flow conducted turbine rotor enclosure by means of extending weather vane A Wind Seeking wind Turbine machine is Horizontal and/or Vertical aligned of medium category size and smaller, can be made with a self-aligning turbine machine enclosure operable mounted with the stationary turbine body. Extending steel joint provided by a Double lap joint whereby the nacelle rotor steel plate is bend around the stator extending steel bar or plate. Welded around the nacelle bearing stator and rotor nacelle parts. Mated in plain bearing for mechanically securing the nacelle rotating and stationary part mounted in bearings and bearing races. Mechanically driven by fluid flow in upstream direction. The wind turbine rotary nacelle comprising an extending wind vane, weather vane, Fin, wing, fin and tail boom. extending from the rear opposing the inlet and mounted at the exact center line of the intake. The wind vane containing a predetermined elevated surface to rotate the mass or the casing mounted in bearings rotating in a circular track by means of wind or water aligning the intake straight parallel in the fluid flow whereby the front intake is always in upwind direction for the turbine to rotate and rotate step-up gears and electric generating means. One may reduce cost for installing a LIDAR, anemoscope and a jaw drive for actuating and adjusting the intake of the wind turbine. Extended wind vane for yawing the rotor casing intake in upwind direction. A tail boom with enlarged fin can also provide upwind alignment for the rotor casing, which is operable mounted in bearing track, having outer extending locking steel flanges plain bearing mated with a spatial gap. or roller bearing tracks in locking flat and “U” type flanges or extending rotor and stator collars.

Ferris wheel type turbine generator. A Ferris wheel consists of carriages on the outer wheel which is operable rotating and kept in balance and position by the lower mass of the carriage. Mounted with the giant upright suspend Ferris wheel so that the individual remains seated upright and do not rotate while the wheel is in rotating motion. Instead of seat horizontal turbine generator rotor are suspended with a partial rotor shield placed with a shielding for rotation in one or both rotating directions, whereby an extra weight or mass is added to the lower rotor shielding. The shielding rotates with the giant wheel and maintains it position.
[0340] Ferris wheel: The wheel may comprise a shaft and two round partial extension for the shields and the stationary shaft for suspending the rotor with a hub geared electric generator. Whereon the turbine rotor is operable mounted in bearings. The space between the rotors comprises airfoils which rotates the Ferris wheel by wind and the angle of the airfoils, set for stall will rotate forward and lift will rotate the wheel backward. The center of the wheel which is mounted to the solid steel frame which is bolted to the base flanges is also integrated with an electric generator from which the generated current is collected by slip rings and carbon collectors or electric swivel. The connected electric cables are conducted through the hollow steel frame.

[0341] Wind and Hydro turbines can be made Horizontal, Vertical and diagonal or suspended in any degree preferred. An example of five turbine generator constructed on five shafts construction with a vertical center shaft with turbine generator mounted thereon, and two diagonal shafts on both sides with turbines generators, and there under a horizontal shaft on both sides a turbine generator. The vertical shaft extends downward and is rotatable mounted with a yaw drive. The upper housing of the vertical turbine comprises the electric wind vane connected to the yaw drive electric driver to keep the wind turbines in upwind direction whereby all generating a pulsing electric current provided to the transformer and to the grid. The system can be expended with two turbine on stacked on each shafts etc.

[0342] Single rotor stator turbine generator unidirectional or omnidirectional. The stator nacelle forms the collection chamber and intakes and discharge accommodating the rotor operatively in the plenum. The stator and rotor are the stator and rotor of the electric generator. The inner nacelle body comprises and armature of electric conductive high permeable sheet of iron or copper with the intake and discharge apertures made on the inner nacelle and electrically insulated from the frame and turbine body, comprising coils of wiring at the lower and upper ends wounded on the outer circumferential of the armature. The magnets are made on the plurality of blade tips which are slightly oval corresponding with the inner nacelle and curved 90° facing the inner nacelle armature with a minimum spatial distance. The rotor blade extends radially from the hub and stretches its form in longitude along the hub expending lateral horizontal and vertical having crossed extension with permanent magnets fitted in alternating pole on each blade tip. The rotor may resemble a swastika.

HYDRAULIC AMPLIFIERS.

[0343] AT LEAST ONE, Hydraulic force amplifier applied for current amplification. One small hydraulic compartment and a large hydraulic compartment for the incompressible medium like liquid water of transmission fluid. A small chamber is encased in a second small chamber and a large chamber is encased in a second large camber water proof enclosed. The second chambers are of larger diameter wherein the first chamber is inserted by sliding the first compartment into the second compartment and enclosed with the upper lid having the drive bar
protruding through the center of the second cover and connect with the center of the first moving cover. The upper cover is push downward whereby the fluid flows through a narrow channel connecting the first and the second chamber into the larger chamber which is located at the top of the small chamber. The upper piston drive a large electric machine by a rack and pinion mechanism. Rotation is obtained by moving piston-rack driving the generator gearwheel in both rotating direction. A single rotating direction is also achievable by the switching gear wheels explained in the chapter of electric machines. A simple step-up gear assembly is required for the required generator velocity.

[0344] The solid steel cover moving in plain journal bearing with the outer surface connected with a drive shaft of a linear electric machine. The small chamber piston relates to a wheel exerting a reciprocating motion for pumping the small piston whereby the large piston is moved upward. A return mechanism switches the flywheel in reverse. A governor is mounted with a pulley and pulley belt. A roller encoder is mounted mashing with the wheel by a wheel. A sensor unit is mounted on and around the wheel axis. The small piston is driven by a wind turbine. The large compartment piston is driving a linear generator producing hundreds of kWh. The larger chamber piston rod drives a large linear electric generator producing large MWh, of pulsing electric current whereby force is multiplied by many tons of pressure. A liquid tank is moved up on a support and the lower tank is filled connected by a host. Piezo transducers units and digital sensing units are applied. Large liquid cylinder filled with water. And flexible closed. Water tight linear generator. Mounted with hollow partially water filled, and air filled mounted to the rod end. Bucket rotor or more bucket rotor.

[0345] AT LEAST ONE, hydraulic battery by means of a Plurality of water tanks, Interconnected with one channel connection of the water tanks in the matrix of below, center area and/ or above. Vertical aligned parallel and /or in stacked or in formation. wherein water flows partially from the upper tank to the side tanks by pressure and into the lower. Interconnecting tank. including hydraulic turbine electric generators for flow and linear or rotary electric machines for the vertical changing level of liquid. Water is flown from tank to tank in a matrix downward through the pipe connection with difference in water level and pressure in each tank whereby electric energy is generated in the pipes by means of circulating liquid circulating in a pad from tank to tank. Electric current is generated by the water or liquid level. Float is mounted with the linear electric machine magnet piston rod. Float, with the inner diameter of the tank, having a spatial gap with the tank walls. Solid filled float. Hollow plastic float. Electric machine is mounted on the top dry inner or outer tank cover.

[0346] The electric machine includes a water proof and anti-corrosion casing. The electric machine piston is connected by gear with the piston rod. The electric magnet piston rod races on the racks of the support bars. Certain tanks may be equipped with a piston. creating pressure this multiplying hydraulic force through the tanks. Tubular interconnecting section. with mounting flanges and rubber packing and inner connecting seals. bolted with
the tank corresponding bores on the tank flanges. The inter connecting tubular pipe including a tubular electric machine. The tubular electric machine is arranged in the entire longitudinal direction of the tubular inter connecting part. The tubular electric machine rotor comprising extending blades made of stainless steel. The tubular electric machine is mated in the tubular interconnecting pipe having equal extending distal end wherein the electric machine is mated in a rubber packing. the tubular interconnecting parts includes bores for cable and rubber insulating harness protruding through the machine and exterior tubular part. Tubular electric generator. plurality of tubular generator made in tubular parts. Electric machine with rotor, rotor. The first rotor driving a step-up gear assembly. the step-up gear output pinion connects the second machine rotor. Rack made on the rotor mount. Mounted in bearing. enclosing bearing casing. Watertight enclosed in rubber packing. Enclosed Sealed track bearings and bushing.

[0347] Falling water like a waterfall or from a roof falling vertically or in a slope which can operate multiple horizontal hydroelectric generators arranged from top to bottom on wedged plateaus made of stone wedged in the stone wall. The wedge plateaus made of thick solid state material including plastic, steel or other solid state material. The wedges are zigzag descending vertically made overlapping from left to right with a slope toward each other or toward the geometric center. Water falls on the first wedge and flows with the slope on the second wedge below the first wedged plateau and fles and falls on the third wedge plateau, and subsequently flows down and falls on the forth wedge and the fifth plateau and the sixed wedge and so on till the bottom and in to the river. Turbine generators are installed on the wedges and mounted in the wedges bore holes through the wedge with reinforcing metal plates under the wedge and bolted with bolt, nut and washers, to generate electric energy by the falling water on the horizontal turbine rotor and water streaming on the wedge rotate additional turbine rotor mounted operable on the wedge where water forces through the lower rotor half and generates electricity. The turbine rotors are comprising a direct drive electric generator without gears.

[0348] Turbine power generator comprising at least one rotor, operable suspended in a vacuum chamber rotor compartment wherein the turbine rotors comprising a plurality of perpendicular blades radially projecting their form along the rotor hub. Whereat each plurality of blades include two sides surfaces. A front surface and a back surface. The front of the blade is colored black, and back of the blade is colored white. This feature is for absorbing light and deflecting light. Which also attract heat and repels heat. In certain conditions the turbine rotor can be rotated by light or by heat with a push and pull force of light and heat. For this reason, the push blades of the turbine rotor is colored black and the return blades are colored white. This propulsion by radiation will render an extra force to the turbine rotor. The colors are distinguished by repelling and attracting light and heat applicable for the push or pull blade side. Which is a dark and a light surface that is responsible for this phenomenon. Propelled by a push and pull force of light and heat. For this reason, the push blades of the turbine rotor is colored light and the return blades are colored Dark. This propulsion by radiation and emission will render an extra force to
the turbine rotor. The colors are distinguished by repelling and attracting light and heat applicable for the push or pull blade side.

[0349] AT LEAST ONE: Turbine rotors of turbine machines can be driven Without a mechanical connection in formation or in a cluster of turbine rotors. Driven by Liquid or fluid coupling, magnetism, sound and vibration and emission of light and laser. The turbine rotor in vacuum or in space can be driven by emission and radiation of laser, light, Temperature variation etc.

[0350] AT LEAST ONE: Exemplary Assembly of wind and hydro turbine machines with fluid connected transfer of motion and rotation by fluid driven by wind, for generating electric current. Comprising a round water reservoir open or closed, for eliminating friction along the circular inner side of the water holding reservoir, with hydro turbines installed along the outer diameter in a wave arrangement or other alignment of Hydro-turbine machines. At the center a wind turbine is place which may be self-aligning and wind seeking turbine. The turbine rotor is extended upward on a shaft enclosed in a cylindrical casing wherein the axis is mounted in bearings at the lower part the shaft is mounted with a waterwheel rotating horizontally with the axis mounted on iron frame bars which is mounted in the center of the water reservoir. By rotation of the wind turbine rotor the lower waterwheel rotates simultaneously and whereby water is rotated in the rotating direction of the rotor and wheel. The angular circulating water flows through the hydro turbines which generate electricity. The hydro turbine generator generated electricity which can be stored and amplified or converted or electrically processed for appliance.

[0351] AT LEAST ONE: Magnetic driven turbine machines. Like liquid magnetism is also applicable for rotating an assemble of turbine machines connected by magnetism. We may use the same an simple example of a circular arrangement of rotors and one center rotor. Like a planetary system wherein the sun is at the center with all the planetary bodies aligned around the sun with a minimum spatial gap. Magnet ring is placed on the horizontal center of each body which is the most extended point. We may suspend all the rotor on vertical axis and magnetic levitating bearing or air bearings to illuminate friction. The ring magnets is exposed with a counter pole of the center rotor. By rotation of the center rotor also having a single pole exposed will push the surrounding rotors and rotation will occur. The generator can be made without mechanical connection like illustrated in the prototype by magnetic connection of the magnets and coils. Which are one or two film layers of neodymium super magnets. And cooled supper conducting coils.

[0352] AT LEAST ONE: Vibration motor. A vibration motor is created by vibrating bodies that resonate or oscillate a vibration in a solid vibrating the linear generator coupled to the vibrating body. Vibration motor having a rotor. Just an example of vibrating energy and converting vibration to rotation. We have a vibrating body of wood whereon a rotor is mounted at one end of the horizontal vibrating wooden object whereon the upper part shark
teeth are made. Where against Cams are placed and rotated colliding with the teethes and other types of gear wheels and gear teeth fit in the wood. Also, the cams or gearwheels have different types of gear teethes which are available and some are ideal for this propose. Some of these cams are for better use in this device that normal triangular gear teethes. A linear motion is more effective in this case than when made round a rotary vibration can be applied. By the rotational motion rubbing the wooden parts vibration is transfer to the rotor which starts to rotate. A rotary electric machine with a wobble mechanism is the means to vibrate parts and to transfer vibration.

[0353] AT ELAST ONE: Vibration of solids and sound is also energy which can be transferred to the linear electric machine and converted to electric energy. The linear electric machine is made on a miniature scale to be able to observe vibrate with the vibrating body. A resonance chamber, a vibrating bar or string and other and large or small vibrating surfaces vibrating at different frequency. The movable rod is connected with the vibrating surface and resonates with the surface whereby the second resonating rod end in the linear machine vibrates opposing the coils or magnets with a spatial gap and creating an electric flow in the coils. A vibrating body can be equipped with a plurality of linear electric machines whereon the piston rods are attached. A resonating or oscillating bar is attached by two connecting overtures drilled in the bar. These are the only two connecting points which is in contact with the supporting body so the bar may vibrate freely. The vibration frequency of the object can be determined by the size of the object like a toon having a certain exact size to vibrate at an exact frequency. By this the frequency of the generated current is determined. Vibration can also be generated by rotation of the turbine rotor having at least one string mated to the lower shaft end mounted beside the exact center for shaking the string and creating vibration. There are more ways to mount the string to the shaft also generating a reciprocating motion for vibrating the string or plates.

[0354] AT LEAST ONE: Turbine generator wherein the electric generator comprising one or more Rotors and one or more Stators. Taken the omnidirectional turbine in Fig 5. for example. Where a turbine omnidirectional turbine rotor is suspended operable in a quadratic stator casing with omnidirectional stationary or adjustable vanes build around the quad. The shaft in the lower compartment is connected to a disc comprising, a plurality of magnets in equal numbers. The disc of magnets can be altered in several manners to obtain a more intense magnetic emission of electromagnet waves magnetically radiating the disc and/or coils and transferring magnetism in a pulsing electric current. On the lower shaft is proved at least two magnet retaining discs wherein between two copper discs are mounted. The Fist magnet disc is the upper disc, the second disc is the lower disc. The second magnet disc is emitting magnetism from both surface of the disc to magnetize both upper and lower copper discs. The discs are made in two parts for obtaining a two-phase current and connected to the electrical system for processing and output a regulated current.
[0355] AT LEAST ONE: Turbine generator wherein the electric generator comprising one or more rotors and one or more Stators. This feature of the electric generating process can be exploited, and additional discs of magnets and copper discs can be added to the electric generating parts. The copper discs can likewise be rotated in contra direction of the magnet discs. All the devices can be rotated by applying gear assemblies or an automated gear box. A dual coaxial shaft can also be applied for contra rotation connected by gears. The generator discs are insulated and enclosed in an aluminum or steel casing wherein liquid or gas cooling can be circulated through pipes traversing the side casing and arranged along the inner body in a waved shape. The liquid transferring heat by a pump circulated through the generator in to a reservoir wherein the coolant is cooled and circulating coolant is cooled so that heat is dissolved. The reservoir is pressurized and cooled by air cooling, Refrigerated gases, Cryogenically cooled.

[0356] AT LEAST ONE; In different embodiment of Turbine generators wherein the electric generator comprising one or more Rotors and one or more Stators. The turbine can be made with a upper compartment like the lower compartment wherein the shaft expand to the atop encasing and mounted in bearings. By adding the same compartment above as provided beneath the upper and the lower part generates electric energy. With more discs of magnets and disc of copper. The turbine rotor must contain a larger surface for exerting more force for the additional generator. A horizontal wind or hydro turbine is also very suitable to apply this wind turbine. This omnidirectional turbine can be used as vertical axis wind turbine. By placing this turbine machine and closing the lower surface two surface are used by fluid circulate through the front intakes and the upper intakes and exit through the back of the turbine which is the exhaust. The horizontal aligned turbine can have a open lower part wherein water enter the turbine and circulates partially through the turbine and exits downward to the exhaust which can be piped or channeled in several manners. The turbine can be equipped with two rotors in counter rotation having a dual counter rotating shaft.

[0357] AT LEAST ONE: Wind turbine nacelle and elevated structure comprising an upper layer with Bioluminescence emission of light by Chemiluminescence, Iridescence, Structural coloration, or Phosphorescence. cofactor is a nonprotein chemical compound or metallic ion that is required for an enzyme's activity. Cofactors can be considered "helper molecules" that assist in biochemical transformations. The rates at which these happen are characterized by enzyme kinetics. Cofactors can be sub classified as either inorganic ions or complex organic molecules called coenzymes, the latter of which is mostly derived from vitamins and other organic essential nutrients in small amounts. The ions, metal ions. Iron-sulfur cluster, bio chemicals, Structural coloration are controlled with an electric charge and control unit.

[0358] AT LEAST ONE: turbine rotors or runners in the helix pipe is placed in the pipe at predetermined distances such that water may regain velocity. For rotating the runners which rotate a plurality of step-up gears from which
the highspeed gear is mashing with the center rotor of the turbine electric machine, operable mounted in bearings on the center barrel which supported by at least two rods. The turbine rotor is the first rotor and the turbine rotor the second rotor is the electric machine geared rotor. As the following elaborated may consists of a turbine rotor driving a gear assembly which drives an electric servo or stepper or other type of electric machine for generating current by flowing fluid in the helix pipe.

[0359] AT LEAST ONE Piped mounted turbine generator made In different embodiment, an inclined center axis is to be mounted in the helix pipe, whereby the generator is made in the dry-pipe. The axle can be tilted with the entire rotor suspension placed in a axis hub.

[0360] AT LEAST ONE P IP turbine generator In this embodiment the vertical axis remains vertical in a round hub which is tilted in the determined angle of tilt of the helix profile. The axis hub is a solid piece with the axis fastened with said hub by means of keys on the shaft and molded together or fastened. The axle can be suspended in magnet bearings as to float the axle and the axle mass on the lower magnet. Wherein the lower and upper magnet are in cups. The cups nylon are mated in the rod eyes with a thin magnet ring pressed in place in the rings having load magnets in the lower cup. The cups are mated in the eye and attached with its extended collar to the rod.

[0361] AT LEAST ONE: Needle Axle. Needle type axle, comprising a sharpened lower end, wherein the axle including the entire mass of the needle axis and mounted components is rested on the needle point. The needle point is accommodated in a minuscule dip or point. The machine rotor and/or generating components is supported on a minuscule dot, Small point on its exact center of the axle for supporting its mass.

[0362] AT LEAST ONE: In different embodiment, the shaft can be omitted and the shaft or axis hub is placed at the center where on the outer circumferential the coil wiring made in slots and a ring of electric conductive material and mounted in upper and lower extending supports of the axis hub and the cables are passed through the hollow center of the axis hub. The opposing rotor hub is mounted in the helix pipe which is circular in the helix angle for accommodating the rotor. The helix pipe cycle is not a complete closed circle whereby the helix pipe is closed at that point where the pipe is disturbed and curves downward. Continuous curve completing the circular cycle where fluid drains from the lowest point of the closed circle and bends in downward direction in its helix extending duct. Entering the rotor compartment from the highest point and exits through the lowest point of said compartment.

[0363] This is for accommodating the rotor and whereby the runner is closed in the pipe and water can circulate therein and through the pipe in downward direction. The rotor hub is mounted in the cut out inner sides of the helix pipe and mounted in the helix cutout window in both pipe and mounted movable in tracks in fine ball
bearings or on upper and lower sliding tracks mounted in bearing and bushings whereby the rotor blades are mounted mated on the hub and extending in the pipe with a minimum spatial gap for rotation therein. The rotor hub carrying the blades is overlap and covers the tracks and bearings and is watertight sealed and closed by nylon or rubber packings from both upper and lower hub. The hub containing a frame with vertical windows wherein permanent magnets are slides in the frame and pressed in place.

[0364] Which may be neodymium magnets or high permeable silicon type magnets opposing the stator coils. helix pipe is made of PVC, vinyl, aluminum, iron, steel or light weight alloys. Including clamps and other mounts. Electric current can be tapped from different levels of the building with electric wiring exits from the dry-pipe in to the building. Such devices may contain transducers or non. The electric regulators and probes are in the interior of the building. One may place magneto meters or sonar probes which is all overdone for these devices. Cables are insulated and harnessed and channeled through the center. The inner circumferential can be equipped with internal copper flatted tracks of the generated phases of current attached vertically, with multiple click socket at each generator output mated with its external lead.

[0365] AT LEAST ONE: Electric machine rotor suspension is provided obtained by a lower and upper eyed rod. The suspension rods or arms extend from the sides to the center of the dry-pipe wherein eyes are provided in the horizontal plain for accommodating the vertical axis. The axle can be mounted in bearings and fastened for accommodating the stator armature, stator tray, accommodating electric conductive material of two or more phases. Whereby the suspension also may serve a electric machine coupled by gears to the

[0366] AT LEAST ONE: Stator can also be rotated by means of a gear coupling with the rotor hub. Wherein the output is obtained by slips and carbon pins or pigtails. The axis hub containing a open center provided for cable passage. The cables are connected to two flat tracks of copper or other electric conductive material and are mated with a power strip wherein the cables are inserted in a cable clamp. The strips are insulated and attached with component glue in the inner dry-pipe wherein each phase output is connected to a corresponding power strip of the turbine output.

[0367] AT LEAST ONE: In different embodiment, the electric generator is mounted vertical without tilting the axis. The inner rotor center contains an extension whereon a circular part is mounted or molded containing the magnets on its circumferential and opposing the stator both in straight vertical direction.

[0368] AT LEAST ONE: Method of making and installing a rain gutter includes the step of providing a gutter of PVC material and attaching the gutter along the eaves of a structure to collect rain water draining from the roof of the structure. A downspout connector of PVC is attached to one end of the gutter utilizing a chemical welding or a ring
type fastener is fastened around the sleeve connections by a screw and a bolt in the bracket. The process such that the PVC material in the connector and gutter fuse together to form a single integral piece. The connector is formed so as to redirect water draining from the gutter to a vertical direction, thereby enter a downspout. Support brackets for the gutters are also manufactured of PVC, and attached to the gutter, such that the support brackets become an integral part of the gutter. A special clamp is utilized to connect adjacent pieces during the chemical welding process to ensure that the parts are fused together to form an integrated unit. In the preferred form out of the invention, conventional PVC pipes and various components are cut in half to form gutter lengths, T-shaped connectors, and elbows for use in the gutter system. A rain water leader/gutter adaptor which is adapted to siphon rain water from a gutter. The rain water may be collected inside a gating vessel which is attached to the rain water leader/gutter adapter. In a modified form a leader adaptor is attached to siphon excess rain water from within the rain water leader/gutter adapter once the water collector fills.

[0369] AT LEAST ONE: Hydroelectric turbine functioning in communicating vessels. Which can be a water locks or piping system with water reservoirs. Wind turbine for hydro generators are unidirectional, bidirectional or omnidirectional. A wind turbine having triangle shape with three surfaces serving as intake and exhaust, are omnidirectional. Omnidirectional where directional intake or injectors or diffusers, is in 360 degree in any quantity.

A volatile chamber with hydroelectric turbine rotors. A ring turbine partially closed and opened in the volatile chamber for operation having a lower drain. Water entering the runner of a reaction turbine has only kinetic energy. Rotation of runner or rotor is due to impulse action. Flow regulation is possible without loss. Unit is installed above the tailrace. Casing has no hydraulic function to perform, because the jet is unconfined and is at atmospheric pressure. Thus, casing serves only to prevent splashing of water. It is not essential that the wheel should run full and air has free access to the buckets. Reaction or Pressure turbine. The penstock pipe feeds water to a row of fixed blades through casing that convert a part of the pressure energy into kinetic energy before water enters the runner. Water entering the runner of a reaction turbine has both pressure energy and kinetic energy. Rotation of runner or rotor is partly due to impulse action and partly due to change in pressure over the runner blades. Water leaving the turbine is still left with some energy (pressure energy and kinetic energy). It is not possible to regulate the flow without loss. Unit is entirely submerged in water below the tailrace. Casing is necessary, because the pressure at inlet to the turbine is much higher than the pressure at outlet. Unit has to be sealed from atmospheric pressure. Water completely fills the vane passage.

[0370] Based on the direction of flow through the runner Tangential flow turbine. Direction of flow is along the tangent of the runner e.g. - Pelton wheel turbine. Radial flow turbine. Direction of flow is in radial direction. Radially inwards or centripetal type, e.g. - old Francis turbine. Radially outwards or centrifugal type, e.g. - Fourneyron turbine. Axial flow turbine Direction of flow is parallel to that of the axis of rotation of the runner. The shaft of the turbine is vertical, lower end of the shaft is made larger which is known as hub. (acts as runner). Mixed
flow turbine, Water flows through the runner in the radial direction but leaves in a direction parallel to the axis of rotation of the runner. On the basis of the head at the turbine inlet. High head turbine net head varies from 150m to 2000m or even more. Medium head turbine, net head varies from 30m to 150m. Low head turbine, net head less than 30m. Crossflow turbo machines are partial intake machines. Half submerged lower rad or Water wheel half enclosed upper wheel mounted on a horizontal axis driving a coaxial geared electric machine by pulleys and belts or cams and chains. Underwater laid watertight insulated electric cables and OWF switchgears enables and disables the connection of the turbines to the infield power collection and the connection of several strings of turbines to the shore connection point.

AT LEAST ONE: Fluid turbine connected to water pipes by sleeves and sockets to the inlet and outlet of the hydro turbine which may comprise a valve. Accommodated in drain pipes and for different purpose and size. turbine machine consists drain pipe wherein, on predetermined distances a helix curve is made and the tubular pipe continuous vertically downward or complete helix or resembling a screw tread or a downward spiral shaped pipe or other geometry. The pipe shape is also of more geometry. For example, a rain pipe of a building for channeling rain water from the rooftop for generating electric current whereby the helix pipe is made around a dry vertical Centre pipe both extending vertically from the roof to the ground or into the ground, whereby the helix pipe curves around the dry-pipe. The tressed form provided which is like a spring curling in uniform spring helix downward for channeling water downward with an tangent and accelerating flow toward the drain. This for creating a longer flow path wherein more electric energy is created than in a drain pipe with water falling in a straight vertical line. The pipe integrated turbines are applied for wind, water, vapor, steam for generating electric current and can be applied as propulsion system in a body of water. The device can be made with a center intake and perpendicular exhaust or vice versa.

A plurality of horizontal axis turbine rotors operable mounted in bearing in a frame structure wherein provided bearing mounts. The structure is mounted on a speeding vehicle or ship. Like on a vehicle rooftop arranged transversal in the steel structure. The suspended wind turbine rotors mounted in a slope from the lowest in traveling direction and augmenting in downstream direction, such that the first rotor lower defined push blades are covered by the structure. The first rotor covers the lower return blades of the second turbine rotor which is raised half of the rotor size such to expose the upper half into the flow of fluid. The second rotor shields the return blades of the third rotor which is also elevated at the same manner and slope for generating electric current by the hub electric motor. The multiple turbines generate a large amount of current for the electric vehicle or vessel.

The turbine rotor with a plurality of hub motors. The perpendicular rotor comprises large blades and rotor hub with stretching in length of the inner nacelle mounted with a spatial gap for rotation in the internal nacelle. The horizontal rotor hub is broad wise arranged in sections wherein the sections electric motors are arranged
stationary on the axis and rotatable on the rotor. Which can be a vertical axis rotor as well. The electric generators rotor section is the turbine rotor mounted operable in bearings on the stationary center axis in bearings, the rotor hub inner body comprises permanent neodymium super magnets compressed in corresponding sized windows and mounted with a corresponding sized frame thereon. The coiled wired armature or copper cylinder is provided on the longitudinal axis made around said axis. The external leads of the coils are conducted through the center hollow axis and connected on a terminal. The terminal connects At least one motor with the feedback of the power regulative electric supply which is tapped from the multiple generators and fed back to the selected motor. One may arrange the motor as existing motors such as single fed or double fed etc. This option allows the turbine to startup and to maintain velocity.

[0374] More electric generating methods with stationary arranged turbines are applicable for speeding objects. A “V” formation of two turbine generators can generate electricity with both turbines when speeding. A “W” formation is with four turbine generators applied for speeding vehicles and vessels that generate electric energy when the vehicle is in motion by all four electric generators. More combination are possible like “X” which is dual directional, etc. etc.

[0375] small wind turbines can be mounted on a post or pole mounted in the ground in a concrete support. A pipe can also be applied where on the turbine is mounted with a mandrel and below mounted with the base plateau by a mandrel.

[0376] A spiral fluid turbine generator comprises a nacelle with spiral intakes and spiral rotor with spiral blades propagating radially from the hub and stretching its form in longitude with the rotor hub mounted on a shaft which is operable mounted in the nacelle in magnetic bearings or roller or ball bearings in bearing tracks with the stationary nacelle. The shaft end comprises an absolute encoder made around the shaft and on the separating wall of the rotor chamber with the electric output cable and power supply are ducted to the component chamber or base on the adjacent wall and connected by soldering the wires or screw connection or clamping electrical connection to its unit and controller unit and turbine network hub and modem connecting with the computer system or by optical wireless connection. The vertical axis spiral turbine is mounted on an elevated structure and on the top of the elevated structure. Omni directional or unidirectional.

[0377] The omnidirectional turbine machine comprises a plurality of spiral ducts in a conic slope toward the rotor and center axis. The vertical spiral intake or ducts or baffles are in continuum with the turbine rotor and may comprises the equal number of blades as spiral ducts. The ducts are arranged in a convex for omnidirectional wind catching curved panels and rotor vanes in spiral curvature. Wind or water enters the intakes angular with accelerating curvature in to the trough and discharges on the rotor blades and traveling with the rotor through the
exhaust generating a pulsing electric current by means of an electric motor mechanically mated in concentric mode with the drive turbine shaft. The electric machine is mated in a cavity of the elevated structure which is the component camber and machine base.

[0378] Horizontal and vertical Fluid turbine rotors are arranged combined in the nacelle or in a fuselage. The fuselage comprises a helicopter fuselage with an open front cockpit wherein the turbines are operable mounted for operation. The tailfin is extended upward and downward serving as jaw drive for orienting the fuselage in upwind. The fuselage rotatable mounted on a structure in a circular bearing track having locking and mounting means. The exhaust is made at the rear cabin enclosure around the tail boom.

[0379] Outdoor Air Purifying wind turbine made with horizontal and/or vertical axis wind turbine rotors, With a stationary nacelle or operable. The wind turbine is mounted in cities for reducing traffic and air pollution for filtering the harmful substance, particles, smog, traffic pollution from the ambient air. The wind turbine is mounted on structures and buildings and masts and poles along the streets. The turbine comprises an extended circular intake with a plurality of motorized coreless turbine rotors. The turbine rotor can be a single stretching helix or spiral helix turbine rotor. The coreless is rotatable mounted in a cowl with the stator fixed mounted with the cowl inner body comprises airfoils extending from the circular inner ring radially toward the axis. Turbines made in the duct connected to the discharge of filter made in a circular frame and fixed mounted in the cowl. Ambient air is conducted through the intake and the rotor blades to the filter arranged linear after the intake motor.

[0380] The filters are HEPA filters with additional monoxide filters that filter out most harmful particle. Carbone filters can also be applied in the closed discharge where through ambient air is conducted through the activated charcoal and carbons. The third stage is the ionizer filter where the partially processed air passes through and the last stage is the PECO stage for removing airborne chemicals. After the last stage two counter rotating electric turbine rotors are operatively mounted at the exhaust nozzle that are fed by the generated power supply of the first turbine rotor. All the turbines can be operated by an electric power supply for filtering ambient air continuously. The cowl is mounted operable on the elevated standing structure mounted in bearings with the mast comprising an electronic wind vane mounted on the upper cowling. The cowling hollow body comprises electric units, conductors in ducts, sensors units, power regulating power supply and connecting panel with external power supply connection. Ozone generators can also be provided in the wind stream.