The Ettridge Wind Turbine

A New Generation Environmentally friendly Wind Turbine

ADVANTAGES.

1. The most efficient conversion of wind power to rotary mechanical motion.

2. Simple low cost construction.

3. Smaller size than comparable propeller type wind generators.

4. Multi uses, including automobile applications.

5. Low environmental visual profile.

6. No high towers needed, can be positioned at ground height, or roof height.

7. Can be screened to ensure no harm to wildlife and protected birds.

8. Easy Maintenance at ground level.

9. No high surface speeds and excessive noise.

I would like to introduce you to an Improved Rotary Wind Powered Turbine (Savonius Rotor) that I have invented. We are all familiar with the propeller type of wind generator, and most would know of the rotary air ventilators used on the top of vans, commercial vehicles and factories, the rotary ventilator has been condemned to low torque applications up to now, but with this improved rotary wind powered turbine, that is all about to change.

The common Wind Generator is propeller driven, mounted on a tall tower, but due to their visual impact, many planning authorities are refusing planning approval, pushing proposed wind farm developments out into the country, and often away from electricity connectors, adding substantial costs to the wind farm developer.

The Improved Rotary Wind Powered Turbine is a low visual impact alternative, which does not require to be mounted on a high tower, this is a down to earth installation which delivers high efficiency, uses simple gearing if needed (depends on average wind speeds) and low cost installation and maintenance. A real alternative wind farm generator worth considering.

So, what is new, and how does it work ?

The problem with the current Savonius type wind turbines is the fact that the blades are only driven by the wind for approximately 120 degrees of one rotation, that is from the direction of the oncoming wind to about 120 degree from the center, the remaining 240 degrees, the blades are actually using power, and have to be driven into the wind. The solution that I came up with was to allow the normal operation for the 120 degrees of the turn, and for the remaining 240 degrees to place a shield, or skirt to cover the blades in the area that they normally would need to be driven into the oncoming wind, and by using overhead air scoops, directed the air above the rotor down into the tunnel created by the rotor and wind shield. This has the effect that the blades on the rotating turbine are driven for the full 360 degrees, greatly improving low wind speed start up efficiency, and by rotating the skirt and scoops effectively feathering the rotor in high wind speeds. The wind shield also can be moved, to ensure the wind scoops are facing the direction of the oncoming wind, either by a wind tail or mechanical means.

I have attached a simple animation to show how it works.

I am looking for financial assistance to build a demonstration unit, if your company would like to know more, or can be of assistance, please contact John Patrick Ettridge at:

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