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Innovation Infosheet

HyperBlade Coaxial Wind Turbine

Track Code: BITAR-01

Categories:
- Green Technology

Keywords:
- Clean Energy
- Green Technology
- Wind Energy

Wind turbines convert the kinetic energy in wind into mechanical energy that is then converted by a generator into electricity. A coaxial wind turbine utilizes a second counter-rotating rotor to increase the amount of kinetic energy converted from a particular patch of sky.

AirBuoyant, LLC has developed the patented HyperBlade, a coaxial, counter-rotating, bladed wind turbine design that is 30 percent more efficient than conventional designs for the same blade diameter and reduces kick-in power by nearly half over conventional layouts. The HyperBlade has the same footprint of standard horizontal wind turbines and has the same cost of implementation, yet generates more power. A small, 2 to 3 kW variant of HyperBlade is currently being manufactured for customers and has a broadening install base across many industries and applications.

Advantages:
-It is 30 percent more efficient
-Installation cost is the same
-Footprint is the same

Potential Applications:
-Wind turbine industry
-Clean energy
-Green technology

People:
- Bitar, Pete (Project leader)

Intellectual Property:

Application Date: October 4, 2011
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