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Title	**HORIZONTAL AXIS WIND TURBINE WITH TWO COUNTER-ROTATING ROTORS**
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Description	The invention relates to energy, namely, to horizontal axis wind turbines, and can be used for converting wind energy into electrical energy with increased conversion efficiency. A horizontal axis wind turbine with two counter-rotating rotors includes a support tower (1), on which a nacelle (2) is installed with the possibility of rotation around the axis of the support tower (1). In the nacelle (2) is installed a radial generator with permanent magnets (3), the rotor (4) of the generator is fixedly connected to the wind rotor shaft (5) with aerodynamic blades (6), installed at an angle of attack $-\alpha_{optim}\pm\Delta\alpha$. The stator (7) of the generator is fixedly connected to the wind rotor shaft (8) with aerodynamic blades (9), installed at an angle of attack optimal in terms of wind energy conversion $+\alpha_{optim}$. The stator (7) is connected to the nacelle (2) by means of a one-way coupling (10), and the rotor (4) of the generator is connected to the nacelle (2) by means of a one-way coupling (11). The horizontal axis wind turbine with two counter-rotating rotors operates in the following way. At the wind direction indicated in the figure, the air currents act on the aerodynamic blades (6), installed under the angle of attack $-\alpha_{optim}\pm\Delta\alpha$, driving the wind rotor (5) and the rotor (4) of the generator (3) into rotational motion, which will rotate with the angular velocity ω_1, producing the amount of power P1. The air currents, which pass through the wind rotor (5), will act on the aerodynamic blades (9), installed under the angle of attack $-\alpha_{optim}$, driving the wind rotor (8), which is rigidly connected to the stator (7) of the generator (3) into rotational motion. as a result, the stator (7) will rotate in the opposite direction to the rotor (4) of the generator (3) with the angular velocity ω_2, producing the amount of power P_2. Thus, the magnetic field of the stator (7) accumulated from the counter-rotating rotations of the wind rotors (5) and (8) will rotate with the total angular velocity $\omega_\Sigma=\omega_1+\omega_2$. The value of the angle of attack deviation $\pm\Delta\alpha$ will be chosen provided that $P_1= P_2$.