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The invention relates to devices for wind-to-electric power conversion, namely for conversion of air flow power actuated by the road traffic.

The wind turbine 2 actuated by the road traffic flow 1 includes a base, onto which there is installed a fixed vertical axle, onto which, by means of bearings, there is installed a hollow shaft with blades, the profile of which in longitudinal section is described by a logarithmic spiral, the curvature radius of which is smaller at the periphery of the blades, at least two in number. In the upper part of the hollow shaft there is fixed a drive gear or friction wheel of the precession step-up gear, kinematically joined by a satellite gear unit with the fixed gear or friction wheel, rigidly joined by the body of the electric generator with the fixed vertical axle, and the crank, onto which there is installed the satellite gear unit, is coupled with the rotor of the electric generator. The wind turbine may be installed in the space between the trafficway lanes in order to use the air flow power on both sides of the road traffic. The wind turbine may be used for highway lighting and for power supply of the warning systems, for lighting of small premises, placed on the road side: places of temporary parking, public conveniences, stalls etc., for lighting of advertising panels, warming of the trafficway with the view of preventing the glaze formation etc.

Claims: 3
Fig.: 11