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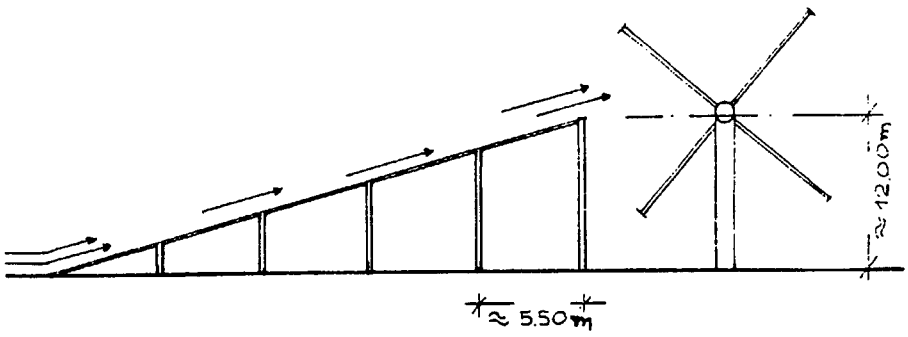

(57) Abstract

The present invention refers to a method and a mechanism for engaging great amounts of aeolian energy and transform it into electric energy by means of a big horizontal, rotating iron shaft 6-20 m long and with a diameter of 16-50 cm. The said shaft is supplied with four rows of frames covered with canvas or nylon sheets. Moreover, the horizontal shaft is furnished with a second rotary motion changing its direction. Two kinds of protective windscreens whose surfaces are covered with nylon or aluminium sheets stapled together form also part of the invention.

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AMENDED CLAIMS

[received by the International Bureau on 10 February 1995 (10.02.95);
original claims 1-11 replaced by amended claims 1-6 (2 pages)]

1. Method for engaging aeolian energy and transformation thereof into electric energy by means of generators characterized in that it consists of a wired turbine with "horizontal shaft around which a rigid cylindrical blade rotor revolves and said rotor comprises rectangular blades equipped either with concave surfaces or planar bent surfaces towards the upwind direction, blades which also have voids between the hub and one half the radius of the blade rotor so that the said blade rotor has the capability of being oriented into the prevailing wind direction.

2. Method for engaging aeolian energy and transformation thereof into electric energy by means of generators as claimed in Claim 1, characterized in that the wind turbine comprises two vertical converging rigid planar surfaces the minimum horizontal distance of which equals the length of the blade rotor shaft and the height of which is at least twice the diameter of the blade rotor and in such a way so that the entire aeolian device is supported by a circular concrete base used as a platform orientation.

3. Method for engaging aeolian energy and transformation thereof into electric energy by means of generators as claimed in Claim 2, characterized in that the wind turbine consists of two metal pylons which support the two ends of the rotor blade shaft and of a third metal pylon which supports the central section of the rotor blade shaft which is divided in two parts.
So that said pylons are supported each by four wheels attached to the base of each pylon so that said wheels are able to roll on a pair of concentric circular metal tracks.

4. Method for engaging aeolian energy and transformation thereof into electric energy by means of generators as claimed in Claim 3, characterized in that the wind turbine's concrete circular base is equipped with an inclined planar structure and the said inclined structure has the capacity of rotating around a vertical axis without touching the ground, with the inclined structure's maximum height being greater than that of the blade rotor shaft's and said inclined

structure has its upper surface covered by an appropriately smooth material of small air drag friction coefficient.

5. Method for engaging aeolian energy and transformation thereof into electric energy by means of generators as claimed in Claim 4, characterized in that the wind turbine is equipped with a pair of vertical planar structures, structures which have their internal surfaces covered by an appropriately smooth material of small air drag friction coefficient and said pair of structures are divided into two parts, the one nearest to the wind turbine being rigidly connected to the outer converging surface of the inclined structure so that said pair of vertical surfaces and the inclined structure can rotate in unisome around a vertical axis, and the other part of the pair of vertical axis, and the other part of the pair of vertical structures is anchored to the ground in such a way so that an open circuit wind tunnel is formed, the axis of which coincides with the direction of the prevailing winds so that the tunnel's largest cross section is upwind and the tunnel's smallest cross section is downwind adjacent to the rotor blades leading edges.

6. Method for engaging aeolian energy and transformation thereof into electric energy by means of generators as claimed in Claim 5, characterized in that the wind turbine's horizontal shaft, the inclined structure and the pair of vertical structures may be rigidly locked and non rotatable around a vertical axis.