

Title (en)
WIND TURBINE HAVING A SHAFT ARRANGED PERPENDICULARLY WITH RESPECT TO THE WIND DIRECTION ON A VERTICAL AXIS, AND FLETTNER ROTORS PARALLEL TO THE SHAFT.

Title (de)
WINDRAD MIT QUER ZUR WINDRICHTUNG VERLAUFENDER ACHSE UND FLETTNERROTOREN PARALLEL ZUR ACHSE.

Title (fr)
EOLIEENNE AYANT UN ARBRE DISPOSE PERPENDICULAIREMENT A LA DIRECTION DU VENT SELON UN AXE VERTICAL, ET DES ROTORS DE FLETTNER PARALLELES A L'ARBRE.

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Application
EP 79901369 A 19790806

Priority
DE 7900079 W 19790806

Abstract (en)
[origin: WO8100435A1] The wind turbine comprises a shaft (1) arranged perpendicularly with respect to the wind direction according to a vertical, horizontal or inclined axis. Flettner rotors (2) are fixed on the spokes (3) or along the periphery (4) of the wind turbine. These Flettner rotors (2) transform the transverse generated by the Magnus effect into a rotation force of the wind turbine. The Flettner rotors (2) which are provided preferably with end disks, are driven by electrical motors or by Savonius rotors. On the leeward of the wind turbine, the Magnus effect is eliminated by stopping the rotation of the Flettner rotors (2) or by taking them away from the action of the wind by a mask (5) or by other means. Thereby is provided a wind turbine which may operate with small wind speeds, of which the number of revolutions is easily adjustable to a large extent and which has a high efficiency due to the magnitude of the Magnus effect.

Abstract (fr)
L'eolienne comprend un arbre (1) dispose perpendiculairement a la direction du vent selon un axe vertical, horizontal ou incline. Des rotors Flettner (2) sont fixes sur les rayons (3) ou le long de la peripherie (4) de l'eolienne. Ces rotors Flettner (2) transforment la force transversale generee par l'effet Magnus en une force de rotation de l'eolienne. Les rotors Flettner (2) qui sont munis, de preference, de disques d'extremite, sont entraines par des moteurs electriques ou par des rotors Savonius. Du cote sous le vent de l'eolienne l'effet Magnus est elimine en arretant la rotation des rotors Flettner (2) ou en les soustrayant a l'action du vent par un cache (5) ou par d'autres moyens. On obtient une eolienne qui peut exploiter de petites vitesses de vent, dont le nombre de tours est facilement réglable dans une large mesure et qui a un grand rendement, grace a la grandeur de l'effet Magnus.

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