

Title (en)

PROCEDURE AND APPARATUS FOR PRODUCING ENERGY FROM TEMPERATURE DIFFERENCE OF OPEN AIR AND WATER

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ENERGIEENTWICKLUNG UNTER VERWENDUNG DES TEMPERATURUNTERSCHIEDES ZWISCHEN UMGEBUNGSLUFT UND WASSER

Title (fr)

PROCEDE ET APPAREIL DE PRODUCTION D'ENERGIE A PARTIR DE LA DIFFERENCE DE TEMPERATURE ENTRE L'AIR AMBIANT ET L'EAU

Publication

EP 0832355 A1 19980401 (EN)

Application

EP 95903355 A 19941209

Priority

- FI 9400559 W 19941209
- FI 935572 A 19931213

Abstract (en)

[origin: WO9516858A1] Solar and wind energy are still costly. Their yield is poor at times when energy is needed most, that is, in winter in Europe. The invention relates to a method and an apparatus for producing electricity by means of vertical wind and/or horizontal wind provided by temperature difference of open air and water. In the winter, the water temperature is above zero (in centigrades). The condensation heat of power plants is about +15 CEL. In freezing weather (temperature below zero), the temperature difference of water and air is at the discharge site of condensation water up to 40 CEL. A chimney (4) resembling a condensation tower draws open air (3) heated in a heat transfer means (5) upwards. The direction of the flow is deflected with vanes (6), whereby the power plant, or the heat transfer means only, rotates supported by a pontoon (2). The heat transfer means (5) is a siphon. Air is removed from the pipes of the transfer means with a low pressure compressor. The pipes are filled with water by air pressure. The flow is maintained with the aid of forces generated by the rotation. The vertical chimney comprises vanes appropriate for recovering horizontal wind, or the vanes are connected to the sides of the chimney like sails. The apparatus is a vertical axis windmill, bearably carried in the water part of the time.

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