

Title (en)
HYBRID SOLAR RECEIVER, AND CONCENTRATING SOLAR SYSTEM COMPRISING THE SAME

Title (de)
HYBRID-SOLAREMPFÄNGER UND KONZENTRIERENDES SOLARSYSTEM DAMIT

Title (fr)
RECEPTEUR SOLAIRE HYBRIDE ET SYSTEME SOLAIRE A CONCENTRATION LE COMPORTANT

Publication
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Application
EP 10727103 A 20100505

Priority
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Abstract (en)
[origin: WO2010128251A1] The invention relates to a hybrid solar receiver that includes photovoltaic cells (2) for converting sun rays concentrated on said cells into electricity, and a heat pipe (3) having a heat discharge area (3a) serving as an evaporator for discharging the heat accumulated on the photovoltaic cells (2) and a dissipation area (3a) for dissipating the heat absorbed by the heat pipe, the entire rear surface (S2) of the photovoltaic cells (2) being placed on and in contact with the heat discharge area (3a) of the heat pipe (3) via an interface layer (4) electrically insulating the photovoltaic cells (2) from the heat pipe (3) in order to instantaneously transfer the heat accumulated on the photovoltaic cells (2) to the liquid coolant in the heat pipe. The entire surface of the photovoltaic cells (2), except for the rear surface (S2), is coated with a layer (5) of an encapsulation material, and a transparent plate (9) is placed on the encapsulation layer (5). The use of such a receiver along with a linear concentrator forms a concentrating solar system that generates electricity and heat for domestic use in an optimum manner.

IPC 8 full level
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