Title (en)

SOLAR THERMAL COLLECTORS AND THIN PLATE HEAT EXCHANGERS FOR SOLAR APPLICATIONS

Title (de)

THERMISCHE SONNENKOLLEKTOREN UND DÜNNE PLATTENWÄRMETAUSCHER FÜR SOLARANWENDUNGEN

Title (fr)

CAPTEURS SOLAIRES À CONVERSION THERMIQUE ET ÉCHANGEURS DE CHALEUR À PLAQUES MINCES POUR DES APPLICATIONS SOLAIRES

Publication

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Application

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Abstract (en)

[origin: CN107208933A] According to various aspects, exemplary embodiments are disclosed of solar thermal collectors, solar heating systems, and thin plate heat exchangers and absorbers. The thin plate heat exchangers and absorbers may be used for solar applications and/or non-solar applications. In an exemplary embodiment, a photovoltaic thermal collector generally includes a photovoltaic panel, a first layer, and a second layer. The first layer is configured such that thermal energy is transferable from the photovoltaic panel to the first layer. The second layer includes edges sealed to edges of the first layer. A permeable core is disposed between the first and second layers. In operation, a heat transfer fluid may flow through the permeable core, whereby thermal energy is transferable from the first layer to the heat transfer fluid.

IPC 8 full level

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