

Title (en)
SOLAR COLLECTOR PANEL SYSTEM

Title (de)
SONNENKOLLEKTORPANEELSYSTEM

Title (fr)
SYSTEME DE PANNEAU COLLECTEUR SOLAIRE

Publication
EP 1834136 A1 20070919 (EN)

Application
EP 05771773 A 20050810

Priority

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Abstract (en)
[origin: WO2006017885A1] The presented solar collector panel based on direct solar absorption offers significantly higher efficiency over the traditional tube and fins designs. The heat exchange is improved by increasing the heat dissipation area and coating of the absorber inner surface with a radiation enhancing layer. Meandering channel design enables higher volume of heat exchanging fluid, reducing the absorber temperature, the main condition for the high efficiency. It also ensures uniform temperature distribution. It has been demonstrated that uniform temperature distribution of the absorber enhances the efficiency. A system with individual panel control enables taking advantage of different roof slopes and sun movement throughout the day.

IPC 8 full level
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