Title (en)

SOLAR COLLECTOR PANEL SYSTEM

Title (de)

SONNENKOLLEKTORPANEELSYSTEM

Title (fr)

SYSTEME DE PANNEAU COLLECTEUR SOLAIRE

Publication

EP 1834136 A4 20130501 (EN)

Application

EP 05771773 A 20050810

Priority

- AU 2005001199 W 20050810
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- AU 2004905238 A 20040913

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

F24D 17/00 (2006.01); **F24J 2/04** (2006.01); **F24J 2/46** (2006.01); **F24J 2/48** (2006.01); **F24S 10/50** (2018.01); **F24S 10/55** (2018.01); **F24S 10/70** (2018.01)

CPC (source: EP US)

F24D 17/0021 (2013.01 - EP US); **F24S 10/503** (2018.04 - EP US); **F24S 10/55** (2018.04 - EP US); **F24S 10/748** (2018.04 - EP US); **F24S 70/225** (2018.04 - EP US); **F24S 70/30** (2018.04 - EP US); **F24S 70/60** (2018.04 - EP US); F24S 2080/05 (2018.04 - EP US); Y02B 10/20 (2013.01 - EP US); Y02E 10/44 (2013.01 - EP US)

Citation (search report)

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- See references of WO 2006017885A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006017885 A1 20060223; **WO 2006017885 B1 20060330**; EP 1834136 A1 20070919; EP 1834136 A4 20130501; US 2009025709 A1 20090129

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