

Title (en)

LIQUID COOLING OF PHOTOVOLTAIC SOLAR PANELS

Title (de)

FLÜSSIGKÜHLUNG PHOTOVOLTAISCHER SOLARZELLEN

Title (fr)

REFROIDISSEMENT DE LIQUIDE DE PANNEAUX SOLAIRES PHOTOVOLTAIQUES

Publication

EP 2111520 A4 20100616 (EN)

Application

EP 08724917 A 20080130

Priority

- US 2008001169 W 20080130
- FR 0700655 A 20070131

Abstract (en)

[origin: FR2911997A1] The device has a coolant liquid containing space arranged between a bottom panel (2) and a thermo-mechanical interface in connection with a rear surface of a solar panel (1), where a flow rate of a wave of coolant liquid is laminar. The wave of the coolant liquid is separated by a set of canals which is parallel to a flow direction of the wave of the coolant liquid, and ribs are arranged in the direction of the flow causing a non stationary laminar flow. Obstacles (15) are arranged perpendicular to the flow direction of the wave of the coolant liquid.

IPC 8 full level

F24S 23/70 (2018.01); **H01L 31/052** (2006.01); **F24S 90/00** (2018.01)

CPC (source: EP US)

F24S 10/502 (2018.04 - EP); **F24S 80/00** (2018.04 - EP US); **H01L 31/0521** (2013.01 - EP US); **F24S 2080/05** (2018.04 - EP);
H02S 40/44 (2014.12 - EP); **Y02B 10/20** (2013.01 - EP); **Y02B 10/70** (2013.01 - EP); **Y02E 10/44** (2013.01 - EP); **Y02E 10/50** (2013.01 - EP);
Y02E 10/60 (2013.01 - EP)

Citation (search report)

- [Y] US 2004103680 A1 20040603 - LASICH JOHN BEAVIS [AU]
- [Y] US 2002074034 A1 20020620 - FUJISAKI TATSUO [JP], et al
- See references of WO 2008094555A2

Cited by

US10381500B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2911997 A1 20080801; FR 2911997 B1 20090904; EP 2111520 A2 20091028; EP 2111520 A4 20100616; TW 200845403 A 20081116;
WO 2008094555 A2 20080807; WO 2008094555 A3 20081009

DOCDB simple family (application)

FR 0700655 A 20070131; EP 08724917 A 20080130; TW 97103729 A 20080131; US 2008001169 W 20080130