

Title (en)

SOLAR HEATING SYSTEM FOR WARMING HOT WATER BASED ON THE PRINCIPLE OF HEAT EXCHANGE THROUGH THE PHASE-CHANGE PROCESS OF EVAPORATION AND CONDENSATION

Title (de)

SOLARHEIZUNGSSYSTEM ZUM ERWÄRMEN VON HEISSWASSER AUF GRUNDLAGE DES PRINZIPS DES WÄRMEAUSTAUSCHES DURCH DEN PHASENWECHSELPROZESS VON VERDAMPFUNG UND KONDENSATION

Title (fr)

SYSTEME DE CHAUFFAGE SOLAIRE POUR TIÉDIR L'EAU CHAUDE SUR LA BASE DU PRINCIPE D'ECHANGE DE CHALEUR PAR LE BIAIS DU PROCESSUS DE CHANGEMENT DE PHASE D'EVAPORATION ET DE CONDENSATION

Publication

EP 2347194 A2 20110727 (EN)

Application

EP 09745103 A 20090929

Priority

- IB 2009006987 W 20090929
- IT BA20080044 A 20081023

Abstract (en)

[origin: WO2010046740A2] Solar heating system for providing hot water based on the principle of heat exchange through the phase-change process of evaporation and condensation, comprising at least a storage tank (3) and at least a primary circuit, provided at least with a solar collector (2), at least a heat exchanger (5), and means (4, 6) for connecting the heat exchanger (5) to the solar collector (2), characterized in that said primary circuit allows to transfer heat from the hot end to the cold end of the circuit by means of evaporation and condensation of the fluid contained therein; said storage tank (3) is arranged horizontally or sub- horizontally.

IPC 8 full level

F24J 2/34 (2006.01); **F24J 2/44** (2006.01); **F24S 10/95** (2018.01)

CPC (source: EP US)

F24S 10/95 (2018.04 - EP US); **F24S 60/30** (2018.04 - EP US); **F24S 80/40** (2018.04 - EP US); **Y02E 10/44** (2013.01 - EP)

Citation (search report)

See references of WO 2010046740A2

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 MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2010046740 A2 20100429; **WO 2010046740 A3 20101125**; **WO 2010046740 A4 20110203**; EP 2347194 A2 20110727;
IT 1395011 B1 20120905; IT BA20080044 A1 20100424

DOCDB simple family (application)

IB 2009006987 W 20090929; EP 09745103 A 20090929; IT BA20080044 A 20081023