

Title (en)

THERMAL ENERGY STORAGE AND DELIVERY DEVICE

Title (de)

WÄRMEENERGIESPEICHER UND ABGABEVORRICHTUNG

Title (fr)

DISPOSITIF DE STOCKAGE ET DE RESTITUTION D'ÉNERGIE THERMIQUE

Publication

EP 3108196 A1 20161228 (FR)

Application

EP 15708269 A 20150216

Priority

- FR 1400425 A 20140217
- IB 2015000169 W 20150216

Abstract (en)

[origin: WO2015121743A1] The invention relates to a device for storage of thermal energy coming from, for example, thermal solar panels and for later delivery of this energy for the heating of domestic hot water, radiators, underfloor heating, etc. The device comprises: - a first fluid that is a heat-transfer fluid; - a second fluid; - a chemical that is soluble in the second fluid, dilution of which in the second fluid is exothermic; - a heat exchanger (1) comprising an inlet and an outlet for the second fluid; and - a tank of second fluid (14). The device is characterised in that the second fluid inlet and outlet of the heat exchanger (1) are combined in a single port (11). The invention also relates to a thermal energy storage and delivery method using the said device, as well as to a heat exchanger.

IPC 8 full level

F28D 20/00 (2006.01); **F24D 11/02** (2006.01); **F24D 19/10** (2006.01)

CPC (source: EP US)

F24D 11/003 (2013.01 - EP); **F24D 19/1042** (2013.01 - EP US); **F24T 10/17** (2018.04 - EP); **F28D 20/003** (2013.01 - EP);
F28D 20/0034 (2013.01 - EP); **F28F 13/125** (2013.01 - EP); **F24D 2200/11** (2013.01 - EP); **F24D 2200/14** (2013.01 - EP);
F28D 2021/0066 (2013.01 - EP); **Y02B 10/20** (2013.01 - EP); **Y02B 10/40** (2013.01 - EP); **Y02B 10/70** (2013.01 - EP); **Y02E 10/10** (2013.01 - EP);
Y02E 60/14 (2013.01 - EP); **Y02E 70/30** (2013.01 - EP)

Citation (search report)

See references of WO 2015121743A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2015121743 A1 20150820; EP 3108196 A1 20161228; FR 3017694 A1 20150821; FR 3017699 A1 20150821; FR 3017699 B1 20160520

DOCDB simple family (application)

IB 2015000169 W 20150216; EP 15708269 A 20150216; FR 1400425 A 20140217; FR 1401125 A 20140519