

Title (en)

HEAT STORAGE DEVICES AND CIRCUITS FOR SOLAR STEAM GENERATION, AND ASSOCIATED SYSTEMS AND METHODS

Title (de)

WÄRMESPEICHERVORRICHTUNGEN UND KREISLÄUFE ZUR SOLARDAMPFERZEUGUNG UND ZUGEHÖRIGE SYSTEME UND VERFAHREN

Title (fr)

DISPOSITIFS ET CIRCUITS DE STOCKAGE DE CHALEUR POUR LA PRODUCTION SOLAIRE DE VAPEUR, AINSI QUE SYSTÈMES ET PROCÉDÉS ASSOCIÉS

Publication

EP 3403032 A4 20191106 (EN)

Application

EP 17757036 A 20170217

Priority

- US 201662298409 P 20160222
- US 2017018480 W 20170217

Abstract (en)

[origin: US2017241669A1] Heat storage devices and circuits suitable for storing solar energy, and associated systems and methods are disclosed. Representative systems can include a solar energy collection system having a first solar field coupled between a first working fluid source and a target heat user via first fluid network, at least one heat storage device, and a second solar field coupled to the at least one heat storage device via a second fluid network. The second fluid network carries a second working fluid and is isolated from fluid communication with the first fluid network. At least one heat exchanger is coupled to the first and second fluid networks to provide thermal communication between the first and second fluid networks.

IPC 8 full level

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Citation (search report)

- [XY] US 2012274069 A1 20121101 - VENETOS MILTON [US], et al
- [X] WO 2013080386 A1 20130606 - HITACHI LTD [JP], et al
- [X] US 2014075939 A1 20140320 - AGA VIPLUV [CH], et al
- [Y] US 2014352304 A1 20141204 - ARIAS DIEGO [US], et al
- [Y] US 2013049368 A1 20130228 - KAUFMANN GABRIEL [IL], et al
- [A] US 2013269682 A1 20131017 - CUTHBERT JOHN B [US], et al
- [A] WO 2013065492 A1 20130510 - MITSUBISHI HEAVY IND LTD [JP]
- [A] WO 2014068797 A1 20140508 - MITSUI SHIPBUILDING ENG [JP]
- See references of WO 2017147022A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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