

Title (en)

REGENERATIVE THERMAL ENERGY SYSTEM, A POWER GENERATING FACILITY COMPRISING SUCH A SYSTEM AND A METHOD OF OPERATING THE SAME

Title (de)

REGENERATIVES WÄRMEENERGIESYSTEM, ENERGIEERZEUGUNGSEINRICHTUNG MIT SOLCH EINEM SYSTEM UND VERFAHREN ZUM BETRIEB DAVON

Title (fr)

SYSTÈME D'ÉNERGIE THERMIQUE À RÉCUPÉRATION ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication

EP 2895706 A1 20150722 (EN)

Application

EP 13748194 A 20130731

Priority

- US 201213563142 A 20120731
- US 2013052810 W 20130731

Abstract (en)

[origin: US2014033714A1] A regenerative thermal energy system includes a heat exchange reactor that includes a top entry portion, a lower entry portion, and a bottom discharge portion. The system also includes at least one fluid source coupled in flow communication with the at least one heat exchange reactor at the lower entry portion. The system also includes at least one cold particle storage source coupled in flow communication with the at least one heat exchange reactor at the top entry portion. The system further includes at least one thermal energy storage (TES) vessel coupled in flow communication with the heat exchange reactor at each of the bottom discharge portion and the top entry portion. The heat exchange reactor is configured to facilitate direct contact and counter-flow heat exchange between solid particles and a fluid.

IPC 8 full level

F01K 3/00 (2006.01); **F01K 27/00** (2006.01); **F02C 6/16** (2006.01); **F02C 7/10** (2006.01); **F28C 3/14** (2006.01)

CPC (source: EP KR US)

F01K 3/00 (2013.01 - EP KR US); **F01K 3/02** (2013.01 - KR); **F01K 27/00** (2013.01 - EP KR US); **F02C 6/16** (2013.01 - KR); **F02C 7/10** (2013.01 - KR); **F28C 3/14** (2013.01 - EP KR US); **F28D 19/02** (2013.01 - EP US); **F28D 20/0056** (2013.01 - KR); **F28D 20/0056** (2013.01 - EP US); **Y02E 60/14** (2013.01 - EP); **Y02E 60/16** (2013.01 - EP)

Citation (search report)

See references of WO 2014022451A1

Designated contracting state (EPC)

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BA ME

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