

Title (en)

MAGNETO CALORIC DEVICE WITH CONTINUOUS PUMP

Title (de)

MAGNETOKALORISCHE VORRICHTUNG MIT KONTINUIERLICHER PUMPE

Title (fr)

DISPOSITIF MAGNÉTOCALORIQUE À POMPE CONTINUE

Publication

EP 2936007 A1 20151028 (EN)

Application

EP 13799164 A 20131118

Priority

- US 201213719395 A 20121219
- US 2013070518 W 20131118

Abstract (en)

[origin: US2014165594A1] A heat pump system having magneto caloric material positioned in a continuously rotating regenerator is provided. The magneto caloric material is staged so that as the regenerator is rotated, a portion of the material is cycled in and out of a magnetic field in a continuous manner. A heat transfer fluid is circulated through the magneto caloric material simultaneously along at least two paths to provide for the transfer of heat both to and from the material in a cyclic manner. The magneto caloric material may include zones having different temperature ranges of responsiveness to the magnetic field. An appliance using a heat pump system based on magneto caloric material is also provided.

IPC 8 full level

F25B 21/00 (2006.01); **F25D 11/00** (2006.01)

CPC (source: CN EP US)

F25B 21/00 (2013.01 - CN EP US); **F25D 11/00** (2013.01 - CN EP US); **F25B 2321/0021** (2013.01 - CN EP US); **Y02B 30/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2014099199A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2014165594 A1 20140619; CA 2893874 A1 20140626; CN 104870911 A 20150826; CN 104870911 B 20170630; EP 2936007 A1 20151028; KR 20150096743 A 20150825; MX 2015007963 A 20151008; WO 2014099199 A1 20140626

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US 201213719395 A 20121219; CA 2893874 A 20131118; CN 201380067028 A 20131118; EP 13799164 A 20131118; KR 20157019140 A 20131118; MX 2015007963 A 20131118; US 2013070518 W 20131118