

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)

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)

**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

DOCDB simple family (application)

**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