

Title (en)
THERMAL ENERGY STORAGE

Title (de)
WÄRMEENERGIESPEICHERUNG

Title (fr)
STOCKAGE D'ÉNERGIE THERMIQUE

Publication
EP 2529173 A2 20121205 (EN)

Application
EP 11702759 A 20110127

Priority
• US 29956510 P 20100129
• US 2011022662 W 20110127

Abstract (en)
[origin: WO2011094371A2] The invention is directed at articles and devices for thermal energy storage, and for process of storing energy using these articles and devices. The articles comprise a capsular structure 10 having one or more sealed spaces 14, wherein the sealed spaces encapsulate one or more thermal energy storage materials 26: wherein the capsular structure has one or more fluid passages 16 which are sufficiently large to allow a heat transfer fluid to flow through the one or more fluid passages; and when a heat transfer fluid contacts the capsular structure 10 the thermal energy storage material 26 is isolated from the heat transfer fluid. The devices include two or more articles arranged so that a fluid, such as a heat transfer fluid, may flow through the fluid passage 16 of an article before or after flowing through a space between two of the articles.

IPC 8 full level
F28D 20/00 (2006.01)

CPC (source: EP KR US)
B60H 1/00492 (2013.01 - EP US); **C09K 5/00** (2013.01 - KR); **F28D 20/00** (2013.01 - KR); **F28D 20/02** (2013.01 - EP US); **F28D 20/026** (2013.01 - EP US); **B60K 11/02** (2013.01 - EP US); **B60K 2001/008** (2013.01 - EP US); **F28D 2020/0008** (2013.01 - EP US); **F28D 2020/0021** (2013.01 - EP US); **Y02E 60/14** (2013.01 - EP US)

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 2011094371 A2 20110804; WO 2011094371 A3 20120809; BR 112012017117 A2 20171003; CA 2785112 A1 20110804; CN 102762948 A 20121031; EP 2529173 A2 20121205; JP 2013518243 A 20130520; KR 20120139704 A 20121227; MX 2012008781 A 20120823; TW 201144705 A 20111216; US 2012279679 A1 20121108

DOCDB simple family (application)
US 2011022662 W 20110127; BR 112012017117 A 20110127; CA 2785112 A 20110127; CN 201180005613 A 20110127; EP 11702759 A 20110127; JP 2012551276 A 20110127; KR 20127022147 A 20110127; MX 2012008781 A 20110127; TW 100103377 A 20110128; US 201113511196 A 20110127