

Title (en)

SHAPED BODIES MADE OF POWDERS OR GRANULATED METAL, METHOD FOR THE PRODUCTION THEREOF AND THEIR USE

Title (de)

FORMKÖRPER AUS PULVERN ODER GRANALIEN, VERFAHREN ZU IHRER HERSTELLUNG UND IHRE VERWENDUNG

Title (fr)

CORPS MOULES A PARTIR DE POUDRES OU GRANULES, LEUR PROCEDE DE PRODUCTION ET LEUR UTILISATION

Publication

**EP 1765492 A1 20070328 (DE)**

Application

**EP 04738915 A 20040709**

Priority

DE 2004001535 W 20040709

Abstract (en)

[origin: WO2006005275A1] The invention relates to a shaped body, particularly a sorbent shaped body made of microporous and mesoporous adsorbents and of composite adsorbents, which serve to store useful heat and useful cold. The shaped body comprises a reduced proportion of binding agents. The sorbent shaped bodies have non-uniformly distributed cavities in the form of vacuoles that form gap volumes. The shaped bodies are obtained by placing the solid pre-mixed constituents of the shaped body onto a porous or perforated support. After adding the binding agent, the process of pre-solidifying the binding agent ensues by the action of an external force field, and this force field results in the formation of the non-uniformly distributed cavities. The proportion of binding agent on the support, which depicts the wall of the shaped body, is higher than that inside the shaped body. The advantages of the inventive sorbent shaped body consist of an optimally possible combining of the reaction efficacy of modified aluminosilicates and/or aluminum silicates with their fluidic action during the exchange of materials and heat with the aim of achieving high space-time yields while storing useful heat and useful cold.

IPC 8 full level

**B01J 20/18** (2006.01); **B01J 20/28** (2006.01); **B01J 20/30** (2006.01); **B28B 1/20** (2006.01); **B28B 7/40** (2006.01); **C09K 5/14** (2006.01)

CPC (source: EP US)

**B01J 20/183** (2013.01 - EP US); **B01J 20/28019** (2013.01 - EP US); **B01J 20/28023** (2013.01 - EP US); **B01J 20/2803** (2013.01 - EP US); **B01J 20/28042** (2013.01 - EP US); **B01J 20/28078** (2013.01 - EP US); **B01J 20/30** (2013.01 - EP US); **C09K 5/14** (2013.01 - EP US); **F25B 37/00** (2013.01 - EP US); **F28D 20/003** (2013.01 - EP US); **Y02E 60/14** (2013.01 - EP US); **Y10T 428/249954** (2015.04 - EP US); **Y10T 428/249956** (2015.04 - EP US); **Y10T 428/249957** (2015.04 - EP US); **Y10T 428/249969** (2015.04 - EP US); **Y10T 428/24997** (2015.04 - EP US); **Y10T 428/249975** (2015.04 - EP US); **Y10T 428/249986** (2015.04 - EP US)

Citation (search report)

See references of WO 2006005275A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2006005275 A1 20060119**; DE 112004002971 A5 20070712; EP 1765492 A1 20070328; US 2007251837 A1 20071101; US 8092903 B2 20120110

DOCDB simple family (application)

**DE 2004001535 W 20040709**; DE 112004002971 T 20040709; EP 04738915 A 20040709; US 63215204 A 20040709