Title (en)

METHOD FOR STORING A GAS BY CHEMISORPTION ON A POROUS MATERIAL COMPRISING EXPANDED GRAPHITE

Title (de)

VERFAHREN ZUR LAGERUNG EINES GASES DURCH CHEMISORPTION AUF EINEM PORÖSEN MATERIAL MIT

Title (fr)

PROCÉDÉ DE STOCKAGE PAR CHIMISORPTION D'UN GAZ SUR UN MATÉRIAU POREUX COMPRENANT DU GRAPHITE EXPANSÉ

Publication

EP 2742274 A1 20140618 (FR)

Application

EP 12751095 A 20120802

Priority

- FR 1102514 A 20110812
- FR 2012051840 W 20120802

Abstract (en)

[origin: WO2013024223A1] Method for storing a gas in solid phase so that it can be distributed in gaseous phase, that consists in introducing the gas in gaseous phase into a storage tank (1) containing a reactive mixture the apparent density of which is between 40 kg/m3 and 60 kg/m3 and preferably of the order of 50 kg/m3, and which is made up of a reactive product and of expanded natural graphite, this reactive mixture and the gas being such that, when brought into the presence of one another, the reactive product and the gas undergo a thermochemical reaction the effect of which is that the gas is absorbed by the reactive product and a solid product of reaction is produced and, conversely, undergo a reverse thermochemical reaction in which the gas absorbed by the reactive product is desorbed when this product is heated after it has absorbed the gas.

IPC 8 full level

F17C 11/00 (2006.01)

CPC (source: EP US)

C01B 3/001 (2013.01 - EP US); **C01C 1/006** (2013.01 - EP US); **F17C 11/00** (2013.01 - EP US); **F17C 11/005** (2013.01 - EP US); Y02E 60/32 (2013.01 - EP US)

Citation (search report)

See references of WO 2013024223A1

Designated contracting state (EPC)

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Designated extension state (EPC)

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