

Title (en)
HYBRID MATERIAL, AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
HYBRIDMATERIAL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
MATERIAU HYBRIDE ET PROCEDE POUR SA PREPARATION

Publication
EP 2117709 A2 20091118 (FR)

Application
EP 08775553 A 20080214

Priority
• FR 2008000193 W 20080214
• FR 0701077 A 20070214

Abstract (en)
[origin: FR2912400A1] Material in the form of a honeycomb monolith comprises an inorganic oxide polymer with organic substituents R. The monolith comprises macropores with an average size of 4-50 μm , mesopores with an average size of 2-3 nm and micropores with an average size of 0.5-1 nm, the pores being interconnected. tetramethoxysilaneMaterial in the form of a honeycomb monolith comprises an inorganic oxide polymer with organic substituents R of formula (I). The monolith comprises macropores with an average size of 4-50 μm , mesopores with an average size of 2-3 nm and micropores with an average size of 0.5-1 nm, the pores being interconnected. (CH₂)_nR 1> (I) n : 0-5; R 1>SH, pyrrolyl, NAA', alkyl, phenyl or alkylphenyl; A, A' : H, alkyl, alkylamino or optionally substituted aryl. An independent claim is also included for producing a material as above by emulsifying an oil phase in an aqueous surfactant solution, adding an aqueous solution of a metal tetraalkoxide (II) and an R-substituted metal alkoxide (III), leaving the mixture to stand until the alkoxides condense, and drying the mixture.

IPC 8 full level
B01J 35/04 (2006.01); **B01J 37/00** (2006.01); **C04B 35/14** (2006.01); **C04B 35/624** (2006.01); **C04B 35/80** (2006.01); **C04B 38/00** (2006.01)

CPC (source: EP US)
B01D 53/72 (2013.01 - US); **B01D 53/81** (2013.01 - US); **B01J 23/44** (2013.01 - EP US); **B01J 31/125** (2013.01 - US); **B01J 31/126** (2013.01 - US); **B01J 31/1608** (2013.01 - EP); **B01J 31/1633** (2013.01 - EP); **B01J 31/1675** (2013.01 - EP); **B01J 35/23** (2024.01 - US); **B01J 35/56** (2024.01 - EP US); **B01J 35/647** (2024.01 - US); **B01J 35/657** (2024.01 - US); **B01J 35/69** (2024.01 - US); **B01J 37/0217** (2013.01 - US); **B01J 37/0219** (2013.01 - US); **B01J 37/0228** (2013.01 - US); **B01J 37/0236** (2013.01 - US); **B01J 37/0244** (2013.01 - US); **C02F 1/285** (2013.01 - US); **C04B 35/14** (2013.01 - EP); **C04B 35/624** (2013.01 - EP); **C04B 35/6325** (2013.01 - EP); **C04B 38/10** (2013.01 - EP); **C07C 2/86** (2013.01 - US); **B01D 2253/204** (2013.01 - US); **B01D 2257/7027** (2013.01 - US); **B01J 2231/005** (2013.01 - US); **B01J 2231/4211** (2013.01 - EP US); **B01J 2231/4261** (2013.01 - US); **B01J 2531/005** (2013.01 - US); **B01J 2531/824** (2013.01 - EP); **C02F 2101/322** (2013.01 - US); **C04B 2111/00793** (2013.01 - EP); **C07C 2523/44** (2013.01 - US); **C07C 2531/06** (2013.01 - US)

Citation (search report)
See references of WO 2008129151A2

Citation (examination)
A. KELLY: "Why engineer porous materials?", PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A, vol. 364, no. 1838, 15 January 2006 (2006-01-15), The Royal Society, pages 5 - 14, Retrieved from the Internet <URL:http://rsta.royalsocietypublishing.org/content/364/1838/5.full.pdf> [retrieved on 20110318], DOI: 10.1098/rsta.2005.1686

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