

Title (en)
METHOD FOR PREPARING CARBON FIBRILS AND/OR NANOTUBES FROM A CARBON SOURCE INTEGRATED IN THE CATALYST

Title (de)
VERFAHREN ZUR HERSTELLUNG VON KOHLENSTOFFFIBRILLEN UND/ODER -NANORÖHRCHEN AUS EINER KATALYSATORINTEGRIERTEN KOHLENSTOFFQUELLE

Title (fr)
PROCEDE DE PREPARATION DE FIBRILLES ET/OU NANOTUBES DE CARBONE A PARTIR D'UNE SOURCE DE CARBONE INTEGREE AU CATALYSEUR

Publication
EP 2097168 A2 20090909 (FR)

Application
EP 07871964 A 20071218

Priority

- FR 2007052550 W 20071218
- FR 0655594 A 20061218
- US 87880607 P 20070105

Abstract (en)
[origin: FR2909989A1] Catalyst material (I) for the production of multi-shell carbon fibrils and nanotubes (II), comprises one or more multivalent transition metals and a solid organic substrate. Independent claims are also included for (1) a method (M1) for the production of (I) by bringing an organic substrate into contact with a solution of transition metal salt(s), preferably under a current of dry gas (2) a method (M2) for the production of multi-shell carbon fibrils and nanotubes (II) by (a) making catalyst material (I) as above with a BET surface of less than 200 (preferably 0.1-50) m²/g, (b) growing (II) by thermal decomposition of the organic substrate by heating (I) at 300-1200[deg] C in presence of gas containing at least 20% hydrogen, and then (c) cooling the product .

IPC 8 full level
B01J 23/70 (2006.01); **B01J 23/72** (2006.01); **B01J 23/745** (2006.01); **B01J 23/75** (2006.01); **B01J 23/755** (2006.01); **B01J 37/02** (2006.01); **C01B 31/02** (2006.01)

CPC (source: EP US)
B01J 21/185 (2013.01 - EP US); **B01J 23/74** (2013.01 - EP US); **B01J 23/745** (2013.01 - EP US); **B01J 23/75** (2013.01 - EP US); **B01J 31/06** (2013.01 - EP US); **B01J 37/0201** (2013.01 - EP US); **B82Y 30/00** (2013.01 - EP US); **B82Y 40/00** (2013.01 - EP US); **C01B 32/162** (2017.07 - EP US); **D01F 9/127** (2013.01 - EP US); **B01J 23/24** (2013.01 - EP US); **B01J 23/40** (2013.01 - EP US); **B01J 23/70** (2013.01 - EP US); **B01J 35/613** (2024.01 - EP US); **B01J 35/615** (2024.01 - EP US); **B01J 37/0203** (2013.01 - EP US); **C01B 2202/02** (2013.01 - EP US); **C01B 2202/06** (2013.01 - EP US)

Citation (search report)
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