

Title (en)

HIGH YIELD VAPOR PHASE DEPOSITION METHOD FOR LARGE SCALE SINGLE WALLED CARBON NANOTUBE PREPARATION

Title (de)

HOCHLEISTUNGS-GASPHASEN-DAMPFABSCHIEDUNGSVERFAHREN ZUR HERSTELLUNG VON GROSSFORMATIGEN EINWANDIGEN NANORÖHREN

Title (fr)

PROCEDE DE DEPOT EN PHASE VAPEUR A HAUT RENDEMENT POUR LA PREPARATION A GRANDE ECHELLE DE NANOTUBES DE CARBONE A PAROI SIMPLE

Publication

EP 1252360 A4 20060726 (EN)

Application

EP 01926332 A 20010105

Priority

- US 0100335 W 20010105
- US 17487400 P 20000107

Abstract (en)

[origin: WO0149599A2] An improved vapor phase deposition method for preparation of single walled carbon nanotubes on an aerogel supported metal catalyst. The total yield of SWCNTs often is at least about 100 %, based the weight of the catalyst, for a reaction time of at least about 30 minutes.

IPC 1-7

C23C 16/00; C01B 31/02; B01J 37/32; B01J 23/88; B01J 23/89

IPC 8 full level

B01J 23/88 (2006.01); **B01J 23/89** (2006.01); **B01J 32/00** (2006.01); **B01J 35/10** (2006.01); **B01J 37/32** (2006.01); **C01B 31/02** (2006.01)

CPC (source: EP KR)

B01J 23/88 (2013.01 - EP); **B01J 23/881** (2013.01 - EP); **B01J 23/8906** (2013.01 - EP); **B01J 37/32** (2013.01 - EP); **B82Y 30/00** (2013.01 - EP); **B82Y 40/00** (2013.01 - EP); **C01B 32/162** (2017.07 - EP); **C23C 16/32** (2013.01 - KR); **B82Y 40/00** (2013.01 - KR); **C01B 2202/02** (2013.01 - EP)

Citation (search report)

- [PX] MING SU ET AL: "A scalable CVD method for the synthesis of single-walled carbon nanotubes with high catalyst productivity", CHEMICAL PHYSICS LETTERS, NORTH-HOLLAND, AMSTERDAM, NL, vol. 322, no. 5, 26 May 2000 (2000-05-26), pages 321 - 326, XP002210666, ISSN: 0009-2614
- [A] SOMG X.Y. ET AL: "AEM and HREM evaluation of carbon nanostructures in silica aerogels", 1994, XP002374141, Retrieved from the Internet <URL:http://www.osti.gov/bridge/servlets/purl/10165302-1HhOMG/native/10165302.pdf> [retrieved on 20060327]
- See references of WO 0149599A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0149599 A2 20010712; **WO 0149599 A3 20020307**; AU 5287601 A 20010716; CA 2395807 A1 20010712; CN 1418260 A 20030514; EP 1252360 A2 20021030; EP 1252360 A4 20060726; JP 2003520176 A 20030702; KR 20020084087 A 20021104

DOCDB simple family (application)

US 0100335 W 20010105; AU 5287601 A 20010105; CA 2395807 A 20010105; CN 01803478 A 20010105; EP 01926332 A 20010105; JP 2001550143 A 20010105; KR 20027008727 A 20020705