

Title (en)

METHOD FOR PREPARING SINGLE WALLED CARBON NANOTUBES FROM A METAL LAYER

Title (de)

VERFAHREN ZUR HERSTELLUNG EINWANDIGER KOHLENSTOFFNANORÖHRCHEN AUS EINER METALLSCHICHT

Title (fr)

PROCÉDÉ DE PRÉPARATION DE NANOTUBES DE CARBONE À PAROI SIMPLE À PARTIR D'UNE COUCHE MÉTALLIQUE

Publication

**EP 2001794 A4 20120620 (EN)**

Application

**EP 07868204 A 20070329**

Priority

- US 2007065508 W 20070329
- US 2006012001 W 20060329
- US 74392706 P 20060329

Abstract (en)

[origin: WO2008057620A2] Methods of preparing single walled carbon nanotubes are provided. An arrangement comprising one or more layers of fullerene in contact with one side of a metal layer and a solid carbon source in contact with the other side of metal layer is prepared. The fullerene/metal layer/solid carbon source arrangement is then heated to a temperature below where the fullerenes sublime. Alternatively, a non-solid carbon source may be used in place of a solid carbon source or the metal layer may simply be saturated with carbon atoms. A multiplicity of single walled carbon nanotubes are grown on the fullerene side of the metal layer, wherein at least 80% of the single walled carbon nanotubes in said multiplicity have a diameter within  $\pm 5\%$  of a single walled carbon nanotube diameter D present in said multiplicity, said diameter D being in the range between 0.6-2.2 nm.

IPC 8 full level

**C01B 31/00** (2006.01); **C01B 31/02** (2006.01)

CPC (source: EP KR US)

**B82B 3/0009** (2013.01 - KR); **B82Y 30/00** (2013.01 - EP); **B82Y 40/00** (2013.01 - EP KR US); **C01B 32/156** (2017.07 - EP US); **C01B 32/159** (2017.07 - KR); **C01B 32/16** (2017.07 - EP KR); **C01B 32/162** (2017.07 - EP); **C01B 2202/02** (2013.01 - EP KR); **C01B 2202/36** (2013.01 - EP)

Citation (search report)

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Designated contracting state (EPC)

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

DOCDB simple family (publication)

**WO 2008057620 A2 20080515**; **WO 2008057620 A3 20080626**; AU 2007317741 A1 20080515; CA 2647569 A1 20080515; CN 101454242 A 20090610; CN 101454242 B 20120411; EP 2001794 A2 20081217; EP 2001794 A4 20120620; JP 2009538809 A 20091112; KR 20090019777 A 20090225

DOCDB simple family (application)

**US 2007065508 W 20070329**; AU 2007317741 A 20070329; CA 2647569 A 20070329; CN 200780019414 A 20070329; EP 07868204 A 20070329; JP 2009503276 A 20070329; KR 20087026459 A 20081029