

Title (en)

INTEGRATED PROCESSES FOR GENERATING CARBON MONOXIDE FOR CARBON NANOMATERIAL PRODUCTION

Title (de)

INTEGRIERTE VERFAHREN ZUR ERZEUGUNG VON KOHLENMONOXID ZUR HERSTELLUNG VON KOHLENSTOFFNANOMATERIAL

Title (fr)

PROCÉDÉS INTÉGRÉS POUR GÉNÉRER DU MONOXYDE DE CARBONE POUR UNE PRODUCTION DE NANOMATÉRIAU CARBONÉ

Publication

EP 2165009 A1 20100324 (EN)

Application

EP 08826367 A 20080604

Priority

- US 2008065746 W 20080604
- US 93359907 P 20070606
- US 93360007 P 20070606
- US 93359807 P 20070606
- US 97495407 A 20071017
- US 97495307 A 20071017
- US 97495207 A 20071017

Abstract (en)

[origin: WO2009011984A1] The integrated processes of the dry reforming or partial oxidation upstream of the carbon nanotube-producing reactor are described allowing the carbon monoxide to be produced on an as-needed basis, negating the need to transport carbon monoxide to the production site or store large quantities of carbon monoxide on-site. The apparatuses allowing to carry out such integrated processes are also provided. Carbon dioxide emissions may be eliminated from the carbon nanotube production process. This may be achieved by recycling the carbon dioxide byproduct and mixing it with the feed to the partial oxidation process.

IPC 8 full level

B01J 8/08 (2006.01); **B82Y 30/00** (2011.01); **C01B 3/38** (2006.01); **C01B 3/50** (2006.01); **C01B 31/02** (2006.01); **C01B 32/40** (2017.01); **D01C 5/00** (2006.01); **D01F 9/127** (2006.01); **D01F 9/133** (2006.01)

CPC (source: EP KR)

B82Y 30/00 (2013.01 - EP KR); **B82Y 40/00** (2013.01 - EP KR); **C01B 3/38** (2013.01 - EP KR); **C01B 3/382** (2013.01 - EP KR); **C01B 3/386** (2013.01 - EP KR); **C01B 3/50** (2013.01 - EP KR); **C01B 3/501** (2013.01 - EP KR); **C01B 32/162** (2017.07 - EP KR); **D01F 9/1278** (2013.01 - EP KR); **D01F 9/133** (2013.01 - EP); **C01B 2203/0233** (2013.01 - EP); **C01B 2203/0238** (2013.01 - EP); **C01B 2203/0244** (2013.01 - EP); **C01B 2203/0255** (2013.01 - EP); **C01B 2203/0261** (2013.01 - EP); **C01B 2203/0405** (2013.01 - EP); **C01B 2203/043** (2013.01 - EP); **C01B 2203/046** (2013.01 - EP); **C01B 2203/0465** (2013.01 - EP); **C01B 2203/047** (2013.01 - EP); **C01B 2203/0475** (2013.01 - EP); **C01B 2203/06** (2013.01 - EP); **C01B 2203/0822** (2013.01 - EP); **C01B 2203/0827** (2013.01 - EP); **C01B 2203/0883** (2013.01 - EP); **C01B 2203/0894** (2013.01 - EP); **C01B 2203/1058** (2013.01 - EP); **C01B 2203/1064** (2013.01 - EP); **C01B 2203/107** (2013.01 - EP); **C01B 2203/1082** (2013.01 - EP); **C01B 2203/1241** (2013.01 - EP); **C01B 2203/1258** (2013.01 - EP); **C01B 2203/127** (2013.01 - EP); **C01B 2203/1276** (2013.01 - EP); **C01B 2203/1288** (2013.01 - EP); **C01B 2203/142** (2013.01 - EP); **C01B 2203/143** (2013.01 - EP); **C01B 2203/146** (2013.01 - EP); **C01B 2203/147** (2013.01 - EP); **C01B 2203/148** (2013.01 - EP); **C01B 2203/86** (2013.01 - EP); **Y02P 20/10** (2015.11 - EP); **Y02P 30/00** (2015.11 - EP)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

WO 2009011984 A1 20090122; CN 101707864 A 20100512; EP 2165009 A1 20100324; EP 2165009 A4 20120808; JP 2010528974 A 20100826; KR 20100037087 A 20100408; TW 200911687 A 20090316

DOCDB simple family (application)

US 2008065746 W 20080604; CN 200880019143 A 20080604; EP 08826367 A 20080604; JP 2010511294 A 20080604; KR 20107000106 A 20080604; TW 97121343 A 20080606