

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
16 July 2009 (16.07.2009)

PCT

(10) International Publication Number  
WO 2009/088882 A3

- (51) International Patent Classification:  
*H01L 21/336* (2006.01) *H01L 29/78* (2006.01)
- (21) International Application Number:  
PCT/US2008/088572
- (22) International Filing Date:  
30 December 2008 (30.12.2008)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
61/018,426 31 December 2007 (31.12.2007) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

- (88) Date of publication of the international search report:  
24 September 2009

(54) Title: EDGE-CONTACTED VERTICAL CARBON NANOTUBE TRANSISTOR

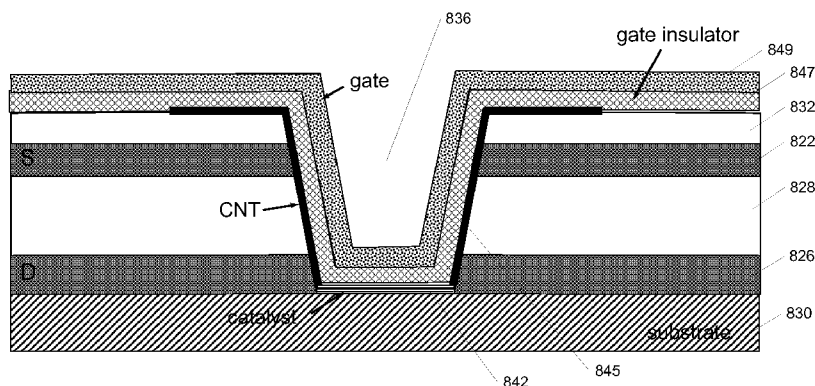


Figure 8A

(57) Abstract: A vertical device geometry for a carbon-nanotube-based field effect transistor has one or multiple carbon nanotubes formed in a trench.

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**A. CLASSIFICATION OF SUBJECT MATTER*****H01L 21/336(2006.01)i, H01L 29/78(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC : H01L 29/76, 31/00, 29/94, 21/00, 21/8232

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS(KIPO Internal) &amp; Keyword: nanotube, edge, transistor and trench

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0012961 A1 (EUN-JU BAE et al.) 18 January 2007 See Abstract and Figure2	1-31
A	US 2005-0059176 A1 (THOMAS RUECKES et al.) 17 March 2005 See Abstract and Figure16	1-31
A	US 2007-0048908 A1 (JOERG APPENZELLER et al.) 01 March 2007 See Abstract and Figure3	1-31

 Further documents are listed in the continuation of Box C. See patent family annex.

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"&amp;" document member of the same patent family

Date of the actual completion of the international search

30 JULY 2009 (30.07.2009)

Date of mailing of the international search report

**31 JULY 2009 (31.07.2009)**

Name and mailing address of the ISA/KR

Korean Intellectual Property Office  
Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

Hong, Sung Ui

Telephone No. 82-42-481-8496



**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2008/088572**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007-0012961 A1	18.01.2007	JP 2006-108653 A KR 10-0601965 B1 US 07381983 B2 US 2008-0191280 A1	20.04.2006 18.07.2006 03.06.2008 14.08.2008
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