

Title (en)
MEMORY ELEMENTS AND CROSS POINT SWITCHES AND ARRAYS OF SAME USING NONVOLATILE NANOTUBE BLOCKS

Title (de)
SPEICHERELEMENTE UND SCHNITTPUNKTSCHALTER SOWIE ARRAYS DAVON MIT NICHT FLÜCHTIGEN NANORÖHRCHENBLÖCKEN

Title (fr)
ÉLÉMENTS DE MÉMOIRE ET COMMUTATEURS À POINT DE CROISEMENT ET RÉSEAUX CONSTITUÉS DE CEUX-CI FAISANT APPEL À DES BLOCS DE NANOTUBES NON VOLATILS

Publication
EP 2057683 A4 20100310 (EN)

Application
EP 07840799 A 20070808

Priority

- US 2007075520 W 20070808
- US 83634306 P 20060808
- US 83643706 P 20060808
- US 84058606 P 20060828
- US 85510906 P 20061027
- US 91838807 P 20070316

Abstract (en)
[origin: WO2008021900A2] Under one aspect, a non-volatile nanotube diode device includes first and second terminals; a semiconductor element including a cathode and an anode, and capable of forming a conductive pathway between the cathode and anode in response to electrical stimulus applied to the first conductive terminal; and a nanotube switching element including a nanotube fabric article in electrical communication with the semiconductive element, the nanotube fabric article disposed between and capable of forming a conductive pathway between the semiconductor element and the second terminal, wherein electrical stimuli on the first and second terminals causes a plurality of logic states.

IPC 8 full level
B28B 1/00 (2006.01)

CPC (source: EP KR)
B82Y 10/00 (2013.01 - EP); **G11C 11/56** (2013.01 - EP KR); **G11C 13/0064** (2013.01 - EP KR); **G11C 13/0069** (2013.01 - EP KR); **G11C 13/025** (2013.01 - EP KR); **G11C 14/00** (2013.01 - EP KR); **G11C 17/16** (2013.01 - EP KR); **G11C 29/86** (2013.01 - EP KR); **H01L 27/101** (2013.01 - EP); **H01L 29/0665** (2013.01 - EP KR); **H01L 29/0673** (2013.01 - EP KR); **H01L 29/0676** (2013.01 - EP KR); **H10K 10/29** (2023.02 - EP); **G11C 2013/0076** (2013.01 - EP); **G11C 2213/19** (2013.01 - EP); **G11C 2213/71** (2013.01 - EP); **G11C 2213/72** (2013.01 - EP); **H01L 27/1021** (2013.01 - EP); **H10K 85/221** (2023.02 - EP); **Y10S 977/762** (2013.01 - KR)

Citation (search report)

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- [XY] PRADHAN B ET AL: "Electrical bistability and memory phenomenon in carbon nanotube-conjugated polymer matrixes", JOURNAL OF PHYSICAL CHEMISTRY. B, MATERIALS, SURFACES, INTERFACES AND BIOPHYSICAL, WASHINGTON, DC, US, vol. 110, 27 April 2006 (2006-04-27), pages 8274 - 8277, XP007908929, ISSN: 1089-5647
- See references of WO 2008021911A2

Citation (examination)
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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 2008021900 A2 20080221; WO 2008021900 A3 20080529; EP 2057633 A2 20090513; EP 2057633 A4 20091125; EP 2057633 B1 20130306; EP 2057683 A2 20090513; EP 2057683 A4 20100310; EP 2070088 A2 20090617; EP 2070088 A4 20090729; EP 2104108 A1 20090923; EP 2104109 A1 20090923; HK 1137163 A1 20100723; HK 1138425 A1 20100820; JP 2010515240 A 20100506; JP 2010515241 A 20100506; JP 2010515285 A 20100506; JP 2017085134 A 20170518; JP 5394923 B2 20140122; JP 5410974 B2 20140205; JP 6114487 B2 20170412; KR 101169499 B1 20120727; KR 101461688 B1 20141113; KR 101486406 B1 20150126; KR 20090043552 A 20090506; KR 20090057239 A 20090604; KR 20090057375 A 20090605; TW 200826102 A 20080616; TW 200826302 A 20080616; TW 200832399 A 20080801; TW I419163 B 20131211; TW I457923 B 20141021; TW I463673 B 20141201; WO 2008021911 A2 20080221; WO 2008021911 A3 20080502; WO 2008021912 A2 20080221; WO 2008021912 A3 20080619

DOCDB simple family (application)
US 2007075506 W 20070808; EP 07840788 A 20070808; EP 07840799 A 20070808; EP 07840800 A 20070808; EP 09159271 A 20070808; EP 09159276 A 20070808; HK 10100859 A 20100127; HK 10103347 A 20100401; JP 2009523981 A 20070808; JP 2009523984 A 20070808; JP 2009523985 A 20070808; JP 2016246351 A 20161220; KR 20097004498 A 20070808; KR 20097004520 A 20070808; KR 20097004772 A 20070808; TW 96129300 A 20070808; TW 96129304 A 20070808; TW 96129308 A 20070808; US 2007075520 W 20070808; US 2007075521 W 20070808