

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
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Application
EP 07840799 A 20070808

Priority
• US 2007075520 W 20070808
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• 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); **H10K 99/00** (2023.01)

CPC (source: EP KR US)
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Citation (search report)
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• [Y] JP S57113296 A 19820714 - SUWA SEIKOSHA KK
• [A] EP 0036802 A1 19810930 - COMMISSARIAT ENERGIE ATOMIQUE [FR]
• [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

Citation (examination)
US 2007236325 A1 20071011 - BERTIN CLAUDE L [US], et al

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