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(54) Title: METHODS FOR FABRICATION OF POSITIONAL AND COMPOSITIONALLY CONTROLLED NANOSTRUCTURES ON SUBSTRATE

(57) Abstract: Fabrication methods disclosed herein provide for a nanoscale structure or a pattern comprising a plurality of nanostructures of specific predetermined position, shape and composition, including nanostructure arrays having large area at high throughput necessary for industrial production. The resultant nanostructure patterns are useful for nanostructure arrays, specifically sensor and catalytic arrays.

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**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: **B82B 3/00( 2006.01),1/00( 2006.01)**  
  
 USPC: 216/24  
 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)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2004/0007740 A1 (ABSTREITER et al.) 15 January 2004 (15.01.2004), figures 1, 3, 4 and 5, paragraphs 0008-0012 and 0032.	100-109, 111-116, 118-127, 129-134 ----- 110, 117, 128, 135 34-57, 59-66 ----- 58
X --- Y	US 2002/0047172 A1 (REID) 25 April 2002 (25.04.2002), figures !E, !F, paragraphs 0019, 0024, 0027 and 0034.	58
A	US 2003/0230234 A1 (NAM et al.) 18 December 2003 (18.12.2003)	1-135
A	US 2004/0043527 A1 (BRADLEY et al.) 04 March 2004 (04.03.2004),	1-135
A	US 2003/013433 A1 (GABRIEL et al.) 17 July 2003 (17.07.2003)	1-135

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