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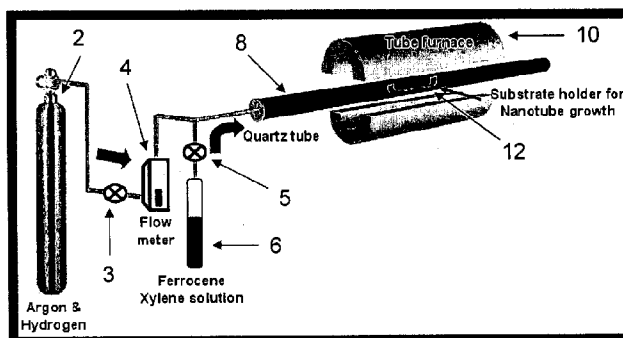
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[Continued on next page]

(54) Title: CARBON NANOTUBE GROWTH ON METALLIC SUBSTRATE USING VAPOR PHASE CATALYST DELIVERY

Figure 1



(57) Abstract: A chemical vapor deposition (CVD) method using a vapor phase catalyst of directly growing aligned carbon nanotubes on a metal surfaces. The method allows for fabrication of carbon nanotube containing structures that exhibit a robust carbon nanotube metal junction without a pre-growth application of solid catalytic materials to the metal surface or the use of solder or adhesives in a multi-step fabrication process.

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - D01F 9/00, D01F 9/12 (2008.04)
 USPC - 423/447.3
 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)
 USPC - 423/447.3; 428/215; 257/E21.171; 257/E51.04; 427/249.1; 427/255.7; 428/323; 977/844

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)
 WEST (all 5 databases) - terms: carbon nanotube, CNT, MWNT, MWCNT, inconel, metal\$, substrate, surface
 Dialog files 2,144,65,35,440,351,345 - terms: carbon nanotube, CNT, MWNT, MWCNT, metal???, substrate, surface, film, coating, layer, inconel, CVD, chemical vapor deposition, ferrocene, metallocene

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ---	US 2005/0238810 A1 (SCARINGE et al.), 27 October 2005 (27.10.2005), entire document	1-2, 4-5, 8-10
Y		3, 6-7, 11-20
Y	US 6,495,258 B1 (CHEN et al.), 17 December 2002 (17.12.2002), Column 5, lines 49-52	3, 17, 19
Y	JP 2004-284921 A (KENJIRO et al.), 14 October 2004 (14.10.2004), English abstract	6-7
Y	US 2005/0287064 A1 (MAYNE et al.), 29 December 2005 (29.12.2005), Example 2A	11-20

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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