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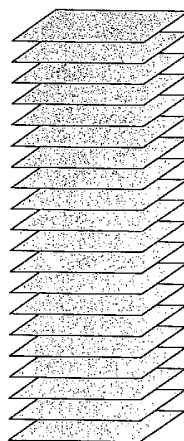
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(54) Title: MULTI-COMPONENT CONDUCTIVE POLYMER STRUCTURES AND A METHOD FOR PRODUCING SAME



Platelet

(57) Abstract: Novel electrically conductive polymer composite structures having a horizontal plane that contain effective amounts of two different types of conductive graphitic nanofibers. The first type of graphitic nanofiber is aligned substantially parallel to the horizontal plane of the polymer structure and are comprised of graphite platelets that are aligned substantially parallel to the longitudinal axis of the nanofiber. The second type of conductive graphite nanofiber are aligned at an angle to the horizontal plane of the polymer structure and are comprised of graphite platelets aligned at an angle to the longitudinal axis of the nanofiber. The conductive polymer composite structures are further comprised of one or more polymer layers.

WO 2006/012556 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/26157

A. CLASSIFICATION OF SUBJECT MATTER

IPC: H01B 1/00(2006.01);D02G 3/00(2006.01)

USPC: 428/373;977/700;252/500

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)

U.S. : 428/373;977/700, 712, 742, 778, 783, 784, 785; 252/500

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)

EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,213,892 A (BRUCKNER) 25 May 1993, see abstract, entire document.	1-33
Y	US 2002/0129864 A1 (ARTHURS) et al, 19 September 2002, see abstract, [0025], [0026], [0027], [0031], [0036], and [0044].	1-33
Y	US 6,764,628 B2 (LOBOVSKY et al.) 20 July 2004, see entire document.	1-33
Y,P	US 6,800,584 B2 (BAKER et al) 05 October 2004, see abstract, Figs. 1a, 1b, 2a, column 2, lines 51-60, column 3, lines 17-53.	1-33
Y, E	US 2005/0170177 A1, (CRAWFORD et al) 04 August 2005, see entire document.	1-33
Y,E	US 2005/0250895 A1 (BAKER et al) 10 November 2005, see entire document.	1-33
Y,E	US 2006/0060825 A1 (GLATKOWSKI) 23 March 2006, see abstract, entire document.	1-33

Further documents are listed in the continuation of Box C.

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