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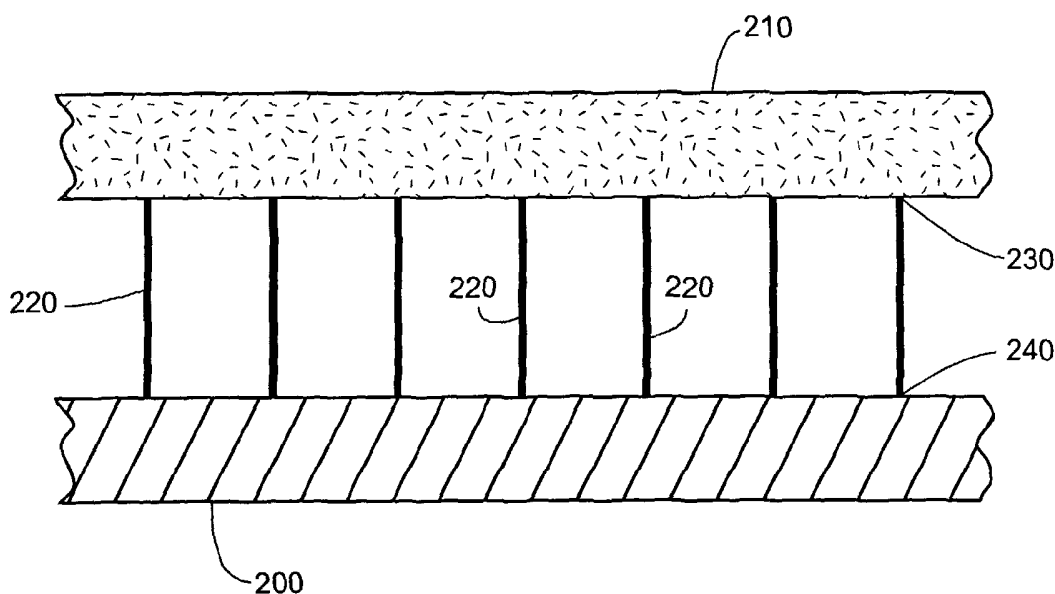
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(54) Title: STRUCTURES, SYSTEMS AND METHODS FOR JOINING ARTICLES AND MATERIALS AND USES THEREFOR



(57) Abstract: This invention provides novel nanofibers and nanofiber structures which possess adherent properties, as well as the use of such nanofibers and nanofiber comprising structures in the coupling and/or joining together of articles or materials.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/12194

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : A61B 17/08, 17/68, 17/86; A61F 2/06, 5/00, 13/00; B32B 31/06
 US CL : 156/276, 306.3; 602/1, 58; 606/60, 75, 151, 205; 623/1.15
 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. : 156/276, 306.3; 602/1, 41, 58; 606/60, 75, 151, 205; 623/1.15

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)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,265,333 B1 (DZENIS et al.) 24 July 2001 (24.07.2001), entire document.	1-12, 26-44, 50-58, 64, 75
X	US 2002/0090725 A1 (SIMPSON et al.) 11 July 2002 (11.07.2002), entire document.	1, 2, 4-15, 21-26, 28-42, 44-50, 52-58, 64-74
X	US 2003/0059742 A1 (WEBSTER et al.) 27 March 2003 (27.03.2003), entire document.	1-11, 21-23, 25-47, 49-58, 64
X	WO 99/40812 A1 (BOARD OF TRUSTEES OPERATING MICHIGAN STATE UNIVERSITY) 19 August 1999 (19.08.1999), entire document.	1-20, 26-44, 50-64, 65, 67
Y	US 2003/0065355 A1 (WEBER) 03 April 2003 (03.04.2003), entire document.	1-77
X, P	US 2003/0195611 A1 (GREENHALGH et al.) 16 October 2003 (16.10.2003), entire document.	1-64

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search 14 September 2004 (14.09.2004)	Date of mailing of the international search report 01 OCT 2004
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer <i>Melvin Curtis Mayes</i> Melvin Curtis Mayes Telephone No. 571-272-1700
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/12194

Continuation of B. FIELDS SEARCHED Item 3:

EAST

search terms: nanofibers, nanotubes, nanowires, nanotubules, nanowhiskers, van der Waals, friction, medical, biological, bandage, mesh, patch, clamp, stent, shunt, probe, retractor, screw, nail, staple