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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR PRODUCING BIOMATERIAL SCAFFOLDS

(57) Abstract: The present invention provides a multilayer scaffold for tissue engineering. The scaffold comprises at least a first layer comprised of a polymer having a pattern of microchannels therein; and at least a second layer comprised of a polymer having a pattern of microchannels therein. The first and second layers are joined together (preferably by lamination) and the channels are connected for the circulation of fluid through the layers. The scaffold is coated with bacterial cellulose. The scaffold may further include a mammalian cell.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/36724

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8): **A61F 2/00(2006.01)**

USPC: **424/423**

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. : 424/423

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.
Y	US 2002/0182241 A1 (BORENSTEIN et al) 05 Dec 2002 (05.12.2002), abstract, figures 1-22, summary of the invention, paragraphs [0040], [0043], [0058], [0059], [0090], [0099], [0102], [0114], [0119], [0140], [0167], examples 1-4, and claims.	1-10
Y	US 6,143,293 (WEISS et al) 07 Nov 2000 (07.11.2000), abstract, background of the invention, claims.	1-10
Y	US 6,197,575 B1 (GRIFFITH et al) 06 Mar 2001 (06.03.2001), abstract, columns 13-19, examples 1, 3, 7, and claims.	1-10
Y	US 2002/0143403 A1 (VAIDYANATHAN et al) 03 Oct 2002 (03.10.2002), abstract, summary of the invention, and claims.	1-10
Y	US 5,885,829 (MOONEY et al) 23 Mar 1999 (23.03.1999), abstract, summary of the invention.	1-10
Y	US 2004/0096509 A1 (HUTCHENS et al) 20 May 2004 (20.05.2004), abstract, summary, and claims.	1-10

Further documents are listed in the continuation of Box C. See patent family annex.

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"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent published on or after the international filing date	"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
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"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	"&" document member of the same patent family

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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2001/0043949 A1 (DELGADO) 22 Nov 2001 (22.11.2001), abstract, brief summary of the invention, and claims.	1-10

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Continuation of B. FIELDS SEARCHED Item 3:

EAST:

USPAT, USOCR, US PG-PUB, JPO, EPO, DERWENT

STN (STIC SEARCHED):

REGISTRY, WPIX, HCAPLUS

SEARCH STRATEGY:

polycaprolactone or pcl; polylactide or plga or synthet? polymer

microchannel? or channel? and scaffold or support or matrix

tissue or bio and engineer?

mammal? and cell? and scaffold and multilayer?

bacter? and cellulose and coat? and scaffold