(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 10 April 2003 (10.04.2003)

PCT

(10) International Publication Number WO 03/028545 A3

(51) International Patent Classification⁷: A61B 17/08

(21) International Application Number: PCT/US02/31765

(22) International Filing Date: 3 October 2002 (03.10.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 09/970,323 3 October 2001 (03.10.2001) US

- (71) Applicant (for all designated States except US): VERI-GEN AG [DE/DE]; Hemmelrather Weg 201, 51377 Leverkusen (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ASCULAI, Samuel, S. [US/CA]; 53 McCaul Street, Unit #13, Toronto, Ontario M5T 2W9 (CA). IDOURAINE, Ahmed [US/US]; 2452 E. Springfield Place, Chandler, AZ 85249 (US). GIAN-NETTI, Bruno, M. [IT/DE]; Oberdorf 59, 53347 Bonn (DE).
- (74) Agents: HALLIDAY, Christopher, I. et al.; Morgan, Lewis & Bockius LLP, 1701 Market Street, Philadelphia, PA 19103 (US).

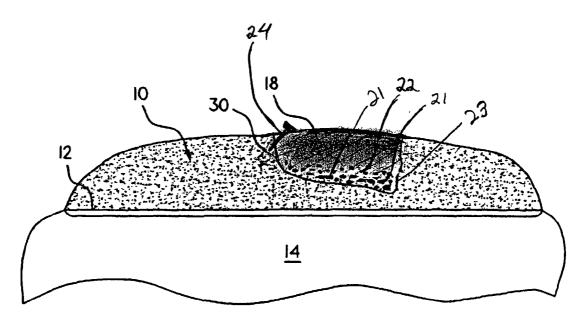
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 19 June 2003

[Continued on next page]

(54) Title: METHOD, INSTRUMENTS, AND KIT FOR AUTOLOGOUS TRANSPLANTATION



(57) Abstract: An implantable article for cartilage repair by implantation in an animal. The implantable article includes a support matrix (18), and chondrocyte cells (21) and a bio-compatible adhesive (22) adhered to an edge of the support matrix, wherein the support matrix (18) is absorbable by the animal. The support matrix (18) is a biocompatible material such as collagen, and the adhesive is autologous fibrin.



WO 03/028545 A3

WO 03/028545 A3

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.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/31765

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : A61B 17/08 US CL : 606/151; 623/23.75, 23.75 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.: 606/151; 623/23.75, 23.75, 1, 11, 16; 424/426				
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)				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.	
A	US 6,080,194 A (PACHENCE ET AL) 27 June 2000, see entire document.		1-15	
Α	WO 93/19168 A1 (KANDEL) 30 September 1993, see entire document.		1-15	
Α	WO 93/11723 A1 (STONE ET AL) 24 June 1993, see entire document.		1-15	
Α	EP 0,530,804 A1 (HUNZIKER) 10 March 1993, see entire document.		1-15	
Α	US 5,206,023 A (HUNZIKER) 27 April 1993, see entire document.		1-15	
Α -	WO 90/13302 A1 (SONIS) 15 November 1990, see entire document.		1-15	
Α	US 5,041,138 A (VACANTI ET AL) 20 August 1991, see entire document.		1-15	
	_			
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	
"A" document defining the general state of the art which is not considered to be of particular relevance		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		
	ctual completion of the international search	Date of mailing of the international search report		
	2002 (19.12.2002)	Authorized office	<u> </u>	
Commissioner of Patents and Trademarks		Cary E. O'Connor	Luman	
Washington, D.C. 20231				
Facsimile No. (703)305-3230 Telephone No. 703-308-0858				