

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 December 2002 (05.12.2002)

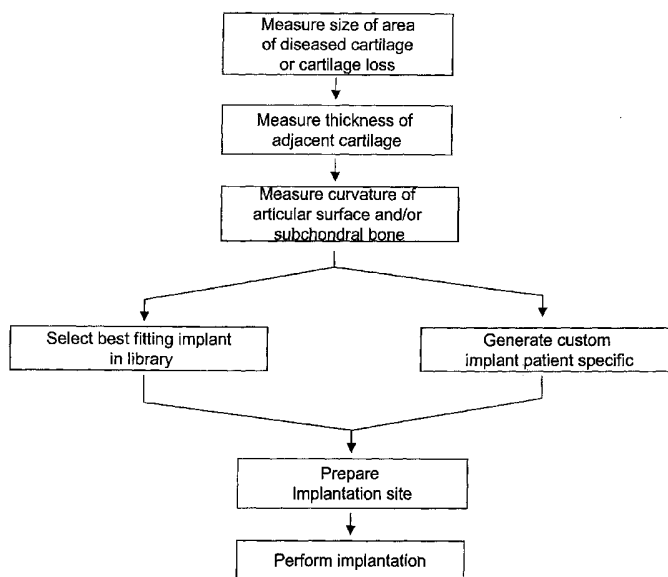
PCT

(10) International Publication Number
WO 02/096268 A3

- (51) International Patent Classification⁷: **A61F 2/30** US 60/380,692 (CIP)
Filed on 14 May 2002 (14.05.2002)
- (21) International Application Number: PCT/US02/16945
- (22) International Filing Date: 28 May 2002 (28.05.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/293,488 25 May 2001 (25.05.2001) US
60/363,527 12 March 2002 (12.03.2002) US
60/380,695 14 May 2002 (14.05.2002) US
60/380,692 14 May 2002 (14.05.2002) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:
US 60/293,488 (CIP)
Filed on 25 May 2001 (25.05.2001)
US 60/363,527 (CIP)
Filed on 12 March 2002 (12.03.2002)
US 60/380,695 (CIP)
Filed on 14 May 2002 (14.05.2002)
- (71) Applicant (for all designated States except US): **IMAGING THERAPEUTICS** [US/US]; 1720 South Amphlett Boulevard, Suite 240, San Mateo, CA 94402 (US).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **LANG, Philipp** [DE/US]; 36 Fairlawn Lane, Lexington, MA 02420 (US). **LINDER, Barry** [US/US]; 29 Bluehaven Court, Danville, CA 94506 (US). **STEINES, Daniel** [DE/US]; 3619 Park Boulevard, Palo Alto, CA 94306 (US).
- (74) Agents: **PASTERNAK, Dahna, S.** et al.; Robins & Pasternak LLP, 545 Middlefield Road, Suite 180, Menlo Park, CA 94025 (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,

[Continued on next page]

(54) Title: METHODS AND COMPOSITIONS FOR ARTICULAR RESURFACING



(57) Abstract: Methods and compositions for producing articular repair materials (825) and for repairing an articular surface (800). In particular, methods for providing articular replacement material (825), the method comprising the step of producing articular replacement material (825) of selected size, curvature and/or thickness are provided. Also provided are articular surface repair systems (830) designed to replace a selected area cartilage (805), for example, a system (830) comprising at least one solid, non-pliable component and an external surface having near anatomic alignment to the surrounding structures.



WO 02/096268 A3



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, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
31 July 2003

**(15) Information about Correction:
Previous Correction:**

see PCT Gazette No. 15/2003 of 10 April 2003, Section II

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/US02/16945

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61F 2/30
US CL : 623/13.12, 23.61
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. : 623/13.1, 13.12, 13.17, 13.18, 23.61

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)

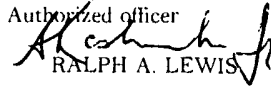
C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	US 4,055,862 A (FARLING) 01 November 1977, see entire document.	1-5 ----- 24-28, 46-48, 57-61, 63- 65, 67-71
X ----- Y	US 5,067,964 A (RICHMOND et al) 26 November 1991, see entire documnet.	1-4, 24-27 ----- 5, 21 - 23, 28, 38, 40-43, 46-48, 57-61, 63-65, 67-71

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

* Special categories of cited documents:	"I"	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
"E" earlier document published on or after the international filing date	"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
"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)	"&"	document member of the same patent family
"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 23 SEPTEMBER 2002	Date of mailing of the international search report 26 MAR 2003
--	--

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer  RALPH A. LEWIS Telephone No. (703) 308-0770
---	--

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/16945

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	US 5,306,311 A (STONE et al) 26 April 1994, see entire document.	1-4, 24-27 ----- 5,21-23,28, 38,40-43,46- 48,57-61, 63- 65,67-71
X ----- Y	US 5,632,745 A (SCHWARTZ) 27 May 1997, see entire document.	1-4, 24-27 ----- 5,21-23,28, 38,40- 43,46-48,57-61,63 -65,67-71
X	US 6,120,541 A (JOHNSON) 19 September 2000, see entire document.	1-5, 24-27

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/16945**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.: 6-20, 29-37, 39, 44-45, 49-56, 62, 66, and 72-74
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.