

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 February 2007 (22.02.2007)

PCT

(10) International Publication Number
WO 2007/021903 A3

- (51) International Patent Classification:
A61B 10/00 (2006.01)
- (21) International Application Number:
PCT/US2006/031325
- (22) International Filing Date: 10 August 2006 (10.08.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/707,289 10 August 2005 (10.08.2005) US

(71) Applicant (for all designated States except US): **C.R. BARD INC.** [US/US]; 730 Central Avenue, Murray Hill, NJ 07974 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **THOMPSON, Stanley, O.** [US/US]; 92 Town Farm Road, New Boston, NH 03070-4013 (US). **COONAHAN, Timothy, J.** [US/US]; 2 Brookstone Lane, Sterling, MA 05643 (US). **TAYLOR, Jon** [US/US]; 4 Augustine Drive, Groton, MA 01450 (US).

(74) Agent: **LAUB, David, W.**; Proskauer Rose LLP, 1001 Pennsylvania Avenue, N.W., Suite 400 South, Washington, DC 20004 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (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:
23 April 2009

(54) Title: SINGLE-INSERTION, MULTIPLE SAMPLING BIOPSY DEVICE WITH LINEAR DRIVE

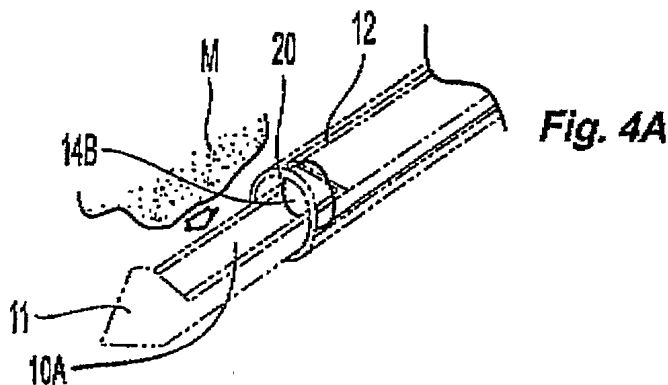


Fig. 4A

(57) Abstract: The present invention provides for exemplary embodiments of a single-insertion, multiple sampling biopsy device. Exemplary embodiments of a single-insertion, multiple sampling device with integrated marker release.



WO 2007/021903 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/31325

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **A61B 10/00(2006.01)**

USPC: 600/562,564-568
 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. : 600/562, 564-568

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	US 6488636 B2 (Bryan et al) 03 December 2002 (03.12.2002), entire document.	1-6, 11-23, 27-33, 38-43
X	US 5526822 (Burbank et al) 18 June 1996 (18.06.1996), entire document.	34-37, 45-50, 52-58
Y	US 20050049489 A1 (Foerster et al) 03 March 2005 (03.03.2005), entire document.	7-8, 24-26, 44, 51

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

* Special categories of cited documents:	
"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	"&" document member of the same patent family
"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 24 April 2008 (24.04.2008)	Date of mailing of the international search report 19 MAY 2008
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. (571) 273-3201	Authorized officer Max Hindenburg <i>Anna Hirsch</i> Telephone No. 571-272-3700 <i>Jos</i>

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/31325

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search 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.: 9-10
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 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 additional fees, this Authority did not invite payment of any additional fees.
 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 and, where applicable, the payment of a protest fee.
 - The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
 - No protest accompanied the payment of additional search fees.