



(51) International Patent Classification:
A61B 10/00 (2006.01) *A61B 17/34* (2006.01)

(21) International Application Number:
PCT/US2008/081801

(22) International Filing Date:
30 October 2008 (30.10.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/965,354 27 December 2007 (27.12.2007) US

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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ,
EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,

KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO,
NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG,
SK, SL, SM, ST, SV, 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, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MT, NL, NO, 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 (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

(88) Date of publication of the international search report:
20 August 2009

(54) Title: BONE MARROW BIOPSY NEEDLE

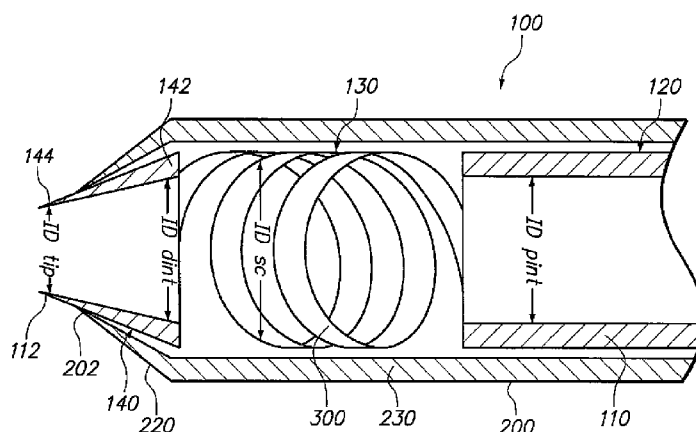


FIG. 1

(57) Abstract: According to one embodiment, a biopsy needle for removal of tissue from a patient includes an outer tube having a distal end and an inner tube disposed within said outer tube. The inner tube has a first section that includes a proximal end thereof, a second section that includes an actuatable snare, and a third section that includes a distal end thereof. The third section is coupled to the outer tube. The snare has a variable diameter that is controlled by rotation of the inner tube with respect to the outer tube in a prescribed direction resulting in the opening and closing, respectively, of the snare. The needle is configured such that the distal end of third section of the inner tube extends beyond the distal end such that the distal end of the inner tube represents a distal tip of the needle. The snare coil has an inner diameter (ID_{sc}) and the third section at the distal tip has an inner diameter (ID_{tip}) and a ratio (R) = (ID_{sc}) / (ID_{tip}) is greater than 1.



A. CLASSIFICATION OF SUBJECT MATTER*A61B 10/00(2006.01)i, A61B 17/34(2006.01)i*

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)

IPC : A61B 10/00, A61B 17/34

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

- Korean Utility models and applications for Utility models since 1975
- Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS(KIPO internal) & keywords : 'biopsy', 'snare', and 'diameter'

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5634473 A (GOLDENBERG, ALEC et al.) 03 Jun. 1997 The whole documents.	1 - 27
A	US 2007-142744 A1 (PROVENCHER, KEVIN M.) 21 Jun. 2007 The whole documents.	1 - 27
A	US 2006-116689 A1 (ALBANS, WILLIAM J. et al.) 1 Jun. 2006 The whole documents.	1 - 27



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See patent family annex.

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Date of the actual completion of the international search

25 JUNE 2009 (25.06.2009)

Date of mailing of the international search report

25 JUNE 2009 (25.06.2009)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

YANG, Seong Ji

Telephone No. 82-42-481-5624



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2008/081801

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US 2006-116689 A1	01.06.2006	None	