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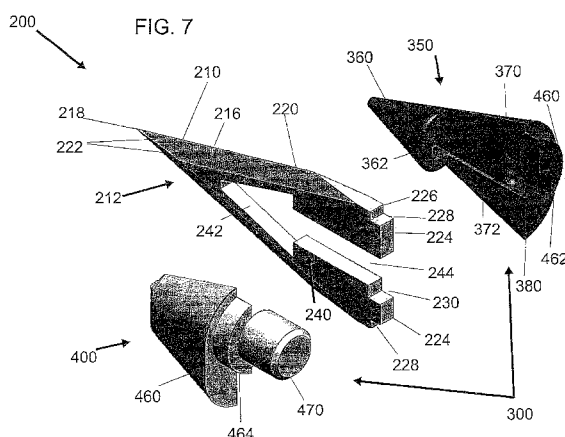
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10 May 2013

(54) Title: NEEDLE ASSEMBLY AND BLADE ASSEMBLY FOR BIOPSY DEVICE



(57) Abstract: A biopsy device may comprise a probe assembly that has a needle assembly extending distally from the probe assembly. The needle assembly has a needle portion and blade assembly. The blade assembly comprises a blade and a multi-member coupling assembly. The multi-member coupling assembly is configured to couple to the blade and to the needle portion to attach the blade to the needle portion. In one configuration the multi-member coupling assembly comprises two coupling members configured to couple to the blade. The blade may be a flat blade that has a retention channel formed therein, wherein the two coupling members may couple to the blade at the retention channel. The needle portion may comprise a needle and a cutter receiving tube. The needle may be an ovular cross-sectioned tube having a cut-out portion into which a circular cross-sectioned cutter receiving tube may be inserted and coupled thereto.

A. CLASSIFICATION OF SUBJECT MATTER***A61B 10/02(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)

A61B 10/02; B21G 1/00; A61B 10/00; A61B 17/32

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

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: biopsy, needle, blade, coupling.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6551253 B2 (DUSTIN WORM et al.) 22 April 2003	1-10, 12-18
Y	See columns 3, 4, claim 1 and figs. 2A-2C.	11, 19-20
Y	US 2006-0144548 A1 (ANDREW T. BECKMAN et al.) 06 July 2006	11, 19-20
A	See paragraphs 34, 40, 41, claims 1, 2, 27 and figs. 2, 4-7, 11.	1-10, 12-18
A	US 2002-0120212 A1 (MARK A. RITCHART et al.) 29 August 2002	1-20
	See claim 1 and figs. 5, 6, 7.	
A	WO 02-062231 A2 (TYCO HEALTHCARE GROUP LP) 15 August 2002	1-20
	See claim 1 and figs. 2A, 2D.	
A	US 2007-0185411 A1 (JOHN A. HIBNER) 09 August 2007	1-20
	See claim 1 and figs. 3, 4.	



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

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"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

"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

"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

"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

"&" document member of the same patent family

Date of the actual completion of the international search

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City, 302-701, Republic of Korea

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Telephone No. 82-42-481-5593



INTERNATIONAL SEARCH REPORTInternational application No.
PCT/US2012/037865**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.:
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:

Invention Group I: a technical feature of a blade assembly for a biopsy device. (Claims 1-20)

Invention Group II: a technical feature of a needle portion for a biopsy device. (Claims 21-34)

The Inventions listed as Invention Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1, because they lack the same or corresponding inventive technical feature defined in PCT Rule 13.2. Therefore, the present application does not meet the requirement of unity of invention under PCT Rule 13.1.

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.: 1-20

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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/037865

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