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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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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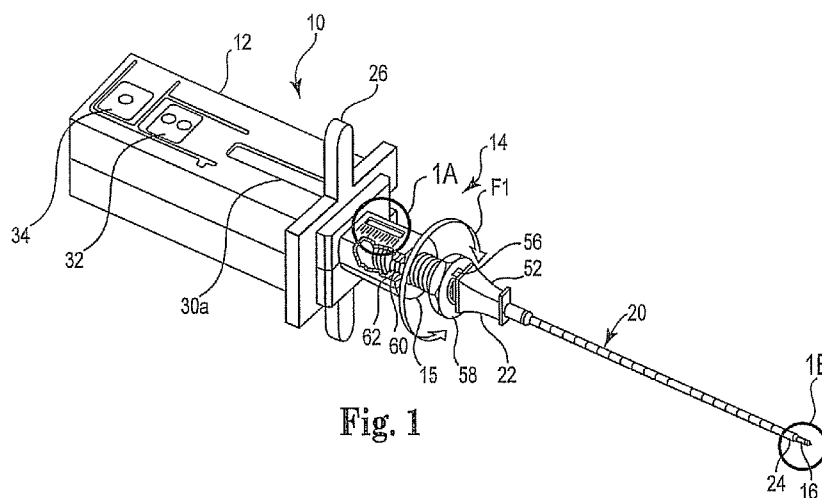


Fig. 1

(57) Abstract: A biopsy device is disclosed that includes a housing maintaining a stylet and a cannula. A control device is operably coupled to operate the stylet and the cannula. A handle operates to modify the device from a loading configuration with an expanded profile to a delivery configuration with a reduced profile.



A. CLASSIFICATION OF SUBJECT MATTER***A61B 10/02(2006.01)i, A61B 17/34(2006.01)i, C12M 1/26(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; A61B 10/00; A61B 17/32; A61B 5/00; A61B 1/06

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, cannula, stylet, removable, handle, profile, angle

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 05951489 A (BAUER, ALBERTO) 14 September 1999 See figs. 1, 1A, 1B; column 4, lines 11-16, 38-41; column 5, lines 1-3; claims 1, 10.	1-20
A	US 2004-0097832 A1 (ADAMS, LELAND RAY et al.) 20 May 2004 See abstract; figs. 1, 3A; paragraph 24; claim 1.	1-20
A	US 2004-0034280 A1 (PRIVITERA, SALVATORE et al.) 19 February 2004 See abstract; figs. 1, 4; paragraphs 44, 56; claim 1.	1-20
A	US 2005-0203440 A1 (GELLMAN, BARRY N. et al.) 15 September 2005 See abstract; figs. 1, 3; paragraphs 19, 20; claim 1.	1-20



Further documents are listed in the continuation of Box C.



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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 05951489 A	14.09.1999	None	
US 2004-0097832 A1	20.05.2004	AU 2003-293014 A1 EP 1562483 A1 EP 1761158 A1 JP 04478029 B2 JP 2006-506199 A JP 2008-500109 A US 2005-0277845 A1 US 2006-0116604 A1 US 2008-0269638 A1 US 2009-069713 A1 US 7008382 B2 US 7449000 B2 WO 2004-045415 A1 WO 2005-117683 A1	15.06.2004 17.08.2005 14.03.2007 09.06.2010 23.02.2006 10.01.2008 15.12.2005 01.06.2006 30.10.2008 12.03.2009 07.03.2006 11.11.2008 03.06.2004 15.12.2005
US 2004-0034280 A1	19.02.2004	AU 1999-56027 A1 AU 1999-56027 B2 CA 2287087 A1 CA 2287087 C EP 0995400 A1 EP 0995400 B1 EP 1745746 A1 JP 04364364 B2 JP 2000-152941 A US 2001-0047183 A1 US 2008-0146965 A1 US 2009-0198149 A1 US 2011-0125055 A1 US 6273862 B1 US 8016844 B2	04.05.2000 15.05.2003 23.04.2000 04.12.2007 26.04.2000 10.01.2007 24.01.2007 28.08.2009 06.06.2000 29.11.2001 19.06.2008 06.08.2009 26.05.2011 14.08.2001 13.09.2011
US 2005-0203440 A1	15.09.2005	AU 2005-228939 A1 CA 2557170 A1 EP 1722687 A1 US 7879054 B2 WO 2005-094692 A1	13.10.2005 13.10.2005 22.11.2006 01.02.2011 13.10.2005