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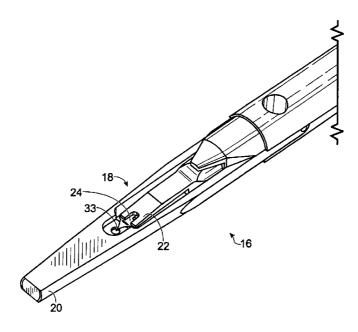
(71) Applicant (for all designated States except US): AS-CEND INSTRUMENTS, LLC [US/US]; 2056 NW Aloclek Drive, Suite 323-325, Hillsboro, OR 97124 (US).

- (72) Inventor; and
- (75) Inventor/Applicant (for US only): RASMUSSEN, Jorgen [US/US]; 13445 SW Hialeah Drive, Beaverton, OR 97008 (US).

- (74) Agent: KARNSTEIN, Walter, W., et al.of; Kolisch Hartwell, P.C., 200 Pacific Building, 520 SW Yamhill Str., Portland, OR 97204 (US).
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[Continued on next page]

(54) Title: SAMPLE MANIPULATION SYSTEM



(57) Abstract: A sample manipulator (10) that includes a shaft (14), a proximal end (12), and a distal end (16) that includes a sample holder (18) and a support arm (20) having both a retracted position and a deployed position. The support arm (20) is configured to support a sample associated with the sample holder (18) when the support arm (20) is in the deployed position. The sample holder (18) may include an end effector (34) that includes a generally planar body (36), and a cantilever tip (40) extending from the planar body to associate with a sample.



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B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
U.S.: 422/68.1, 102, 104; 606/32,33,39,79,82,84,167-170,205-211			
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
EAST search on: cantilever tip, tissue, specimen, biopsy, endoscopy, cutting, surgery			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.
X	US 3,844,272 A (BANKO) 29 October 1974 (29.10.		1,2,4-6,13,14,16,21
	and 4.		
Х	US 4,200,111 A (HARRIS) 29 April 1980 (29.06.1980), Figures 1, 4 and 8-10, columns 2- 3.		
х	US 5,526,822 A (BURBANK et al) 18 June 1996 (18.06.1996), Figures 1F-1G and 14B, 1,6,3,14,16,21		
	columns 13-14 and 18-19.		
Α	US 5,643,282 A (KIETURAKIS) 01 July 1997 (01.07.1997)		
A	US 5,928,161 A (KRULEVITCH et al) 27 July 1999 (27.07.1999)		
A	US 5,645,564 A (NORTHRUP et al) 08 July 1997 (08.07.1997)		
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