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(54) Title: DUAL-PROBE SCANNING PROBE MICROSCOPE

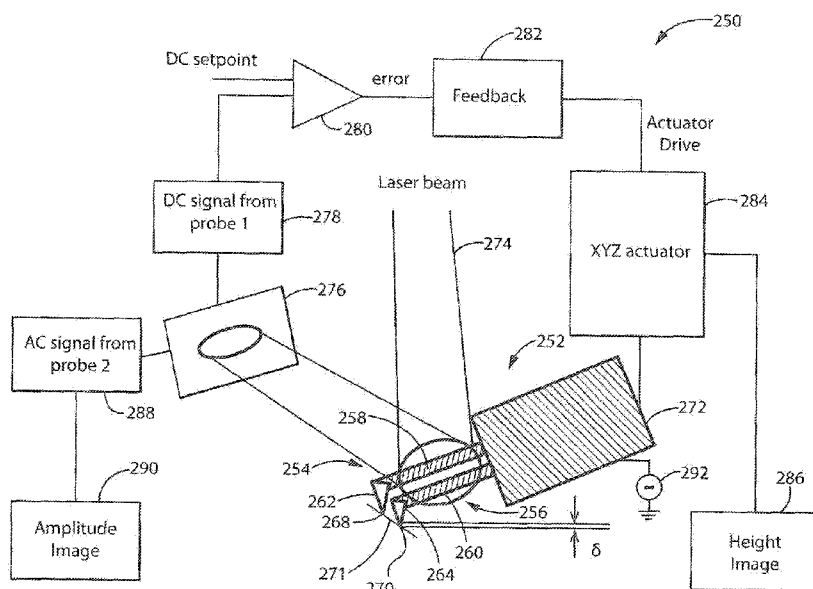


FIG. 10

(57) Abstract: An apparatus and method of positioning a probe of an atomic force microscope (AFM) includes using a dual probe configuration in which two probes are fabricated with a single base, yet operate independently. Feedback control is based on interaction between the reference probe and surface, giving an indication of the location of the surface, with this control being modified based on the difference in tip heights of the two probes to allow the sensing probe to be positioned relative to the sample at a range less than 10 nm.



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B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
G01Q 10/00-10/06, 20/00-20/04, 60/00, 60/02, 60/24-60/42, 70/00		
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
PatSearch (RUPTO internal), USPTO, PAJ, Esp@cenet, DWPI, EAPATIS, PATENTSCOPE, Information Retrieval System of FIPS		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6545492 B1 (EUROPAISCHES LABORATORIUM FUR MOLEKULARBIOLOGIE (EMBL)) 08.04.2003, col. 1, lines 4-10, col. 4, lines 11-41, 62-col. 5, line 1, col. 10, lines 3-8, 35-67, col. 11, line 36-col. 12, lines 27, 47-col. 13, line 61, col. 14, line 65-col. 15, line 5, fig. 1	1-2, 5-12, 15-17, 19-20
Y		3, 13
A		4, 14, 18
Y	US 6279389 B1 (NANODEVICES, INC.) 28.08.2001, col. 6, line 42-col. 7, line 6, fig. 2, 3	3, 13
A	JPH 04330653 A (CANON INC) 18.11.1992, abstract	1-20
A	US 5929643 A (OLYMPUS OPTICAL CO., LTD) 27.07.1999	1-20
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