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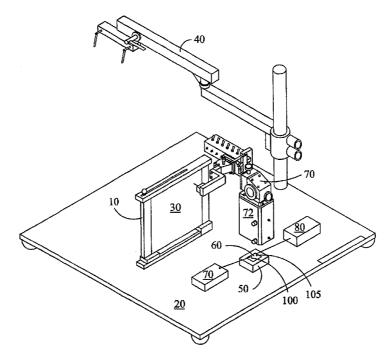
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(54) Title: DOUBLE SIDED PROBING STRUCTURES



(57) Abstract: A test configuration for dour e sided probing of a device under test includes a holder to secure the device under test in a first orientation, a calibration substrate secured in a second orientation and a probe capable of calibration using the calibration substrate and probing the device under test.



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Minimum documentation searched (classification system followed by classification symbols) U.S.: 324/158.1				
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C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.	
X X,P	US 6,396,296 B1 (TARTER et al) 28 March 2002 (28.03.2002), Figure 4; column 3, lines 45-46; column 4, lines 51-52. US 2004/0201388 A1 (BARR) 14 October 2004 (14.10.2004), paragraph 0012, lines 3-7.		1	
A,P	7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		1	
A	US 2002/0153909 A1 (PETERSEN et al) 24 October 2002 (24.10.2002), Figure 8;		1	
	paragraph 0142.			
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