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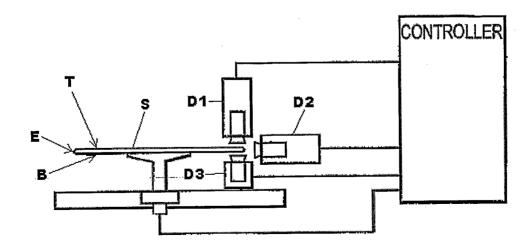
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(54) Title: ALL SURFACE DATA FOR USE IN SUBSTRATE INSPECTION



(57) Abstract: A system for capturing, calibrating and concatenating all-surface inspection and metrology data is herein disclosed. Uses of such data are also disclosed.





INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/44300 CLASSIFICATION OF SUBJECT MATTER IPC: G06K 9/00(2006.01) USPC: 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) U.S.: 382/145 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) **EAST** DOCUMENTS CONSIDERED TO BE RELEVANT C. Relevant to claim No. Category * Citation of document, with indication, where appropriate, of the relevant passages 1-2, 5, 7, 9, 10-13 US 6.160,906 (Lehnen et al) 12 Dec. 2000 (12.12.2000), col. 2, lines 4-24, col. 3, line 44-X col. 4, line 25, col. 5, lines 51-67, col. 6, lines 51-59, col. 7, lines 5-17, col. 8, lines 22-25, Y 53-61, Figs. 2 and 4 3-4, 6, 8, 11 1, 9, 14-19 X US Patent Pub. 2005/0038554 (Watkins) July 14 2003 (14.7.2003, filing date), Figs. 1-3, pargraphs [0014-0018, 0022, 0024-0028, 0031, 0036]. US 5,787,190 (Peng et al) 28 July 1998 (28.7.1998), col. 1, lines 16-50, lines 56-65, Figs. 1, 3-4, 6, 8, 15 Y 2, 4, col. 2, lines 21-34. 1, 14-19 US 6,809,809 (Kinney et al) 30 Oct. 26, 2004 (30.10.2004), Figs. 1, 4A-4C, 7, 9-11, 13-14, 18 and 21, col. 5, line 62-col. 6, line 5, col. 10, 36-59, col. 16, lines 47-67, col. 17, lines 36-49, col. 19, lines 6-25, col. 21, lines 31-66, col. 22, lines 51-59, col. 31, lines 44-67. 11 and 17-19 US 7,103,505 (Teshima et al) 5 Sept. 2006 (5.9.2006), col. 1, lines 14-39, Figs. 3A, 4A, 4H-Y 4I, 6B, 20B and 21. Further documents are listed in the continuation of Box C. See patent family annex. later document published after the international filing date or priority date and not in conflict with the application but cited to understand the Special categories of cited documents: principle or theory underlying the invention document defining the general state of the art which is not considered to be of "A" particular relevance document of particular relevance; the claimed invention cannot be "X" considered novel or cannot be considered to involve an inventive step "E" earlier application or patent published on or after the international filing date when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as "[" 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 referring to an oral disclosure, use, exhibition or other means "O" document published prior to the international filing date but later than the document member of the same patent family priority date claimed Date of the actual completion of the international search Date of mailing of the international search report U 6 NOV 2007 08 March 2007 (08.03,2007) Authorized officer Name and mailing address of the ISA/US

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Y	US 6,583,414 (Nozoe et al) June 24 2003 (24.6.2003), abstract, col. 11, lines 28-56	1, 14-19