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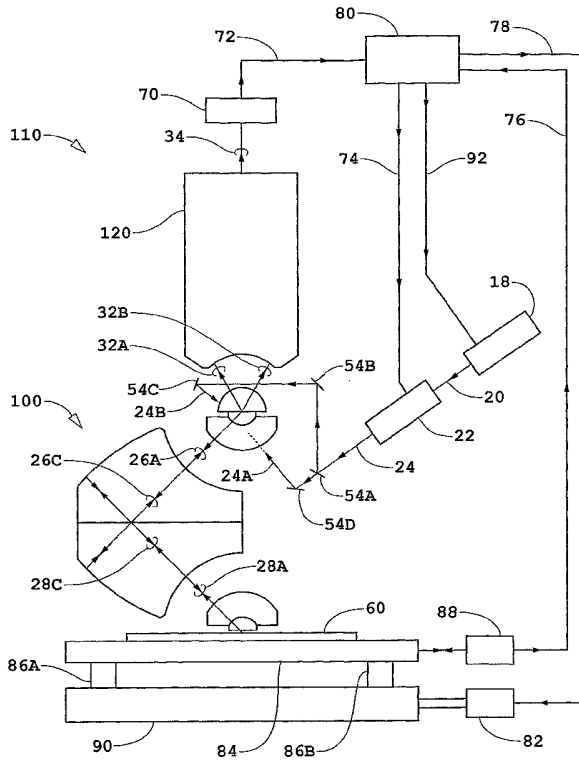
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[Continued on next page]

(54) Title: SUB-NANOMETER OVERLAY, CRITICAL DIMENSION, AND LITHOGRAPHY TOOL PROJECTION OPTIC METROLOGY SYSTEMS BASED ON MEASUREMENT OF EXPOSURE INDUCED CHANGES IN PHOTORESIST ON WAFERS



(57) Abstract: A method of processing a substrate on which a layer of photoresist has been applied, the method involving: exposing the layer of photoresist to patterned radiation to generate exposure-induced changes in the layer of photoresist which form patterns having one or more features; and before developing the exposed photoresist, interferometrically obtaining measurements of the pattern in the exposed layer of photoresist for determining locations of the one or more features of the pattern.

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FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
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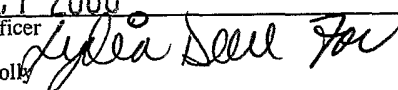
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/29339

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC: G01B 11/02(2006.01);G03B 27/32(2006.01)</p> <p>USPC: 356/512;355/27 According to International Patent Classification (IPC) or to both national classification and IPC</p>								
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) U.S. : 356/512;355/27</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet</p>								
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">Category *</th> <th style="width:70%;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="width:20%;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td align="center">A</td> <td>US 2005/0037272 A1 (TANAKA) 17 February 2005 (17.02.2005), see entire document</td> <td align="center">1-33</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	A	US 2005/0037272 A1 (TANAKA) 17 February 2005 (17.02.2005), see entire document	1-33
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<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.</p>								
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<p>Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201</p>		<p>Authorized officer  Patrick Connolly Telephone No. 571.272.2412</p>						

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Continuation of B. FIELDS SEARCHED Item 3:

EAST

search terms: interference, wafer, substrate, resist, photoresist, exposure, developing