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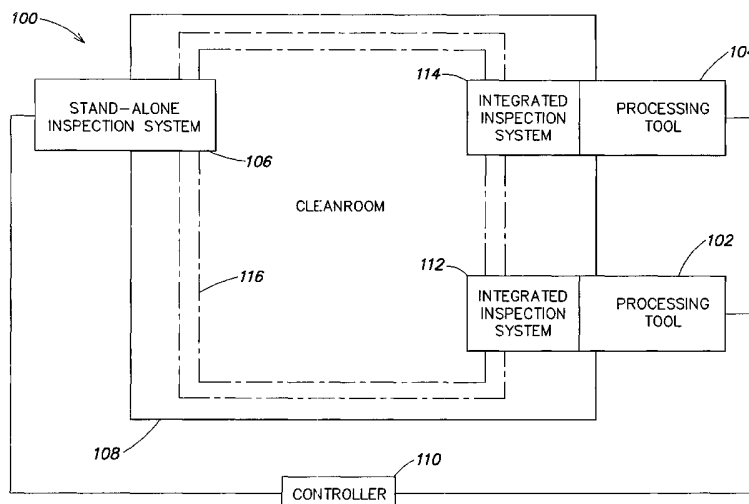
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(54) Title: SYSTEMS AND METHODS FOR CALIBRATING INTEGRATED INSPECTION TOOLS



(57) Abstract: Systems, methods and computer program products are provided for calibrating integrated the inspection tools of one or more processing tools. In a first aspect, a system is provided that includes (1) a processing tool adapted to process substrates; (2) an integrated inspection tool coupled to the processing tool; and (3) a controller adapted to communicate with the integrated inspection tool. The controller includes computer program code adapted to receive a first result generated by inspecting a production substrate with a stand-alone inspection tool, and to receive a second result generated by inspecting the production substrate with the integrated inspection tool. The computer controller further includes computer program code adapted to calibrate the integrated inspection tool based on the first and second results. Numerous other systems are provided, as are methods and computer program products.



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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 02/18495

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 H01L21/00				
According to International Patent Classification (IPC) or to both national classification and IPC				
<b>B. FIELDS SEARCHED</b>				
Minimum documentation searched (classification system followed by classification symbols) IPC 7 H01L				
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 practical, search terms used) EPO-Internal, WPI Data, PAJ, INSPEC				
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>				
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
A	DATABASE INSPECON 'Online! THE INSTITUTION OF ELECTRICAL ENGINEERS, STEVENAGE, GB; Inspec No. solid state technology, 1 April 2001 (2001-04-01) CLAASEN-VUJCIC T; HASPER A; ABRAHAM M: "analysis of a 200/300mm vertical furnace with integrated metrology" XP001025036 abstract	1, 22, 31-35		
A	--- US 5 657 254 A (SIEK ET AL.) 12 August 1997 (1997-08-12) column 3, line 12-40	1, 22, 31-35		
A	--- US 5 866 437 A (CHEN ET AL.) 2 February 1999 (1999-02-02) column 3, line 41-50 ---	1, 22, 31-35		
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.				
<input checked="" type="checkbox"/> Patent family members are listed in annex.				
* Special categories of cited documents :				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;">                     *A* document defining the general state of the art which is not considered to be of particular relevance                      *E* earlier document but published on or after the international filing date                      *L* 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 specified)                      *O* document referring to an oral disclosure, use, exhibition or other means                      *P* document published prior to the international filing date but later than the priority date claimed                 </td> <td style="width: 50%; border: none; vertical-align: top;">                     *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention                      *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone                      *Y* 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.                      *&amp;* document member of the same patent family                 </td> </tr> </table>			*A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* 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 specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* 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 member of the same patent family
*A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* 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 specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* 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 member of the same patent family			
Date of the actual completion of the international search <p style="text-align: center;">5 March 2003</p>		Date of mailing of the international search report <p style="text-align: center;">12/03/2003</p>		
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer <p style="text-align: center;">Oberle, T</p>		

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 6 245 581 B1 (BONSER ET AL.) 12 June 2001 (2001-06-12) abstract; figures 1,2 -----	1, 22, 31-35

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