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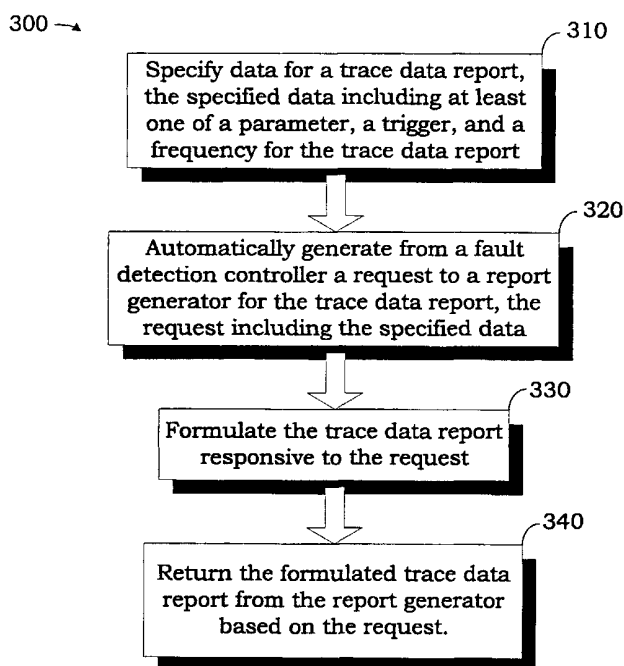
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(54) Title: A METHOD FOR REQUESTING TRACE DATA REPORTS FROM FAULT DETECTION CONTROLLED SEMI-CONDUCTOR FABRICATION PROCESSES



(57) Abstract: The invention is, in its various aspects, a method and apparatus for dynamically generating trace data reports in a semiconductor fabrication process employing fault detection control. The method comprises specifying data for a trace data report, the specified data including at least one of a parameter, a trigger, and a frequency for the trace data report; automatically generating from a fault detection controller (250) a request to a report generator (260) for the trace data report, the request including the specified data; formulating the trace data report responsive to the request; and returning the formulated trace data report from the report generator (260) based on the request. In other aspects, the invention comprises a computer programmed to perform this method and a computer-readable, program storage medium encoded with instructions that perform this method when executed by a computer. The apparatus is a semiconductor fabrication processing system, comprising: a fabrication tool (110) capable of providing at least one of specified data and a trace data report; a fault detection controller (250) implementing a fault detection control, the fault detection controller (250) being capable of automatically generating a request for the trace data report, the request including the specified data; a report generator (260) capable of requesting at least one of the specified data and the trace data report from the fabrication tool (110) and capable of, if the specified data is requested from the fabrication tool (110), providing the trace data report; and an operator interface (230) for receiving data specified for the trace data report, the specified data including at least one of a parameter, a trigger, and a frequency for the trace data report, and to which the trace data report may be returned from at least one of the report generator (260) and the fabrication tool (110).

WO 01/52320 A3

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01L21/66		
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B. FIELDS SEARCHED		
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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, PAJ, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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A	EP 0 932 195 A (IBM) 28 July 1999 (1999-07-28) the whole document ---	1-10
A	US 5 751 581 A (TAU LOK L ET AL) 12 May 1998 (1998-05-12) the whole document ---	1-10
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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.		
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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	
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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;">Kirkwood, J</p>	

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