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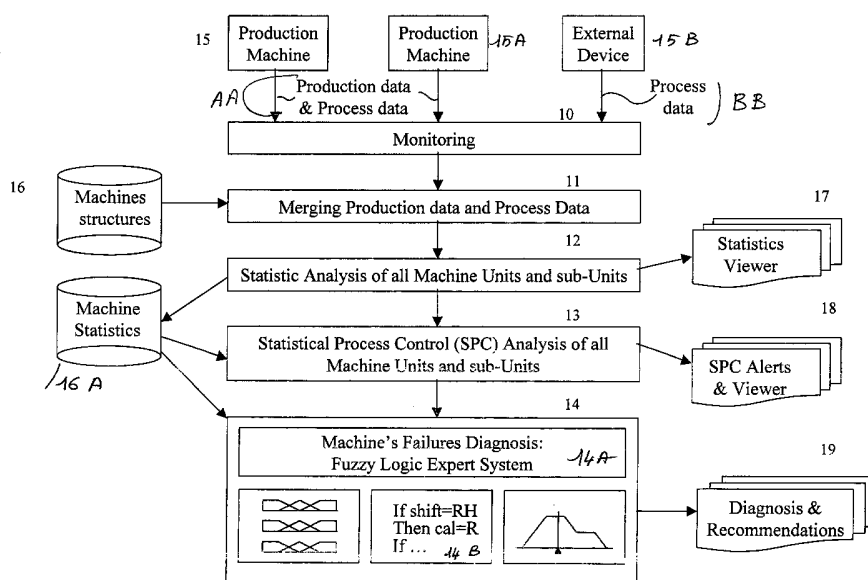
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(54) Title: METHOD AND SYSTEM FOR REAL TIME DIAGNOSIS OF MACHINE OPERATION



(57) Abstract: The proposed system according to the present invention provides a real time diagnosis of machine failures during operation, wherein said diagnosis is based on in-depth Statistical Process Control (SPC, 13) data of all machine assembly units at all structure levels. The system defines the malfunctioning machine's units (14), while presenting the failure type and recommended correction actions (19) that should be taken in order to repair the failure. Moreover, the system provides explanations of the system's logic that lead to its conclusions. These explanations are presented to a user in natural language that is easy to work with and understand by human operators.



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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL04/00712

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(7) : GO6F 19/00 US CL : 700/28, 32, 95, 108, 109, 110; 702/81, 84 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) U.S. : 700/28, 32, 95, 108, 109, 110; 702/81, 84 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) Please See Continuation Sheet		
<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,P	US 6,725,402 B1 (COSS, Jr. et al.) 20 April 2004 (20.04.2004).	1-17 and 19-38
A	US 5,943,237 A (Van Boxem) 24 August 1999 (24.08.1999).	1-17 and 19-38
A	US 5,862,054 A (Li) 19 June 1999 (19.06.1999).	1-17 and 19-38
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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Continuation of B. FIELDS SEARCHED Item 3:

EAST

SPC, diagnosi\$4, correlati\$3, machine.