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(54) Title: MODELING OF TRANSACTION FLOW FOR FAULT DETECTION

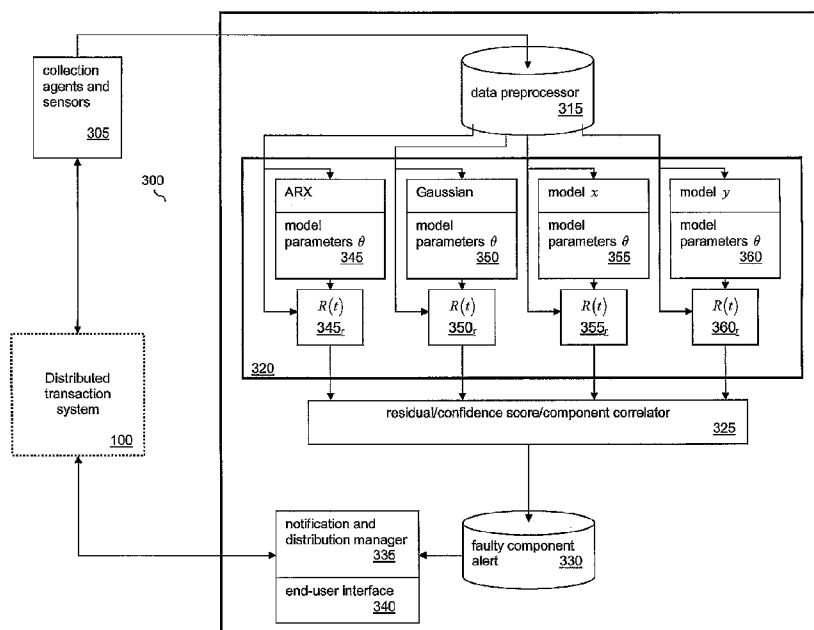


FIG. 3

(57) Abstract: A method and system that automatically derives models (350) between monitored quantities under non-faulty conditions (305) so that subsequent faults can be detected as deviations from the derived models (325). The invention identifies unusual conditions for fault detection and isolation that is absent in rule-based systems.

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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US06/35889

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: **G06F 17/10**( 2006.01)

USPC: 703/2

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. : 703/2

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)  
IEEE, the Google, search terms distributed system model fault failure

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CHEN, Haifeng et al., Failure Detection and Localization in Component Based Systems by Online Tracking, Proceedings of the eleventh ACM Special Interest Group on Knowledge Discovery in Data international conference on Knowledge discovery in data mining, August 2005, pages 750 - 755	1-7,12
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Y	US 2005/0193281 (IDE et al) 01 September 2005 (01.09.2005) paragraph 106	8
Y	US 2005/0193281 (IDE et al) 01 September 2005 (01.09.2005) paragraph 106	8
A	HAJJI, H. Baseline Network Traffic and Online Faults Detection IEEE International Conference on Communications May 2003, Volume 1, pages 301 - 308	1-20
A	US 5,659,593 (TZVIELI) 19 AUGUST 1997 (19.08.1997)	1-20

Further documents are listed in the continuation of Box C.

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"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	

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