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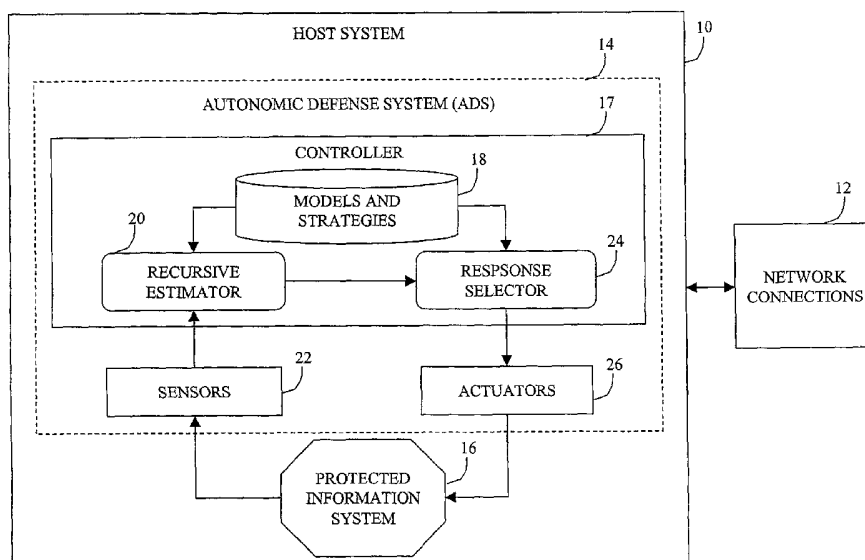
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(54) Title: CONTROL SYSTEMS AND METHODS USING A PARTIALLY-OBSERVABLE MARKOV DECISION PROCESS (PO-MDP)



(57) Abstract: Methods and systems for controlling at least a part of a microprocessor system include, based at least in part on objectives of at least one electronic attack, using a partially observable Markov decision process (PO-MDP) to provide a model of at least part of the microprocessor system, the PO-MDP including a controller (17), the controller including an estimation policy (20) to recursively generate a state estimate at stage k based on a state estimate at stage $k-1$, a control at stage $k-1$, and an observation at stage k , and, a response policy (24) to select a control at stage k based on the state estimate at stage k , and cause the selected control to be provided to at least a part of the microprocessor system.



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US CL : 713/200,201

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. : 713/200,201

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6366559 B1 (KRISHNAN et al.) 02 April 2002 (02.04.2002), lines 31-39 of column 7.	1-31
A	US 6353814 B1 (WENG) 05 March 2002 (05.03.2002), lines 1-16 of column 10 and 43-54 of column 21.	1-31
A	US 6311096 B1 (SAXENA et al.) 30 October 2001 (30.10.2001), lines 9-26 of column 3 and lines 14-35 of column 4.	1-31
A	US 6108597 (KIRCHNER et al.) 22 August 2000 (22.08.2000), lines 13-17 of column 4, 50-57 of column 12, and 51-63 of column 16.	1-31



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	
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