

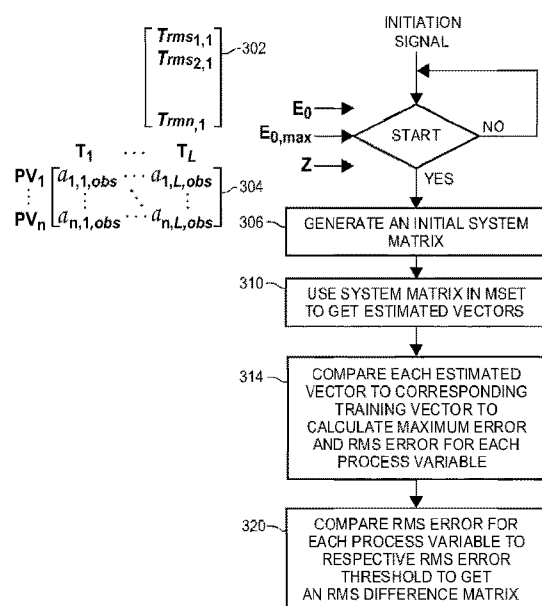
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(54) Title of the Invention: Improved pattern recognition technique for data-driven fault detection within a process plant
 Abstract Title: Improved pattern recognition technique for data-driven fault detection within a process plant

(57) A real-time control system includes a fault detection training technique to implement a data-driven fault detection function that provides an operator with information that enables a higher level of situational awareness of the current and likely future operating conditions of the process plant. The fault detection training technique enables an operator to recognize when a process plant component is behaving abnormally to potentially take action, in a current time step, to alleviate the underlying cause of the problem, thus reducing the likelihood of or preventing a stall of the process control system or a failure of the process plant component.



From Fig. 3B