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(54) Title: SYSTEMS AND METHODS FOR MONITORING POTENTIAL FAILURE IN A MACHINE OR A COMPONENT THEREOF

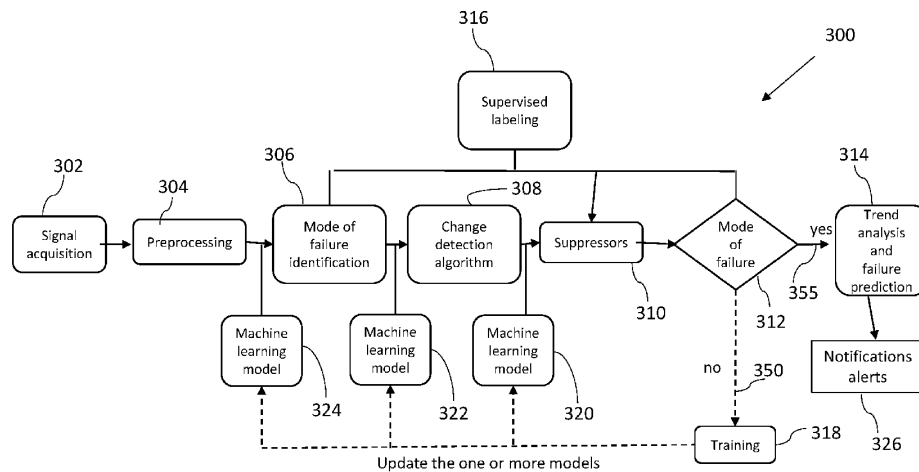


FIG. 3

(57) Abstract: A system for monitoring potential failure in a machine or a component thereof, the system including: at least one optical sensor configured to be fixed on or in vicinity of the machine or the component thereof, at least one processor in communication with the sensor, the processor being executable to: receive signals from the at least one optical sensor, obtain data associated with characteristics of at least one mode of failure of the machine or the component thereof, identify at least one change in the received signals, for an identified change in the received signals, apply the at least one identified change to an algorithm configured to analyze the identified change in the received signals and to classify whether the identified change in the received signals is associated with a mode of failure of the machine or the component thereof, thereby labeling the identified change as a fault, based, at least in part, on the obtained data, and for an identified change is classified as being associated with a mode of failure, outputting a signal indicative of the identified change associated with the mode of failure.

[Continued on next page]

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