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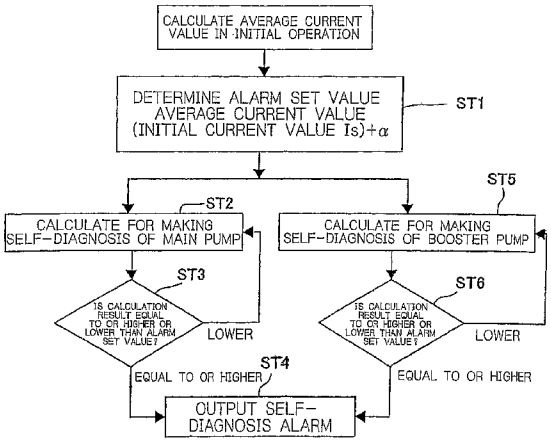
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(54) **Title:** VACUUM PUMP SELF-DIAGNOSIS METHOD, VACUUM PUMP SELF-DIAGNOSIS SYSTEM, AND VACUUM PUMP CENTRAL MONITORING SYSTEM



(57) **Abstract:** There are provided a vacuum pump self-diagnosis method, a vacuum pump self-diagnosis system, a vacuum pump central monitoring system capable of making self-diagnosis of a dry vacuum pump. A vacuum pump self-diagnosis method decides the occurrence of failure and generates an alarm when a predetermined alarm set value is exceeded by an integrated value or an average value of a current of a motor for rotating a rotor of said vacuum pump. In a vacuum pump self-diagnosis system for making self-diagnosis of a vacuum pump which comprises a casing and a rotor rotatably arranged in the casing for sucking and discharging a gas through rotations of the rotor, the rotor comprises a plurality of stages and a pressure sensor is provided between the rotor stages. A self-diagnosis unit is provided for calculating an integrated value or an average value of a current of a motor for rotating said rotor, and making self-diagnosis of the vacuum pump when the integrated value or average value exceeds a predetermined alarm set value. The self-diagnosis unit switches from one self-diagnosis calculation method to another or interrupts the self-diagnosis calculation based on a pressure value detected by said pressure sensor.

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