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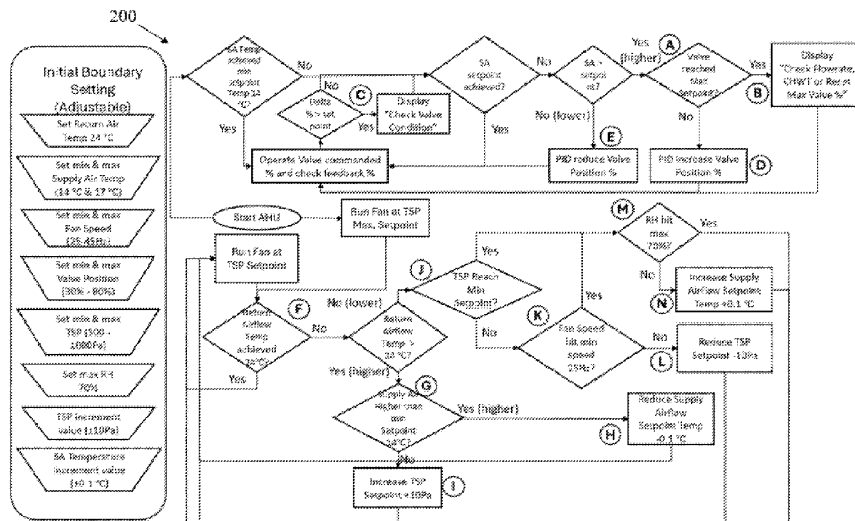


FIG.2

(57) Abstract: Embodiments of the invention provide for a computer-implemented method and a system for optimizing the operating airside efficiency of an AHU which regulates airflow into a building space. The system may include a variety of sensors for measuring the present temperature of return airflow, present temperature of supply airflow, present relative humidity of return airflow / intake entering the AHU, present total static pressure of supply airflow. The system may also include a chilled water valve, a variable speed drive, a memory, and a computer processor or controller. The method includes a combination of a chilled water valve control loop, a return temperature control loop, and a total static pressure control loop for auto-adjusting setpoint temperature of return airflow and setpoint total static pressure of supply airflow / intake entering the AHU.

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