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(54) **Title**: AUTOMATIC CONTROL SYSTEM FOR CEILING FAN BASED ON TEMPERATURE DIFFERENTIALS

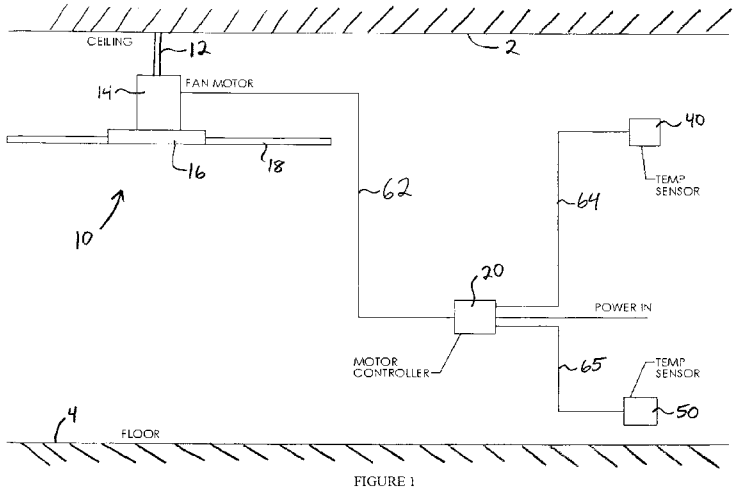


FIGURE 1

(57) **Abstract**: A fan includes a hub, several fan blades, and a motor that is operable to drive the hub. A motor controller is in communication with the motor, and is configured to select the rate of rotation at which the motor drives the hub. The fan is installed in a place having a floor and a ceiling. An upper temperature sensor is positioned near the ceiling. A lower temperature sensor is positioned near the floor. The temperature sensors communicate with the motor controller, which includes a processor configured to compare substantially contemporaneous temperature readings from the upper and lower temperature sensors. The motor controller is thus configured to automatically control the fan motor to minimize the differences between substantially contemporaneous temperature readings from the upper and lower temperature sensors. The fan system may thus substantially destratify air in an environment, to provide a substantially uniform temperature distribution within the environment.

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