In the Claims

1. An apparatus for moving air within a space, comprising:

a fan including a plurality of blades for moving the air within the space; and

at least one temperature sensor for sensing temperature at a location external to the fan;

wherein the fan comprises a cover, and the at least one temperature sensor comprises a passive infrared sensor within the cover for receiving energy from the cover to detect a temperature wherein the temperature of the cover is the same temperature as the temperature external to the fan.

2. The apparatus of claim 1, wherein the fan comprises a heat-generating element, such as a motor or electric circuit board, and the cover is spaced therefrom.

3. The apparatus of claim 1, wherein the at least one temperature sensor comprises a first temperature sensor adapted for detecting a first temperature of an object in the space and, further including a second temperature sensor adapted for detecting a second temperature of the cover.

4. A method for detecting temperature for use in regulating the operation of a fan, comprising:

via a passive infrared sensor, detecting a temperature of a structure in contact with an ambient environment external to the fan by receiving energy from or through a cover on the fan; and

via a controller, regulating the operation of the fan based on the temperature of the structure

sensing a temperature of the cover adjacent to the fan via the passive infrared sensor;

comparing the temperature of the cover to the temperature of the structure to determine a temperature difference via the controller; and

increasing a speed of the fan until the temperature difference is reduced or eliminated via the controller.

5. The method of claim 4, wherein the regulating step comprises regulating a speed of the fan based on the detected temperature of the structure relative to a pre-determined or user-inputted set point value via the controller.

6. The method of claim 4, wherein the regulating step comprises regulating the fan once the detected temperature of the structure reaches a pre-determined level set by a thermostat via the controller.