

**TITLE OF INVENTION: BODY TEMPERATURE ESTIMATION SYSTEM
AND METHOD BASED ON ONE-CHANNEL TEMPERATURE SENSOR**

ABSTRACT

A body temperature estimation system and method based on a one-channel temperature sensor are provided for estimating the body temperature of a target person in consideration of a change in the space temperature or a change in the skin temperature according to a change in the space temperature when continuously measuring the body temperature. The system may include a temperature measurement unit and a body temperature estimation unit. The temperature measurement unit is attached to a skin of the target person and measures a skin temperature at regular intervals. The body temperature estimation unit estimates a current body temperature, based on an average body temperature measured at the regular intervals and the skin temperature received from the temperature measurement unit, by reflecting the average body temperature, the skin temperature, a difference value (h) of the skin temperature, and a change amount (h') of the skin temperature difference value.

[Fig.1]