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[54] APPARATUS FOR SIMULATING THE THERMOREGULATORY RESPONSES OF HUMAN SKIN AND RELATED METHOD FOR PREDICTING FABRIC COMFORT LEVEL

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[57] **ABSTRACT**

Sweating hot plate apparatus simulating the thermoregulatory behavior of human skin and related method for predicting fabric comfort level with the apparatus. Fabric is placed on the top surface of the apparatus, and selected constant inputs of power flux and water flow are supplied to the apparatus, whereby the surface temperature of the apparatus changes and closely approximates the skin temperature of human subjects having levels of heat generation and sweat production corresponding at the same levels of power flux input and water flow input, respectively.

20 Claims, 15 Drawing Sheets

