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Padiy

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(54) **METHODS AND DEVICES FOR MEASURING CORE BODY TEMPERATURE**

(75) Inventor: **Alexander V. Padiy**, Geldrop (NL)

(73) Assignee: **KONINKLIJKE PHILIPS N.V.**, Eindhoven (NL)

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CPC ***G01K 13/002*** (2013.01); ***A61B 5/0002*** (2013.01); ***A61B 5/015*** (2013.01); ***A61B 5/6814*** (2013.01); ***A61B 5/6815*** (2013.01); ***A61B 5/6833*** (2013.01); ***A61B 5/6838*** (2013.01);
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See application file for complete search history.

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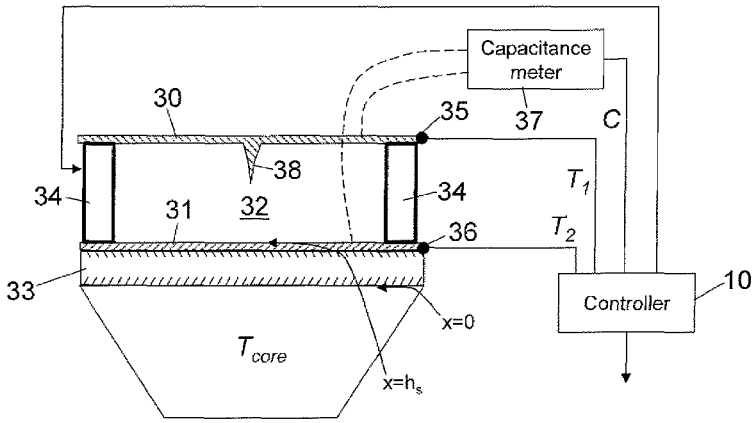
Primary Examiner — Rene Towa
Assistant Examiner — H. Q. Nguyen

(57) **ABSTRACT**

A core body temperature measurement device includes a plurality of electronic temperature sensors (**12**, **12***f*, **12***b*, **132**) operatively coupled with or near a surface (STA, PAA, BTT) having a surface temperature approximating the core body temperature, and a readout controller (**10**, **48**, **68**, **90**, **124**) including a maximum temperature reading selector (**14**). The readout controller is configured to acquire temperature readings using the plurality of temperature sensors and to output a core body temperature based on a highest usable temperature reading of the acquired temperature readings as determined by the maximum temperature reading selector. A core body temperature measurement method includes: acquiring a plurality of temperature readings at and near a surface (STA, PAA, BTT) having a surface temperature approximating the core body temperature; generating a highest usable temperature reading from the acquired temperature readings; and outputting a core body temperature based on the highest usable temperature.

12 Claims, 9 Drawing Sheets