

Title (en)  
SWITCHED CAPACITOR RESISTANCE EMULATION

Title (de)  
WIDERSTANDSEMULATION EINES SCHALKONDENSATORS

Title (fr)  
ÉMULATION DE RÉSISTANCE DE CONDENSATEUR COMMUTÉ

Publication  
**EP 3881042 A1 20210922 (EN)**

Application  
**EP 19801558 A 20191111**

Priority  
• US 201862758863 P 20181112  
• EP 2019080893 W 20191111

Abstract (en)  
[origin: WO2020099337A1] A resistance emulation device includes a resistance emulation circuit, a controller configured to control the resistance emulation circuit to emulate a desired resistance at output terminals, a buffered voltage measurement circuit and a current measurement circuit configured to output respective measurements of electrical voltage and current at the output terminals. The controller determines a measured emulated resistance from the measurements of voltage and current over the output terminals and calibrates the control of the resistance emulation circuit to match the measured emulated resistance with the desired resistance. The controller may also convert a temperature to the desired resistance using a temperature-to-thermistor resistance conversion operation. A core body temperature (CBT) thermometer may include the resistance emulation device to emulate a thermistor resistance corresponding to a CBT measured non-invasively by the CBT thermometer using a heat flux approach.

IPC 8 full level  
**G01K 1/02** (2021.01); **G01K 1/16** (2006.01); **G01K 13/00** (2021.01)

CPC (source: EP)  
**G01K 1/02** (2013.01); **G01K 1/165** (2013.01); **G01K 13/20** (2021.01)

Citation (search report)  
See references of WO 2020099337A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

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**EP 2019080893 W 20191111**; CN 201980074622 A 20191111; EP 19801558 A 20191111; JP 2021523172 A 20191111