

Title (en)
METHOD AND DEVICE FOR THE TIME-RESOLVED MEASUREMENT OF CHARACTERISTIC VARIABLES OF THE CARDIAC FUNCTION

Title (de)
VERFAHREN UND VORRICHTUNG ZUR ZEITAUFGELÖSTE MESSUNG VON KENNGRÖSSEN DER HERZFUNKTION

Title (fr)
PROCÉDÉ ET DISPOSITIF SERVANT À MESURER AVEC UNE RÉOLUTION TEMPORELLE DES GRANDEURS CARACTÉRISTIQUES DE LA FONCTION CARDIAQUE

Publication
EP 3595521 A1 20200122 (DE)

Application
EP 18721690 A 20180313

Priority

- DE 102017002334 A 20170313
- DE 102017002335 A 20170313
- DE 102017003803 A 20170420
- DE 102018000574 A 20180125
- DE 102018001390 A 20180221
- EP 2018056275 W 20180313

Abstract (en)
[origin: WO2018167082A1] The invention relates to the time-resolved measurement of the blood pressure, the arterial elasticity, the pulse wave, the pulse wave transit time and the pulse wave velocity and/or changes of the cardiac output and/or of the cardiac output of an object, namely a human or animal body, using pressure sensors for time-resolved measurement of the energy pulse wave. According to the invention, a pressure sensor unit is provided for the time-resolved pressure measurement of the pressure exerted onto the skin by a pulse wave, wherein the pressure sensor unit is an air and/or gas pressure sensor and/or is designed to change at least one electrical conductance and/or resistance when subjected to pressure. In particular, the pressure sensor unit has at least two conductor path assemblies, in particular networks of conductor paths, and a functional polymer which is designed to be compressed when subjected to pressure and to produce and/or change the contact between the conductor path assemblies. Alternatively, the pressure sensor unit has at least two conductive layers with an intermediate space arranged between them, and the pressure sensor unit may be configured in such a manner that, by being subjected to pressure, the intermediate space is compressed and/or in particular the capacitance of the arrangement consisting of the two conductive layers changes.

IPC 8 full level
A61B 5/021 (2006.01); **A61B 5/02** (2006.01); **A61B 5/0285** (2006.01)

CPC (source: EP US)
A61B 5/02007 (2013.01 - EP US); **A61B 5/021** (2013.01 - EP); **A61B 5/02125** (2013.01 - US); **A61B 5/02133** (2013.01 - US); **A61B 5/02233** (2013.01 - US); **A61B 5/0285** (2013.01 - EP US); **A61B 5/029** (2013.01 - US); **A61B 5/681** (2013.01 - US); **A61B 5/02422** (2013.01 - US); **A61B 2560/0223** (2013.01 - US); **A61B 2562/0219** (2013.01 - US); **A61B 2562/0247** (2013.01 - EP US); **A61B 2562/0261** (2013.01 - EP US); **A61B 2562/028** (2013.01 - US)

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

DOCDB simple family (publication)
WO 2018167082 A1 20180920; CN 111491556 A 20200804; EP 3595521 A1 20200122; IL 269362 A 20191128; JP 2020510512 A 20200409; US 2020121201 A1 20200423

DOCDB simple family (application)
EP 2018056275 W 20180313; CN 201880031831 A 20180313; EP 18721690 A 20180313; IL 26936219 A 20190915; JP 2019571776 A 20180313; US 201816493913 A 20180313