

Title (en)

METHOD AND DEVICE FOR DETERMINING AT LEAST ONE PHYSIOLOGICAL PARAMETER

Title (de)

VERFAHREN UND GERÄT ZUR BESTIMMUNG MINDESTENS EINES PHYSIOLOGISCHEN PARAMETERS

Title (fr)

PROCÉDÉ ET APPAREIL PERMETTANT DE DÉTERMINER AU MOINS UN PARAMÈTRE PHYSIOLOGIQUE

Publication

EP 3801226 A1 20210414 (DE)

Application

EP 19725664 A 20190514

Priority

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- EP 2019062254 W 20190514

Abstract (en)

[origin: WO2019233709A1] The method is used to determine physiological parameters (P) of a patient. At a pulse measurement point on the arm of the patient: at least one pulse measurement signal (PM) of a pulse pressure wave, which propagates inside the blood vessels starting from the heart, is sensed continuously over a sensing period of at least one hour; an electrical heart measurement signal (EM) of electrical activity of the heart is sensed continuously over the sensing period; and an oscillometric or auscultatory cuff-based blood pressure measurement signal (MM) is sensed at specified points in time during the sensing period. Values for a first pulse wave propagation velocity (PWG1) and for a first blood pressure (BD1) are calculated continuously over the sensing period on the basis of the sensed pulse measurement signal (PM) and the sensed electrical heart measurement signal (EM), wherein the sensed cuff-based blood pressure measurement signal (MM) is used for calibration in the calculation of the values for the first blood pressure (BD1). The sensed pulse measurement signal (PM) is divided into a first pulse measurement signal portion (PM1) of a pulse pressure wave arriving directly from the heart, and into a second pulse measurement signal portion (PM2) of a reflected pulse pressure wave. Values for a second pulse wave propagation velocity (PWG2) are calculated continuously over the sensing period on the basis of the first and the second pulse measurement signal portions (PM1, PM2). The first and the second pulse wave propagation velocities (PWG1, PWG2) and the first blood pressure (BD1) are physiological parameters (P) that are continuously determined over the sensing period.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2019233709A1

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