Title (en)

METHOD FOR DETERMINING A CURRENT GLUCOSE VALUE IN A TRANSPORTED FLUID

Title (de)

VERFAHREN ZUM BESTIMMEN EINES AKTUELLEN GLUKOSEWERTS IN EINEM TRANSPORTFLUID

Title (fr)

PROCÉDÉ POUR DÉTERMINER UNE VALEUR INSTANTANÉE DE GLUCOSE DANS UN FLUIDE DE TRANSPORT

Publication

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Application

EP 22717726 A 20220322

Priority

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Abstract (en)

[origin: CA3213064A1] The invention relates to a method for, in particular, continuously determining a current glucose value in a transport fluid, in particular blood, of an organism, comprising the steps ofa) Determining a measurement series using a sensor device, comprising atleast two measured values for a tissue glucose value that are spaced apartin time in the tissue surrounding the transport fluid,b) determining the tissue glucose value using the determined series ofmeasurements based on a measurement model in the form of a linear or non-linear function, with the measurement model measuring values of the sensordevice measuring tissue glucose values taking into account at least onemeasurement noise value are assigned,c) providing at least one state transition model, with the at least one statetransition model being used to assign at least one glucose value in thetransport fluid to the determined tissue glucose values, taking into account atleast one process noise value, andd) estimating the current glucose value in the transport fluid based on anapproximation of at least one provided state transition model and thedetermined tissue glucose value using at least one Kalman filter in the caseof a measurement model in the form of a linear function or at least oneextended Kalman filter Case of a measurement model in the form of a non-linear function.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2022199765A1

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