

Title (en)

SAFEGUARDING TECHNIQUES FOR A CLOSED-LOOP INSULIN INFUSION SYSTEM

Title (de)

SICHERHEITSVERFAHREN FÜR EIN GESCHLOSSENES INSULININFUSIONSSYSTEM

Title (fr)

TECHNIQUES DE SÉCURITÉ POUR SYSTÈME DE PERFUSION D'INSULINE EN BOUCLE FERMÉE

Publication

EP 2891089 A2 20150708 (EN)

Application

EP 13753741 A 20130814

Priority

- US 201261694950 P 20120830
- US 201261694961 P 20120830
- US 201361812874 P 20130417
- US 201313870902 A 20130425
- US 201313870907 A 20130425
- US 201313870910 A 20130425
- US 201313966109 A 20130813
- US 201313966101 A 20130813
- US 201313966114 A 20130813
- US 201313966120 A 20130813
- US 2013054996 W 20130814

Abstract (en)

[origin: WO2014035672A2] Processor-implemented methods of controlling an insulin infusion device for a user are provided here. A first method obtains and analyzes calibration factors (and corresponding timestamp data) for a continuous glucose sensor, and regulates entry into a closed-loop operating mode of the infusion device based on the calibration factors and timestamp data. A second method obtains a most recent sensor glucose value and a target glucose setpoint value for the user at the outset of the closed-loop mode. The second method adjusts the closed-loop insulin infusion rate over time, in response to the sensor glucose value and the setpoint value. A third method calculates an upper insulin limit that applies to the insulin infusion rate during the closed-loop mode. The insulin limit is calculated based on a fasting blood glucose value of the user, a total daily insulin value of the user, and fasting insulin delivery data for the user.

IPC 8 full level

G06F 19/00 (2011.01)

CPC (source: EP KR US)

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Citation (search report)

See references of WO 2014035672A2

Citation (examination)

- US 2010057041 A1 20100304 - HAYTER GARY [US]
- US 2009112478 A1 20090430 - MUELLER JR JOHN C [US], et al

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