

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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**US 2013054996 W 20130814**; AU 2013309344 A 20130814; CA 2882300 A 20130814; CA 2884997 A 20130814; CA 2885003 A 20130814; CN 201380055567 A 20130814; CN 201510274455 A 20130814; CN 201510275978 A 20130814; EP 13753741 A 20130814; EP 15157701 A 20130814; EP 15157703 A 20130814; JP 2015130885 A 20150630; JP 2015130886 A 20150630; JP 2015529845 A 20130814; KR 20157006674 A 20130814; KR 20157008489 A 20130814; KR 20157008517 A 20130814