

Title (en)

A METHOD OF NON-INVASIVE MEASUREMENT OF SUGAR IN BLOOD AND CONSTRUCTION FOR ITS REALISATION

Title (de)

VERFAHREN ZUR NICHTINVASIVEN MESSUNG VON ZUCKER IM BLUT UND KONSTRUKTION ZU SEINER UMSETZUNG

Title (fr)

PROCEDE DE MESURE NON-INVASIVE DE LA CONCENTRATION DE SUCRE DANS LE SANG ET CONSTRUCTION PERMETTANT SA REALISATION

Publication

EP 1796535 A1 20070620 (EN)

Application

EP 05786969 A 20050921

Priority

- IB 2005002794 W 20050921
- RU 2004128624 A 20040924

Abstract (en)

[origin: WO2006032981A1] A method of non-invasive measurement of sugar in blood and construction for its realization. The invention refers to technique of measuring devices for noninvasive determination by physical-chemical methods of presence in organisms of human or animal organic and non-organic inclusions and measuring their concentration, for measuring sugar concentration in human blood in particular. The invention is designed for creation of a cheap and portable construction of broad application, using which any person or medical person is able to determine sugar concentration in blood, without sampling said blood. Above mentioned possibilities of the device in proposed device are implemented on the basis of using laser absorption spectroscopy, photo-physical effects of excitation in organic molecules by laser radiation electron and spin-oscillatory transitions, causing big organic molecules of live organism to emit fluorescent and conversion radiation, and resonant absorption of said radiation in solution of substrate under investigation when laser radiation is scattered on human tissues and part of scattered radiation is resonantly absorbed by investigated substrate solution.

IPC 8 full level

A61B 5/00 (2006.01)

CPC (source: EP)

A61B 5/14532 (2013.01); **A61B 5/1455** (2013.01)

Citation (search report)

See references of WO 2006032981A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006032981 A1 20060330; EP 1796535 A1 20070620; RU 2004128624 A 20060310; RU 2279250 C2 20060710

DOCDB simple family (application)

IB 2005002794 W 20050921; EP 05786969 A 20050921; RU 2004128624 A 20040924