

Title (en)

RAPID MEASUREMENT OF FORMED BLOOD COMPONENT SEDIMENTATION RATE FROM SMALL SAMPLE VOLUMES

Title (de)

SCHNELLE MESSUNG DER SEDIMENTATIONSRATE VON FESTEN BLUTKOMPONENTEN AUS KLEINEN PROBENMENGEN

Title (fr)

MESURE RAPIDE DE LA VITESSE DE SÉDIMENTATION DES COMPOSANTS SANGUINS FORMÉS, À PARTIR DE PETITS VOLUMES D'ÉCHANTILLON

Publication

EP 3097415 A4 20171129 (EN)

Application

EP 15740716 A 20150122

Priority

- US 201461930432 P 20140122
- US 2015012537 W 20150122

Abstract (en)

[origin: WO2015112768A1] Devices and methods are described for measuring formed blood component sedimentation rate. Some of the methods may use (1) centrifugal techniques for separating red blood cells from plasma and (2) video and/or still imaging capability. Both may be used alone or in combination to accelerate formed blood component sedimentation and to measure its rate. In one example, the method may advantageously enable rapid measurement of sedimentation rate using small blood sample volumes. Automated image analysis can be used to determine both sedimentation rate and hematocrit. Automated techniques may be used to compensate for effects of hematocrit on uncorrected sedimentation rate data.

IPC 8 full level

G01N 33/49 (2006.01); **B01D 21/32** (2006.01); **G01N 15/05** (2006.01); **G06K 9/78** (2006.01)

CPC (source: EP)

B01D 21/262 (2013.01); **B01D 21/30** (2013.01); **B01D 21/32** (2013.01); **G01N 15/05** (2013.01); **G01N 33/491** (2013.01); **B01L 3/5021** (2013.01); **G01N 2015/055** (2013.01)

Citation (search report)

- [Y] WO 9639618 A1 19961212 - BRIGHAM & WOMENS HOSPITAL [US]
- [X] US 2013078733 A1 20130328 - HOLMES ELIZABETH [US], et al
- [X] US 2011226045 A1 20110922 - MCQUILLAN ADRIAN CHARLES [GB]
- [Y] YVES PAWLOTSKY ET AL: "[Sigma] ESR : An Erythrocyte Sedimentation Rate Adjusted for the Hematocrit and Hemoglobin Concentration", AMERICAN JOURNAL OF CLINICAL PATHOLOGY, vol. 122, no. 5, 1 November 2004 (2004-11-01), US, pages 802 - 810, XP055415688, ISSN: 0002-9173, DOI: 10.1309/8H4L45F5G0G1VKY1
- [A] SURESH G. SHELAT ET AL: "Differences in Erythrocyte Sedimentation Rates Using the Westergren Method and a Centrifugation Method", AMERICAN JOURNAL OF CLINICAL PATHOLOGY, vol. 130, no. 1, 1 July 2008 (2008-07-01), US, pages 127 - 130, XP055415701, ISSN: 0002-9173, DOI: 10.1309/E5R9P5YPHXFE3198
- See references of WO 2015112768A1

Cited by

EP3568077B1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2015112768 A1 20150730; CA 2936828 A1 20150730; CN 106170696 A 20161130; CN 106170696 B 20200320; CN 111562203 A 20200821; EP 3097415 A1 20161130; EP 3097415 A4 20171129; JP 2017504027 A 20170202; JP 2020046442 A 20200326; JP 2022043307 A 20220315; MX 2016009516 A 20161026; MX 2021013459 A 20211210

DOCDB simple family (application)

US 2015012537 W 20150122; CA 2936828 A 20150122; CN 201580015419 A 20150122; CN 202010107295 A 20150122; EP 15740716 A 20150122; JP 2016547876 A 20150122; JP 2019236592 A 20191226; JP 2022000958 A 20220106; MX 2016009516 A 20150122; MX 2021013459 A 20160721