

Title (en)
METHOD AND DEVICE FOR DETERMINING VITAL PARAMETERS

Title (de)
VERFAHREN UND VORRICHTUNG ZUR BESTIMMUNG VON VITALPARAMETERN

Title (fr)
PROCÉDÉ ET DISPOSITIF DE DÉTERMINATION DE PARAMÈTRES VITAUX

Publication
EP 2916724 A1 20150916 (DE)

Application
EP 13801993 A 20131108

Priority

- DE 102012021940 A 20121111
- DE 102013001553 A 20130130
- DE 102013005610 A 20130404
- DE 102013008442 A 20130520
- EP 2013073362 W 20131108

Abstract (en)
[origin: WO2014072461A1] The invention relates to a method for determining vital parameters of a human body by means of a device (10) with at least one optical recording unit (11) and a computing unit (12), said method comprising the following steps: recording a sequence of individual image data of a single limited area of the skin (30) of the human body by means of the optical recording unit (11); evaluating the image data, including determining a pulse wave transit time; and determining vital parameters of the human body from the image data by means of the computing unit (12). The invention further relates to a device for determining vital parameters. In addition, the invention relates to a method for authenticating a person and to a method for identifying a reaction of a person.

IPC 8 full level
A61B 5/021 (2006.01); **A61B 5/00** (2006.01); **A61B 5/0205** (2006.01)

CPC (source: EP RU US)
A61B 5/0077 (2013.01 - EP RU US); **A61B 5/0205** (2013.01 - EP RU US); **A61B 5/021** (2013.01 - EP US); **A61B 5/02125** (2013.01 - EP RU US); **G06T 7/0012** (2013.01 - RU US); **G06T 7/0016** (2013.01 - EP RU US); **G06T 7/20** (2013.01 - RU US); **G06V 40/70** (2022.01 - US); **G16H 30/40** (2018.01 - EP US); **G16H 40/63** (2018.01 - EP US); **G16H 40/67** (2018.01 - EP US); **H04N 23/56** (2023.01 - RU US); **A61B 5/6898** (2013.01 - EP US); **A61B 2562/0204** (2013.01 - EP US); **A61B 2562/0219** (2013.01 - EP US); **G06T 2200/04** (2013.01 - US); **G06T 2207/10012** (2013.01 - US); **G06T 2207/10024** (2013.01 - EP US); **G06T 2207/20021** (2013.01 - EP US); **G06T 2207/30076** (2013.01 - EP US); **G06T 2207/30088** (2013.01 - US)

Citation (examination)

- EP 2000084 A1 20081210 - SONY CORP [JP]
- HAO-YU WU ET AL: "Eulerian video magnification for revealing subtle changes in the world", ACM TRANSACTIONS ON GRAPHICS, vol. 31, no. 4, 1 July 2012 (2012-07-01), pages 1 - 8, XP055124867, ISSN: 0730-0301, DOI: 10.1145/2185520.2185561
- MACKOVÁ, HANA: "Pulse Wave Velocity in Arteries", 12 September 2012 (2012-09-12), Retrieved from the Internet <URL:https://dSPACE.cvut.cz/handle/10467/13174> [retrieved on 20170418]
- See also references of WO 2014072461A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2014072461 A1 20140515; BR 112015010677 A2 20170711; CA 2891194 A1 20140515; CN 105338890 A 20160217; CN 105338890 B 20181009; EP 2916724 A1 20150916; JP 2016501048 A 20160118; KR 20150095661 A 20150821; RU 2015122420 A 20170110; RU 2018118973 A 20181102; RU 2656559 C2 20180605; US 2015287187 A1 20151008; US 2018122073 A1 20180503; US 9892505 B2 20180213

DOCDB simple family (application)
EP 2013073362 W 20131108; BR 112015010677 A 20131108; CA 2891194 A 20131108; CN 201380069939 A 20131108; EP 13801993 A 20131108; JP 2015541151 A 20131108; KR 20157015355 A 20131108; RU 2015122420 A 20131108; RU 2018118973 A 20131108; US 201314441917 A 20131108; US 201815859862 A 20180102