

Title (en)

ANALYTE SENSOR AND SYSTEM WITH MULTIPLE DETECTOR ELEMENTS THAT CAN TRANSMIT OR RECEIVE

Title (de)

ANALYTSSENSOR UND SYSTEM MIT MEHREREN DETEKTORELEMENTEN, DIE SENDEN ODER EMPFANGEN KÖNNEN

Title (fr)

CAPTEUR D'ANALYTE ET SYSTÈME COMPRENANT DE MULTIPLES ÉLÉMENTS DE DÉTECTION QUI PEUVENT ÉMETTRE OU RECEVOIR

Publication

**EP 4099904 A4 20240228 (EN)**

Application

**EP 21751141 A 20210201**

Priority

- US 202062971041 P 20200206
- US 202062971048 P 20200206
- IB 2021050805 W 20210201

Abstract (en)

[origin: WO2021156734A1] An analyte sensor includes a detector array having at least two detector elements, for example antennas or light emitting diodes, that transmit electromagnetic energy. Any one or more of the detector elements in the detector array can be selectively controlled to function as a transmit detector element that functions to transmit a generated transmit signal in a radio or microwave or visible light frequency range of the electromagnetic spectrum into a target containing an analyte of interest. In addition, any one or more of the detector elements in the detector array can be selectively controlled to function as a receive detector element that functions to detect a response resulting from transmission of the transmit signal by the transmit detector element into the target. A scan routine can be implemented that includes a plurality of scans, where each scan uses a different combination of the detector elements to transmit a signal and detect a response.

IPC 8 full level

**A61B 5/145** (2006.01); **A61B 5/00** (2006.01); **A61B 5/1455** (2006.01); **G01N 33/49** (2006.01); **G16H 40/67** (2018.01)

CPC (source: EP)

**A61B 5/0507** (2013.01); **A61B 5/14532** (2013.01); **A61B 5/1455** (2013.01); **A61B 5/7225** (2013.01); **G01N 22/00** (2013.01); **A61B 5/6802** (2013.01); **A61B 5/7264** (2013.01); **A61B 5/7405** (2013.01); **A61B 5/742** (2013.01); **A61B 5/7455** (2013.01); **A61B 2562/046** (2013.01); **G01N 33/49** (2013.01); **Y02A 90/10** (2018.01)

Citation (search report)

- [X] US 2019104939 A1 20190411 - COSTANTINE JOSEPH [US], et al
- [X] US 2017164878 A1 20170615 - CONNOR ROBERT A [US]
- [X] US 2017188914 A1 20170706 - DUTTA ACHYUT K [US]
- [X] US 2019357800 A1 20191128 - BOSUA PHILLIP [US]
- [X] STOJANOVIC R ET AL: "A LED-LED-based photoplethysmography sensor", PHYSIOLOGICAL MEASUREMENT., vol. 28, no. 6, 3 May 2007 (2007-05-03), GB, pages N19 - N27, XP093119631, ISSN: 0967-3334, DOI: 10.1088/0967-3334/28/6/N01
- See also references of WO 2021156734A1

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 2021156734 A1 20210812**; CN 115361905 A 20221118; EP 4099904 A1 20221214; EP 4099904 A4 20240228; JP 2023512580 A 20230327

DOCDB simple family (application)

**IB 2021050805 W 20210201**; CN 202180024441 A 20210201; EP 21751141 A 20210201; JP 2022548137 A 20210201