Title (en)

SYSTEMS AND METHODS FOR NON-INVASIVE DETERMINATION OF COVID-19 CORONAVIRUS INFECTION

Title (de)

SYSTEME UND VERFAHREN ZUR NICHTINVASIVEN BESTIMMUNG EINER COVID-19-CORONAVIRUS-INFEKTION

Title (fr)

SYSTÈMES ET MÉTHODES POUR LA DÉTERMINATION NON INVASIVE DE L'INFECTION PAR LE CORONAVIRUS COVID-19

Publication

EP 4121760 A4 20240320 (EN)

Application

EP 21771884 A 20210319

Priority

- US 202062992627 P 20200320
- US 202063000077 P 20200326
- IL 27370920 A 20200331
- US 202063002404 P 20200331
- US 202063012672 P 20200420
- US 202063012682 P 20200420
- US 202063015714 P 20200427
- US 202063015723 P 20200427
- US 202063032732 P 20200601
- US 202063032735 P 20200601
- US 202063038920 P 20200615
- US 202063038921 P 20200615
- US 202063051398 P 20200714
- US 202063051399 P 20200714
- US 202063057318 P 20200728
- US 202063057319 P 20200728
- US 202063075316 P 20200908
- US 202063075324 P 20200908
- US 202063111089 P 20201109
- US 202063111091 P 20201109
- IB 2021052327 W 20210319

Abstract (en)

[origin: WO2021186412A1] A high throughput method for label-free, noncontact, noninvasive, and nondestructive detection of at least one virus infected or virus free individual from at least one tested individual is provided. The method includes collecting a sample from exhaled breath of a subject for analysis of the sample. The collecting includes the subject exhaling into at least one sampler and collecting aerosols and/or any airborne compound from the exhaled breath by passing the exhaled breath through a metamaterial membrane within the sampler. The metamaterial membrane is arranged transverse to a flow of exhaled breath through the sampler. The method further includes analyzing the sample for detection of at least one virus infected individual from at least one tested individual.

IPC 8 full level

G01N 21/3581 (2014.01); **G01N 21/552** (2014.01); **G01N 33/497** (2006.01); **G06N 3/08** (2023.01); **G06N 20/00** (2019.01); G01N 21/77 (2006.01)

CPC (source: EP)

G01N 21/3581 (2013.01); **G01N 21/553** (2013.01); **G01N 33/497** (2013.01); **G06N 20/00** (2019.01); G01N 2021/775 (2013.01); G01N 2201/1296 (2013.01); G06N 3/08 (2013.01)

Citation (search report)

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- [E] WO 2021191768 A2 20210930 - RAM THZ SOLUTIONS PTE LTD [SG]
- [IA] PARK S. J. ET AL: "Sensing viruses using terahertz nano-gap metamaterials", BIOMEDICAL OPTICS EXPRESS, vol. 8, no. 8, 7 July 2017 (2017-07-07), United States, pages 3551, XP093127301, ISSN: 2156-7085, DOI: 10.1364/BOE.8.003551
- See also references of WO 2021186412A1

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DOCDB simple family (application)

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