

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
11 January 2024 (11.01.2024)



(10) International Publication Number
WO 2024/010526 A1

(51) International Patent Classification:
C12Q 1/04 (2006.01) *G01N 21/65* (2006.01)

(21) International Application Number:
PCT/SG2023/050472

(22) International Filing Date:
05 July 2023 (05.07.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10202250373D 05 July 2022 (05.07.2022) SG

(71) Applicants: **AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH** [SG/SG]; 1 Fusionopolis Way, #20-10, Connexis North Tower, Singapore 138632 (SG). **NATIONAL UNIVERSITY HOSPITAL (SINGAPORE) PTE LTD** [SG/SG]; 1E Kent Ridge Road, #13-00, Singapore 119228 (SG).

(72) Inventors: **OLIVO, Malini**; c/o Institute of Bioengineering and Bioimaging, 11 Biopolis Way, #01-02 Helios Building, Singapore 138667 (SG). **CHOO LANI, Mahesh Arjandas**; c/o National University Hospital (Singapore) Pte Ltd, 1E Kent Ridge Road, #13-00, Singapore 119228 (SG). **WANG, Yusong**; c/o Institute of Bioengineering and Bioimaging, 11 Biopolis Way, #01-02 Helios Building, Singapore 138667 (SG). **PERUMAL, Jayakumar**; c/o Institute of Bioengineering and Bioimaging, 11 Biopolis Way, #01-02 Helios Building, Singapore 138667 (SG). **DEV, Kapil**; c/o Institute of Bioengineering and Bioimaging, 11 Biopolis Way, #01-02 Helios Building, Singapore 138667 (SG). **BALASUNDARAM, Ghayathri**; c/o Institute of Bioengineering and Bioimaging, 11 Biopolis Way, #01-02 Helios Building, Singapore 138667 (SG). **MOOTHANCHERY, Mo-hesh**; c/o Institute of Bioengineering and Bioimaging, 11 Biopolis Way, #01-02 Helios Building, Singapore 138667 (SG). **UNNIMADHAVA KURUP SOUDAMINI AMMA, Dinish**; c/o Institute of Bioengineering and Bioimaging, 11 Biopolis Way, #01-02 Helios Building, Singapore 138667 (SG).

(54) Title: METHOD OF IDENTIFYING ONE OR MORE BACTERIA

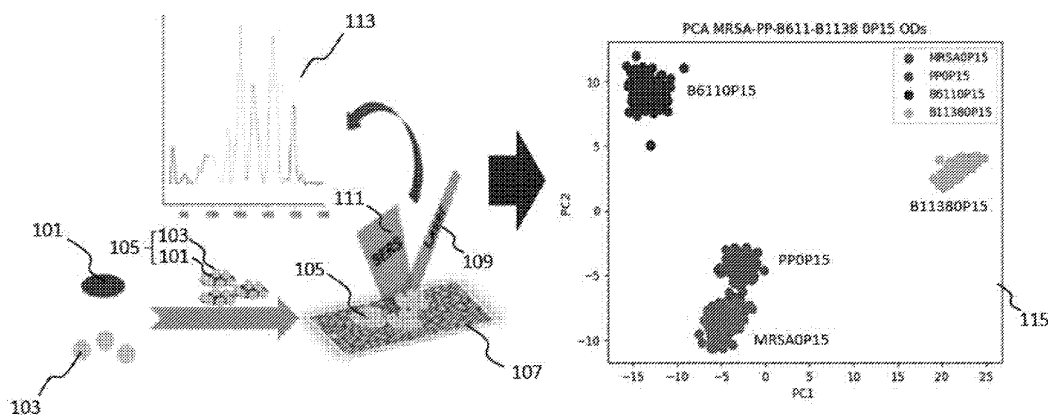


FIG. 1

(57) Abstract: A method of identifying one or more bacteria from a sample, wherein the one or more bacteria is suspected to be present in the sample, is provided. The method may include providing an aqueous suspension comprising a bacteria-SERS nanoparticle complex, wherein the bacteria-SERS nanoparticle complex comprises (i) a SERS nanoparticle and (ii) the one or more bacteria suspected to be present in the sample; depositing the aqueous suspension comprising the bacteria-SERS nanoparticle complex on a substrate having structures coated with a SERS-active material to dispose the bacteria-SERS nanoparticle complex on the substrate; irradiating the bacteria-SERS nanoparticle complex disposed on the substrate with laser to generate one or more SERS signals; having a SERS-spectroscopic module operable to render one or more SERS spectral data corresponding to the one or more SERS signals; and having a process module operable to identify the presence or absence of the one or more bacteria from the one or more SERS spectral data.

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ing, 11 Biopolis Way, #01-02 Helios Building, Singapore 138667 (SG).

(74) **Agent: VIERING, JENTSCHURA & PARTNER LLP;**
P.O. Box 1088, Rochor Post Office, Rochor Road, Singapore 911833 (SG).

(81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))