

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
13 July 2023 (13.07.2023)



(10) International Publication Number
WO 2023/131910 A3

(51) International Patent Classification:

C12Q 1/6806 (2018.01) G01N 33/50 (2006.01)
C12Q 1/25 (2006.01)

(21) International Application Number:

PCT/IB2023/050130

(22) International Filing Date:

07 January 2023 (07.01.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/297,241 07 January 2022 (07.01.2022) US
63/406,745 15 September 2022 (15.09.2022) US

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(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, 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.

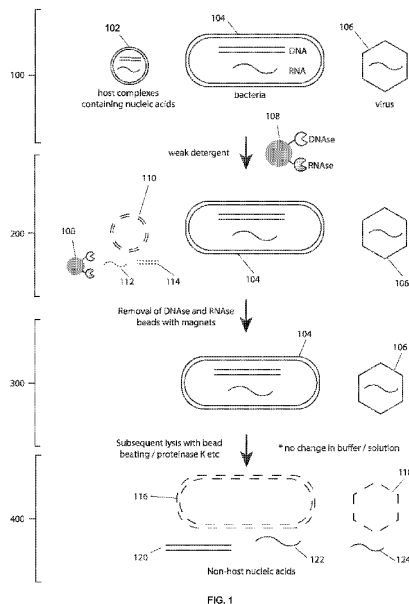
(84) Designated States (unless otherwise indicated, for every kind of regional protection available):

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).

Declarations under Rule 4.17:

— as to the identity of the inventor (Rule 4.17(i))

(54) Title: RAPID PATHOGEN IDENTIFICATION AND DETECTION MOLECULAR DIAGNOSTICS TECHNOLOGY



(57) Abstract: The present invention provides a method of detecting non-host species in a host sample. The host sample is contacted with magnetic particles coupled to enzymes to degrade cell-free host nucleic acids present in the host sample, wherein the magnetic particles coupled to enzymes are capable of degrading both DNA and RNA. A magnetic field is applied to remove the magnetic particles coupled to enzymes from the host sample. A DNA and RNA library is created from the degraded sample in a one-pot process, followed by detection of the presence of non-host nucleic acids from the DNA and RNA library.

WO 2023/131910 A3

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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))*
- *with sequence listing part of description (Rule 5.2(a))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*

(88) Date of publication of the international search report:

21 September 2023 (21.09.2023)