

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
01 February 2024 (01.02.2024)

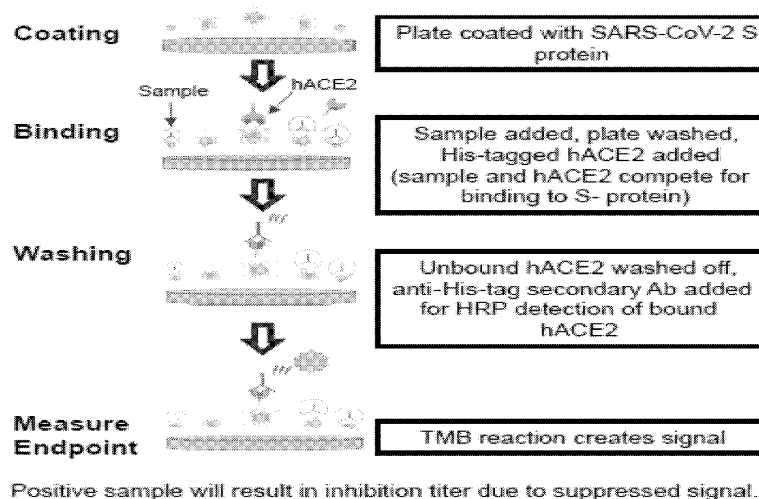


(10) International Publication Number
WO 2024/026360 A2

- (51) **International Patent Classification:**
C12Q 1/70 (2006.01) *C07K 14/165* (2006.01)
- (21) **International Application Number:**
PCT/US2023/071044
- (22) **International Filing Date:**
26 July 2023 (26.07.2023)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/392,390 26 July 2022 (26.07.2022) US
63/405,653 12 September 2022 (12.09.2022) US
63/428,991 30 November 2022 (30.11.2022) US
- (71) **Applicant:** NOVAVAX, INC. [US/US]; 21 Firstfield Road, Gaithersburg, Maryland 20878 (US).
- (72) **Inventors:** PLESTED, Joyce S.; c/o Novavax, Inc., 21 Firstfield Road, Gaithersburg, Maryland 20878 (US). KALKERI, Raj; c/o Novavax, Inc., 21 Firstfield Road, Gaithersburg, Maryland 20878 (US).
- (74) **Agent:** BROWN, Fraser et al.; Cooley LLP, 1299 Pennsylvania Ave., Suite 700, Washington, District of Columbia 20004 (US).
- (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,

(54) **Title:** ACE2 INHIBITION ASSAY FOR EVALUATION OF VACCINE IMMUNOGENICITY

Fig. 1



(57) **Abstract:** Disclosed herein is an assay for measuring inhibition of binding between SARS-CoV-2 Spike (S) glycoproteins and hACE2. Also provided herein are methods of using the assay to evaluate the efficacy of COVID-19 vaccines.

[Continued on next page]

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 applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*
- *with sequence listing part of description (Rule 5.2(a))*