

(19) World Intellectual Property
Organization
International Bureau



WIPO | PCT



(10) International Publication Number

WO 2021/216787 A9

(43) International Publication Date
28 October 2021 (28.10.2021)

(51) International Patent Classification:

G16B 15/30 (2019.01) G16B 40/20 (2019.01)
G16B 40/10 (2019.01)

(21) International Application Number:

PCT/US2021/028500

(22) International Filing Date:

21 April 2021 (21.04.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/013,480	21 April 2020 (21.04.2020)	US
63/090,498	12 October 2020 (12.10.2020)	US
63/111,395	09 November 2020 (09.11.2020)	US

(71) Applicant: **REGENERON PHARMACEUTICALS, INC.** [US/US]; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US).

(72) Inventors: **ZHANG, Wen**; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **HE, Jing**; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **GUP-**

TA, Namita; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **ATWAL, Gurinder S.**; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **HAWKINS, Peter**; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US).

(74) Agent: **BROWN, Charley F.** et al.; Ballard Spahr LLP, 999 Peachtree Street, Suite 1600, Atlanta, Georgia 30309 (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, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, 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, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ,

(54) Title: METHODS AND SYSTEMS FOR ANALYSIS OF RECEPTOR INTERACTION

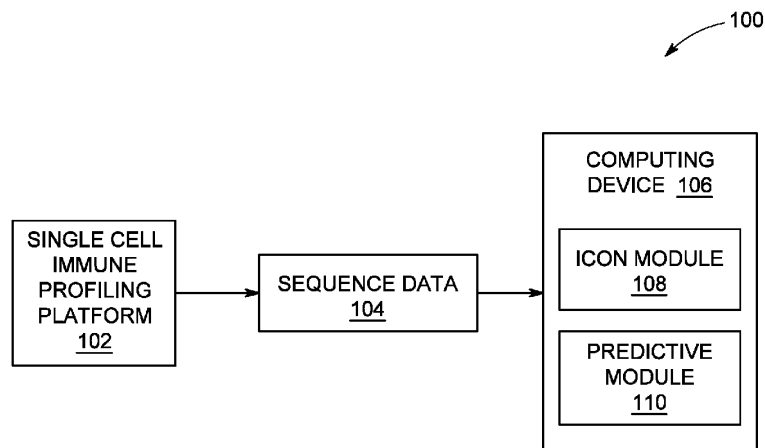


FIG. 1

(57) Abstract: A computational framework for high-throughput mapping, validating, and predicting receptor sequence interactions is described.

[Continued on next page]

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, 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 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:

- *with international search report (Art. 21(3))*

(48) Date of publication of this corrected version:

20 October 2022 (20.10.2022)

(15) Information about Correction:

see Notice of 20 October 2022 (20.10.2022)