



- (51) **International Patent Classification:**
A61J 1/16 (2023.01) *A61M 5/178* (2006.01)
A61J 1/18 (2023.01) *A61J 1/06* (2006.01)
A61J 1/20 (2006.01)
- (21) **International Application Number:**
PCT/US2023/060743
- (22) **International Filing Date:**
17 January 2023 (17.01.2023)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/300,554 18 January 2022 (18.01.2022) US
- (71) **Applicant: REGENERON PHARMACEUTICALS, INC.** [US/US]; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US).
- (72) **Inventors: GRYGUS, Bryan;** c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **HALBIG, Daniel;** c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **HOUDE, Eric;** c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **SINGH, Prithvi;** c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US).

eron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **WAECHTER, Paige**; c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **VALDEZ, Parker**; c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **SPENCER, Sandy**; c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **KUCHIBHATLA, Sindhuja**; c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **LANGLEY, Trevor**; c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US).

- (74) **Agent:** NGUYEN, Jacqueline et al.; c/o Bookoff McAndrews, PLLC, 2020 K Street, N.W., Suite 400, Washington, District of Columbia 20006 (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, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, OA, RO, RS,

- (54) Title:** VIAL ADAPTER ASSEMBLY

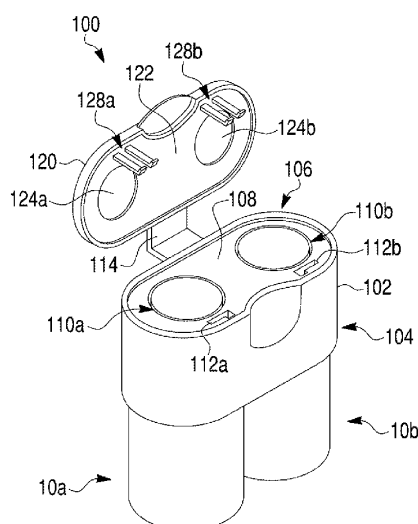


FIG. 1

(57) Abstract: A vial adapter assembly that includes a housing, a first receptacle formed within the housing and configured to receive a first vial within the housing, and a second receptacle formed within the housing and configured to receive a second vial within the housing. An opening of the first receptacle and an opening of the second receptacle is in fluid communication with the upper surface of the housing. The vial adapter assembly includes a cap that is coupled and movable relative to the housing from a closed configuration to an open configuration. In the closed configuration, the cap is configured to cover the opening of the first receptacle and the opening of the second receptacle on the upper surface. In the open configuration, the cap is configured to uncover the opening of the first receptacle and the opening of the second receptacle, and expose the upper surface.

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, 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))*