

(51) International Patent Classification:
G01N 33/68 (2006.01)(21) International Application Number:
PCT/US2021/020133(22) International Filing Date:
27 February 2021 (27.02.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/982,346 27 February 2020 (27.02.2020) US
63/021,181 07 May 2020 (07.05.2020) US
63/073,125 01 September 2020 (01.09.2020) US(71) Applicant: **REGENERON PHARMACEUTICALS, INC.** [US/US]; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US).(72) Inventors: **XIAO, Hui**; c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **ZHANG, Sisi**; c/o Regeneron Pharmaceuti-

cals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US).

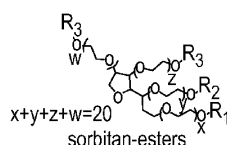
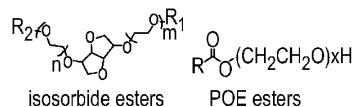
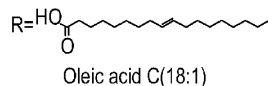
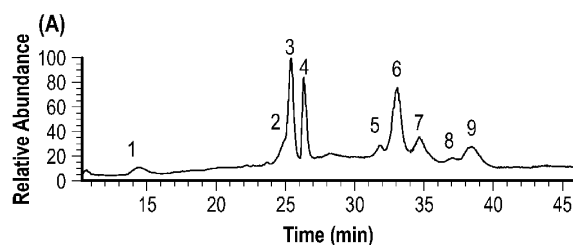
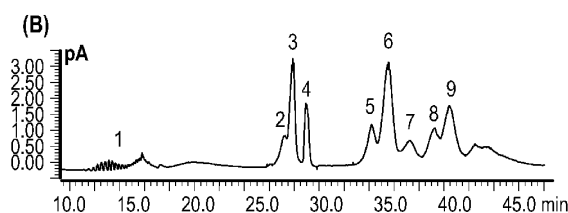
(74) Agent: **CAPLAN, Jonathan S.**; Kramer Levin Naftalis & Frankel LLP, 1177 Avenue of the Americas, New York, New York 10036 (US).

(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, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

(54) Title: METHODS OF REDUCING POLYSORBATE DEGRADATION IN DRUG FORMULATIONS

FIG. 1



(57) Abstract: The present disclosure pertains to compositions with reduced residual amount of lipases and methods of making such compositions. In particular, it pertains to compositions and methods of such making compositions by depleting the compositions of certain lipases, such as, liver carboxylesterase B-1-like protein and liver carboxylesterase 1-like protein.

[Continued on next page]

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))*
- *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))*