



(51) International Patent Classification:

A61K 31/216 (2006.01) A61P 9/12 (2006.01)
A61K 9/16 (2006.01)

(21) International Application Number:

PCT/US2024/020472

(22) International Filing Date:

18 March 2024 (18.03.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/452,985 17 March 2023 (17.03.2023) US

(71) Applicant: **INSMED INCORPORATED** [US/US]; 700 US Highway 202/206, Bridgewater, New Jersey 08807 (US).

(72) Inventors: **CIPOLLA, David**; c/o Insmmed Incorporated, 700 US Highway 202/206, Bridgewater, New Jersey 08807 (US). **LI, Zhili**; c/o Insmmed Incorporated, 700 US Highway 202/206, Bridgewater, New Jersey 08807-1704 (US). **PALWAI, Naveen**; c/o Insmmed Incorporated, 700 US Highway 202/206, Bridgewater, New Jersey 08807-1704 (US). **AMIN, Harshh**; c/o Insmmed Incorporated, 700 US Highway 202/206, Bridgewater, New Jersey 08807-1704 (US).

SULLIVAN, Eugene; c/o Insmmed Incorporated, 700 US Highway 202/206, Bridgewater, New Jersey 08807-1704 (US). **FERNANDEZ, Carlos**; c/o Insmmed Incorporated, 700 US Highway 202/206, Bridgewater, New Jersey 08807-1704 (US).

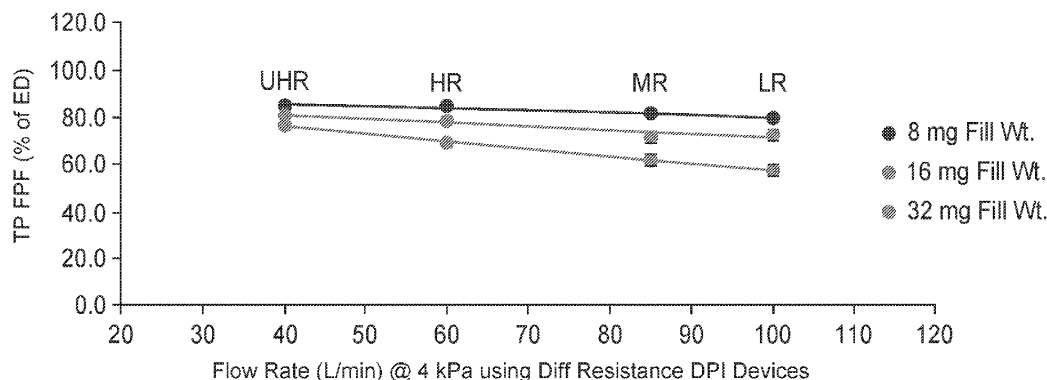
(74) Agent: **TUSCAN, Michael S.** et al.; Cooley LLP, 1299 Pennsylvania Avenue, N.W., Suite 700, Washington, District of Columbia 20004 (US).

(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,

(54) Title: SPRAY DRIED TREPROSTINIL FORMULATION

FIG. 8A



(57) Abstract: The present disclosure provides aerosol properties of a powder composition administered via a dry powder inhaler, as well as spray drying processes. Also provided is a method for treating pulmonary hypertension (PH) in a patient comprising administering once daily to the lungs of a patient an effective amount of the powder composition via inhalation with the dry powder inhaler. A system for treating PH is further provided using the powder composition and the dry powder inhaler.

[Continued on next page]

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))