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- (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.

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- (54) **Title:** CRYOPRESERVED PLATELETS, COLLECTIONS THEREOF, AND PROCESSES FOR PREPARING THE SAME

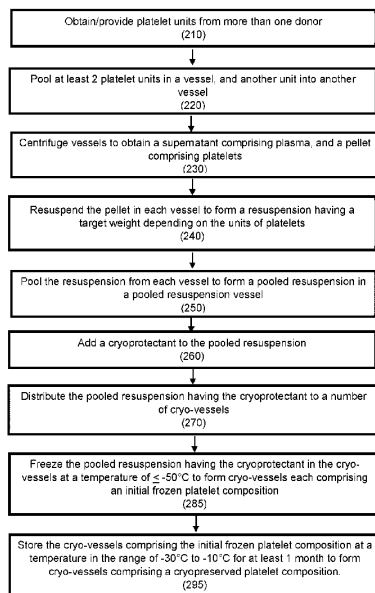


FIG. 2B

- (57) **Abstract:** The present disclosure provides processes for preparing cryopreserved platelets, compositions comprising frozen platelets in a cryopreservation medium, and a collection of cryo-vessels comprising cryopreserved platelets. In some aspects, provided herein are processes for preparing cryopreserved platelets from a platelet pool of more than 1 donor to provide collections of cryopreserved platelets with improved vial to vial and lot to lot consistency for example, in DMSO concentration. Also provided herein is a collection of cryo-vessels, each comprising cryopreserved platelets having a biomolecule profile indicative of more than 1 platelet donor. Furthermore, provided herein are compositions comprising frozen platelets that when stored at a temperature in a range of -10°C to -30°C, for at least 1 month are capable of yielding a platelet count of at least 1.0 x 10¹¹/35 ml of the composition and other recited properties

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