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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

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(54) Title: POLYMER PRODUCTION AT SUPERCRITICAL CONDITIONS

(57) Abstract: This invention relates to a process to polymerize olefins comprising contacting, in a polymerization system, olefins having three or more carbon atoms with a catalyst compound, activator, optionally comonomer, and optionally diluent or solvent, at a temperature above the cloud point temperature of the polymerization system and a pressure no lower than 10MPa below the cloud point pressure of the polymerization system, where the polymerization system comprises any comonomer present, any diluent or solvent present, the polymer product, where the olefins having three or more carbon atoms are present at 40 weight % or more. This invention also relates to polymers produced herein including a propylene polymer having a 1,3 regio defect population of greater than 5 per 10,000 monomer units, a melting point of 70°C or more, a g' of 0.97 or more and an Mw greater than 10,000.

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