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(21) International Application Number: PCT/US99/01363 (22) International Filing Date: 21 January 1999 (21.01.99) (30) Priority Data: 60/074,419 11 February 1998 (11.02.98) US (71) Applicant: THE DOW CHEMICAL COMPANY [US/US]; 2030 Dow Center, Midland, MI 48674 (US). (72) Inventors: CAMPBELL, Richard, E., Jr.; 5301 Woodview Pass, Midland, MI 48642-3111 (US). DEVORE, David, D.; 4881 East Shaffer Road, Midland, MI 48642 (US). PEIL, Kevin, P.; 4636 Eight Mile Road, Auburn, MI 48611 (US). TIMMERS, Francis, J.; 4605 Lund Drive, Midland, MI 48642 (US). (74) Agent: DELINE, Douglas, N.; Patent Dept., P.O. Box 1967, Midland, MI 48641-1967 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: IMPROVED OLEFIN POLYMERIZATION PROCESS (57) Abstract A process for preparing homopolymers and copolymers of addition polymerizable monomers, or mixtures of such monomers, and the resulting polymer, wherein the process comprising contacting said monomer or mixture under high monomer conversion polymerization conditions with a catalyst composition comprising: a) a catalyst system comprising a Group 3-10 metal complex; and c) a silane, or hydrocarbylsilane corresponding to the formula: J_jSiH_{4-j} or $A_nJ_jSiH_{4-(n+j)}$ wherein: J is C_{1-40} hydrocarbyl, A is a C_{2-20} alkenyl group, n is 1 or 2, and j is 0 or 1; wherein the polymer comprises from 0.1 to 100 long chain branches per 10,000 carbons, and at least some of which comprise a silane branching center.		