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(21) International Application Number: PCT/EP98/06732 (22) International Filing Date: 23 October 1998 (23.10.98) (30) Priority Data: 97203332.8 29 October 1997 (29.10.97) EP (71) Applicant (for all designated States except US): MONTELL TECHNOLOGY COMPANY B.V. [NL/NL]; Hoeksteen 66, NL-2132 MS Hoofddorp (NL). (72) Inventors; and (75) Inventors/Applicants (for US only): HORTON, Andrew, D. [GB/NL]; Titiaanstraat 1, NL-1077 RC Amsterdam (NL). ② VAN BAAR, Jan, F. [NL/NL]; De Terp 45, NL-1911 AB Uitgeest (NL). ③ SCHUT, Peter, A. [NL/NL]; Forelstraat 26, NL-1317 PT Almere (NL). ④ VAN KESSEL, Gerard, M., M. [NL/NL]; Koningsspil 6, NL-4191 TB Geldermalsen (NL). ⑤ VON HEBEL, Klaas, L. [NL/NL]; Bernard van Beeklaan 40, NL-1241 AH Kortenhoef (NL). (74) Agent: ZANOLI, Enrico; Montell Italia S.p.A., Via Pergolesi, 25, I-20124 Milano (IT).		(81) Designated States: AU, BR, CA, CN, CZ, HU, ID, IL, JP, KR, MX, NO, PL, RU, SG, TR, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: CATALYSTS AND PROCESSES FOR THE POLYMERIZATION OF OLEFINS (57) Abstract Catalysts for the polymerization of olefins are disclosed, which comprise the product obtained by contacting: (A) a bridged and/or substituted cyclopentadienyl compound of titanium, zirconium or hafnium; (B) an organometallic aluminium compound of the formula: $Al(CH_2-CR^4R^5-CR^6R^7R^8)_wR^9H_z$ wherein R^4 is a C_1-C_{10} alkyl, alkenyl or arylalkyl group; R^5 is hydrogen or a C_1-C_{10} alkyl, alkenyl or arylalkyl group; R^6 and R^7 are C_1-C_{10} alkyl, alkenyl, aryl, arylalkyl or alkylaryl groups; R^8 is hydrogen or a C_1-C_{10} alkyl, alkenyl, aryl, arylalkyl or alkylaryl group; R^9 is a C_1-C_{10} alkyl, alkenyl or arylalkyl group, a carbon atom in the compound of formula (II) being optionally replaced by a Si or Ge atom; w is 1-3, z is 0 or 1, $q=3-w-z$, and (C) water; the molar ratio (B)/(C) being comprised between 1:1 and 100:1. These catalysts show an improved activity with respect to known catalysts, wherein different aluminium compounds are used.		