



PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C07F 17/00, 7/10, C08F 10/00	A1	(11) International Publication Number: WO 98/06728 (43) International Publication Date: 19 February 1998 (19.02.98)
(21) International Application Number: PCT/US97/13171 (22) International Filing Date: 28 July 1997 (28.07.97) (30) Priority Data: 60/023,768 ☒ 8 August 1996 (08.08.96) ☒ US (71) Applicant (for all designated States except US): THE DOW CHEMICAL COMPANY [US/US]; 2030 Dow Center, Midland, MI 48674 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): KLOSIN, Jerzy [PL/US]; 2504 Abbott Road #07, Midland, MI 48642 (US). KRUPER, William, J., Jr. [US/US]; 230 Barden Road, Sanford, MI 48657 (US). NICKIAS, Peter, N. [US/US]; 2705 Mt. Vernon Drive, Midland, MI 48642 (US). PATTON, Jasson, T. [US/US]; 1302 Whitehall Street, Midland, MI 48642 (US). WILSON, David, R. [US/US]; 1220 West Stewart Road, Midland, MI 48640 (US). (74) Agent: ROBERTS, John, H.; 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, HU, IL, IS, JP, KE, KG, 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, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published With international search report.
(54) Title: 2-HETEROATOM SUBSTITUTED CYCLOPENTADIENYL-CONTAINING METAL COMPLEXES AND OLEFIN POLYMERIZATION PROCESS ☒ (57) Abstract This invention relates to heteroatom substituted cyclopentadienyl-containing ligands, metal complexes containing these ligands, catalyst systems prepared from catalyst components comprising these metal complexes. The metal complexes contain a heteroatom-Cp bond or a ring heteroatom-Cp bond in the 2-position of the Cp. In preferred metal complexes the ligand is a 2-heteroatom substituted indenyl group. The catalyst systems for olefin polymerization may be used at high temperatures, are highly active and produce high molecular weight polymer.		