

-YNR₂, or -NR₂, wherein Y is an alkylene group containing 1 to 24 carbon atoms, wherein each R is individually selected from alkyl groups containing 1 to 20 carbon atoms. Another aspect of the invention is to provide a metallocene represented by the formula ZAMX₃, wherein Z and A are as described above, M is a Group IVB or VB transition metal, and X is a halide. Other aspects of the present invention include catalyst systems comprising the metallocenes and an organoaluminumoxane, processes for preparing the above defined ligands, metallocenes and catalyst systems, and polymerization processes employing the catalyst systems.

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**OLEFIN POLYMERIZATION
CATALYST COMPRISING A
METALLOCENE AND AN
ANHYDROUS LITHIUM
HALIDE-TREATED
ALKYLALUMINOXANE**

Sangokoya Samuel Baton Rouge, LA, UNITED STATES assigned to Albemarle Corporation

Alkylaluminumoxanes having improved catalytic activity such as when they are used in combination with metallocenes for the polymerization of alpha-olefins, are prepared by treating an organic solvent solution of an alkylaluminumoxane, such as methylaluminumoxane, with anhydrous lithium halide.

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**POLYMERIC, CATALYTICALLY
ACTIVE COMPOUNDS, THEIR
PREPARATION, AND THEIR USE AS
CATALYSTS IN THE PREPARATION
OF POLYISOCYANATES
CONTAINING URETDIONE GROUPS**

Bruchmann Bernd; Minges Roland; Schade Christia; Stiefenhofer Konrad Ludwigshafen, GERMANY assigned to BASF Aktiengesellschaft

Polymeric, catalytically active compounds comprising polymer chains to which imidazole groups are linked terminally or laterally are used as catalysts for the dimerization of isocyanates.

5565547

**CATALYST FOR THE PREPARATION
OF LINEAR CARBON
MONOXIDE/ALPHA-OLEFIN
COPOLYMERS**

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Novel catalyst compositions comprising a cationic transition metal complex of the formula (*See Patent for Tabular Presentation*) PS wherein: Pd(II) is palladium having a valence of +2; S is a synthesis solvent; L is a monodendate, bidendate or tridendate ligand or ligands having one or more bonding sites; x is an integer from 1 to 3 and is equal to the total number of ligand bonding sites; A is a weakly or non-coordinating anion capable of stabilizing the complex in its cationic form; and n is 1 or 2 and y is 2 or 1; provided that (i) when n is 1, y is 2 and when n is 2, y is 1; and (ii) when the anion A is tetrafluoroborate, the organometallic complex is not (tris(acetonitrile) palladium(II)

triphenylphosphine), bis(acetonitrile) palladium(II) bis(triphenylphosphine)), ((acetonitrile) palladium (II) tris(triphenylphosphine)) or (bis(acetonitrile)palladium(II) 1,3-bis (diphenylphosphino)propane). The new catalyst compositions are useful for the copolymerization of carbon monoxide and at least one ethylenically unsaturated hydrocarbon to produce linear alternating polymers. The rate of polymerization is enhanced by including an alcohol, such as methanol, in the polymerization mixture.

5583188

PROCESS FOR PRODUCING AN OLEFIN POLYMER OR COPOLYMER AND CATALYST COMPOSITION THEREFOR

Kashiwa Norio; Kioka Mamoru; Ushida Yoshihisa Iwakuni, JAPAN assigned to Mitsui Petrochemical Industries Ltd

As improved process for producing an olefin polymer or copolymer by using a novel catalyst composition composed of (A) a titanium catalyst component containing magnesium, titanium, halogen and an ester specified in claim 1, as an electron donor, (B) an organoaluminum compound and (C) a heterocyclic compound or a ketone specified in claim 1, as a third component. The combination parameter of the ester in (A) and the (C) component is new, and the process can give a highly stereospecific olefin polymer or copolymer in high yields.

5583194

SELECTIVE CATALYSTS FOR THE SYNTHESIS OF EPOXYSILICONE MONOMERS AND POLYMERS

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The invention provides a method for making a curable epoxysilicone composition through the hydrosilation reaction between an ethylenically unsaturated epoxide and an SiH-containing silicone to produce an epoxysilicone product, and catalyzed by a quaternary ammonium, phosphonium or arsonium hexahaloplatinate which does not promote the oxirane ring-opening reaction of either the ethylenically unsaturated epoxide starting material or the epoxysilicone product. The invention also provides for a curable epoxysilicone composition made by the above method.

5585317

COMPONENTS AND CATALYSTS FOR THE POLYMERIZATION OF OLEFINS

Sacchetti Mario; Pennini Gianni; Cuffiani Illaro Ferrara, ITALY assigned to Montell Technology Company bv

The present invention relates to spherical solid components of catalysts for the polymerization of olefins comprising, supported on a magnesium dihalide in active form, a titanium compound containing at least one Ti-halogen bond and one OR group, said OR group being bonded to Ti in an amount such that the OR/Ti molar ratio is greater than or equal to 0.5; optionally the component also comprises an electron donor compound. The spherical solid components of the invention are characterized by having a porosity comprised between 0.35 and 0.7 cm³/g and by a pore size