5543374

ISOMERIZATION CATALYST AND USE THEREOF IN ALKANE/CYCLOALKANE ISOMERIZATION

Wu An-hsiang Bartlesville, OK, UNITED STATES assigned to Phillips Petroleum Company

A catalyst composition is prepared by a method comprising impregnating alumina with at least one platinum compound, followed by calcining, reducing treatment, and heating with gaseous aluminum chloride and gaseous titanium tetrachloride. The thus-prepared catalyst composition is employed in the isomerization of saturated C4-C8 hydrocarbons (alkanes and/or cycloalkanes), preferably n-butane.

5543377

OLEFIN POLYMERIZATION CATALYSTS AND METHODS OF OLEFIN POLYMERIZATION

Tsutsui Toshiyuk; Yoshitsugu Ken Waki cho, JAPAN assigned to Mitsui Petrochemical Industries Co Ltd

An olefin polymerization catalyst of the present invention comprises (A) a metallocene compound, (B) an organoaluminum oxy compound, and (C) at least one kind of carbonyl-containing compound selected from ketoalcohol and beta-diketone, and optionally (D) an organoaluminum compound, and therefore, the catalyst is excellent in polymerization activity per catalyst unit weight, and is capable of giving olefin (co)polymers having high molecular weight. A supported olefin polymerization catalyst and its olefin prepolymerized catalyst of the present invention are excellent in polymerization activity per catalyst unit weight, and is capable of giving olefin (co)polymers having uniform particle size.

5543480

POLYMERIZATION PROCESS USING DIENE CONTAINING CATALYSTS

Patton Jasson T; Devore David D; Timmers Francis J; Soto Jorge; Schmidt Gregory F; Wilson David R Midland, MI, UNITED STATES assigned to The Dow Chemical Company

Compositions comprising Group 4 metal complexes containing a diene moiety and activating cocatalysts are used as catalysts for polymerizing olefins, diolefins and/or acetylenically unsaturated monomers. Vinylidene aromatic monomers, particularly styrene are polymerized to form highly syndiotactic polymers.

5545601

POLYETHER-CONTAINING DOUBLE METAL CYANIDE CATALYSTS

Le-Khac Bi West Chester, PA, UNITED STATES assigned to Arco Chemical Technology L P

Improved double metal cyanide (DMC) catalysts are disclosed. The catalysts comprise a DMC compound, an organic complexing agent, and from about 5 to about 80 wt. % of a polyether polyol that has tertiary hydroxyl groups. Compared with other DMC catalysts, those of the invention have excellent activity for epoxide polymerization, and they can be used to make polyols having very low unsaturation even at high epoxide polymerization temperatures.