

5618770**PROCESS FOR THE PRODUCTION OF POWDER CATALYSTS**

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Magnesium chloride, titanium chloride and at least an electron donor are introduced in a plasma torch. These chlorides being in solution or in suspension in a liquid that can be an electron donor. A very fine granulometry powder is collected after cooling. The powder is very fine, it has a controlled morphology and it can be used as catalyst for alpha-olefins polymerization.

5618771**COMPONENTS AND CATALYSTS FOR THE POLYMERIZATION OF OLEFINS**

Parodi Sandro; Nocci Roberto; Giannini Umberto; Barbacu e Pier Camill; Scatacu a Umberto Novara, ITALY assigned to Montell Technology Company B V

Disclosed are catalysts for the polymerization of alpha-olefins which comprise the reaction product of: (a) an Al alkyl compound; (b) a silicon compound containing at least a Si-OR or Si-OCOR or Si-NR₂ bond, R being a hydrocarbyl radical; (c) a solid comprising, as essential support, a Mg dihalide in active form and, supported thereon, a Ti halide or a halo-Ti-alcoholate and a particular, selected type of electron-donor compound.

5618886**OLEFIN POLYMERIZATION CATALYST AND PROCESS FOR PREPARING POLYPROPYLENE AND PROPYLENE BLOCK COPOLYMERS**

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The present invention provides olefin polymerization catalysts and processes for preparing a polypropylene and a propylene block copolymer using said olefin polymerization catalysts. The olefin polymerization catalyst (1) of the invention is formed from: (I-1) a contact product obtained by contacting: (A) a solid titanium catalyst component, (B) an organometallic compound catalyst component, and (C) a specific organosilicon compound; (II-1) (D) a specific polyether compound; and optionally, (III) an organometallic compound catalyst component. The olefin polymerization catalyst (2) of the invention is formed from: (I-2) a contact product obtained by contacting: (A) a solid titanium catalyst component, (B) an organometallic compound catalyst component, and (D) a specific polyether compound; (11-2) (C) a specific organosilicon compound.

5624878**TITANIUM (II) OR ZIRCONIUM (II) COMPLEXES AND ADDITION POLYMERIZATION CATALYSTS THEREFROM**

Devore David D; Timmers Francis J; Stevens James; Mussell Robert D; Crawford Lenore H Midland, MI, UNITED STATES assigned to The Dow Chemical Company

Novel catalytic derivatives of titanium or zirconium

complexes containing one and only one cyclic delocalized, anionic, π -bonded group wherein the metal is in the +3 or 2 formal oxidation state and having a bridged ligand structure and an activating cocatalyst are useful as catalysts for polymerizing olefins, diolefins and/or acetylenically unsaturated monomers.+RE

5625013

PREPARATION OF A SUPPORTED CATALYST FOR THE POLYMERIZATION OF ALPHA-OLEFINS

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A process for the preparation of a supported catalyst for the polymerization of alpha-olefins, in which (1) a silicon dioxide-containing support gel is prepared by (1.1) introducing a sodium water glass or potassium water glass solution into a swirling stream of an aqueous mineral acid longitudinally and tangentially to the stream, spraying the resultant silica hydrosol in drop form into a gaseous medium and allowing it to solidify to form a hydrogel, and freeing the resultant hydrogel from salts by washing without prior ageing, (1.2) drying the hydrogel resulting from (1.1) to form the support gel, (2) the support gel (1) is charged with chromium trioxide or a chromium compound which can be converted into chromium trioxide under the conditions of process step (3), giving a chromium-containing support gel, and (3) the chromium-containing support gel (2) is heated at from 400° to 1100°C for from 10 to 1000 minutes in an anhydrous gas stream containing oxygen in a concentration of greater than 10% by volume, comprises drying the hydrogel resulting from step (1.1) in step (1.2) within a time of not more than 60 seconds in a shaping, high-speed dryer at an inlet

temperature of from 80° to 400°C

5625015

METHOD FOR MAKING SUPPORTED CATALYST SYSTEMS AND CATALYST SYSTEMS THEREFROM

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Catalyst systems and methods for supporting catalysts and their components, particularly metallocene catalyst components, are provided. The method involves techniques for evenly distributing a small volume of catalyst component over and among a porous support material. Such even distribution is thought to result in reduced fouling.

5625115

WAX HYDROISOMERIZATION USING A DIFUNCTIONAL CATALYST

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A difunctional catalyst is disclosed which is constituted by: (a) silica particles partially coated with zirconia, acidified by means of the introduction of sulfate moieties, (b) one or more metal(s) from Group VIII A. The preparation of said catalyst and its use in wax hydroisomerization are disclosed as well.