distribution such that at least 50% of the porosity is due to pores having an average radius greater than 800 #521 .+RE+RE.+RE

5585447

CATALYST FOR THE (CO)POLYMERIZATION OF ALPHA-OLEFINS, A PROCESS FOR ITS PREPARATION AND (CO)POLYMERIZATION PROCESS MAKING USE THEREOF

Adisson Emmanuel; Bujadoux Karel; Fontanille Michel; Deffieux Alain Divion, FRANCE assigned to ECP-Enichem Polymeres France S A

This catalyst has the general formula VX3, mAIX3, nZ, wherein X is a halogen atom, Z is at least one at least partially halogenated, branched or unbranched, saturated hydrocarbon, m is between 0.1 and 10, and n is between 1 and 300. To prepare it, a vanadium halide VX2 and/or VX3 is coground with an aluminum halide AlX3, and then at least one halogenated hydrocarbon Z is added to the mixture obtained in proportions corresponding to the chosen values of m and n. The invention also relates to the (co)polymerization of alpha-olefins at 20°-350°C. in the presence of a catalyst system comprising at least one catalyst as defined above and at least one organometallic activator.

5585496

CATALYTIC PREPARATION OF CONDENSATION PRODUCTS OF FORMALDEHYDE

Teles Joaquim H; Melder Johann-Peter; Gehrer Eugen; Harder Wolfgang; Ebel Klaus; Groening Carsten; Meyer Regina Ludwigshafen, GERMANY assigned to BASF Aktiengesellschaft

A process for the catalytical preparation of condensation products of formaldehyde, in which formaldehyde or a formaldehyde-forming compound is caused to undergo reaction using a catalyst which has been produced, in the presence of an auxiliary base, from a triazolium salt of formula I (*See Patent for Chemical Structure*) (I) in which R1 and R3 are the same or different and stand for aliphatic groups having from 1 to 30 carbon atoms, optionally substituted aryl groups, optionally substituted aralkyl groups, and/or optionally substituted heteroaryl groups, R2 represents hydrogen, the hydroxymethylene group -CH2OH or the hydroxy-hydroxymethylene-methylidyne group -CH(OH)(CH2OH), and R4 denotes hydrogen, a halogen atom, a nitro or cyano group, an aliphatic group having from 1 to 30 carbon atoms, an optionally substituted aryl group, an optionally substituted aralkyl group, an optionally substituted heteroaryl group, an alkoxy group -OR5, a thioether group -SR6, an amino group -NR7R8, an acyl group-COR9 or an ester group -COOR10, where R5, R6, R7, R8, and R9 stand for radicals such as those stated above for R1, and R10 is a C1-C10 alkyl group or an optionally substituted aryl or aralkyl group, or R3 and R4 together form a C3-C5 alkylene or C3-C5 alkenylene group or a C6-C14 alkylene group, or a C7-C14 aralkylene or C8-C14 aralkenylene bridging member, and A is the equivalent of an anion having one or more negative charges for electrical neutralization of the charge on the triazolium cation.

5585508

METALLOCENES, PROCESS FOR THEIR PREPARATION AND THEIR USE AS CATALYSTS

Kuml uber Frank; Aulbach Michae; Bachmann Bernd;Spaleck Walter; Winter Andreas Oberursel, GERMANY assigned to Hoechst AG

The present invention relates to a polynuclear metallocene compound of the formula I (*See Patent for Chemical Structure*) (I) a process for their preparation and their use as a catalyst for olefin polymerization.

5587439

POLYMER SUPPORTED CATALYST FOR OLEFIN POLYMERIZATION

DiMaio Anthony-J Maineville, OH, UNITED STATES assigned to Quantum Chemical Corporation

The present invention is directed to a supported metallocene catalyst useful in the polymerization of alpha-olefins which is obtained by tethering a metallocene catalyst component to the surface of a particulate, functionalized copolymeric support material.

5591815

ZIRCONIUM AND HAFNIUM-CATALYZED POLYMERIZATION OF METHYLENECYCLOPROPANE

Marks Tobin J; Yang Xinmin; Jia Li Evanston, IL, UNITED STATES assigned to Northwestern University

A polymer having a repeating unit of (*See Patent for Chemical Structure*) and a method for preparing it through Zr-catalyzed polymerization of methylenecyclopropane is disclosed.

5597935

SYNTHESIS OF ANSA-METALLOCENE CATALYSTS

Jordan Richard F; Diamond Gary Iowa City, IA, UNITED STATES assigned to University of Iowa Research Foundation

A process of preparing in high yield ansa-metallocene complexes and rac ansa-metallocene complexes by reacting an ansa-bis-cyclopentadiene compound with a metal amide complex.

ENVIRONMENTAL CATALYSIS

5565091

CATALYST COMPOSITION MANUFACTURING METHOD AND SULFUR-CONTAINING HYDROCARBON HYDRODESULFURIZATION METHOD USING THE SAME CATALYST COMPOSITION

Iino Akira; Iwamoto Ryuichiro; Mitani Tsuyoshi Sodegaura, JAPAN assigned to Idemitsu Kosan Co Ltd; Petroleum Energy Center

PCT No. PCT/JP94/00222 Sec. 371 Date Oct. 14, 1994 Sec. 102(e) Date Oct. 14, 1994 PCT Filed Feb. 15, 1994 PCT Pub. No. WO94/17910 PCT Pub. Date Aug. 18, 1994. By mixing an alumina gel suspension prepared by dispersing alumina gel in pure water in an alumina concentration of 0.1 to 12% by weight, with an aqueous metal salt solution wherein a compound of a Group VIA metal and a compound of a Group VIII metal are dissolved, and then evaporating water to dry while stirring the mixture, the metal component can be loaded effectively on the alumina gel to a sufficiently high loading quantity, and active catalyst compositions