

Title (en)
HIGH ACTIVITY CATALYSTS FOR THE PREPARATION OF POLYETHYLENE WITH AN INTERMEDIATE MOLECULAR WEIGHT DISTRIBUTION

Title (de)
KATALYSATOREN MIT HOHER AKTIVITÄT ZUR HERSTELLUNG VON POLYETHYLEN MIT MITTLERER
MOLEKULARGEWICHTSVERTEILUNG

Title (fr)
CATALYSEURS A FORTE ACTIVITE POUR LA PREPARATION DE POLYETHYLENE AVEC UNE REPARTITION INTERMEDIAIRE DES POIDS
MOLECULAIRES

Publication
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Application
EP 97932291 A 19970625

Priority
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Abstract (en)
[origin: WO9802245A1] A supported alpha-olefin polymerization catalyst composition of this invention of improved activity as measured by productivity is prepared in a multi-step process. An ethylene homopolymerization or ethylene copolymerization catalyst is formed by: (i) providing a slurry of a solid porous inorganic support having reactive hydroxyl (-OH) groups and a non-polar solvent; (ii) impregnating said support having -OH groups, with RMgR' compound, to form an intermediate, which intermediate has an -OH group:Mg ratio of less than 1, wherein each of said R and R' is alkyl of 1 to 12 carbon atoms and is the same or different; (iii) treating the intermediate with TiCl₄ to form a titanium containing intermediate which has an -OH group:Ti ratio of less than 1; (iv) reacting the titanium containing intermediate with an amount of oxygen containing electron donor containing 1 to 15 carbon atoms, combining the electron donor treated titanium containing intermediate with triethylaluminum to form the catalyst. The catalyst also produces polymers having relatively intermediate molecular weight distribution.

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