selected from Group IIIA and Group VA of the Periodic Table on a carbon support consisting essentially of activated carbon, optionally on a carbon support treated with phosphorus, having a B.E.T. (Braunauer-Emmett Teller) surface area of at least 100 m2/g and an average Pore Diameter greater than 12#521 +0 and a Total Pore Volume greater than 0.3 cc/g.+RE+RE.+REc/g.+RE

5625114

PROCESS FOR THE RECOVERY OF SPENT ACID CATALYST

Hommeltoft Sven Hiller, DENMARK assigned to Haldor Tops

A process for the recovery of a sulphonic acid catalyst from an aqueous extract of an alkylation effluent stream comprising the steps of evaporating the extract to obtain a hydrate of the sulphonic acid catalyst; reacting the hydrate with an olefin containing hydrocarbon stream to its corresponding sulphonic acid ester; and introducing the acid ester to a process for the alkylation of a hydrocarbon feedstock with an olefinic alkylation agent at alkylation conditions, thereby decomposing the sulphonic acid ester to its acid form being catalytic active in the alkylation process.

5625115

WAX HYDROISOMERIZATION USING A DIFUNCTIONAL CATALYST

Flego Cristin;Zanibelli Laura Trieste, ITALY assigned to Eniricerche S p A; AGIP Petroli S p

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 VIIIA. The preparation of said catalyst and its use in wax hydroisomerization are disclosed as well.

5629463

NAPHTHALENE ALKYLATION WITH RE AND MIXED H/NH3 FORM CATALYST

Ardito Susan C; Ashjian Henr; Degnan Thomas F; Helton Terry E; Le Quang; Quinones Augusto R Spring Lake Hts, NJ, UNITED STATES assigned to Mobil Oil Corporation

Long chain alkyl substituted naphthalenes are produced by alkylating naphthalene with an olefin or other alkylating agent with at least 6, and usually 12 to 20 carbon atoms, in the presence of an alkylation catalyst comprising a zeolite having rare earth cations, and both ammonium and protonic species, associated with the exchangeable sites of the zeolite. The zeolite is usually a large pore size zeolite such as USY. The presence of rare earths and both ammonium and protonic species increases selectivity for production of long chain mono-alkyl substituted naphthalenes in preference to more highly substituted products.

POLYMERISATION CATALYSTS

5599760

MAGNESIUM CHLORIDE PARTICULATES HAVING UNIQUE MORPHOLOGY AND OLEFIN POLYMERIZATION CATALYSTS SUPPORTED THEREON

Brun Claude; Brusson Jean-Miche; Duranel Laurent; Spitz Roger Idron, FRANCE assigned to Elf Atochem S A

Crystalline MgCl2 particulates, exhibiting the

morphology of substantially regular polyhedra having an even number of from 10 to 18 face surfaces, are well suited as support substrate for olefin polymerization catalysts.

5599761

IONIC METALLOCENE CATALYST COMPOSITIONS

Turner Howard W Houston, TX, UNITED STATES assigned to Exxon Chemical Patents Inc

An ionic catalyst system component comprising a water-stable anion having a plurality of lipophilic radicals covalently coordinated to and shielding a central, formal charge bearing metal or metalloid atom, in which the lipophilic radicals of the anion include substituted aromatic radicals useful for polymerizing olefins, diolefins, or acetylenically unsaturated monomers, either alone or in combination with each other or with other polymerizable monomers is disclosed. A method of using the anion to stabilize ionic catalyst systems during polymerization is also disclosed.

5599762

USE OF GLYCOL ETHER COMPOUNDS FOR THE PRODUCTION OF POLYOLEFIN CATALYSTS AND SUPPORTS

Denton Dean Baltimore, MD, UNITED STATES assigned to W R Grace & Co-Conn

Glycol ether compounds such as glycol ethers and glycol ether esters are used as azeotropic distillation solvents for conversion of inorganic oxide hydrogels to xerogels by removal of water. These compounds are especially useful to make chromium-containing catalysts for production of high melt index polyolefins at reduced cost compared to known azeotropic solvents.

5599887

CHROMIUM CATALYST COMPOSITIONS AND ETHYLENE POLYMERIZATION PROCESSES THEREWITH

Badley Rickey D; Rollmann Kent W; McDaniel Max P Dewey, OK, UNITED STATES assigned to Phillips Petroleum Company

This invention provides a chromium catalyst system that comprises (a) a support that comprises silica, wherein said support has a surface area to pore volume relationship as follows (*See Patent for Tabular Presentation*) PS wherein said f(SA) is (*See Patent for Tabular Presentation*) PS and (b) a hexavalent chromium compound; wherein the surface concentration of said hexavalent chromium on said support is from 0.25 to 1 hexavalent chromium atoms per square nanometer. Another embodiment of this invention provides a process to homopolymerize ethylene, or copolymerize ethylene with a comonomer, said process comprises polymerizing ethylene with the above chromium catalyst composition.

5600055

IMMOBILIZED LEWIS ACID CATALYSTS

Chung Tze-Chian; Chen Frank J -; Stanat Jon E; Kumar Alok State College, PA, UNITED STATES assigned to Exxon Chemical Patents Inc

Immobilized Lewis Acid catalyst comprising polymer having at least one Lewis Acid immobilized within the structure therein, said polymer having monomer units represented by the structural formula: (*See Patent for Chemical