

5545792**ISOMERIZATION CATALYST AND PROCESS**

Cox William L. Houston, TX, UNITED STATES
assigned to Amoco Corporation

A process for producing an internal olefin of the formula (*See Patent for Chemical Structure*) where R1 and R2 are the same or different and are either a hydrogen or an alkyl and m is an integer of from 0 to 20 comprising contacting a vinyl or vinylidene olefin of the formula (*See Patent for Chemical Structure*) where R1, R2 and m are as previously defined, with a catalytically effective amount of a mixture of i) an aluminum compound of the formula $R_3nAl(OR_4)_p$ where R3 and R4 are the same or different and are alkyl, n is an integer from 0.75 to 2.25, and p is an integer from 0.75 to 2.25, the sum of n and p being 3, and ii) a cobalt (II) salt of an organic carboxylic acid, at a temperature of from about 25°C to about 250°C whereby a major amount of said internal olefin is produced and only a minor amount of a tri-substituted internal olefin.

5550094**BINARY COCATALYST COMPOSITIONS FOR ACTIVATING HETEROGENEOUS POLYMERIZATION CATALYSTS**

Ali Ahmed H; Firdaus Vaseem; Geoghegan Tomas A; Kissin Yury; Mink Robert Beaumont, TX, UNITED STATES assigned to Mobil Oil Corporation

A catalyst composition for copolymerizing ethylene with alpha-olefins is prepared by supporting a magnesium compound and a titanium compound on a solid, inert porous carrier, and activating the precursor with a mixture of dimethylaluminum

chloride and a trialkylaluminum compound. Products with a bimodal molecular weight distribution are produced which are free of alpha-olefin oligomers.

5550304**NICKEL-CONTAINING COMPOSITION FOR CATALYSIS AND OLEFIN DIMERISATION AND OLIGOMERISATION PROCESS**

Chauvin Yves; Einloft Sandra; Olivier Helene Rueil Malmaison, FRANCE assigned to Institut Francais Du Petrole

The invention concerns a catalytic composition and a process for the dimerisation, codimerisation or oligomerisation of olefins, said composition comprising a mixture of at least one bivalent nickel complex which contains two tertiary phosphine molecules, at least one nickel complex which contains neither water nor phosphine, and at least one alkylaluminium halide. The mixture is particularly for use in ionic type non aqueous liquid compositions, such as those formed by quaternary ammonium halides and/or quaternary phosphonium halides with aluminium halides and/or alkylaluminium halides.

5550306**CATALYTIC PROCESS FOR THE DIMERIZATION OF OLEFINS**

Chauvin Yves; Einloft Sandra; Olivier Helene Rueil Malmaison, FRANCE assigned to Institut Francais du Petrole

The invention is concerned with a process for the dimerization, co-dimerization and oligomerization of olefins with a catalytic composition resulting from mixing at least one quaternary ammonium

halide and/or at least one quaternary phosphonium halide, at least one aluminum halide, at least one aromatic hydrocarbon and optionally an aluminium organometallic compound.

5550307

INCREASED DIMER YIELD OF OLEFIN OLIGOMERS THROUGH CATALYST MODIFICATIONS

Hope Kenneth D; Ho Ting C; Cupples Barrett L
Kingwood, TX, UNITED STATES assigned to
Chevron Chemical Company

An oligomer is made by contacting an olefinic monomer with a catalyst comprising boron trifluoride, an alcohol alkoxylate, and a ketone. In one embodiment, the olefinic monomer is a straight-chain, alpha-olefinic monomer containing from 8 to 12 carbon atoms, the alcohol alkoxylate is 2-ethoxyethanol, the ketone is methyl ethyl ketone, and the oligomer product has a kinematic viscosity at 100°C of less than 1.7 cSt. Before removal of unreacted monomer, the oligomer product is at least 50 wt. % dimer, at least 80 wt. % dimer plus trimer, and less than 3.25 wt. % tetramer and greater.

5552358

POLYMERIZATION CATALYST SYSTEMS, THEIR PRODUCTION AND USE

Specia Anthony Kingwood, TX, UNITED STATES assigned to Exxon Chemical Patents Inc

This invention is generally directed toward a supported catalyst system useful for polymerizing olefins. The method for preparing the catalyst system of the invention provides for an optionally supported, metallocene catalyst component which when utilized in a polymerization process exhibits

improved reactor operability.

5552359

COMPONENTS AND CATALYST FOR THE POLYMERIZATION OF OLEFINS

Morini Giampier; Barino Luisa; Scordamaglia Raimondo; Barbassa Elisabetta; Baruzzi Giovanni
Pavia, ITALY assigned to Montell North America Inc

Disclosed are catalyst components for the polymerization of olefins which include magnesium halide in active form, and, supported thereon, a titanium halide or titanium halogen alcoholate and an electron-donor compound selected from the group diamines of formula (*See Patent for Chemical Structure*) (I) wherein the radicals R1 to R10 are the same or different and are hydrogen or C1-C18 hydrocarbon radicals, with the proviso that at least one of the R7 and R8 radicals and at least one of the R9 and R10 radicals are not hydrogen. Also, disclosed are catalysts obtained from the catalyst components and an Al-alkyl compound, as well as catalysts obtained by reaction of an Al-alkyl compound and a diamine of formula (I) with a solid catalyst component including a titanium halide or a titanium halogen alcoholate, and an electron-donor compound having particular characteristics of extractability with Al-triethyl, supported on magnesium halide in active form.

5552501

METHOD FOR THE RAPID FREE RADICAL POLYMERIZATION OF ACRYLAMIDE CO-POLYMERS USING TETRAMETHYLAMINE CATALYSTS

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