

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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