

**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