A method for manufacturing cobalt complexes having the formula:(*See Patent for Tabular Presentation*) PS said method comprising reacting cobalt (II) acetate having the formula Co(OAc)2 4H2O with concentrated ammonium hydroxide/ammonium acetate, followed by oxidizing agent (e.g., peroxide).

POLYMERISATION CATALYSIS

5541346

POLYMERIZATION OF, AND DEPOLYMERIZATION TO, CYCLIC ETHERS USING SELECTED METAL COMPOUND CATALYSTS

Drysdale Neville E; Herron Norman Newark, DE, UNITED STATES assigned to E I Du Pont de Nemours and Company

A process for polymerizing oxiranes, oxetanes, oxepanes, dioxolanes, trioxanes, and tetrahydrofurans to their respective polymers by contacting them with a selected metal compound is disclosed; and also a process for depolymerizing polytetrahydrofurans to monomeric tetrahydrofurans by contacting the polymer with a selected metal compound at a temperature of about 100°C to about 250°C. The catalysts may be in solution or part of a heterogeneous solid, and selected organic compounds are used as accelerators in the polymerizations. The polymeric products, some of which are novel, may be used as polyether monomers for further polymerization, as by reaction with isocyanates to produce polyurethanes, and other useful polymers. Some of the polymeric products are relatively high in molecular weight and are suitable for direct use, for instance as spandex fibers.

5541349

METAL COMPLEXES CONTAINING PARTIALLY DELOCALIZED II-BOUND GROUPS AND ADDITION POLYMERIZATION CATALYSTS THEREFROM

Wilson David R; Neithamer David R; Nickias Peter; Kruper W Jac Midland, MI, UNITED STATES assigned to The Dow Chemical Company

Novel Group 4 metal complexes wherein the metal is in the +2 or +4 formal oxidation state containing a cyclic or noncyclic, non-aromatic, anionic, dienyl ligand group bound to M and having a bridged ligand structure, catalytic derivatives of such complexes including novel zwitterionic complexes; and the use thereof as catalysts for polymerizing addition polymerizable monomers are disclosed.

5541350

AMIDO SILYLDIYL BRIDGED CATALYST COMPONENTS, METHODS OF MAKING AND USING

Murata Masahide; Burkhardt Terry J Ohi machi, JAPAN assigned to Exxon Chemical Patents Inc

Disclosed is a mono- or di-amido silyldiyl bridged composition of matter useful as a catalyst component for the homo or copolymerization of olefins.