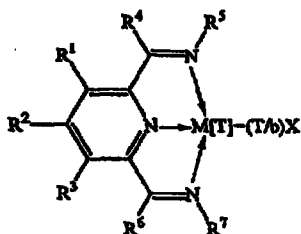




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(54) Title: POLYMERISATION CATALYSTS

(I)

(57) Abstract

The present invention relates to a process for the polymerisation and copolymerisation of 1-olefins and to a catalyst to be used in said process wherein the catalyst comprises (1) a complex having formula (I) wherein M is Fe[II], Fe[III], Co[I], Co[II], Co[III], Mn[I], Mn[II], Mn[III], Mn[IV], Ru[II], Ru[III] or Ru[IV]; X represents an atom or group covalently or ionically bonded to the metal M; T is the oxidation state of the metal; b is the valency of the atom or group X; and R¹ to R⁷ are each independently selected from hydrogen, halogen, hydrocarbyl, substituted hydrocarbyl, heterohydrocarbyl, substituted heterohydrocarbyl or SiR'₃, where each R' is independently selected from hydrogen, halogen, hydrocarbyl, substituted hydrocarbyl, heterohydrocarbyl, substituted heterohydrocarbyl; and when any two or more of R¹ to R⁷ are hydrocarbyl, substituted hydrocarbyl, heterohydrocarbyl or substituted heterohydrocarbyl, said two or more can be linked to form one or more cyclic substituents; (2) an activator which is an alkylaluminum; and (3) a support material, wherein the atomic ratio of aluminium in the alkylaluminum (2) to transition metal M in (1) is from 6:1 to 25:1.