

PROCESS FOR PRODUCTION OF SYNDIOTACTIC α -OLEFIN POLYMER

Abstract

A process for producing a syndiotactic α -olefin polymer having high racemic diad fraction and high molecular weight with
5 excellent polymerization activity through a method permitting high-temperature polymerization. The production process comprises polymerizing a monomer that comprises at least one C3-10 α -olefin and a small amount of ethylene, in the presence of an olefin polymerization catalyst comprising a transition
10 metal compound (A) represented by the general formula [1], at least one compound (B) selected from an organoaluminum oxy-compound (b-1), a compound (b-2) that reacts with the transition metal compound (A) to form an ion pair and an organoaluminum compound (b-3), which process for producing a
15 syndiotactic α -olefin polymer satisfies the relationship:
 $0.001 \leq P_E/P_0 \leq 0.030$, provided that the molar amounts of ethylene and an α -olefin having 3 to 10 carbon atoms that are fed into a polymerization reactor under a polymerization temperature of not lower than 25°C are P_E and P_0 , respectively.

20 (No suitable Figure)