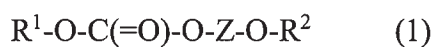


ABSTRACT

High stereoregularity, highly active catalytic performance, and good hydrogen response can be obtained by homopolymerizing propylene in the presence of a catalyst that includes a solid catalyst component including titanium, magnesium, a halogen, a carbonate compound represented by the following formula, and a diether compound. Excellent polymerization behavior can also be obtained when effecting random copolymerization or block copolymerization.



wherein R^1 and R^2 are a hydrocarbon group or a substituted hydrocarbon group having 1 to 24 carbon atoms, or a heteroatom-containing group, provided that R^1 and R^2 are either identical or different, and Z is a linking group that links two oxygen atoms through a carbon atom or a carbon chain.

FIG. 1

(A) SOLID CATALYST COMPONENT FOR OLEFIN POLYMERIZATION

