

ABSTRACT

MODIFIED ALUMINUM OXY COMPOUND, POLYMERIZATION
CATALYST AND PROCESS FOR PRODUCING OLEFIN POLYMER AND
ALKENYL AROMATIC HYDROCARBON POLYMER

A modified aluminum oxy compound(A) obtained by
reacting an aluminum oxy compound(a), water (b) and a
5 compound having a hydroxyl group(c); a polymerization
catalyst component comprising the modified aluminum oxy
compound; a polymerization catalyst obtained by
contacting said modified aluminum oxy compound(A), a
transition metal compound(B) and optionally an
10 organoaluminum compound(C) and a specified boron
compound; and a process for producing an olefin polymer
or an alkenyl aromatic hydrocarbon polymer with the
polymerization catalyst.