

METHOD FOR FORMING HIGHLY REACTIVE OLEFIN FUNCTIONAL POLYMERS

ABSTRACT OF THE DISCLOSURE

An improved process for the preparation of polybutene having an exo-olefin content of at least 50 mol. % by the polymerization of iso-butene, or a C₄ feed containing iso-butene and other C₄ olefins using (i) a Lewis acid•Lewis base catalyst complex and an alkyl halide initiator, in a substantially or completely apolar polymerization medium, in the presence of a hindered alcohol or alkoxyaluminum dichloride. In the above polymerization reaction, it has been found that a hindered alcohol or hindered alkoxyaluminum dichloride will function as an “exo enhancer” resulting in high isobutene conversion and the production of a polybutene product having a high terminal vinylidene content, while maintaining a target molecular weight.

(No suitable figure)