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(54) Title: PROPYLENE POLYMERS INCORPORATING POLYETHYLENE MACROMERS

(57) Abstract

A polyolefin product is provided which comprises a branched olefin copolymer having an isotactic polypropylene backbone, polyethylene branches and, optionally, one or more comonomers. The total comonomer content of the branched olefin copolymer is from 0 to 20 mole percent. Also, the mass ratio of the isotactic polypropylene to the polyethylene ranges from 99.9:0.1 to 50:50. Additionally, a process is provided for preparing a branched olefin copolymer which comprises: a) copolymerizing ethylene, optionally with one or more copolymerizable monomers, in a polymerization reaction under conditions sufficient to form copolymer having greater than 40 % chain end-group unsaturation; b) copolymerizing the product of a) with propylene and, optionally, one or more copolymerizable monomers, in a polymerization reactor under suitable polypropylene polymerization conditions using a chiral, stereorigid transition metal catalyst capable of producing isotactic polypropylene; and c) recovering a branched olefin copolymer.

