

METHODS FOR SUPPLYING SOLID CATALYSTS TO A SOLUTION POLYMERIZATION REACTOR

ABSTRACT

Disclosed is a solution polymerization process, or, alternatively, a method of delivering powder catalysts to a solution polymerization reactor, comprising combining a homogeneous single-site catalyst precursor with α -olefin monomers to form a polyolefin, wherein the homogeneous single-site catalyst precursor is in the form of (i) a dry powder, (ii) suspended in an aliphatic hydrocarbon solvent, or (iii) suspended in an oil or wax, wherein the homogeneous single-site catalyst precursor is at a concentration greater than 0.8 mmole/liter when suspended in the aliphatic hydrocarbon solvent prior to entering the solution polymerization reactor.

Fig. 1