

HIGH MELT STRENGTH POLYETHYLENE COMPOSITIONS AND METHODS FOR MAKING THE SAME

Abstract

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The present invention is a method for increasing the melt strength of a polyethylene resin comprising reacting the polyethylene resin with a free radical generator with a decomposition energy in between -50 kJoule/mole and -250 kJoules/mole and a peak decomposition temperature of less than 280 degree C. The resulting resin has

10 increased melt strength with higher ratio of elongational viscosities at 0.1 to 100 rad/s when compared to substantially similar polyethylene resins which have not been reacted with a free radical generator such as an alkoxy amine derivative.

(No suitable figure)