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(54) Title: METHOD OF CHANGING MELT RHEOLOGY PROPERTY OF BIMODAL POLYETHYLENE POLYMER

(57) Abstract: A method of independently changing a melt rheology property value of a bimodal polyethylene polymer being made using a bimodal catalyst system in a single gas phase polymerization reactor. The method comprises process conditions comprising alkane(s) in the reactor. The method comprises a bimodal catalyst system that is characterized by an inverse response to alkane(s) concentration. The method comprises changing concentration of the alkane(s) in the reactor by an amount sufficient to effect a measurable change in the melt rheology property value; wherein the bimodal catalyst system is characterized by an inverse response to alkane(s) concentration such that when the alkane(s) concentration is increased, the melt rheology property value of the resulting bimodal polyethylene polymer is decreased, and when the alkane(s) concentration is decreased, the melt rheology property value of the resulting bimodal polyethylene polymer is increased.



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