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(54) Title: MULTIMODAL ETHYLENE-BASED COPOLYMER COMPOSITIONS AND PROCESSES OF PRODUCING

(57) Abstract: Embodiments of processes of making a multimodal ethylene-based copolymer may include contacting, in a solution polymerization reactor system at a reactor temperature of greater than or equal to 150 °C, at least two olefinic monomers in the presence of at least a first catalyst to produce a bulk low molecular weight component and a second catalyst to produce a high molecular weight component. The multimodal ethylene-based copolymer may comprise a long chain branching frequency of from 1.0 to 1.8; a melt index of from 0.5 g/10 minutes (g/10 min) to 10.0 g/10 min; and a molecular weight distribution determined by GPC-LALLS CDF comprising greater than 8% of a high molecular weight fraction, wherein the high molecular weight fraction is computed by measuring an area fraction of a low angle light scattering (LALLS) detector chromatogram greater than 500,000 g/mol using GPC.