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(54) Title: BIMODAL ETHYLENE-BASED POLYMERS

(57) Abstract: Embodiments of the present disclosure, include a bimodal ethylene-based polymer, the bimodal ethylene-based polymer being the polymerized reaction product of ethylene and one or more C_3-C_{14} olefinic comonomers. The bimodal ethylene-based polymer comprises: a high density fraction (HDF) from 12.0% to 35.0%, the HDF being defined as a ratio of the mass eluted at temperatures from 93 °C to 119 °C to the total mass eluted when measured using an improved comonomer content distribution (iCCD) curve of mass eluted versus temperature; an I_{10}/I_2 ratio from 5.5 to 7.0, wherein I_2 is the melt index when measured according to ASTM D 1238 at a load of 2.16 kg and temperature of 190° C. and I_{10} is the melt index when measured according to ASTM D 1238 at a load of 10 kg and temperature of 190° C; and the high density fraction has a molecular weight of at least 120,000 g/mol.