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

(57) Abstract: Processes of making a multimodal ethylene-based copolymer. The processes include adding ethylene, at least one olefinic monomer, at least a first catalyst system, and less than 0.3 mol% hydrogen gas to a solution polymerization reactor to create an effluent feed at a reactor temperature of greater than or equal to 100 °C. The effluent feed and a second catalyst system is fed to a second reactor absent fresh feed and absent hydrogen gas. At least one of the first catalyst system and the second catalyst system have a chain transfer constant of from 0.005 to 1.0. The multimodal ethylene-based copolymer comprises a high molecular weight fraction, meaning the molecular weight fraction that is greater than 500,000 g/mol, from 8% to 50% based on the total percent of the multimodal ethylene-based copolymer.