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(54) Title: CONTROLLING MOLECULAR WEIGHT DISTRIBUTION AND CHEMICAL COMPOSITION DISTRIBUTION OF A POLYOLEFIN PRODUCT

(57) Abstract: A method broadening a molecular weight distribution and/or broadening a chemical composition distribution of the polyolefin product can include: polymerizing a feedstock in the presence of a metallocene catalyst in a loop reactor to produce a polyolefin product, the feedstock comprising two or more monomers; and adjusting a polymerization parameter selected from the group consisting of decreasing a recycle ratio, increasing a polymer concentration, increasing a LRSU number, and any combination thereof.

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