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(74) Agents: MIGLIORINI, Robert, A. et al.; Exxonmobil Research And Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

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(71) Applicant (for all designated States except US): EXXON-MOBIL RESEARCH AND ENGINEERING COMPANY [US/US]; 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

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(72) Inventors; and

(75) Inventors/Applicants (for US only): KISS, Gabor [US/US]; 4 Thomas Court, Hampton, NJ 08827 (US). GALUSKA, Alan, A. [US/US]; 36 Bell Avenue, Glen Gardner, NJ 08826 (US). LATTNER, James, R. [US/US]; 10 Bay Oaks, LaPorte, TX 77571 (US).

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(54) Title: MONOMER RECYCLE PROCESS FOR FLUID PHASE IN-LINE BLENDING OF POLYMERS

Prior art monomer recycle process with full recovery of individual monomer components (monomer recycles (1) and (2)) used in conjunction with a fluid phase in-line polymer blending process

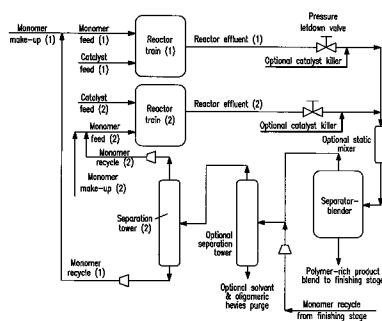


FIG. 5

(57) Abstract: A monomer recycle process for fluid phase in-line blending of polymers is provided. The monomer recycle process includes providing a first group (G1) of one or more reactor trains and a second group (G2) of one or more reactor trains and one or more separators fluidly connected to G1 and G2; polymerizing in each of G1 and G2 olefin monomers to form homogenous fluid phase polymer-monomer mixtures wherein each of the G1 and G2 have at least one common monomer; passing the reactor effluents from G1 through the G1 separators to separate a monomer-rich phase from a polymer-enriched phase, passing the polymer-enriched phase and the reactor effluents from G2 into the G2 separator to separate another monomer-rich phase from a polymer-rich blend, and recycling to each of G1 and G2 the separated monomer-rich phase from the G1 and G2 separators, respectively.