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Salsman

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(71) Applicant: **Beaulieu Group, LLC**, Dalton, GA (US)

(72) Inventor: **Robert Keith Salsman**, Hoschton, GA (US)

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This patent is subject to a terminal disclaimer.

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(58) **Field of Classification Search**

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See application file for complete search history.

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Primary Examiner — Michael Pepitone
(74) *Attorney, Agent, or Firm* — McGuireWoods LLP

(57) **ABSTRACT**

Embodiments relate to a relatively rapid transesterification process including transesterifying condensation polymers such as polyethylene terephthalate (PET), or other polyesters used in commerce, with a modifying monomer mix containing other monomers to manufacture new polymers containing the pre-condensed moieties. The process preferably only involves transesterification as a reaction mechanism. The process preferably produces a rapid buildup of molecular weight and/or polymer uniformity by the high temperature transesterification of the condensation polymer with the modifying monomer mixture. The process can be performed in any suitable vessel including an extrusion line, and it has the advantage of greatly reduced cycle times over currently used condensation polymer utilization processes such as the recycling of PET into other materials.

18 Claims, No Drawings