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(54) **Title:** SEEDING PROCESS FOR THE MANUFACTURE OF POLYMER MODIFIED POLYOLS

(57) **Abstract:** Embodiments of the invention provide for polymer polyols and methods of producing polymer polyols. Methods include providing at least one first composition which includes at least one polyol, at least one isocyanate non-reactive seed population, and at least one of a co-reactant having an equivalent weight of up to 400 and at least one active hydrogen attached to a nitrogen or oxygen atom. The at least one isocyanate non-reactive seed population includes less than about 5% by weight of the total weight of the first composition, and the seed population has a maximum particle diameter of less than 10 μm . The first composition is combined with at least one polyisocyanate under mixing to form at least one of a polyurea, polyurethane, and a polyurethane-urea particle population dispersed in the first composition, wherein at least 90% by weight of the particle population has a particle diameter of less than 100 μm .

