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(54) Title: ELASTOMERIC POLYMER BLENDS AND PROCESSES FOR THEIR PRODUCTION

(57) Abstract: Elastomeric polymer blends and processes for their production are described. Specifically, the polymer blends comprise a first polymer and a second polymer, where the first polymer comprises from 70 wt% to 90 wt% units derived from propylene and from 10 wt% to 30 wt% units derived from ethylene and/or a C₄-C₁₀ alpha-olefin, and the second polymer comprises from 88 wt% to 98 wt% units derived from propylene and from 2 wt% to 12 wt% units derived from ethylene and/or a C₄-C₁₀ alpha-olefin. The elastomeric polymer blends are further characterized by having two or more of the following properties: an overall propylene content of between 75 wt% and 90 wt%, a melting point between 110°C and 145°C, a Vicat softening point greater than 45°C, a tensile stress at 300% strain of less than 500 psi (3447 kPa), as determined by a stress strain test according to ASTM D412, or an average maximum force for pellet separation of less than 10 N in an accelerated storage stability test. The polymer blends are produced in a dual reactor process, in which the first polymer and the second polymer are prepared using differing catalyst systems.



WO 2011/102946 A1