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(54) **Title:** NOVEL MEDIUM DENSITY POLYETHYLENE COMPOSITIONS

(57) **Abstract:** An ethylene alpha-olefin copolymer having (a) a density of from about 0.910 g/cc to about 0.940 g/cc; (b) a weight average molecular weight of from about 150,000 g/mol to about 300,000 g/mol; and (c) a melt index at a load of 2.16 kg of from about 0.01 dg/10 min. to about 0.5 dg/min.; wherein a 1 mil blown film formed from the polymer composition is characterized by (i) a Dart Impact strength greater than about 175 g/mil; (ii) an Elmendorf machine direction tear strength greater than about 20 g/mil; and (iii) an Elmendorf transverse direction tear strength greater than about 475 g/mil.

