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(54) Title: SINGLE REACTOR BIMODAL POLYETHYLENE WITH IMPROVED MODULUS FOR EXTRUSION BLOW MOLDING DRUM APPLICATIONS

(57) Abstract: In various embodiments, a bimodal polyethylene composition may have a density (ρ) from 0.952 g/cm³ to 0.957 g/cm³, a high load melt index (I_{21}) from 1 to 10 dg/min, and a z-average molecular weight ($M_{z(GPC)}$) from 3,200,000 to 5,000,000 g/mol. The bimodal polyethylene composition may also have a peak molecular weight ($M_{p(GPC)}$) defined by the equation: $M_{p(GPC)} < -2,805.3 \text{ MWD} + 102,688$, wherein MWD is a molecular weight distribution defined by the equation: $\text{MWD} = M_{w(GPC)} / M_{n(GPC)}$. $M_{w(GPC)}$ is a weight average molecular weight of the bimodal polyethylene composition, $M_{n(GPC)}$ is a number average molecular weight of the bimodal polyethylene composition. Additionally, the bimodal polyethylene composition has a ratio of the ($M_{z(GPC)}$) to the $M_{w(GPC)}$ from 8.5 to 10.5. Articles made from the bimodal polyethylene composition, such as articles made by blow molding processes, are also provided.