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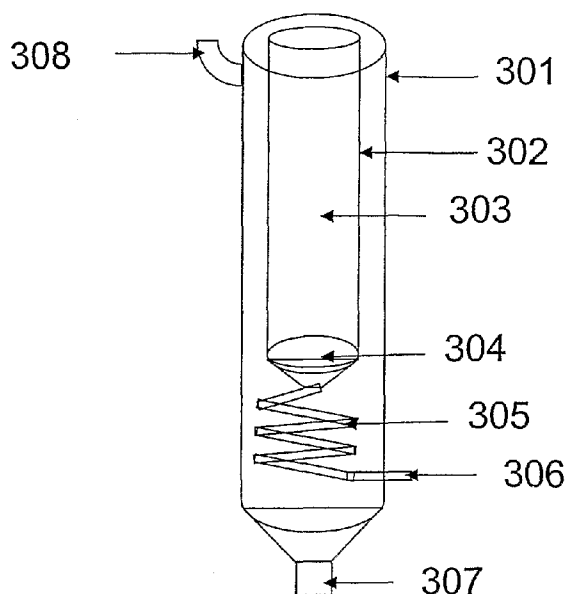
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(54) Title: LOW MELTING POLYESTER POLYMERS



(57) Abstract: A bulk of polyester polymer particles comprising polyester polymer comprising greater than 75% virgin polyester polymer, the particles having: A) an It.V. of at least 0.72 dl/g, and B) 10 ppm or less of residual acetaldehyde; and C) at least two melting peaks, wherein one of said at least two melting peaks is a low peak melting point within a range of 140 °C to 220 °C and having a melting endotherm area of at least the absolute value of 1 J/g. The particles may also have a degree of crystallinity within a range of 20% and a maximum degree of crystallinity T_{cmax} defined by the equation: $T_{cmax} = 50\% - CA - OH$ where CA is the total mole % of all carboxylic acid residues other than terephthalic acid residues, based on 100 mole % of carboxylic acid residues, and OH is the total mole % of all hydroxyl functional compound residues other than ethylene glycol residues, based on 100 mole % of hydroxyl functional compounds residues. The preforms and bottles made from these particles can be obtained by melt processing these particles at either lower overall power, faster screw speeds, lower residence time, or lower overall cycle time to thereby reduce the level of residual acetaldehyde generated in the melt.



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