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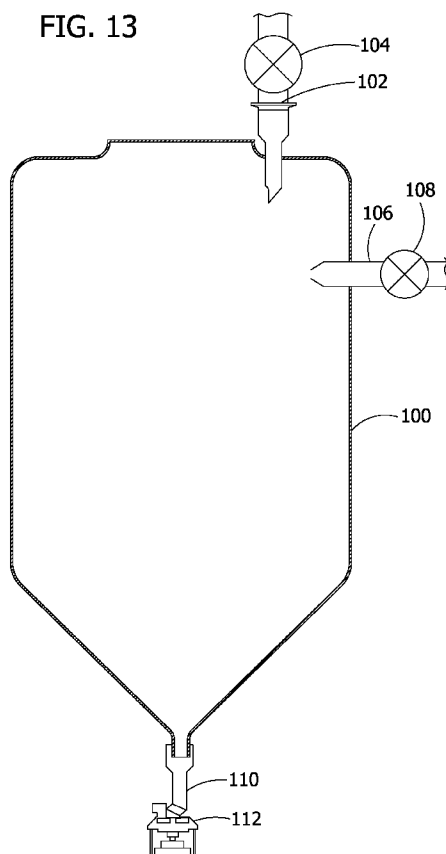
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(54) Title: REDUCTION OF AIR POCKETS IN SILICON CRYSTALS BY AVOIDING THE INTRODUCTION OF NEARLY INSOLUBLE GASES INTO THE MELT

FIG. 13



(57) Abstract: A process is provided for controlling the amount of insoluble gas carried by a charge of granular polycrystalline silicon. The process comprises (i) charging a feeding container with granular polycrystalline silicon, (ii) forming an ambient atmosphere in the feeding container, the ambient atmosphere having a mole fraction of at least 0.9 of a gas having a solubility in molten silicon of at least about 5×10^{13} atoms/cm³ at a temperature near the melting point of silicon and at a pressure of about 1 bar (about 100 kPa), and (iii) reducing the pressure inside the charged feeding container.



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