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(54) Title: USE OF QUARTZ PLATES DURING GROWTH OF SINGLE CRYSTAL SILICON INGOTS

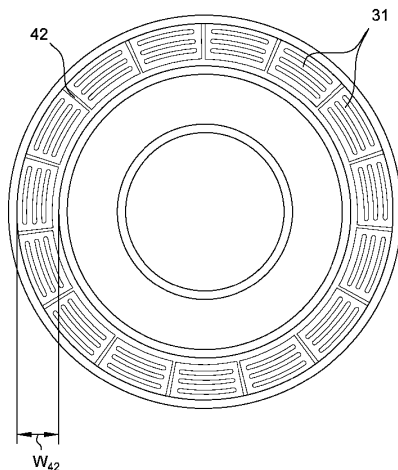


FIG. 3

(57) Abstract: Methods for producing single crystal silicon ingots by Continuous Czochralski (CCz) are disclosed. One or more plates are added to the outer melt zone of a crucible assembly such that the plates are disposed on the initial charge of solid-state silicon. The silicon is melted and the plates float on the silicon melt. When silicon is added to the outer melt zone to replenish the melt during ingot growth, the silicon contacts the plates rather than falling directly into the melt in the outer melt zone. The silicon melts and falls through openings that extend through the thickness of the plates.

WO 2022/258634 A1

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