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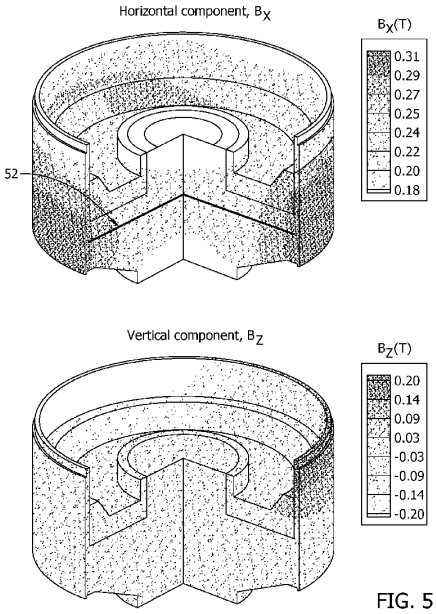


FIG. 5

(57) Abstract: Method for producing a silicon ingot in which a horizontal magnetic field is generated are disclosed. A plurality of process parameters are regulated during ingot growth including a wall temperature of the crucible, a transport of silicon monoxide (SiO) from the crucible to the single crystal, and an evaporation rate of SiO from the melt. Regulating the plurality of process parameters may include controlling the position of a maximum gauss plane of the horizontal magnetic field, controlling the strength of the horizontal magnetic field, and controlling the crucible rotation rate.

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