

Title (en)

METHOD AND DEVICE FOR FEEDING ARSENIC DOPANT INTO A SILICON CRYSTAL GROWING PROCESS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ZUFÜHRUNG VON ARSEN ALS DOTIERUNGSSTOFF BEI EINEM VERFAHREN ZUR ZÜCHTUNG VON SILIZIUMEINKRISTALLEN

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT D'INTRODUIRE UN DOPANT A BASE D'ARSENIC DANS UN PROCEDE DE TIRAGE DE CRISTAL DE SILICIUM

Publication

**EP 1282733 A1 20030212 (EN)**

Application

**EP 01924683 A 20010404**

Priority

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- US 56835600 A 20000510

Abstract (en)

[origin: WO0186033A1] In a silicon crystal growing machine an arsenic dopant is introduced into the silicon melt through a sealed feeding tube with an open end submerged below the silicon melt surface. The arsenic vapor generated is then introduced into the silicon melt volume directly with minimal arsenic vapor loss within the crystal grower volume above the silicon melt. The dopant feeding tube can be constructed either as an assembly that is attached to the crystal grower seed chuck and is lowered into the silicon melt using the seed chuck drive mechanism, or as a separate assembly that can be extended or retracted from the silicon melt through an access port in the crystal grower chamber wall above the silicon melt surface.

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**C30B 15/04**

IPC 8 full level

**C30B 29/06** (2006.01); **C30B 15/04** (2006.01)

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