

Abstract

The object of the invention is a method for producing multicrystalline silicon, comprising the following steps: providing a crucible for receiving a silicon melt, which comprises a bottom and an internal face, wherein at least the bottom of the crucible has a coating containing one or more compounds selected from the group consisting of Si_3N_4 , oxidised Si_3N_4 and SiO_2 ; arranging a silicon layer in the crucible in contact with the coating of the bottom of the crucible; arranging polycrystalline silicon in the crucible in contact with the silicon layer; heating the crucible, until the polycrystalline silicon and silicon layer are completely melted to form a silicon melt; directional solidification of the silicon melt so as to result in a multicrystalline silicon block, characterised in that on heating the crucible and/or on melting the silicon layer, the silicon layer releases a reducing agent.

Fig. 1