

ABSTRACT

[Problem] Dislocation of a single crystal which is caused by adding a granular secondary dopant in the midst of pulling up a crystal is prevented.

[Means for Solving the Problem] A manufacturing method of a silicon single crystal according to the present invention includes a melting step for generating a silicon melt 3 containing a primary dopant, and a crystal pulling-up step that pulls up a silicon single crystal 2 from the silicon melt 3. The crystal pulling-up step includes at least one additional doping step for adding a dopant raw material 5 containing a secondary dopant into the silicon melt 3. A flow rate of Ar gas during a first period in which the secondary dopant 5 is not added is set as a first flow rate, and the flow rate of Ar gas during a second period that includes a period in which the secondary dopant 5 is added is set as a second flow rate that is greater than the first flow rate.