

**SYSTEMS AND METHODS FOR PRODUCTION
OF LOW OXYGEN CONTENT SILICON**

ABSTRACT

A method for producing a silicon ingot includes withdrawing a seed crystal from a melt that includes melted silicon in a crucible that is enclosed in a vacuum chamber containing a cusped magnetic field. At least one process parameter is regulated in at least two stages, including a first stage corresponding to formation of the silicon ingot up to an intermediate ingot length, and a second stage corresponding to formation of the silicon ingot from the intermediate ingot length to the total ingot length. During the second stage process parameter regulation may include reducing a crystal rotation rate, reducing a crucible rotation rate, and/or increasing a magnetic field strength relative to the first stage.

FIG. 4