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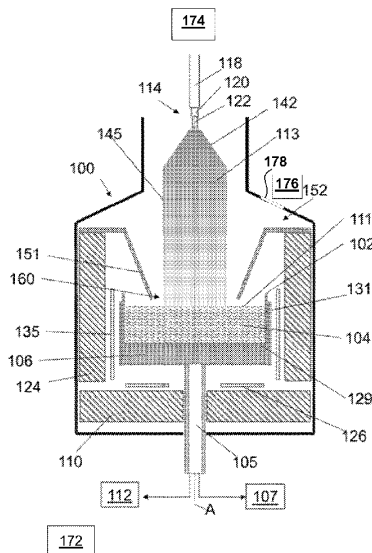


FIG. 1

(57) Abstract: A system for producing a silicon ingot, the system includes a crystal puller, a pyrometer, an infrared (IR) camera, and a controller. The crystal puller includes a hotzone having one or more components therein, and in which a silicon ingot may be pulled. The pyrometer is positioned to view a region of interest within the hotzone. The IR camera is positioned to view one or more additional regions of interest within the hotzone. The controller is connected to the crystal puller, the pyrometer, and the IR camera. The controller is programmed to control the crystal puller to produce a silicon ingot, receive temperature data of the region of interest within the hotzone from the pyrometer while producing the silicon ingot, and receive IR images of the one or more additional regions of interest from the IR camera while producing the silicon ingot.

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