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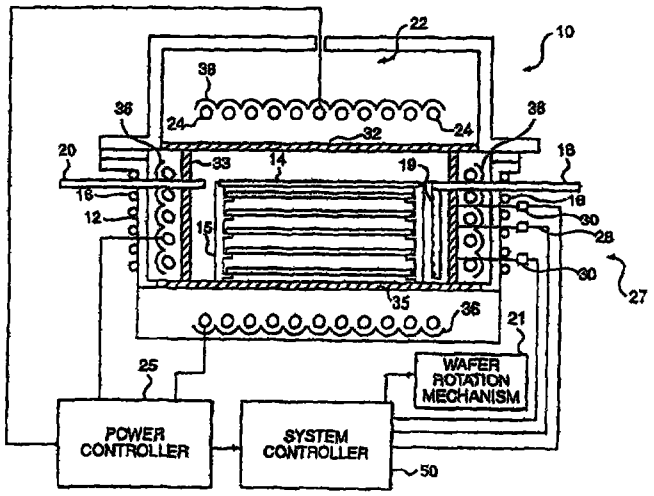
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(54) Title: RAPID THERMAL PROCESSING CHAMBER FOR PROCESSING MULTIPLE WAFERS



(57) Abstract

A system for heating a plurality of semiconductor wafers at the same time is disclosed. The apparatus includes a thermal processing chamber containing a substrate holder designed to hold from about three to about ten wafers. The thermal processing chamber is surrounded by light energy sources which heat the wafers contained in the chamber. The light energy sources can heat the wafers directly or indirectly. In one embodiment, the thermal processing chamber includes a liner made from a heat conductive material. The light energy sources are used to heat the liner which, in turn, heats the wafers. In an alternative embodiment, energy dispersing plates are placed in between adjacent wafers. Light energy being emitted by the light energy sources enters the energy dispersing members and gets distributed across the surface of adjacent wafers for heating the wafers uniformly.