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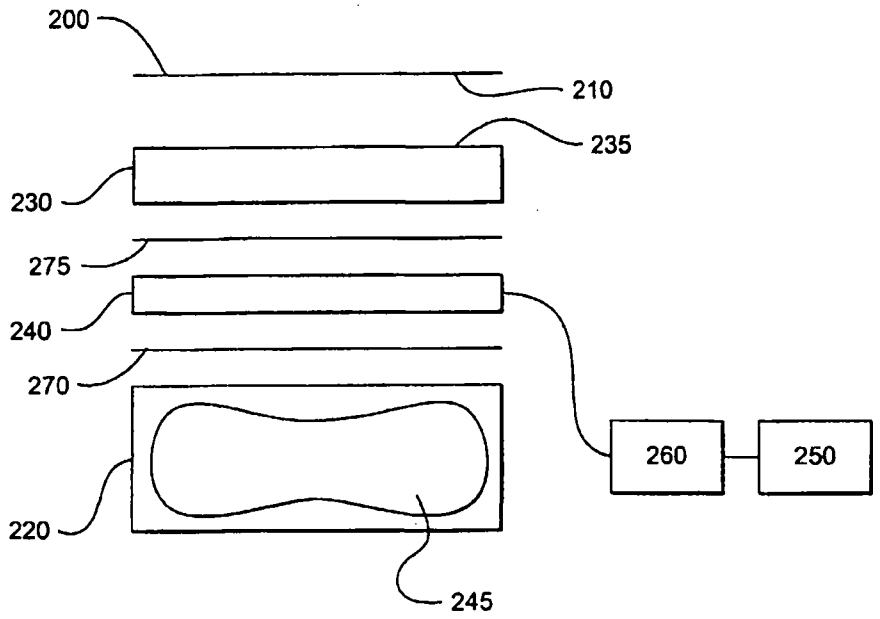
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(54) Title: SUBSTRATE THERMAL MANAGEMENT SYSTEM



(57) Abstract: This invention is a substrate thermal management system for efficient, rapid, controllable and uniform thermal management over a wide temperature range. The thermal management system integrates a thermal source, thermal sink and a thermal diffuser. According to the invention, a thermal diffuser is positioned stationary relative to the wafer surface and coupled to a thermal source and a thermal sink, which are also stationary relative to the wafer surface. The thermal source includes a plurality of zones adapted to provide differing amounts of heat and a controllable temperature field over a surface proximal to the thermal diffuser. The thermal sink comprises a heat-carrying media with a controllable temperature.

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