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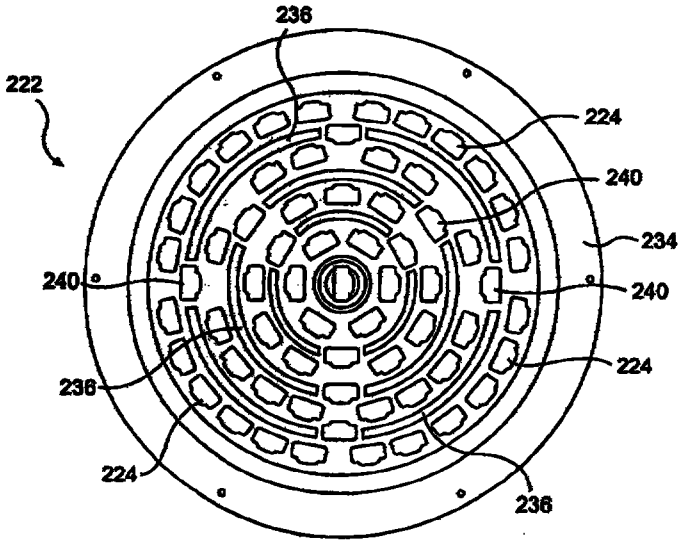
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(54) Title: HEATING DEVICE FOR HEATING SEMICONDUCTOR WAFERS IN THERMAL PROCESSING CHAMBERS



(57) Abstract

An apparatus for heat treating semiconductor wafers is disclosed. The apparatus includes a heating device which contains an assembly of light energy sources for emitting light energy onto a wafer. The light energy sources can be placed in various configurations. In accordance with the present invention, tuning devices which are used to adjust the overall irradiance distribution of the light energy sources are included in the heating device. The tuning devices can be either active sources of light energy or passive sources which reflect, refract or absorb light energy. For instance, in one embodiment, the tuning devices can comprise a lamp spaced from a focusing lens designed to focus determined amounts of light energy onto a particular location of a wafer being heated.