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[54] CONICAL RAPID THERMAL PROCESSING APPARATUS

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[58] Field of Search **392/416, 418; 219/390, 219/405, 411; 118/724, 725, 728, 730, 50.1; 432/120**

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[57] ABSTRACT

A conical rapid thermal processing system includes a conical thermal radiation reflector and a plurality of elongated radiant heating sources within the conical thermal radiation reflector. The elongated radiant heating sources pass through an imaginary conical surface within the conical thermal radiation reflector. A wafer holder within the imaginary conical surface holds the wafer face transverse to the common axis of the conical reflector and the conically arranged radiant heating lamps. The conical thermal radiation reflector and conically arranged lamps provide uniform radiant heating across the face of a wafer without significantly degrading coupling efficiency.

31 Claims, 6 Drawing Sheets

