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(54) Title: THERMAL PROCESSING SYSTEM WITH CROSS-FLOW LINER

(57) Abstract: An apparatus is provided for thermally processing substrates held in a carrier. The apparatus includes a cross-flow liner to improve gas flow uniformity across the surface of each substrate. The cross-flow liner of the present invention includes a longitudinal bulging section to accommodate a cross-flow injection system. The liner is patterned and sized so that it is conformal to the wafer carrier, and as a result, reduces the gap between the liner and the wafer carrier to reduce or eliminate vortices and stagnation in the gap areas between the wafer carrier and the liner inner wall.



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