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(54) Title: AUTOMATED BATCH PRODUCTION THIN FILM DEPOSITION SYSTEMS AND METHODS OF USING THE
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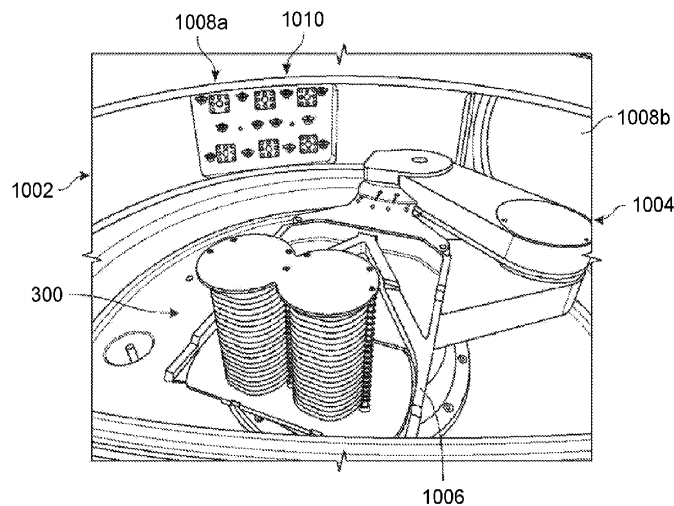


FIG. 10

(57) Abstract: Fully automated batch production thin film deposition systems configured to deliver uniformity combined with high throughput at a low cost-per-wafer. In some examples, systems of the present disclosure include automated safe wafer handling via low-impact batch transfer via transportable wafer racks loaded with a plurality of wafers. In some examples, systems include a modular pre- heat & cool-down architecture that enables a flexible thermal management solution tailored around particular specifications.

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