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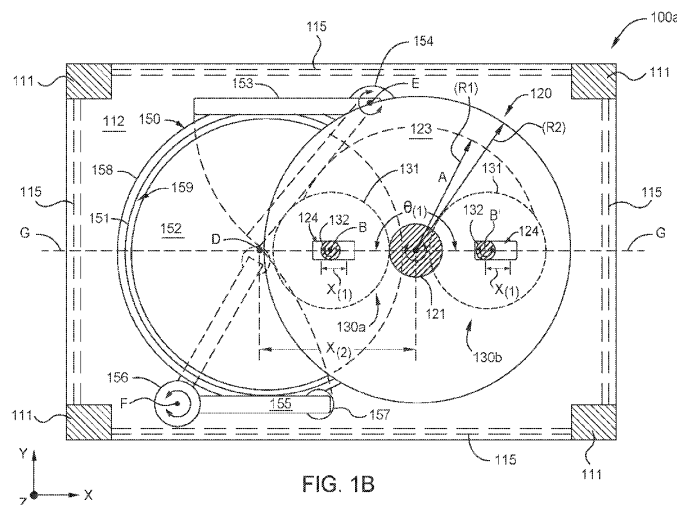
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(54) Title: HIGH THROUGHPUT POLISHING MODULES AND MODULAR POLISHING SYSTEMS



(57) Abstract: Embodiments herein include high throughput density chemical mechanical polishing (CMP) modules and customizable modular CMP systems formed thereof. In one embodiment, a polishing module features a carrier support module, a carrier loading station, and a polishing station. The carrier support module features a carrier platform and one or more carrier assemblies. The one or more carrier assemblies each comprise a corresponding carrier head suspended from the carrier platform. The carrier loading station is used to transfer substrates to and from the carrier heads. The polishing station comprises a polishing platen. The carrier support module, the substrate loading station, and the polishing station comprise a one-to-one-to-one relationship within each of the polishing modules. The carrier support module is positioned to move the one or more carrier assemblies between a substrate polishing position disposed above the polishing platen and a substrate transfer position disposed above the substrate loading station.

[Continued on next page]

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