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(54) Title: LASER SCRIBING SYSTEMS, APPARATUS, AND METHODS

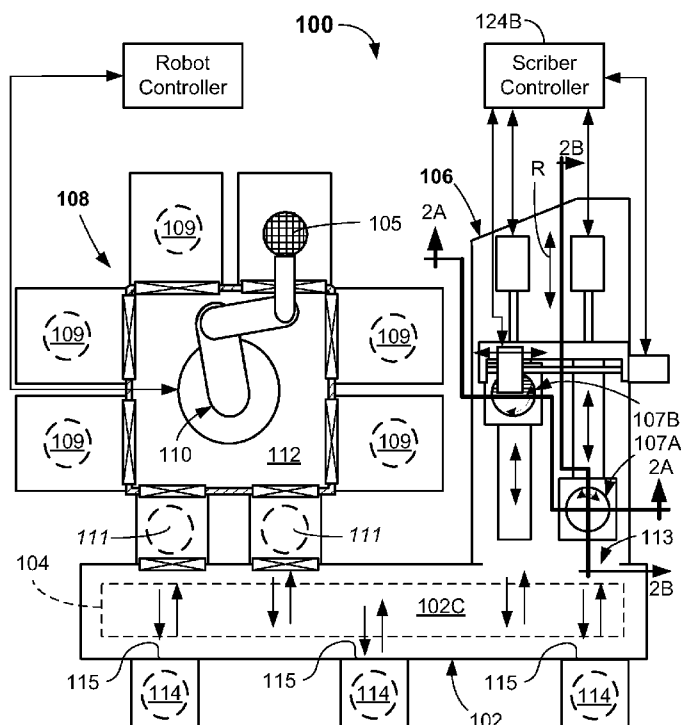


FIG. 1

(57) Abstract: Scribing apparatus are disclosed. In one aspect, a dual-stage scribing apparatus has a first stage adapted to receive a first substrate, a second stage adapted to receive a second substrate, and one or more lasers adapted to emit a laser beam towards the first stage and the second stage and adapted to scribe the substrates. Scribing can be undertaken on the first stage while an orientation process may take place on the other. In another aspect, as dual-laser scribing apparatus is disclosed. Electronic device processing systems and methods including scribing apparatus are described, as are numerous other aspects.



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