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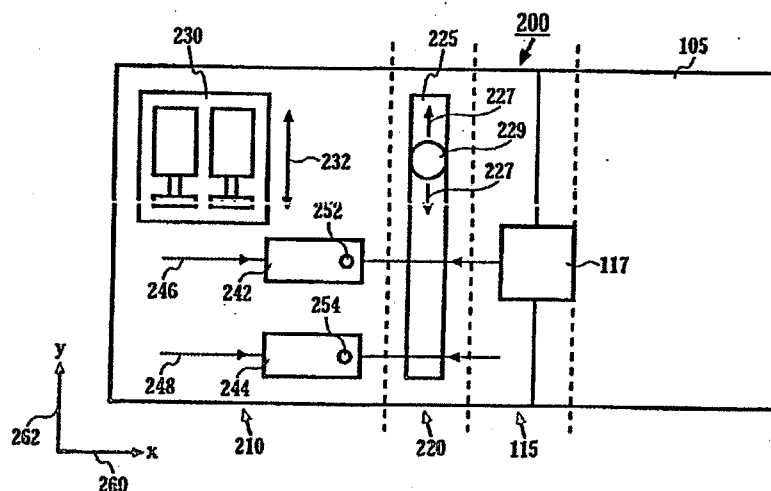
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(54) Title: BI-DIRECTIONAL SINGULATION SAW SYSTEM AND METHOD



(57) Abstract: A sawing system (200) incorporates a vision zone (220) between a loading/ unloading zone (115) and a sawing zone (210). This arrangement allows a dual spindle counter rotating saw assembly (230) to be more rigidly mounted, which reduces the displacement of the saw assembly during the sawing process. This, advantageously reduces the variation in the cut made by the saw blades of the saw assembly to comply with a predetermined required tolerance. In addition, with the vision zone (220) located between the loading/ unloading zone (115) and the sawing zone (210), a semiconductor wafer or substrate is transported from the loading/ unloading zone (115) to the vision zone (220) without passing the sawing zone (210). Consequently, exposure of a semiconductor wafer or substrate to water or debris from the sawing process is avoided, and imaging can be performed at the vision zone (220) without water or debris adversely affecting the imaging.

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