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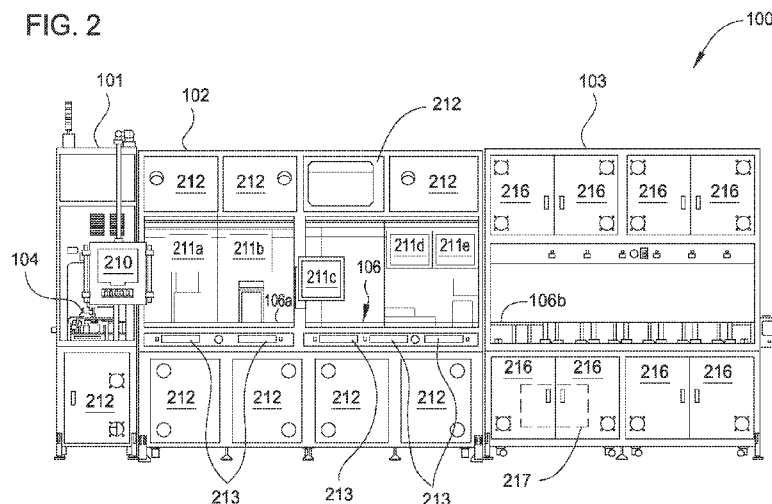
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(54) Title: LINEAR INSPECTION SYSTEM

FIG. 2



(57) **Abstract:** Embodiments of the disclosure generally relate to comprehensive, expandable substrate inspection systems. The inspection systems include multiple metrology units adapted to inspect, detect, or measure one or more characteristics of a substrate, including thickness, resistivity, saw marks, geometry, stains, chips, micro cracks, crystal fraction, and photoluminescence. The inspection systems may be utilized to identify defects on substrates and estimate solar cell efficiency of a solar cell produced with the substrate, prior to processing a substrate into a solar cell. Substrates may be transferred through the inspection system between metrology units on a track or conveyor, and then sorted based upon inspection data.