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(54) Title: MEASUREMENT OF THICK FILMS AND HIGH ASPECT RATIO STRUCTURES

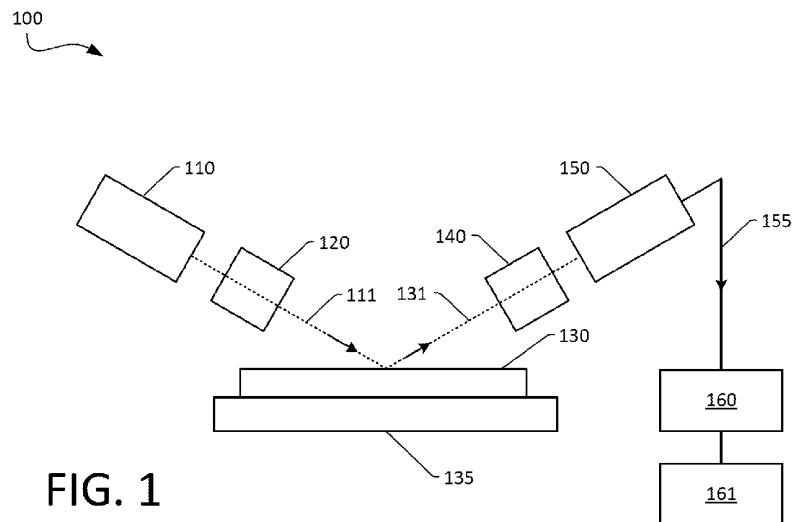


FIG. 1

(57) Abstract: The system includes a light source configured to emit light along an illumination path; a projection optical assembly disposed in the illumination path; a target disposed in the illumination path and configured to reflect the light along a collection path; a collection optical assembly disposed in the collection path; a detector disposed in the collection path and configured to detect the light reflected from the target and generate an output signal based on the detected light; and a processor in electronic communication with the detector and configured to generate a measurement of the target based on the output signal. The projection optical assembly defines a first numerical aperture at the target and the collection optical assembly defines a second numerical aperture at the target, and the first numerical aperture is slightly larger than the second numerical aperture for measurements of thick films and high aspect ratio structures.

[Continued on next page]

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