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(54) Title: METROLOGY SYSTEM AND METHOD FOR MEASURING DIAGONAL DIFFRACTION-BASED OVERLAY TARGETS

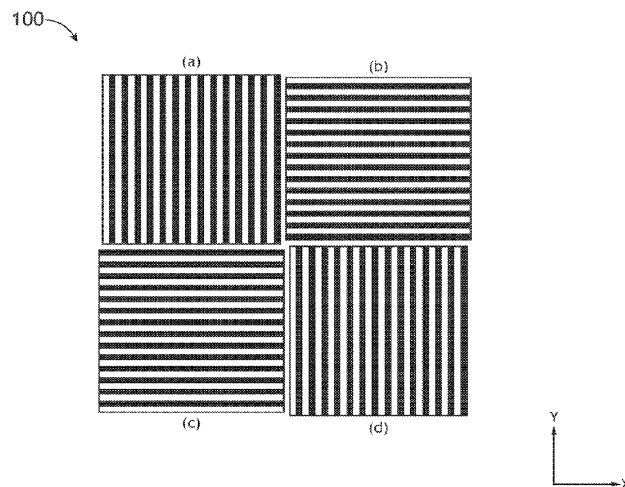


FIG. 1

(57) Abstract: A metrology system is disclosed, in accordance with one or more embodiments of the present disclosure. The metrology system includes a stage configured to secure a sample, one or more diffraction-based overlay (DBO) metrology targets disposed on the sample. The metrology system includes a light source and one or more sensors. The metrology system includes a set of optics configured to direct illumination light from the light source to the one or more DBO metrology targets of the sample, the set of optics including a half-wave plate, the half-wave plate selectively insertable into an optical path such that the half-wave plate selectively passes both illumination light from an illumination channel and collection light from a collection channel, the half-wave plate being configured to selectively align an orientation of linearly polarized illumination light from the light source to an orientation of a grating of the one or more DBO metrology targets.

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