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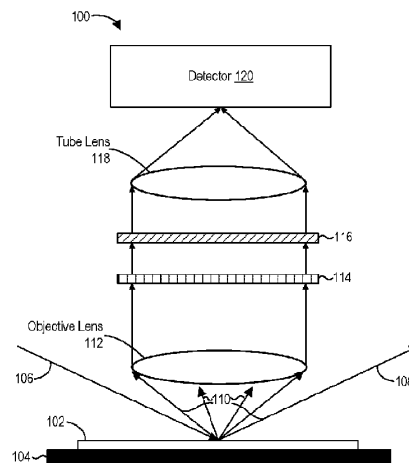


FIG. 1

(57) Abstract: An optical inspection system includes one or more gratings to convert the polarization of light scattered from a target from an elliptical polarization that varies spatially across a collection pupil to a linear polarization that is uniformly oriented across the collection pupil. In some embodiments, the one or more gratings are single-material gratings. In some embodiments, the one or more gratings include at least one grating on a reflective substrate. The one or more gratings have phase retardation that varies spatially across the collection pupil in accordance with the elliptical polarization. The optical inspection system also includes a linear polarizer to filter out the linearly polarized light.

[Continued on next page]

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