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(54) Title: NONLINEAR OPTICAL STOKES ELLIPSOMETERS

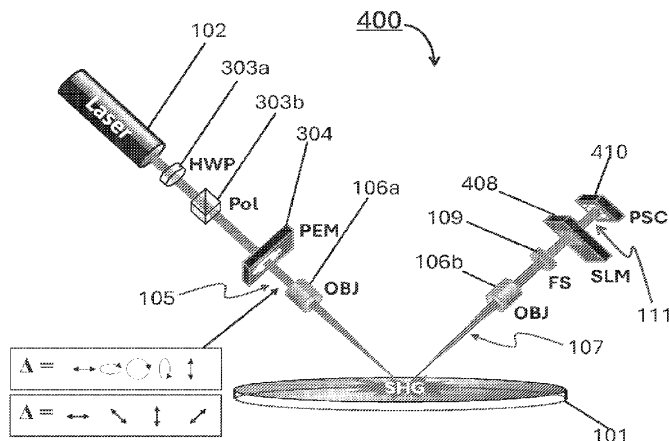


FIG. 4A

(57) Abstract: Described herein are methods and systems for measuring polarization states of nonlinearly generated light by a sample illuminated in response to receiving an incident beam having a known polarization state to determine a characteristic of the sample. The system includes an optical ellipsometer configured to be included in-line of a semiconductor fabrication line and generate measured signals proportional to different polarization parameters of second-harmonic light nonlinearly generated light by the sample, allowing determination of a complete polarization state of the second harmonic light using a characteristic of the sample is determined.

[Continued on next page]

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