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(54) Title: SCANNING MIRROR SYSTEM

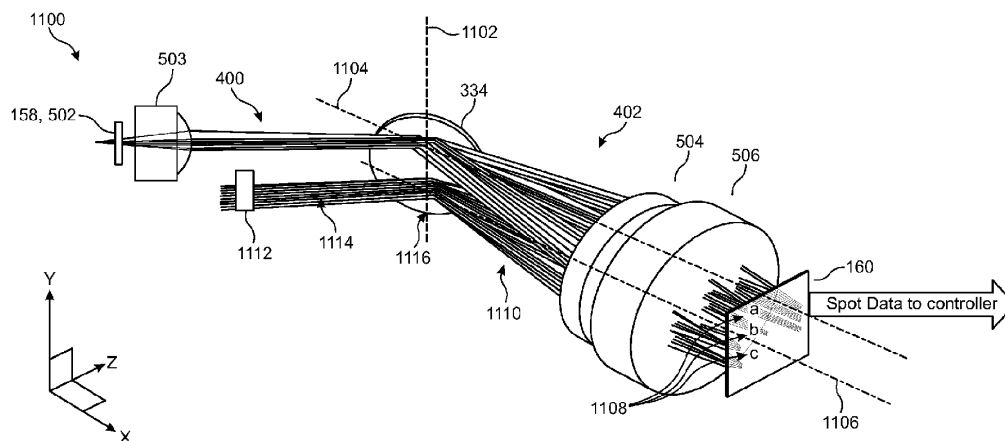


FIG. 11A

(57) Abstract: A scanning mirror system (1100) comprises a MEMS scanning mirror assembly (310), the MEMS scanning mirror assembly comprising a reflective surface (334) configured to reflect light from two different light sources. One light source (308a) is a source for a primary beam (312) which after reflection by the reflective surface forms a probe beam. The other light source (158, 502) being a light source for a secondary light beam (400) which, after reflection by the reflective surface (334) forms a mirror position reference beam (402). The system (1100) also comprises a position sensitive detector, PSD (160) configured to detect incident light of the mirror position reference beam (402), wherein the PDS (160) is configured to generate an feedback signal (1704) indicative of where the mirror position reference beam (402) is incident on the position sensitive detector (160) and send the feedback signal (1704) to a controller (1700). The controller is configured to be responsive to a beam direction input signal and the feedback signal,

[Continued on next page]

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and generate a drive signal. The scanning mirror system also comprises a mirror mover mechanism (1708) configured to be controlled by the drive signal (1706) from the controller (1700), to adjust the position of the MEMS mirror reflective surface (334) to control the direction of the probe beam.