[0010] FIG. 2B is a schematic showing the light path of the optical sensor when the target point is at the minimum distance;

[0011] FIG. 3 shows the reflected light path and the light sensor;

[0012] FIG. 4A is a side view of first embodiment of the focusing film;

[0013] FIG. 4B is a side view of a second embodiment of the focusing film;

[0014] FIG. 5 is a schematic of two optical sensors used to determine thickness of an object;

[0015] FIG. 6 is a schematic of 3 optical sensors used to determine if two plates are level;

[0016] FIG. 7 is a schematic depicting use of a calibration sensor in a semi-conductor deposition apparatus;

[0017] FIG. 8 is a top view of the calibration sensor;

[0018] FIG. 9 is a partly exploded perspective view of the calibration sensor; and

[0019] FIG. 10 is a flowchart showing the interactions of the components of the calibration sensor during use.

DETAILED DESCRIPTION OF THE DRAWINGS

[0020] Figure 1 shows an optical sensor 2 having a light emitter 4, preferably a laser, and a light sensor 6, preferably a charge coupled device (CCD). These elements are preferably contained in a housing (not shown). When in use, the light emitter emits a beam of light 8 directed at a target point 10 on surface 12. The emitted beam 8, hits the target point 10 and is reflected/scattered from the surface 12 to the sensing unit 6 as reflected/scattered light 14. The reflected/scattered light 14 falls on the light sensor 6. The angle at which the light is reflected/ scattered from surface 12 is determined by the target point's distance from the light sensor 6. The reflected/ scattered light 14 falls on the light sensor 6 and the location at which it falls on the light sensor is used to determine the distance of the target point 10 from the light sensor 6. For example, if the target point 10 is far away, as depicted in Figure 2A (at the maximum specified