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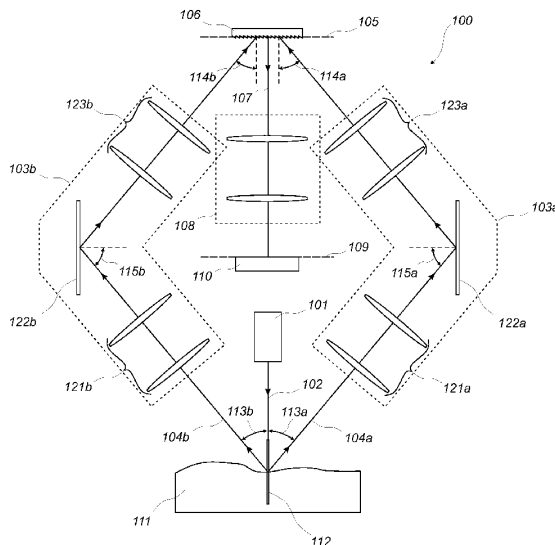


FIG. 1

(57) Abstract: The invention relates to a displacement sensor, for example as used in 3D sensors for measuring the three-dimensional shape of an object. A diffraction grating is used to reduce the angle of incidence of measurement light on a light sensor, such as an image sensor, thereby improving the performance of the light sensor. The displacement sensors of the present invention include sensors based on triangulation and coaxial sensors.

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