Title (en)

NON-CONTACT POSITION SENSOR

Title (de)

KONTAKTLOSER POSITIONSSENSOR

Title (fr)

CAPTEUR DE POSITION SANS CONTACT

Publication

EP 0966651 A1 19991229 (EN)

Application

EP 97916026 A 19970314

Priority

US 9704227 W 19970314

Abstract (en)

[origin: WO9841814A1] A device for measuring the displacement of a movable object includes a stationary light source (10) that produces an incident light beam. A target feature (17), attached to, or integral with, the object, reflects the incident light beam and forms a first image of the light source in close proximity of the target feature. An imaging lens (26) receives the reflected light beam and reforms the first image of the light source as a second image on the photodetector (20). The photodetector, spaced from the object, receives the reflected light beam and produces an electric signal having a characteristic which is proportional to a received location on the photodetector of the second image and which represents a position of the object. The target feature includes a curved surface that reflects the light beam such that a small, point-like or line-like first image of the light source is formed and reformed as a second image on the photodetector.

IPC 1-7

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IPC 8 full level

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