

Device for Determining the Location of Mechanical Elements

Abstract

The invention relates to a device for determining the location of a first mechanical element (10) and a second mechanical element (12) with respect to each other, having a first measurement unit (14) for positioning at the first mechanical element, a second measurement unit (18) for positioning at the second mechanical element, and an analysis unit (22), wherein the first measurement unit has means (24) for producing at least one light beam bundle (28, 30), a scattering surface (34) for scattering the light (WV, PV) impinging on the scattering surface, and a camera (36) for recording images of the scattering surface, wherein the second measurement unit has a reflector arrangement (38), which faces the first measurement unit when the measurement units are positioned at the respective mechanical element so as to reflect the light beam bundle (28', 28'') onto the scattering surface, and wherein the analysis unit is designed to determine from the image data supplied by the camera the position of impingement of the light beam bundle, reflected at the reflector arrangement, on the scattering surface and from it the location of the first mechanical element and the second mechanical element with respect to each other.

(Fig. 1)