

Abstract

Arrangement for the detection of disk-shaped objects in a cassette.

The invention is directed to an arrangement for the detection of disk-shaped objects in a cassette preferably for detecting the presence and the position of semiconductor wafers in a cassette.

The object of the invention, to discover a novel possibility for reliable detection of disk-shaped objects in cassettes regardless of their orientation or any discontinuity in their edge region, is met according to the invention in an arrangement by detecting light reflected at the edges of the objects in that it has at least two linearly elongated rows of light sources (11) which are arranged parallel to a family of planes predetermined by the cassette shelves (22) and objects (3) and which lie in a surface parallel to the edge areas (32) to be detected, an objective (13) which is arranged between the parallel linear light sources (11) and by means of which a plurality of shelves (22) is imaged simultaneously on the sensor unit (12), and in that there can be read out of the array of sensor elements at least portions of an edge area (32) of the objects (3) which is elongated transversely to such an extent that, when imaged in the sensor plane, an irregularity present in the edge area (32) of the object (3) is always less than the read out portions of the elongated edge area (32).

FIGURE 1