

Abstract

Inspection system and method for defect analysis of wire connections

The invention relates to an inspection system (10) for defect analysis of a wire connection (11) between a substrate (13) and a semiconductor component (15, 16) of a product (12), the inspection system comprising a
5 first projection device (24), a line scan camera (28) and a processing device, the first projection device having at least one slit projection means (25), the slit projection means being capable of projecting a light slit (33) onto a wire (21, 22) of the wire connection, light of the light slit reflected by the wire in a detection plane (39) of the line scan
10 camera extending perpendicularly, preferably orthogonally to a substrate surface (14) being detectable by means of the line scan camera, analysis image information of the product being derivable from a plurality of line scan image information of the line scan camera by means of the processing device, wherein the slit projection means is arranged in relation
15 to the line scan camera in such a manner that the light slit can be projected onto the product so as to extend within the detection plane, the inspection system comprising a second projection device, the second projection device having at least one illuminating means (27), the illuminating means being capable of projecting diffuse light onto the prod-
20 uct, light of the diffuse light reflected by the product in the detection plane being detectable by means of the line scan camera.

(Fig. 1)