

Title (en)

AUTOMATIC INSPECTION SYSTEM WITH STEREOVISION

Title (de)

GERÄT ZUR AUTOMATISCHEN ÜBERPRÜFUNG MIT STEREOSCOPISCHEM SICHTSYSTEM

Title (fr)

SYSTEME AUTOMATIQUE D'INSPECTION STEREOSCOPIQUE

Publication

EP 1057390 A2 20001206 (EN)

Application

EP 99969986 A 19991217

Priority

- GB 9828109 A 19981219
- US 9930206 W 19991217

Abstract (en)

[origin: WO0038494A2] In one embodiment of the present invention, two banks (22, 24) of fixed array cameras provide tiled stereo images (I1, I2, I3) and electronics assemble the tiled stereo images into a mosaic image. The mosaic image includes height information derived from the two sets stereo images, and is also compensated as a function of reference points in the image to more closely conform to the actual board (10). Preferably, a SAM model is used to locate the reference points. Reconstructed SAM models corresponding to components on the board are applied within a search area where a certain type of component is expected to be found. The best-fit location of the component within the search area, as well as the skew angle and the probability are computed. The best-fit location is the location where the Manhattan distance and the residual error are optimized. Once the best-fit location is computed, it is compared to tolerances to identify improperly placed components, the absence of components or the like.

IPC 1-7

H05K 13/08

IPC 8 full level

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Citation (search report)

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DOCDB simple family (application)

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