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(54) Title: PRINTED CIRCUIT BOARD ASSEMBLY DEFECT DETECTION

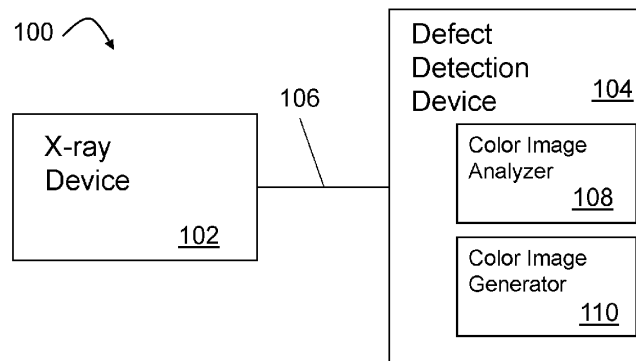


FIG. 1A

(57) Abstract: A method comprises obtaining a plurality of 2-dimensional gray scale images of a portion of a printed circuit board assembly. Each 2-dimensional gray scale image corresponds to one of a plurality of parallel planes intersecting the portion of the printed circuit board assembly at respective different locations. The method further comprises converting the plurality of 2-dimensional gray scale images into a color image. Each of the plurality of 2-dimensional gray scale images corresponds to and is used as input for a respective color channel of the color image. The method further comprises analyzing the color image to detect variation in color that indicates a defect; and outputting an alert indicating the defect in response to detecting the variation in color.

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