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(54) Title: ELECTRONIC ASSEMBLY VIDEO INSPECTION SYSTEM

## (57) Abstract

An apparatus for automatically assessing the quality of a printed circuit board assembly (6) using digitized video image analysis. The apparatus integrates with existing relatively low precision automated surface mount technology ("SMT") manufacturing systems as an inspection station (56a) insertable at various steps in the assembly process or as a separate manually loaded station. The inspection station includes a high resolution video imaging system and a video image analyzer comprising an onboard master computer (26a) that generates control signals to reposition the camera mounted within a screen (45) on a movable carriage (22a) and/or reposition the circuit board, and adjust the lighting; and generates individual board status data to be archived, graphically displayed on monitors (40a, 41a) or otherwise utilized by a rework station.

