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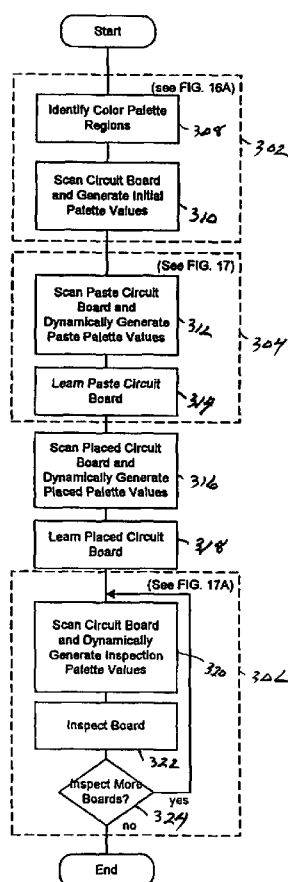
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(54) Title: INSPECTION SYSTEM USING DYNAMICALLY OBTAINED VALUES AND RELATED TECHNIQUES



(57) Abstract: A method and apparatus for identifying and categorizing one or more characteristics associated with a circuit board. Locations on the circuit board, referred to as palette regions, at which representative values for each category can be measured are identified. During an inspection process, characteristic values are dynamically measured at each of the palette regions on each circuit board being inspected and the values at the palette regions can be provided to a variety of models used in the inspection process. Characteristic values are also dynamically measured at regions of interest (ROIs) on the circuit board and are processed by the inspection models. In one embodiment, a negative model receives the characteristic values associated with an ROI and determines whether the characteristic values correspond to a bare or unpopulated circuit board or in the case of a populated circuit board the negative model can determine whether a circuit component is missing.

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