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(54) **INTELLIGENT DETECTION SYSTEM**

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(57) **ABSTRACT**

An intelligent detection system includes an image module, a target detection module, and a physical model processing module. The target detection module runs a scanning mode on the target object and controls the image module to capture target images of the target object with different physical properties under the scanning mode. The scanning mode is allowed to be based on luminescence or thermal radiation emitted by variation of time, voltage, current, or illumination. The physical model processing module receives the target images and carries out an image stacking process with each target image based on different physical properties, generating a detection result image through physical formula of electronic circuit in cooperation with a chromaticity coordinate diagram. The detection result image displays the accordingly formed image distribution, through which the physical model processing module obtains the functions, features, defect locations or identification results of defect locations of the target object.

