

ABSTRACT

A lighting apparatus which is optimum for the examination or observation for external appearances of very minute and precise devices, and an automatic device-exterior examining apparatus using this lighting apparatus are provided. The lighting apparatus comprises an illumination frame having a multiplicity of brightness-controllable light emitting elements arranged around the lens of a camera, and an illumination control means for controlling the brightness of each of said light emitting elements, and the automatic device-exterior examining apparatus comprises, in addition to this lighting apparatus, a camera such as CCD camera for converting a photographed picture into a multiplicity of data of pixels and outputting them, an image processing means for converting the pixel data into image data, an operation processing means for measuring the size, position, etc. of a specified portion of external appearance of a device to be tested, and display means for receiving the image data from the image processing means and displaying an image corresponding thereto. The high accurate examination for the external appearances of the specified portion of the device to be tested can be easily carried out by operating the illumination control means according to the photographed results by the camera to control the brightness of each of the light emitting elements thereby making optimum the illumination on the specified portion of the device.