ABSTRACT

LIGHTING DEVICE FOR INSPECTION AND INSPECTION SYSTEM

Provided is an inspection lighting device with which, even when changes in light that occur at respective feature points on an object to be inspected are small, the amounts of those changes in light can be determined across the entire field-of-view range, and the feature points can be detected under exactly the same conditions. An inspection lighting device 100 includes a surface light source 1 and a lens 2 that is disposed between the surface light source 1 and an inspection object W, the lens 2 being disposed nearer to the inspection object W such that at least one of a shielding mask M1 and a filtering means F1 is located centered around a focal distance position of the lens. An irradiation solid angle of light emitted from the surface light source 1 and irradiated onto the inspection object W by the lens 2 is configured to have solid angle regions as desired, the solid angle regions having specific optical attributes. The shapes, sizes, and inclination angles of irradiation solid angles of the inspection light as well as solid angle regions having specific optical attributes within the irradiation solid angles can be set to be substantially uniform across the entire field of view in accordance with changes that occur at feature points on the inspection object.

[Figure 1]