

INSPECTION SYSTEM AND METHOD OF INSPECTION

ABSTRACT

Provided is an inspection lighting device with which, even when changes
5 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. The 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
10 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 focus 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 that have specific optical attributes
15 and that are radially arranged around an optical axis of the irradiation solid angle.
The shapes, sizes, and incline 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
20 inspection object.

[Figure 1]