ABSTRACT

OBSERVATION APPARATUS

An observation apparatus for observing an observation object is constructed from a light source portion for emitting illumination light, a converging lens for focusing illumination light from the light source portion onto the observation object and a light-receiving portion for receiving light reflected from the observation object, wherein the light source portion includes a first arrangement of at least one light-emitting body provided on the optical axis of the converging lens, a second arrangement of at least one light-emitting body provided near the optical axis so as to shine light onto the observation object at an incidence angle which allows the light source image to completely cover the light-receiving portion (bright field illumination), a third arrangement of at least one light-emitting body provided near the optical axis so as to shine light onto the observation object at an incidence angle which allows the light source image to cover a portion of the light-receiving portion, and a fourth arrangement of at least one light-emitting body provided near the optical axis so as to shine light onto the observation object at an incidence angle which prevents the light source image from covering any of the light-receiving portion (dark field illumination), in which the light-emitting bodies are adapted for selective activation.

(Fig. 1)