

FLUORESCENCE DETECTION DEVICE

ABSTRACT OF THE DISCLOSURE

The fluorescence detection device includes an illumination module and a detection module. The illumination module includes a light source and a first filter. The light source is configured with the first filter to pass a first light beam at a first particular bandwidth along a first optical axis for exciting a targeted fluorescent probe and generating a fluorescent light. The detection module includes a second filter and a photo-detector. The second filter receives the fluorescent light and passes a second light beam at a second particular bandwidth along a second optical axis. The photo-detector receives the second light beam at the second particular bandwidth and converts the second light beam at the second particular bandwidth to an electrical signal. The first optical axis is tilted from the second optical axis at a specific angle ranged from 4.5 degrees to 9.5 degrees.

Fig. 4