

PORTABLE MULTI-COLOR FLUORESCENCE DETECTION DEVICE

ABSTRACT OF THE DISCLOSURE

The portable multi-color fluorescence detection device includes a plurality of wells, an illumination module and a detection module. The plurality of wells configured for accommodating fluorescent mixture. The illumination module comprises at least two light sources and a color combination prism, the color combination prism being configured for combining different frequency light emitting from the at least two light sources into combination beams in parallel toward the plurality of wells for exciting the fluorescent mixture to generate fluorescent light. The detection module comprises a plurality of fiber bundles and an imaging unit, each of the fiber bundles be coupled with the corresponding well, wherein the fluorescent light is transmitted to the imaging unit through the plurality of fiber bundles and converted into an electrical signal by the imaging unit.

Fig. 1