ABSTRACT

REAGENT OPEN MECHANISM OF LUMINESCENCE MEASUREMENT SYSTEM AND OPEN NEEDLE CONTROL METHOD IN REAGENT OPEN MECHANISM

A reagent open mechanism of the luminescence measurement system comprises a triaxial actuator and a reagent dispensing nozzle which is driven by the triaxial actuator. A reagent cartridge where a reagent to be divided by the reagent dispensing nozzle is filled in a concave and the opening of the concave is sealed by an aluminum sheet can be set in. This reagent open mechanism comprises an open needle which is driven by the triaxial actuator and makes a hole in the aluminum sheet and a fixation block between the reagent dispensing nozzle and the open needle which arranges the reagent dispensing nozzle and the open needle in such location that the reagent dispensing nozzle or the open needle does not contact with a structure including the reagent cartridge in a Z-axis operation during opening time or reagent dividing and dispensing time.

Fig. 3