ABSTRACT

The system is comprised of at least one pair of light sources (1;2;3) that emit pulsed electromagnetic radiation in the near-infrared zone; at least one pair of light sources (1;2;3) that emit radiation in the near-ultraviolet zone; at least one photodetector (4) with the absorption band located in the near-infrared zone, for detecting the pulsed radiation transmitted and reflected on the biological element, on the basis of the pulsed radiation emitted by the pair of light sources that emit the radiation in the near-infrared; at least one photodetector (5) with the absorption band located in the near-ultraviolet zone, for detecting the pulsed radiation transmitted and reflected on the biological element, on the basis of the pulsed radiation emitted by the pair of light sources (1;2;3) that emit the radiation in the near-ultraviolet zone; a control unit (8(c)) that interprets the pulsed radiation transmitted and reflected on the biological element; and a processing unit (8(d)) that determines if it is a living biological element, on the basis of the radiation interpreted by the control unit.