

**Arrangement for operating a biosensor and
arrangement for determining the glucose content in blood**

Abstract

The invention relates to an arrangement for operating a biosensor (01) emitting radiation. The arrangement comprises an excitation light source (03), which generates at least one excitation radiation for the biosensor; a coupling fiber (04), at the entry surface of which the excitation radiation is coupled in; an optical Y-coupler (12), including an excitation arm (11), which is connected to the exit surface of the coupling fiber (04), a detector arm (13), which is connected to an optical detector (21), and a sensor foot (14), which can be connected to the biosensor (01). The excitation arm (11) has a conical shape. The radiation axis of the excitation arm (11) includes an angle in the range of 5° to 70° with the main radiation axis of the detector arm (13). The diameter of the excitation arm (11) at the connecting point (16) to the detector arm is less than two thirds the diameter of the detector arm (13). The invention furthermore relates to an arrangement for determining the glucose content, in particular of blood.

Fig. 1