Abstract

The invention relates to a system for measuring an analyte concentration in a body fluid sample, comprising consumables (3) with detection reagents that effect a detection reaction when exposed to the body fluid sample, at least one cartridge (2) that contains consumables (3) of this type for multiple measurements, a data carrier (6) which is affixed to the cartridge (2) and contains a calibration information for the consumables (3) contained in the cartridge (2), a hand-held device (4) that comprises a cartridge reception compartment (7) including a reading facility (10) for receiving a cartridge (2) of this type and for reading its data carrier (6), a measuring facility (12) for measuring the result of a detection reaction, a processor (13) that is connected to the measuring facility (12) and the reading facility (10) for controlling the measuring facility (12) and for analysis of a measuring signal.

According to the invention, the system (1) comprises, aside from the at least one cartridge (2) and the hand-held device (4), as an additional system component at least one replaceable data storage unit (5) in which supplementary data is stored that functions in combination with a calibration information that is stored on the data carrier (6) of a cartridge (2) that is inserted in the device (4) during the analysis of a measuring signal, the hand-held device (4) comprises an interface (18) for transmission of supplementary data from the replaceable data storage unit (5) to the device (4), and a consumables identification is stored on the data carrier (6) and used by the processor (13) after insertion of a cartridge (2) to determine whether the consumables (3) of the inserted cartridge (2) combined with the supplementary data that is available to the processor (13) renders a reliable measurement of an analyte concentration of a body fluid sample feasible.

(Figure 1)