

Title (en)
METHOD AND SYSTEM FOR THE CALIBRATION OF DEVICES FOR IDENTIFYING BLOOD OR BLOOD CONSTITUENTS IN A FLUID

Title (de)
VERFAHREN UND ANORDNUNG ZUM KALIBRIEREN VON VORRICHTUNGEN ZUR ERKENNUNG VON BLUT ODER BLUTBESTANDTEILEN IN EINER FLÜSSIGKEIT

Title (fr)
PROCÉDÉ ET DISPOSITIF D'ÉTALONNAGE DE DISPOSITIFS DE DÉTECTION DE SANG OU DE CONSTITUANTS SANGUINS DANS UN LIQUIDE

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Application
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Abstract (en)
[origin: WO2018149921A1] The invention relates to a method and a system for the calibration of devices (11) for identifying blood or blood constituents in a fluid, especially dialysis fluid, which devices comprise a light emitter (17) and a light receiver (18) and an evaluation unit (20) which receives the signal of the light receiver (18) and which is designed such that blood or blood constituents in the fluid are identified on the basis of the attenuation of a radiation passing through the fluid. The method according to the invention is based on the fact that the devices (11) for identifying blood or blood constituents are calibrated without the use of blood. The calibration is done with an absorption normal (30) which has optical properties predefined with respect to the absorption of the light in blood, wherein the absorption normal (30) is arranged in the beam path (19) between the light emitter (17) and the light receiver (18). The absorption normal (30) makes it possible to detect a defined spectral attenuation of the light depending on the constituents of the blood, especially hemoglobin. However, since the absorption normal (30) does not, in contrast to blood, bring about scattering, this causing the beam path to be influenced differently from blood, the calibration is also done with a scattering normal (36) which has optical properties predefined with respect to the scattering of the light in blood. The system also comprises a beam deflector unit (22) to couple out light for a spectral measurement of the light emitter (17) with a spectrometer (27).

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