Title (en)

BIOLOGICAL FLUID ANALYSIS USING DISTANCE OUTLIER DETECTION

Title (de)

ANALYSE EINER BIOLOGISCHEN FLÜSSIGKEIT DURCH ERFASSUNG ABWEICHENDER WERTE MIT GENERALISIERTEN ENTFERNUNGEN

Title (fr)

ANALYSE DE FLUIDES BIOLOGIQUES PAR DETECTION DES VALEURS ABERRANTES PAR DISTANCES GENERALISEES

Publication

EP 0846253 A4 20091111 (EN)

Application

EP 96926226 A 19960802

Priority

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Abstract (en)

[origin: WO9706418A1] A method and apparatus for measuring the concentration of an analyte present in a biological fluid is disclosed. The method includes the steps of applying NIR radiation to calibration samples to produce calibration data, analyzing calibration data to identify and remove outliers, constructing a calibration model, collecting and analyzing unknown samples to identify and remove outliers, and predicting analyte concentration of non-outliers from the calibration model. Analysis of calibration data includes data pretreatment, data decomposition to remove redundant data, and identification and removal of outliers using generalized distances. The apparatus (100) includes a pump (102) which circulates a sample through tubing (104) to fill a flowcell (106). Light from a NIR source (114) is synchronized with a detector (110), facilitating light and dark measurements, and passes through a monochrometer (120) and the flowcell (106) and strikes the detector (110), whereby radiation transmitted through the sample is measured.

IPC 1-7

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Citation (search report)

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