

Title (en)

METHOD AND APPARATUS FOR SPECTROSCOPIC ANALYSIS, IMPLEMENTING INFRARED AND FLUORESCENCE MULTICHANNEL PROCESSING OF SPECTRAL DATA

Title (de)

VERFAHREN UND VORRICHTUNG ZUR SPEKTROSKOPISCHEN ANALYSE MIT INFRAROT- UND FLUORESENZMEHRKANALVERARBEITUNG VON SPEKTRALEN DATEN

Title (fr)

PROCÉDÉ ET APPAREIL D'ANALYSE SPECTROSCOPIQUE, UTILISANT UN TRAITEMENT MULTIVOIES DE DONNÉES SPECTRALES EN INFRAROUGE ET EN FLUORESCENCE

Publication

EP 3411691 A1 20181212 (FR)

Application

EP 17701899 A 20170131

Priority

- FR 1650830 A 20160202
- EP 2017052046 W 20170131

Abstract (en)

[origin: CA3013301A1] The invention relates to a method for analysing at least one sample, involving the implementation of a method for the analysis of spectroscopic data based on a multichannel statistical model, comprising: a) illuminating said or each sample to be analysed by a first light source and by a second light source, said at least one second light source being different from said first light source; b) acquiring fluorescence spectra of said or each sample, said fluorescence spectra resulting from the illumination of said or each sample by at least one light radiation emitted by said first light source; c) acquiring transmittance and/or reflectance spectra of said or each sample, said transmittance and/or reflectance spectra resulting from the illumination of said or each sample by at least one light radiation emitted by said second light source; d) organising said acquired fluorescence spectra into a first acquisition data cube; e) organising said acquired transmittance and/or reflectance spectra into a second acquisition data cube; f) merging the acquisition data of said first cube and the acquisition data of said second cube into a third cube of merged data; g) decomposing the merged data of said third cube by applying said multichannel statistical model; and h) determining at least one indicator characterising said or each sample, from data provided by the application of said multichannel statistical model to said merged data. The invention also relates to an apparatus for carrying out such a method.

IPC 8 full level

G01N 21/31 (2006.01); **G01N 21/17** (2006.01); **G01N 21/35** (2014.01); **G01N 21/3563** (2014.01); **G01N 21/64** (2006.01)

CPC (source: EP US)

G01N 21/31 (2013.01 - EP); **G01N 21/35** (2013.01 - EP); **G01N 21/3563** (2013.01 - US); **G01N 21/64** (2013.01 - EP);
G01N 21/6486 (2013.01 - US); **G01N 21/3563** (2013.01 - EP); **G01N 21/6486** (2013.01 - EP); **G01N 2021/1736** (2013.01 - EP US);
G01N 2021/6419 (2013.01 - EP); **G01N 2021/6421** (2013.01 - EP US); **G01N 2201/129** (2013.01 - EP US)

Citation (search report)

See references of WO 2017134050A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

FR 3047313 A1 20170804; **FR 3047313 B1 20180112**; CA 3013301 A1 20170810; CN 109313127 A 20190205; EP 3411691 A1 20181212;
JP 2019503490 A 20190207; US 2019369013 A1 20191205; WO 2017134050 A1 20170810

DOCDB simple family (application)

FR 1650830 A 20160202; CA 3013301 A 20170131; CN 201780012576 A 20170131; EP 17701899 A 20170131; EP 2017052046 W 20170131;
JP 2018539897 A 20170131; US 201716073750 A 20170131