

Title (en)

ESTIMATING A SUBSTANCE CONCENTRATION USING MULTIPLE NON-INVASIVE SENSORS

Title (de)

SCHÄTZUNG EINER SUBSTANZKONZENTRATION MIT HILFE MEHRERER NICHTINVASIVER SENSOREN

Title (fr)

ESTIMATION D'UNE CONCENTRATION D'UNE SUBSTANCE AU MOYEN DE PLUSIEURS CAPTEURS NON INVASIFS

Publication

EP 3408772 A1 20181205 (EN)

Application

EP 17702061 A 20170125

Priority

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- EP 2017051573 W 20170125

Abstract (en)

[origin: WO2017129634A1] A method for determining a level of a substance in a material is disclosed. The method comprises: obtaining a first measured spectrum from a first noninvasive sensor, the first measured spectrum relating to a first characteristic of the material; obtaining a second measured spectrum from a second noninvasive sensor, the second measured spectrum relating to a second characteristic of the material; calculating a first intermediate estimate \hat{y}_x of the concentration of a chemical constituent in the material based on the first measured spectrum; calculating a second intermediate estimate \hat{y}_2 of the concentration of a chemical constituent in the material based on the second measured spectrum; determining a first and second residual spectrum r_1 , r_2 , the residual spectra defined as the deviation between the measured spectrum and an estimated spectrum, the estimated spectrum being the component of the measured spectrum corresponding to the intermediate estimate of the concentration of the chemical constituent; and calculating an improved estimated concentration of the chemical constituent in the material based on the first intermediate estimate \hat{y}_1 , the second intermediate estimate \hat{y}_2 and the residual spectra r_1 , r_2 .

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2017129634A1

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