Title (en)

DEVICE FOR CAPTURING A HYPERSPECTRAL IMAGE

Title (de)

VORRICHTUNG ZUR ERFASSUNG EINES HYPERSPEKTRALEN BILDES

Title (fr)

DISPOSITIF DE CAPTURE D'UNE IMAGE HYPERSPECTRALE

Publication

EP 3682201 A1 20200722 (FR)

Application

EP 18830502 A 20180911

Priority

- FR 1758396 A 20170912
- FR 2018052215 W 20180911

Abstract (en)

[origin: WO2019053364A1] The invention relates to a device for capturing a hyperspectral image (15), comprising: means for acquiring a diffracted image (14) of a focal plane; means for acquiring at least two non-diffracted images (17-18) of the focal plane, obtained with different chromatography filters (F1-F4); and means for constructing a hyperspectral image (15) from the different diffractions (R0-R7), comprising a neural network configured to calculate the intensity of each voxel of the hyperspectral image (15) according to: the light intensity in each of the non-diffracted images (17-18) at coordinates x and y, the weight of each intensity depending on the closeness of the desired wavelength to the colour of the chromatography filter of said non-diffracted image; and light intensities in each of the diffractions of the diffracted image (14) in which the x, y coordinates are dependent on coordinates x, y and λ of the voxel.

IPC 8 full level

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CPC (source: EP US)

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