

Title (en)

METHOD FOR IMAGING A SAMPLE BY MEANS OF A LIGHT-SHEET MICROSCOPE

Title (de)

VERFAHREN ZUM ABBILDEN EINER PROBE MITTELS EINES LICHTBLATTMIKROSKOPS

Title (fr)

PROCÉDÉ DE REPRÉSENTATION D'UN ÉCHANTILLON AU MOYEN D'UN MICROSCOPE À FEUILLE DE LUMIÈRE

Publication

**EP 3746829 A1 20201209 (DE)**

Application

**EP 19706380 A 20190129**

Priority

- DE 102018102241 A 20180201
- EP 2019052036 W 20190129

Abstract (en)

[origin: WO2019149666A1] A method is described for imaging a sample by means of a light sheet microscope (10). Here, the sample is illuminated from two different illumination directions by two light sheets (58, 60), which have different polarization states and which are superposed on one another in coplanar fashion in a target region (E) of the sample. An image of the illuminated target region (E) is produced by means of an imaging optical unit (14) of the light sheet microscope (10). An interference pattern (I) is produced in the illuminated target region (E) by means of the two light sheets (58, 60), as a result of which an image modulation corresponding to the interference pattern (I) is imparted on the image of the target region (E). The image modulation is evaluated. Depending on the evaluated image modulation, the illuminated target region (E) is adjusted relative to the focus range (F) of the imaging optical unit (14).

IPC 8 full level

**G02B 21/00** (2006.01)

CPC (source: EP US)

**G02B 21/0032** (2013.01 - EP); **G02B 21/0068** (2013.01 - EP US); **G02B 21/0076** (2013.01 - EP US); **G02B 21/06** (2013.01 - US)

Citation (search report)

See references of WO 2019149666A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102018102241 A1 20190801**; **DE 102018102241 B4 20220224**; CN 111670398 A 20200915; CN 111670398 B 20230908; EP 3746829 A1 20201209; JP 2021514483 A 20210610; JP 7234243 B2 20230307; US 11586027 B2 20230221; US 2021041681 A1 20210211; WO 2019149666 A1 20190808

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