Title (en)

MICROSCOPE AND METHOD FOR LOCALIZING FLUORESCENT MOLECULES IN THREE SPATIAL DIMENSIONS

Title (de)

MIKROSKOP UND VERFAHREN ZUM LOKALISIEREN FLUORESZENTER MOLEKÜLE IN DREI RAUMDIMENSIONEN

Title (fr)

MICROSCOPE ET PROCÉDÉ DE LOCALISATION DE MOLÉCULES FLUORESCENTES DANS TROIS DIMENSIONS SPATIALES

Publication

EP 3452856 A1 20190313 (DE)

Application

EP 17721132 A 20170502

Priority

- DE 102016108259 A 20160503
- DE 102016123387 A 20161202
- EP 2017060390 W 20170502

Abstract (en)

[origin: WO2017191121A1] The invention relates to a microscope which has an optical illuminating system for exciting fluorescence at point light sources of a sample, an optical detection system, and a camera with a sensor. The density of the point light sources is kept low in order to minimize the overlap of point light sources lying one behind the other or in the vicinity of one another in each image captured by the camera, and a means is provided in the beam path of the optical detection system in order to divide the detection aperture into individual sub-apertures such that the images, which have been generated on the camera sensor by the individual sub-apertures, image an object volume from different spatial directions.

IPC 8 full level

G02B 21/00 (2006.01); **G02B 21/16** (2006.01); **G02B 21/36** (2006.01); **G02B 27/58** (2006.01)

CPC (source: EP US)

G02B 21/0032 (2013.01 - EP US); **G02B 21/0076** (2013.01 - US); **G02B 21/16** (2013.01 - EP US); **G02B 21/367** (2013.01 - EP US); **G02B 27/58** (2013.01 - EP US); G02B 2207/113 (2013.01 - US); G02B 2207/129 (2013.01 - US)

Citation (search report)

See references of WO 2017191121A1

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)

WO 2017191121 A1 20171109; EP 3452856 A1 20190313; US 11067781 B2 20210720; US 2019250390 A1 20190815

DOCDB simple family (application)

EP 2017060390 W 20170502; EP 17721132 A 20170502; US 201716098472 A 20170502