

Title (en)

MICROSCOPE WITH AT LEAST ONE ILLUMINATING BEAM IN THE FORM OF A LIGHT SHEET

Title (de)

MIKROSKOP MIT MINDESTENS EINEM BELEUCHTUNGSSTRAHL IN FORM EINER LICHTSCHEIBE

Title (fr)

MICROSCOPE PRÉSENTANT AU MOINS UN RAYON D'ÉCLAIRAGE SOUS FORME D'UNE PLAQUE D'ÉCLAIRAGE

Publication

**EP 2912510 A1 20150902 (DE)**

Application

**EP 13762402 A 20130904**

Priority

- DE 102012110077 A 20121023
- EP 2013002647 W 20130904

Abstract (en)

[origin: WO2014063764A1] The invention relates to a microscope with at least one illuminating lens (10) for guiding at least one illuminating beam (33) in the form of a light sheet for illuminating at least one sample under examination (1), and with at least one detection objective (20) for capturing at least one detection beam (35) issuing from the sample under examination (1) (light sheet microscope). According to the invention, the optical axis (11) of the at least one illuminating lens (10) adopts an angle  $\alpha$ , which is not equal to  $90^\circ$ , with respect to the optical axis (21) of the at least one detection objective (20) and the at least one illuminating beam (33) is preferably incident upon the at least one illuminating lens (10) outside the optical axis (11) thereof under an incident angle  $\beta$  such that the light sheet lies within the focussing plane of the at least one detection objective (20). The arrangement of the at least one illuminating lens (10) at right angles to the at least one detection objective (20) which has been usual so far, which arrangement is accompanied by space restrictions, is overcome by means of the light sheet microscope according to the invention. This opens up new possibilities for the arrangement of the objectives in relation to the capture technology and also for placing the sample under examination on a sample table and moving the sample together with the table.

IPC 8 full level

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Citation (search report)

See references of WO 2014063764A1

Citation (examination)

- EP 2535754 A1 20121219 - LEICA MICROSYSTEMS [DE]
- WO 2010012980 A1 20100204 - IMP INNOVATIONS LTD [GB], et al

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DOCDB simple family (application)

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