

Title (en)

DIGITAL MICROSCOPE HAVING AN OBJECTIVE AND HAVING AN IMAGE SENSOR

Title (de)

DIGITALES MIKROSKOP MIT EINEM OBJEKTIV UND MIT EINEM BILDSSENSOR

Title (fr)

MICROSCOPE NUMÉRIQUE POURVU D'UN OBJECTIF ET D'UN CAPTEUR D'IMAGE

Publication

EP 3452859 A1 20190313 (DE)

Application

EP 17728084 A 20170523

Priority

- DE 102016110407 A 20160606
- EP 2017062405 W 20170523

Abstract (en)

[origin: WO2017211584A1] The invention relates to a digital microscope (16; 17), which comprises an objective (11) for the magnified optical imaging of a sample (10) in an image plane. An image can be provided in the image plane with an optical resolution by means of the objective (11). The microscope (16; 17) also comprises an image sensor (12) for converting the image imaged onto the image sensor (12) by the objective (11) into an electrical signal. The image sensor (12) comprises a matrix of pixels, by which a maximum image resolution of the image sensor is determined, which maximum image resolution is finer than the optical resolution of the objective (11). The objective (11) has a maximum magnification factor of at most 40. The optical resolution of the objective (11) is defined as a minimum distance of two structures that can be distinguished in the image. The maximum image resolution of the image sensor (12) is defined by a pixel distance. A quotient of the minimum distance of two structures that can be distinguished in the image and the pixel distance defines a scanning factor, which is at least five.

IPC 8 full level

G02B 21/36 (2006.01)

CPC (source: EP US)

G02B 21/006 (2013.01 - US); **G02B 21/365** (2013.01 - EP US); **G02B 21/367** (2013.01 - US); **H04N 25/40** (2023.01 - US);
G02B 21/367 (2013.01 - EP)

Citation (search report)

See references of WO 2017211584A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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