

Title (en)
STRUCTURED ILLUMINATION SCANNING MICROSCOPY

Title (de)
RASTERMIKROSKOPIE MIT STRUKTURIERTER BELEUCHTUNG

Title (fr)
MICROSCOPIE À BALAYAGE À ÉCLAIRAGE STRUCTURÉ

Publication
EP 3583459 A1 20191225 (EN)

Application
EP 18710930 A 20180216

Priority
• NL 2018386 A 20170216
• NL 2018050107 W 20180216

Abstract (en)
[origin: WO2018151599A1] A method of forming a high-resolution image of a sample using a scanning microscope controlled by a processor is described wherein the method comprises the steps of receiving or generating control information for controlling a scanning microscope, the control information defining a plurality of different periodic patterns on the basis of one or more pattern parameters, preferably the one or more pattern parameters, including at least one of: a spatial frequency, a periodicity direction, an initial phase; using the control information to control the scanning microscope to expose the sample to multiple illumination patterns, each exposure to an illumination pattern causing one or more optical excitations in the sample, the light originating from said optical excitations forming an emission light signal; controlling an imaging system to capture multiple images, each image being associated with an emission light signal of one of the multiple exposures, and, using a structured light reconstruction algorithm for forming a high-resolution image on the basis of the one or more pattern parameters.

IPC 8 full level
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CPC (source: EP)
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Citation (search report)
See references of WO 2018151599A1

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