

Title (en)  
OPTICAL SCANNING MICROSCOPE AND EXAMINATION METHOD

Title (de)  
OPTISCHES RASTERMIKROSKOP UND UNTERSUCHUNGSVERFAHREN

Title (fr)  
MICROSCOPE À BALAYAGE OPTIQUE ET PROCÉDÉ D'EXAMEN

Publication  
**EP 3455663 A1 20190320 (DE)**

Application  
**EP 17723981 A 20170512**

Priority  
• DE 102016108987 A 20160513  
• EP 2017061470 W 20170512

Abstract (en)  
[origin: WO2017194742A1] The invention relates an optical scanning microscope (1, 2, 3), which comprises an illumination system (20) having a light source portion (100-103) emanating from a light source (100), a first polarization-dependent beam splitter (105a) and a second polarization-dependent beam splitter (105b) and a first optical channel (21) and a second optical channel (22) between the first beam splitter (105a) and the second beam splitter (105b), wherein the light source portion (100-103) is configured to emit a first illumination light beam (203) with light with a first main polarization direction and a second main polarization direction, the first beam splitter (105a) is configured to at least predominantly guide the light with the first main polarization direction into the first channel (21) and the light with the second main polarization direction into the second channel (22), the second beam splitter (105b) is configured form a second illumination light beam (24) from the light with the first main polarization direction from the first channel (21) and from light with the second main polarization direction from the second channel (22), and the channels (21, 22) are configured to emit the light with the first main polarization direction from the first channel (21) and the light with the second main polarization direction from the second channel (22) with different convergent angles. A corresponding method is likewise subject matter of the invention.

IPC 8 full level  
**G02B 21/00** (2006.01)

CPC (source: EP US)  
**A61F 5/01** (2013.01 - EP); **A61F 5/0125** (2013.01 - EP); **G02B 21/0032** (2013.01 - EP US); **G02B 21/0068** (2013.01 - EP); **G02B 21/0076** (2013.01 - EP); **G02B 21/0092** (2013.01 - EP US); **G02B 21/02** (2013.01 - US); **G02B 21/16** (2013.01 - EP); **G02B 27/283** (2013.01 - EP US); **A61F 2005/0153** (2013.01 - EP); **A61F 2005/0167** (2013.01 - EP); **A61F 2005/0174** (2013.01 - EP); **A61F 2005/0179** (2013.01 - EP); **G02B 21/0076** (2013.01 - US)

Citation (search report)  
See references of WO 2017194742A1

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)  
**DE 102016108987 A1 20171116**; DE 202016008489 U1 20180222; EP 3455663 A1 20190320; JP 2019517027 A 20190620; JP 6945557 B2 20211006; US 11630292 B2 20230418; US 2020319445 A1 20201008; WO 2017194742 A1 20171116

DOCDB simple family (application)  
**DE 102016108987 A 20160513**; DE 202016008489 U 20160513; EP 17723981 A 20170512; EP 2017061470 W 20170512; JP 2018559780 A 20170512; US 201716300966 A 20170512