

Title (en)

OPTICAL DEVICE

Title (de)

OPTISCHE VORRICHTUNG

Title (fr)

DISPOSITIF OPTIQUE

Publication

**EP 3500872 A1 20190626 (DE)**

Application

**EP 17755113 A 20170809**

Priority

- DE 102016115277 A 20160817
- EP 2017070173 W 20170809

Abstract (en)

[origin: WO2018033446A1] The invention relates to an optical device, preferably operating according to the time-of-flight principle, particularly for obtaining 3D spatial information and/or for detecting polarisation-changing materials, comprising: a light-producing device (102) comprising at least one light emitter (103) for emitting light into a spatial area; a light-receiving device (110) comprising at least one light detector that can be, or is, oriented towards the spatial area; a polarisation manipulator (108) comprising at least one first optical modulator (106) for influencing a polarisation of a light passing through the modulator (106) and at least one polarisation filter (111) which is optically connected downstream of the modulator (106), where the first optical modulator (106) is designed to generate at least three different polarisation states and/or where a superposition device is provided and designed in such a way that at least three polarisation states can be generated, particularly by time-division multiplexing; and an evaluation device for particularly successive evaluation of the at least three polarisation states of the light passing through the polarisation manipulator.

IPC 8 full level

**G01S 7/499** (2006.01); **G01J 4/04** (2006.01); **G01S 7/481** (2006.01); **G01S 7/486** (2020.01); **G01S 17/89** (2020.01)

CPC (source: EP US)

**G01J 4/04** (2013.01 - US); **G01N 21/21** (2013.01 - US); **G01N 21/88** (2013.01 - US); **G01S 7/4814** (2013.01 - EP); **G01S 7/4816** (2013.01 - EP US); **G01S 7/484** (2013.01 - US); **G01S 7/486** (2013.01 - US); **G01S 7/499** (2013.01 - EP US); **G01S 17/36** (2013.01 - EP); **G01S 17/89** (2013.01 - EP US); **H04N 13/254** (2018.04 - US); **G01N 21/21** (2013.01 - EP); **G01N 2021/8848** (2013.01 - US)

Citation (search report)

See references of WO 2018033446A1

Designated contracting state (EPC)

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