

Title (en)

OPTICAL SYSTEM FOR OBTAINING 3D SPATIAL INFORMATION

Title (de)

OPTISCHES SYSTEM ZUR GEWINNUNG VON 3D-RAUMINFORMATIONEN

Title (fr)

SYSTÈME OPTIQUE POUR OBTENIR DES INFORMATIONS SPATIALES 3D

Publication

EP 4305447 A1 20240117 (DE)

Application

EP 22709973 A 20220214

Priority

- DE 102021105888 A 20210311
- EP 2022053494 W 20220214

Abstract (en)

[origin: WO2022189094A1] The invention relates to an optical system for obtaining 3D spatial information within a spatial region, in particular for detecting 3D information regarding an object, comprising: - a light receiving device (110) comprising at least one light detector which can be or is oriented towards the spatial region; - an optical modulator unit (106) for rotating a polarisation of light passing through the modulator unit (106); and - at least one polarisation filter (111) which is situated optically downstream of the modulator unit; wherein at least one bandpass filter is provided which is situated optically downstream of the polarisation filter and/or wherein the modulator unit comprises at least two optical modulators.

IPC 8 full level

G01S 7/48 (2006.01); **G01N 21/21** (2006.01); **G01S 7/481** (2006.01); **G01S 7/499** (2006.01); **G01S 17/86** (2020.01); **G01S 17/894** (2020.01)

CPC (source: EP US)

G01S 7/4802 (2013.01 - EP); **G01S 7/4816** (2013.01 - EP); **G01S 7/499** (2013.01 - EP US); **G01S 17/86** (2020.01 - EP US); **G01S 17/894** (2020.01 - EP US)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102021105888 A1 20220915; CN 117178195 A 20231205; EP 4305447 A1 20240117; US 2024125938 A1 20240418; WO 2022189094 A1 20220915

DOCDB simple family (application)

DE 102021105888 A 20210311; CN 202280029522 A 20220214; EP 2022053494 W 20220214; EP 22709973 A 20220214; US 202218549915 A 20220214