

Title (en)

OPTICAL MEASURING DEVICE FOR SPATIALLY RESOLVED DISTANCE DETERMINATION

Title (de)

OPTISCHE MESSVORRICHTUNG ZUR ORTSAUFGELOSTEN ABSTANDSBESTIMMUNG

Title (fr)

DISPOSITIF DE MESURE OPTIQUE POUR LA DÉTERMINATION DE DISTANCE À RÉOLUTION LOCALE

Publication

**EP 4214539 A1 20230726 (DE)**

Application

**EP 21782468 A 20210920**

Priority

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- EP 2021075754 W 20210920

Abstract (en)

[origin: WO2022058577A1] The invention relates to an optical measuring device (1) for spatially resolved distance determination, comprising:  
- a laser light source (2); - a scanning unit (4) having a micromirror (5) for deflecting scanning light (3) emitted by the laser light source (2); - a photodetector (8) for sensing detection light (9) incident coaxially with the deflected scanning light (3); - a prism unit (10) for applying the scanning light (3) to the micromirror (5) and for applying the detection light (9) to the photodetector (8); wherein the laser light source (2), the photodetector (8) and the scanning unit (4) are disposed on a common substrate (13), the scanning unit (4) comprises a domed window (14) under which the micromirror (5) is air-tightly encapsulated, and the prism unit (10) comprises a first surface (15) for reflecting the scanning light (3), a second surface (17) for reflecting the detection light (9) to the photodetector (8) and for transmitting the scanning light (3), and a third surface (18) for transmitting and/or deflecting the scanning light (3) and for transmitting and/or deflecting the detection light (9).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2022058577A1

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