

Title (en)

OPTICAL DEVICE

Title (de)

OPTISCHE VORRICHTUNG

Title (fr)

DISPOSITIF OPTIQUE

Publication

EP 3997495 A1 20220518 (DE)

Application

EP 20733207 A 20200604

Priority

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- EP 2020065462 W 20200604

Abstract (en)

[origin: WO2020245259A1] In an optical device for bidirectional coupling of a waveguide (7) to an external medium (6), the aim of the invention is to widen the coupling bandwidth of the optical device, so that a wide spectrum of wavelengths can be coupled into an external medium via the optical device. This aim is achieved in that the optical device comprises at least one taper structure (2), the taper structure (2) comprising a beam entry segment (3), the beam entry segment (3) being designed so as to couple a light beam (5) from the waveguide (7) into the taper structure (2), and the taper structure comprising a beam exit segment (4), the beam exit segment (4) being designed so as to focus the light beam (5) and to couple same into the external medium (6), the taper structure (2) comprising at least one first reflective surface (8) between the beam entry segment (3) and the beam exit segment (4), and the first reflective surface (8) being designed so as to deflect the light beam (5) out of the plane of the waveguide (7).

IPC 8 full level

G02B 6/30 (2006.01); **G02B 6/122** (2006.01); **G02B 6/35** (2006.01); **G02B 6/42** (2006.01)

CPC (source: EP)

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Citation (search report)

See references of WO 2020245259A1

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Designated extension state (EPC)

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DOCDB simple family (publication)

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