

Title (en)

HERMETICALLY ENCAPSULATED OPTICAL PROJECTION ARRANGEMENT AND METHOD FOR PRODUCING SAME

Title (de)

HERMETISCH VERKAPSELTE, OPTISCHE PROJEKTIONSANORDNUNG UND VERFAHREN ZUM HERSTELLEN DERSELBEN

Title (fr)

DISPOSITIF DE PROJECTION OPTIQUE RECOUVERT HERMÉTIQUEMENT ET PROCÉDÉ DE PRODUCTION CORRESPONDANT

Publication

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Application

EP 22734955 A 20220622

Priority

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- EP 2022066987 W 20220622

Abstract (en)

[origin: WO2022268870A2] An optical projection arrangement (10) comprises a first assembly (10-1) arranged on a gastight first partial substrate (20-1), having an optoelectronic component (30) arranged on the first partial substrate (20-1), at least one portion of the transmission radiation (32) of the optoelectronic component (30) having a main emission direction in a range of $\pm 30^\circ$ with respect to a vertical of the first partial substrate (20-1), a gastight covering element (38) hermetically joined to the first partial substrate (20-1) in order to provide a hermetically tight housing for the optoelectronic component (30), the covering element (38) comprising a material transparent to the transmission radiation at least in the region of the main emission direction, a lens arrangement (40) arranged fixedly in relation to the covering element (38), for collimation of the transmission radiation (32) of the optoelectronic component (30), and a prism arrangement (50) configured to guide the collimated transmission radiation (32) of the optoelectronic component (30) and to couple it out at an output coupling surface (52), and furthermore comprises a second assembly (10-1) arranged on a second partial substrate (20-1), having a MEMS mirror arrangement (60) having a movably suspended and deflectable MEMS-based mirror element (62), the prism arrangement (50) and the MEMS mirror arrangement (60) being arranged geometrically with respect to one another such that the transmission radiation (32) coupled out impinges on the movably suspended MEMS-based mirror element (62) at an angle β of incidence, the angle β of incidence in the rest state of the MEMS-based mirror element (62) being in a range of between 30° and 50° .

IPC 8 full level

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