

Title (en)
FUNCTIONALIZED WAVEGUIDE FOR A DETECTOR SYSTEM

Title (de)
FUNKTIONALISIERTER WELLENLEITER FÜR EIN DETEKTORSYSTEM

Title (fr)
GUIDE D'ONDES FONCTIONNALISÉ POUR SYSTÈME DE DÉTECTION

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Application
EP 20703422 A 20200131

Priority

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Abstract (en)
[origin: WO2020157306A1] The invention relates to a functionalized waveguide for a detector system, wherein the waveguide (1) comprises a transparent main body (6) having a front face (7) and a rear face (8). The main body (6) has a partially transparent incoupling region (4) and a decoupling region (5) that is spaced apart therefrom in a first direction (R1). The incoupling region (4) comprises a diffractive structure which deflects only part of radiation coming from an object to be detected and impinging on the front face (7) in such a way that the deflected part propagates as coupled-in radiation in the main body (6) by reflections up to the decoupling region (5) and impinges on the decoupling region (5). The decoupling region (5) deflects at least part of the coupled-in radiation impinging thereon in such a way that the deflected part exits the main body (6) via the front face (7) or rear face (8) in order to impinge on the detector system (2). The extent of the incoupling region (4) in a second direction (R2) transverse to the first direction (R1) is greater than the extent of the decoupling region (5) in the second direction (R2).

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Citation (search report)
See references of WO 2020157306A1

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