

Title (en)

PARTICLE SENSOR DEVICE WITH A REPLACEABLE TRANSPARENT COVER ELEMENT

Title (de)

PARTIKELSENSORVORRICHTUNG MIT EINM AUSWECHSELBAREN TRANSPARENTEN ABDECKELEMENT

Title (fr)

DISPOSITIF DE DÉTECTION DE PARTICULES DOTÉ D'UN ÉLÉMENT DE RECOUVREMENT TRANSPARENT REMPLAÇABLE

Publication

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Application

EP 21700519 A 20210111

Priority

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Abstract (en)

[origin: WO2021170301A1] The invention relates to a particle sensor device (16) with an inner chamber (36) which is delimited by a housing (40) and a cover element (34) that covers an opening of the housing (40) and has a central transparent region (34.1), wherein a laser (18) and a detection device (26) are arranged in the inner chamber (36). The particle sensor device is designed and arranged so as to focus incident laser radiation (10) from the laser (18) through the central transparent region (34.1) into a laser spot (22), and the particle sensor device is designed and arranged so as to conduct thermal radiation emanating from the laser spot (22) through the central transparent region (34.1) into a thermal radiation region (29) which illuminates the detection device (26). The particle sensor device is characterized in that the cover element (34) can be connected to the housing (40) in a non-destructively releasable manner and so as to cover the inner chamber (36) in a gas-tight manner.

IPC 8 full level

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