

Title (en)
LASER SCANNER

Title (de)
LASERSCANNER

Title (fr)
SCANNER LASER

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Application
EP 21820211 A 20211125

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Abstract (en)
[origin: WO2022112418A1] The invention relates to a 2D laser scanner in which pockets (68) are formed on a beam guide (56) in order to minimize scattered light which is reflected by an aperture glass (50). The laser scanner is designed with a rotating deflecting unit which is driven by a drive in order to deflect the measurement beam (62) in the direction of an object to be measured. The deflecting unit has a hollow spindle (28) which supports the beam guide (56) that is paired with a deflecting mirror (46) in order to deflect the received/measurement beam in the direction towards or from a protective glass (50) covering the outlet window. According to the invention, at least one pocket (68) is formed on the beam guide (56), said pocket being designed such that measurement beam components (scattered light) reflected by the protective glass (50) are deflected in the direction of the pockets (68) via the mirror (46). The term "pocket" can be understood as a geometric design of the beam guide (56) such that the pocket is not required to guide the actual measurement beam (62) but rather forms recesses which are arranged laterally from the outgoing measurement beam path and lie in the scattered light beam path. The protective glass (50) is arranged on a rotor housing (74), and the rotor housing (74) covers the deflecting mirror (46), the beam guide (56), and a counterweight (58). In order to clean the protective glass (50), the rotor housing (74) can be removed without changing the position of the deflecting mirror (46) relative to the beam guide (56). A profile measurement is taken during a drive of a carrier vehicle, on which the scanner is mounted, through a surrounding area, wherein profiles (helix) following one another spatially are arranged so as to form an image.

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