

Title (en)
FIBER EXIT ELEMENT

Title (de)
FASERAUSTRITTSELEMENT

Title (fr)
ÉLÉMENT DE SORTIE EN FIBRES

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Application
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Abstract (en)
[origin: WO2020254661A1] The present invention relates to a fiber exit element (1), comprising: a plurality of glass fibers (10) each having at least one core (10a), which is designed to conduct a signal light beam (A); and at least one optical element (14), preferably an optical window (14), an optical lens (14), an optical beamsplitter (14) or an optical prism (14), which is connected to an open end (11) of each core (10a) of the glass fibers (10) and is designed to receive the signal light beam (A) from the open ends (11) of the cores (10a) of the glass fibers (10) and to output said signal light beam outward via at least one exit surface (14b) as exit beams (A'). The fiber exit element (1) is characterized in that the open ends (11) of the cores (10a) of the glass fibers (10), and preferably the open ends (11) of claddings (10b) of the glass fibers (10) substantially surrounding the cores (10a), are each arranged within the material of the optical element (14) with a depth of penetration (W), preferably in relation to an entry surface (14a) of the optical element (14); at least the material of the open ends (11) of the cores (10a) of the glass fibers (10), and preferably the material of the open ends (11) of the claddings (10b) of the glass fibers (10), being fused to the material of the optical element (14).

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