

OPTO-ELECTRONIC MODULE AND DEVICES COMPRISING THE SAME

ABSTRACT

The opto-electronic module (1) comprises a detecting channel (30) comprising a detecting member (D) for detecting light and an emission channel (20) comprising an emission member (E) for emitting light generally detectable by said detecting member. Therein, a radiation distribution characteristic for an emission of light from said emission channel is non rotationally symmetric; and/or a sensitivity distribution characteristic for a detection in said detecting channel of light incident on said detection channel is non rotationally symmetric; and/or a central or main emission direction for an emission of light from said emission channel and a central or main detection direction for a detection of light incident on said detection channel are aligned not parallel to each other; and/or at least a first one of the channels comprises at least one of the following: e1) at least two passive optical components (52, 52'; 53, 53') each having an optical axis (A2, A2'; A3, A3'), wherein these components are arranged such that these optical axes do not coincide; e2) at least one passive optical component (52, 52', 53, 53') having an optical axis, wherein this component is arranged with respect to the detecting member (D) and the emission member (E), respectively, comprised in that first channel such that this optical axis does not coincide with a central axis (c2; c3) of detection and emission, respectively, of the detecting or emission member comprised in said first channel; e3) at least one passive optical component (52, 52', 53, 53') constituting a non rotationally symmetric beam forming element or a portion thereof; e4) at least one passive optical component (52, 52', 53, 53') arranged so as to accomplish that a main direction (m2; m3) or a central direction (c2; c3) of light entering and exiting, respectively, the first channel is angled with respect to a such a direction, of light entering or exiting the first channel without presence of said at least one passive optical component in said first channel.

[Fig. 1]