

**OPTO -ELECTRONIC MODULES AND METHODS OF MANUFACTURING THE SAME
AND APPLIANCES AND DEVICES COMPRISING THE SAME**

ABSTRACT

The method for manufacturing opto-electronic modules (1) comprises a) providing a substrate wafer (PW) on which a multitude of detecting members (D) are arranged; b) providing a spacer wafer (SW); c) providing an optics wafer (OW), said optics wafer comprising a multitude of transparent portions (t) transparent for light generally detectable by said detecting members and at least one blocking portion (b) for substantially attenuating or blocking incident light generally detectable by said detecting members; d) preparing a wafer stack (2) in which said spacer wafer (SW) is arranged between said substrate wafer (PW) and said optics wafer (OW) such that said detecting members (D) are arranged between said substrate wafer and said optics wafer. Preferably, a multitude of emission members (E) for emitting light generally detectable by said detecting members (D) is arranged on said substrate wafer (PW) such that a multitude of neighboring emission members and detecting members are present on said substrate wafer. Single modules (I) can be obtained by separating said wafer stack (2) into a multitude of separate modules (I). The manufacturing method may be applied for the manufacture of proximity sensors.

[Fig. 4]