

TITLE OF INVENTION: SEALING GLASS, GLASS MEMBER PROVIDED WITH
SEALING MATERIAL LAYER, ELECTRONIC DEVICE AND PROCESS FOR
PRODUCING IT

ABSTRACT

The bonding strength to a glass substrate comprising soda lime glass is increased with good reproducibility at a time of laser sealing, to improve the sealing ability and the reliability of an electronic device.

5 A glass substrate 3 has a sealing region. On the sealing region, a sealing material layer 5 is provided, which is a fired layer of a glass material for sealing containing a sealing glass, a low-expansion filler and a laser absorbent. The sealing glass contains, as represented by mass percentage, from 70 to 90% of Bi_2O_3 , from 1 to 20% of ZnO , from 2 to 12% of B_2O_3 and from 10 to 380 ppm of Na_2O . Such a glass
10 substrate 3 and a glass substrate 2 having an element-formed region provided with an electronic element, are laminated, the sealing material layer 5 is irradiated with a laser light 6 to be melted to bond the glass substrates 2 and 3.

Fig. 2(a) to Fig. 2(d)