DIRECT BONDING METHOD WITH REDUCTION IN OVERLAY MISALIGNMENT

ABSTRACT

A method for the direct bonding of a first wafer (100) having an intrinsic curvature before bonding to a second wafer (200) having an intrinsic curvature before bonding, at least one (100) of the two wafers comprising at least one series of microcomponents (110). The method comprises at least one step of bringing the two wafers (100, 200) into contact with each other so as to initiate the propagation of a bonding wave between the two wafers.

During the contacting step, a predefined bonding curvature (KB) in the form of a paraboloid of revolution is imposed on one of the two wafers depending at least on the intrinsic curvature before bonding of the wafer (100) comprising one series of microcomponents (110), the other wafer being free to conform to said predefined bonding curvature (KB).

Fig. 5D and 5E