Method for Permanent Bonding of Wafers

Abstract

This invention relates to a method for bonding of a first contact surface (3) of a first substrate (1) to a second contact surface (4) of a second substrate (2), the second substrate (2) having at least one reaction layer (7), with the following steps, especially the following sequence:

- forming a reservoir (5) in a reservoir formation layer (6) on the first contact surface (3),
- at least partial filling of the reservoir (5) with a first educt or a first group of educts,
- the first contact surface (3) making contact with the second contact surface (4) for formation of a prebond connection,
- thinning of the second substrate (2) and
- forming a permanent bond between the first and second contact surface (3, 4), at least partially strengthened by the reaction of the first educt with the second educt contained in the reaction layer (7) of the second substrate (2).

Figure 5