

Method for Permanent Bonding of Wafers

Abstract

This invention relates to a method for bonding of a first solid substrate (1) to a second solid substrate (2) which contains a first material with the following steps, especially the following sequence:

- formation or application of a function layer (5) which contains a second material to the second solid substrate (2),
- making contact of the first solid substrate (1) with the second solid substrate (2) on the function layer (5),
- pressing together the solid substrates (1, 2) for forming a permanent bond between the first and second solid substrate (1, 2), at least partially reinforced by solid diffusion and/or phase transformation of the first material with the second material, an increase of volume on the function layer being caused.

Figure 1a