Claims

1. A method for bonding of a first substrate (3) to a second substrate (8) on contact surfaces (3k, 8k) of the substrates (3, 8) with the following steps, especially the following sequence:

- receiving the first substrate (3) on a first receiving surface (2o) of a first receiving apparatus (1) and receiving the second substrate (8) on a second receiving surface (2o') of a second receiving apparatus (4), wherein the second receiving apparatus (4) comprises a pin (7), wherein the second substrate (8) on the second receiving surface (2o') is prestressed by the pin (7),
- contact-making of the contact surfaces (3k, 8k) at a bond initiation site (20),
- bonding the first substrate (3) to the second substrate (8) along a bonding wave which is travelling from the bond initiation site (20) to the side edges (3s, 8s) of the substrates (3, 8),

wherein the first substrate (3) and/or the second substrate (8) is/are deformed for alignment of the contact surfaces (3k, 8k) outside the bond initiation site (20) before and/or during the bonding,

wherein the first receiving apparatus (1) is convex or concave.

2. The method as claimed in Claim 1, wherein the deformation of the first substrate (3) and/or of the second substrate (8) takes place depending on factors which influence the travel of the bonding wave.

3. The method as claimed in one of the preceding claims, wherein the bond initiation side (20) is located in the center of the contact surfaces (3k, 8k).

4. The method as claimed in one of the preceding claims, wherein the deformation of the first substrate (3) and/or of the second substrate (8) takes place in the lateral direction and/or convexly and/or concavely.

5. The method as claimed in one of the preceding claims, wherein deformation takes place by expansion or compression or curving of the first substrate (3) and/or of the second substrate (8).

6. The method as claimed in one of the preceding claims, wherein diameters (d1, d2) of the substrates (3, 8) deviate from one another by less than 5 mm, in particular less than 3 mm, preferably less than 1 mm.

7. The method as claimed in one of the preceding claims, wherein the deformation takes place by mechanical actuation means and/or by temperature control of the first and/or second receiving apparatus (1, 4).

8. The method as claimed in one of the preceding claims, wherein the first substrate (3) and/or the second substrate (8) are fixed solely in the region of the side edges (3s, 8s) on the first and/or second receiving surfaces (2o, 2o').

9. A device for bonding of a first substrate (3) to a second substrate (8) on contact surfaces (3k, 8k) of the substrates (3, 8) with the following:

- a first receiving apparatus (1) for receiving the first substrate (3) on a first receiving surface (2o) and a second receiving apparatus (4) for receiving the second substrate (8) on a second receiving surface (2o'), wherein the second receiving apparatus (4) is coupled to a pin (7), wherein the second substrate (8) on the second receiving surface (2o') is prestressed by the pin (7),
- contact means for making contact of the contact surfaces (3k, 8k) at a bond initiation site (20), and

deformation means comprising the pin (7) for deformation of the first substrate (3) and/or of the second substrate (8) for alignment of the contact surfaces (3k, 8k) outside the bond initiation site (20) before and/or during the bonding,

wherein the first receiving apparatus (1) is convex or concave.

10. The device as claimed in Claim 9, wherein the deformation means encompass the first receiving apparatus (1) which is deformable in particular on the first receiving surface (2o) in the lateral direction and/or is deformable convexly or concavely.

11. The device as claimed in Claim 9, wherein the deformation means encompass the second receiving apparatus (4) which is deformable in particular on the second receiving surface (2o') in the lateral direction and/or is deformable convexly or concavely.

12. The device as claimed in at least one of Claims 9 to 11, wherein the deformation means have mechanical actuating means and/or temperature control means for temperature control of the first and/or second receiving apparatus (1, 4).

13. The device as claimed in at least one of Claims 9 to 12, wherein fixing means for fixing of the first substrate (3) and/or of the second substrate (8) are located solely in the region of the side edges (3s, 8s) on the first and/or second receiving surfaces (2o, 2o').