CLAIMS

1. A member bonding apparatus, comprising:

an adhesive application device for applying an adhesive to a bonding surface of one of two members to be bonded;

a member bonding device for pressing either one of the two members with the adhesive between the two members, the adhesive being applied by the adhesive application device, pushing a pressing-side member onto an opposite-side member, bonding the bonding surfaces of the two members, and making a bonded member;

a tilt adjusting device for acquiring with a camera an image of a spreading state of the adhesive in the bonding surface of the two members of the bonded member that is bonded by the member bonding device, and adjusting the tilt of the bonded member when a non-spreading part of the adhesive between an end of the bonded member and an end of the adhesive has a bias in size so that the adhesive moves to the larger side of the non-spreading part;

a spreading adjustment device for controlling a pushing amount and a pushing time interval of a pressing-side member to adjust the spreading of the adhesive so that the size of the non-spreading part reduces to a predetermined size depending on the size of the non-spreading part acquired with the camera; and

an adhesive curing processing device for curing the adhesive in an edge of the bonded member when the non-spreading part is eliminated through the adjustment by the spreading adjustment device.

2. The member bonding apparatus according to claim 1,

wherein the spreading adjustment device is configured to increase the pushing amount when the size of the non-spreading part is larger, decrease the pushing amount when the size of the non-spreading part is smaller, and extend the pushing time interval as the size of the non-spreading part decreases.

3. The member bonding apparatus according to claim 1 or 2,

wherein the size of the non-spreading part is a length or an area of the non-spreading part.

4. A method of manufacturing a bonded member, comprising the steps of:

applying an adhesive to a bonding surface of one of two members to be bonded;

pressing either one of the two members with the adhesive between the two members, pushing a pressing-side member onto an opposite-side member, and bonding the bonding

surfaces of the two members;

acquiring an image of a state of spreading of the adhesive in the bonding surfaces of the two members of the bonded member that is bonded with the adhesive, and adjusting the tilt of the bonded member when a non-spreading part of the adhesive between an end of the bonded member and an end of the adhesive has a bias in size so that the adhesive moves to the larger side of the non-spreading part;

controlling a pushing amount and a pushing time interval of a pressing-side member to adjust the spreading of the adhesive so that the size of the non-spreading part reduces to a predetermined size depending on the size of the non-spreading part acquired with the camera; and

curing the adhesive in an edge of the bonded member when the non-spreading part is eliminated.

5 The method of manufacturing a bonded member according to claim 4,

wherein the pushing amount is increased when the size of the non-spreading part is larger, the pushing amount is decreased when the size of the non-spreading part is smaller, and the pushing time interval is extended as the size of the non-spreading part decreases.

6. The method of manufacturing a bonded member according to claim 4 or 5,

wherein the size of the non-spreading part is a length or an area of the non-spreading part.