FLIP CHIP BONDER AND METHOD OF CORRECTING FLATNESS AND DEFORMATION AMOUNT OF BONDING STAGE

ABSTRACT

Provided is a flip chip bonder including: a base (12); a bonding stage (20); a plurality of vertical-position adjustment support mechanisms (30) attached to the base (12), and respectively configured to support, in a vertical direction, the bonding stage (20) at a plurality of supporting points being provided on a lower surface (22) of the bonding stage (20), and to adjust positions of the supporting points in the vertical direction; and a leaf spring mechanism (40) configured to connect the base (12) with the bonding stage (20). The leaf spring mechanism (40) restrains movement of the bonding stage (20) relative to the base (12) in an X axis along a surface (21) of the bonding stage (20) and a Y axis perpendicular to the X axis, and allows first twisting about the X axis and second twisting about the Y axis of the bonding stage (20) relative to the base (12), and movement of the bonding stage (20) relative to the base (12) in the vertical direction. This provides the flip chip bonder with improved bonding quality and increased bonding speed.

FIGURE 1