

What is Claimed is:

1. A bonding wire for connecting a first pad to a second pad, the bonding wire comprising:

a ball part bonded to the first pad;

a neck part formed on the ball part; and

a wire part extending from the neck part to the second pad,

wherein less than an entire portion of a top surface of the neck part is covered by the wire part, and the wire part is in contact with the neck part, a side surface of the ball part and the first pad.

2. The bonding wire of claim 1, wherein a first portion of the top surface of the neck part is covered by the wire part, and a second portion of the top surface of the neck part adjacent the first portion is substantially flat.

3. The bonding wire of claim 2, wherein the wire part is in contact with the top surface of the neck part, a side surface of the neck part, a top surface of the ball part, ~~a~~the side surface of the ball part, and a top surface of the first pad.

4. The bonding wire of claim 1, wherein less than ~~an~~the entire portion of the top surface of the neck part is covered by the wire part and the top surface of the neck part is substantially flat.

5. The bonding wire of claim 4, wherein the wire part is in contact with a side surface of the neck part, a top surface of the ball part, ~~a~~the side surface of the ball part, and a top surface of the first pad.

6. The bonding wire of any one of claims 1 to 5, wherein a pressed region of the wire part has a V-shape, and is connected to the neck part and the ball part.

7. The bonding wire of claim 6, wherein a bottom surface of the pressed region is in contact with a top surface of the first pad alongside a bottom surface of the ball part in a side cross-sectional view.

8. The bonding wire of claim 6 or claim 7, wherein, in a plan view, a diameter of the ball part is greater than a diameter of the neck part, the diameter of the neck part is less than a maximum width of the pressed region of the wire part, and the maximum width of the pressed region of the wire part is greater than a diameter of a normal region of the wire part.

9. The bonding wire of any one of claims 1 to 8, further comprising a stitch part disposed at an end of the wire part and directly bonded to the second pad.

10. The bonding wire of claim 9, wherein the bonding wire is bonded to the first pad using a ball bonding method and is bonded to the second pad using a stitch bonding method.

11. A semiconductor package comprising:

a semiconductor chip having a first pad on a top surface thereof;

an assembly board having a second pad on a top surface thereof, the semiconductor chip being mounted on the assembly board; and

a bonding wire configured to connect the first pad to the second pad,

wherein the bonding wire comprises:

- a ball part bonded to the first pad;
- a neck part formed on the ball part; and
- a wire part extending from the neck part to the second pad, and

wherein a portion of a top surface of the neck part is covered by the wire part, and the wire part is in contact with the neck part, a side surface of the ball part, and the first pad.

12. The semiconductor package of claim 11, further comprising an adhesive film disposed on the top surface of the semiconductor chip, the first pad, and a portion of the wire part,

wherein a thickness of the adhesive film is greater than a distance from a top surface of the first pad to a highest top surface of the wire part.

13. The semiconductor package of claim 12, wherein the portion of the wire part is in contact with a top surface of the neck part, a side surface of the neck part, a top surface of the ball part, ~~a~~the side surface of the ball part, and a top surface of the first pad.

14. The semiconductor package of claim 13, wherein a protrusion region of the adhesive film in an area in which the wire part is in contact with the top surface of the first pad has a V-shape.

15. The semiconductor package of any one of claims 11 to 14, wherein the bonding wire is bonded to the first pad using a ball bonding method and is bonded to the second pad using a stitch bonding method.

16. A semiconductor package comprising:
a semiconductor chip having a first pad on a top surface thereof;
an assembly board having a second pad on a top surface thereof, the semiconductor chip being mounted on the assembly board;
a bonding wire configured to connect the first pad to the second pad; and
an adhesive film disposed on a top surface of the semiconductor chip, the first pad, and a portion of the bonding wire,

wherein the bonding wire comprises:

a ball part bonded to the first pad;
a neck part formed on the ball part;
a wire part extending from the neck part to the second pad; and
a stitch part bonded to the second pad, and

wherein a top surface of the neck part is completely covered by the adhesive film, and the wire part is in contact with the neck part, a side surface of the ball part, and the first pad.

17. The semiconductor package of claim 16, wherein a thickness of the adhesive film is greater than a sum of a height of the ball part and a height of the neck part.

18. The semiconductor package of claim 16 or claim 17, wherein the wire part is in contact with a side surface of the neck part, a top surface of the ball part, ~~a~~the side surface of the ball part, and a top surface of the first pad.

19. The semiconductor package of claim 18, wherein a pressed region of the wire part has a V-shape, and is in contact with the top surface of the first pad and a bottom surface of the ball part.

20. The semiconductor package of any one of claims 16 to 19, wherein the bonding wire is bonded to the first pad using a ball bonding method and is bonded to the second pad using a stitch bonding method.