CLAIMS

1. A method for bonding a member using an electrically conductive composition containing an electrically conductive filler and a resin particle,

wherein the electrically conductive composition contains, as the resin particle, 0.1 to 10 by mass% of resin particle (C) having 50% average particle diameter in a particle diameter distribution (D50) of 2 to 15 μm, based on the mass of the electrically conductive composition,

the method comprising a step of sintering the electrically conductive composition such that the rate of change of a maximum Feret's diameter of the resin particle (C) after sintering to the maximum Feret's diameter of the resin particle (C) before sintering is less than 1.20, wherein

a temperature at which the electrically conductive composition is sintered is in the range of 80°C to 300°C.

2. The method according to claim 1, wherein the electrically conductive composition comprises a silver fine particle (A) having 50% average particle diameter in a particle diameter distribution (D50) of 10 to 300 nm, and a metal particle (B) having 50% average particle diameter in a particle diameter distribution (D50) of 0.5 to 10 μm, as the electrically conductive filler.

3. The method according to claim 1 or 2, wherein the resin forming the resin particle (C) is selected from a group of a thermoplastic resin, a thermosetting resin and a silicone resin.

4. The method according to claim 3, wherein the thermoplastic resin is selected from a group of a polyolefin and a polyamide.

5. The method according to any one of claims 2 to 4, wherein the electrically conductive composition comprises 5 to 50% by mass of the silver fine particle (A), 35 to 85% by mass of the metal particle (B), and 0.5 to 10% by mass of (D) a binder resin, based on the mass of the electrically conductive composition.

6. The method according to any one of claims 1 to 5, wherein a temperature increase rate when sintering the electrically conductive composition is 1 to 10°C/min.

7. A method for producing an electrically conductive sintered part or bonding part using an electrically conductive composition containing an electrically conductive filler and a resin particle,

wherein the electrically conductive composition contains, as the resin particle, 0.1 to 10 by mass% of resin particle (C) having 50% average particle diameter in a particle diameter distribution (D50) of 2 to 15 μm, based on the mass of the electrically conductive composition,

the method comprising a step of sintering the electrically conductive composition such that the rate of change of a maximum Feret's diameter of the resin particle (C) after sintering to the maximum Feret's diameter of the resin particle (C) before sintering is less than 1.20, wherein

a temperature at which the electrically conductive composition is sintered is in the range of 80°C to 300°C.

8. The method according to claim 7, wherein the electrically conductive composition comprises a silver fine particle (A) having 50% average particle diameter in a particle diameter distribution (D50) of 10 to 300 nm, and a metal particle (B) having

50% average particle diameter in a particle diameter distribution (D50) of 0.5 to 10 μm, as the electrically conductive filler.

9. The method according to claim 7 or 8, wherein the resin forming the resin particle (C) is selected from a group of a thermoplastic resin, a thermosetting resin and a silicone resin.

10. The method according to claim 9, wherein the thermoplastic resin is selected from a group of a polyolefin and a polyamide.

11. The method according to any one of claims 8 to 10, wherein the electrically conductive composition comprises 5 to 50% by mass of the silver fine particle (A), 35 to 85% by mass of the metal particle (B), and 0.5 to 10% by mass of (D) a binder resin, based on the mass of the electrically conductive composition.

12. The method according to any one of claims 7 to 11, wherein a temperature increase rate when sintering the electrically conductive composition is 1 to 10°C/min.

13. A sintered part or a bonding part comprising:

an electrically conductive filler; and

a resin particle, wherein

the sintered part or the bonding part is obtained by the method for bonding according to any one of claims 1 to 6 or the method for producing according to any one of claims 7 to 12,

a proportion at which the electrically conductive filler accounts for a cross-sectional area of the sintered part or the bonding part is 60 to 95% by area,

a proportion at which the resin particle accounts therefor is 1 to 35% by area,

a proportion at which a component or components other than the resin particle and the electrically conductive filler and voids account therefor is 4 to 25% by area, and

the average particle diameter of the resin particle is 2 to 15 μm.

14. A member comprising the sintered part or the bonding part according to claim 13.