[CLAIMS]

[Claim 1]

A method for producing a bonded object, comprising:

a step of preparing a laminate in which a first member, a copper bonding paste, and a second member are laminated in order; and

a step of sintering the copper bonding paste under a pressure of 0.1 to 1 MPa,

wherein the copper bonding paste contains metal particles and a dispersion medium,

a content of the metal particles with respect to a total mass of the copper bonding paste is 50 mass% or more, and

the metal particles contain 95 mass% or more of submicro copper particles with respect to a total mass of the metal particles.

[Claim 2]

A method for producing a semiconductor device, comprising:

a step of preparing a laminate in which a first member, a copper bonding paste, and a second member are laminated in order; and

a step of sintering the copper bonding paste under a pressure of 0.1 to 1 MPa,

wherein at least one of the first member and the second member is a semiconductor element,

the copper bonding paste contains metal particles and a dispersion medium,

a content of the metal particles with respect to a total mass of the copper bonding paste is 50 mass% or more, and

the metal particles contain 95 mass% or more of submicro copper particles with respect to a total mass of the metal particles.

[Claim 3]

A copper bonding paste comprising metal particles and a dispersion medium,

wherein a content of the metal particles with respect to a total mass of the copper bonding paste is 50 mass% or more, and

the metal particles contain 95 mass% or more of submicro copper particles with respect to a total amount of the metal particles.

[Claim 4]

The copper bonding paste according to claim 3,

wherein the metal particles contain 5 mass% or less of micro copper particles with respect to a total mass of the metal particles.

[Claim 5]

The copper bonding paste according to claim 3 or 4,

wherein a viscosity of the copper bonding paste at 25℃ is 0.8 to 40,000 Pa·s.

[Claim 6]

The copper bonding paste according to any one of claims 3 to 5,

wherein the dispersion medium is at least one selected from the group consisting of alcohols and ethers.

[Claim 7]

The copper bonding paste according to any one of claims 3 to 6,

wherein an aspect ratio of the submicro copper particles is 5 or less.

[Claim 8]

A method for producing a bonded object, comprising:

a step of preparing a laminate in which a first member, a copper bonding paste, and a second member are laminated in order; and

a step of sintering the copper bonding paste under a pressure of 0.1 to 1 MPa,

wherein the copper bonding paste contains metal particles and a dispersion

medium,

a content of the metal particles with respect to a total mass of the copper bonding paste is 50 mass% or more,

the metal particles contain submicro copper particles, and

the viscosity of the copper bonding paste at 25℃ is 0.8 Pa·s or more.

[Claim 9]

A method for producing a semiconductor device, comprising:

a step of preparing a laminate in which a first member, a copper bonding paste, and a second member are laminated in order; and

a step of sintering the copper bonding paste under a pressure of 0.1 to 1 MPa,

wherein at least one of the first member and the second member is a semiconductor element,

the copper bonding paste contains metal particles and a dispersion medium,

a content of the metal particles with respect to a total mass of the copper bonding paste is 50 mass% or more,

the metal particles contain submicro copper particles, and

the viscosity of the copper bonding paste at 25℃ is 0.8 Pa·s or more.

[Claim 10]

A copper bonding paste comprising metal particles and a dispersion medium,

wherein a content of the metal particles with respect to a total mass of the copper bonding paste is 50 mass% or more,

the metal particles contain submicro copper particles, and

the viscosity of the copper bonding paste at 25℃ is 0.8 Pa·s or more.

[Claim 11]

The copper bonding paste according to claim 10,

wherein the metal particles contain micro copper particles.

[Claim 12]

The copper bonding paste according to claim 10 or 11,

wherein the dispersion medium is at least one selected from the group consisting of alcohols and ethers.