

Title (en)

COPPER PASTE, BONDING METHOD, AND METHOD FOR PRODUCING BONDED BODY

Title (de)

KUPFERPASTE, VERBINDUNGSVERFAHREN UND VERFAHREN ZUR HERSTELLUNG EINES GEBUNDENEN KÖRPERS

Title (fr)

PÂTE AU CUIVRE, PROCÉDÉ DE COLLAGE ET PROCÉDÉ DE PRODUCTION DE CORPS COLLÉ

Publication

EP 3778069 A4 20220406 (EN)

Application

EP 19775134 A 20190318

Priority

- JP 2018065201 A 20180329
- JP 2019011213 W 20190318

Abstract (en)

[origin: EP3778069A1] This copper paste includes metal particles and a dispersion medium. The metal particles includes first-type particles and second-type particles. The first-type particles are copper particles having nanostructures on the surfaces thereof, and having an average particle diameter of 1 to 100 μm . The second-type particles are copper particles having an average particle diameter of 0.05 to 5 μm . The average particle diameter of the first-type particles is 2 to 550 times the average particle diameter of the second-type particles. For example, a laminate, in which a copper paste (5) is disposed between a first member (1) and a second member (2), is heated in a reducing atmosphere to sinter the copper paste, whereby the first member and the second member can be bonded without pressurizing.

IPC 8 full level

B22F 1/052 (2022.01); **B22F 1/07** (2022.01); **B22F 1/107** (2022.01); **B22F 1/145** (2022.01); **B22F 1/16** (2022.01); **B22F 7/04** (2006.01); **H01B 1/22** (2006.01)

CPC (source: EP US)

B22F 1/052 (2022.01 - EP US); **B22F 1/07** (2022.01 - EP US); **B22F 1/107** (2022.01 - EP US); **B22F 1/145** (2022.01 - EP US); **B22F 1/16** (2022.01 - EP US); **B22F 7/04** (2013.01 - EP); **H01B 1/22** (2013.01 - EP US); **B22F 2007/047** (2013.01 - EP); **B22F 2999/00** (2013.01 - EP)

Citation (search report)

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- [XA] JP 2005298903 A 20051027 - DOWA MINING CO
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- [XA] US 7368070 B2 20080506 - AKIMOTO YUJI [JP], et al
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Cited by

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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DOCDB simple family (application)

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