

METAL PASTE WITH CO PRECURSORS

Abstract

The present invention provides a sintering method, which allows components to be joined to each other in a stable way, wherein the processing temperature is less than 200°C and stable contact points are produced, which have low porosity and also high electrical and thermal conductivity.

Accordingly, the invention relates to a method for joining components in which (a) a sandwich arrangement is provided having at least (a1) a component 1, (a2) a component 2, and (a3) a metal paste located between component 1 and component 2, and (b) the sandwich arrangement is sintered, characterized in that the metal paste includes (A) 75 – 90 weight percent of at least one metal present in the form of particles having a coating containing at least one organic compound, (B) 0 – 12 weight percent of at least one metal precursor, (C) 6 – 20 weight percent of at least one solvent, and (D) 0.1 – 15 weight percent of at least one sintering agent selected from the group comprising (i) salts of organic acids, wherein the organic acids have 1 – 4 carbon atoms, (ii) esters of organic acids, wherein the organic acids have 1 – 4 carbon atoms, and (iii) carbonyl complexes.