CLAIMS

1. A method of producing a ceramic-metal bonded body by bonding a ceramic plate to a metal supporting base with a bonding sheet containing a resin as a main component, the method comprising:

a pre-bake step of heating the bonding sheet ~~in air, in an inert gas, or~~ in a vacuum in advance to reduce the amount of volatile components in the bonding sheet; and

a bonding step of bonding the ceramic plate to the metal supporting base with the bonding sheet therebetween by placing the ceramic plate, the metal supporting base, and the bonding sheet in an airtight bag, reducing pressure in the airtight bag, and performing heating at a temperature lower than that of the pre-bake step while applying a pressure in an autoclave.

2. The method of producing a ceramic-metal bonded body according to Claim 1,

wherein, in the pre-bake step, the bonding sheet is applied onto the metal supporting base, and the metal supporting base to which the bonding sheet is applied is heated to reduce the amount of volatile components in the bonding sheet.

3. The method of producing a ceramic-metal bonded body according to Claim 1,

wherein, in the pre-bake step, the bonding sheet is

7. The method of producing a ceramic-metal bonded body according to any one of Claims 1 to 6,

wherein the ceramic-metal bonded body is an electrostatic chuck used for fixing a wafer by applying suction in a semiconductor manufacturing process or a showerhead used for supplying and dispersing a reactant gas to a chamber in a semiconductor manufacturing process.

~~8. A ceramic-metal bonded body comprising a ceramic plate, a metal supporting base, and a resin bonding sheet that bonds the ceramic plate to the metal supporting base,~~

~~wherein when the bonded body is heated in a vacuum environment of 100 Pa at 120°C for 300 hours, the amount of change in the weight of the bonding sheet is 50 $\mu g/cm^2$ (where the unit is microgram per square centimeter of a bonded surface) or less.~~

~~9. A ceramic-metal bonded body comprising a ceramic plate, a metal supporting base, and a resin bonding sheet that bonds the ceramic plate to the metal supporting base,~~

~~wherein when the bonded body is heated in a vacuum environment of 100 Pa at 120°C for 300 hours, no bubbles are generated at a bonded interface between the ceramic plate and the bonding sheet and a bonded interface between the metal supporting base and the bonding sheet.~~

~~10. The ceramic-metal bonded body according to Claim 8 or 9, wherein the ceramic-metal bonded body is an electrostatic chuck used for fixing a wafer by applying suction in a semiconductor manufacturing process or a showerhead used for supplying and dispersing a reactant gas to a chamber in a semiconductor manufacturing process.~~