

Ceramic-Metal Bonded Body and Method of Producing the
Same

ABSTRACT

First, a plate 22, a cooling plate 28, and a double-sided adhesive bonding sheet 32 composed of an acrylic resin are prepared. Next, the bonding sheet 32 is applied onto the upper surface of the cooling plate 28. Subsequently, the cooling plate 28 to which the bonding sheet 32 is applied is placed in a vacuum dryer. The pressure in the dryer is reduced to 2,000 Pa or less, and a pre-bake treatment is conducted in this state. The pre-bake treatment is conducted at 120°C to 130°C for 15 to 40 hours, and natural cooling is then conducted in a vacuum. After the pre-bake treatment, the plate 22 is stacked on the bonding sheet 32 so that the lower surface of the plate 22 is aligned with the upper surface of the bonding sheet 32, which is applied onto the cooling plate 28. The resulting stacked body is placed in a heat-resistant resin bag, and is then placed in an autoclave. The stacked body and the heat-resistant resin bag containing the stacked body are treated together for several hours under pressure and heat. Thus, an electrostatic chuck 20 is obtained.

FIG. 2