

Abstract

Provided are a contactless electric power supply mechanism and method for a rotary table, and a wafer rotating and holding device, which
5 enable a load connected to the rotary table of the wafer rotating and holding device to be contactlessly supplied with electric power. The contactless electric power supply mechanism for a rotary table of a wafer rotating and holding device comprises: a rotary shaft; a rotary table, which is placed on an end of the rotary shaft, and is configured to hold a wafer on an upper surface
10 of the rotary table; a drive motor configured to supply motive power to the rotary shaft; a fixed-side primary coil wound around the rotary shaft; an electric power supply source connected to the fixed-side primary coil; a rotary table-side secondary coil, which is provided so as to correspond to the fixed-side primary coil and be separated from the fixed-side primary coil by a
15 predetermined distance, and is mounted to the rotary table; and a load connected to the rotary table-side secondary coil. In the contactless electric power supply mechanism for a rotary table, the load is supplied with electric power via the secondary coil by electromagnetic induction.