

ABSTRACT

ULTRASONIC CLEANING APPARATUS AND ULTRASONIC CLEANING SYSTEM

To provide an ultrasonic cleaning apparatus and an ultrasonic cleaning system, which are capable of cleaning large-sized objects to be cleaned, e.g., semiconductor substrates such as glass substrates, flexible films, and the like, include functions of line shower type and horn type ultrasonic cleaning apparatuses, and capable of saving the liquid by greatly reducing the cleaning liquid to be used. The ultrasonic cleaning apparatus includes: a casing having a bottom surface that forms a tilted surface provided by opposing to the object to be cleaned and having an ultrasonic transducer provided at an inner lower surface; a cleaning liquid supply device as a liquid film forming means configured to supply the cleaning liquid to a casing bottom surface; and a flow-speed accelerator as a flow-speed acceleration part that ejects the cleaning liquid by accelerating the flow speed of the cleaning liquid from the cleaning liquid supply device as the liquid film forming means. The casing is formed by a main body including an upper plate, a projected part attached to a lower part of the upper plate, an outer lateral face extended from the projected part in a downward direction, and the bottom surface connected integrally at a lower end part of the outer lateral face. The bottom surface is formed to be tilted at a prescribed angle with respect to a horizontal plane.

Figure 1