ABSTRACT

A wafer processing apparatus according to the present invention includes a processing chamber 104 disposed in a vacuum vessel, into which processing gas is supplied, a cylindrical sample stand 103 disposed in the processing chamber for supporting a wafer as a processing target, a stepped portion for annularly surrounding a mount surface of the sample stand, on which the wafer 204 is mounted, a ring shaped gas dispersing plate 208 which is mounted on a bottom surface of the steeped portion to surround the mount surface, a susceptor ring 205 which is mounted on an upper surface of the gas dispersing plate to surround the mount surface, and a flow passage through which inert gas flows, which is constituted by a gap between a bottom surface of the gas dispersing plate and the bottom surface of the stepped portion, a gap between an inner circumferential side wall of the gas dispersing plate and an outer circumferential side wall of the stepped portion, and a gap between an inner circumferential side wall of the susceptor ring and the outer circumferential side wall of the stepped portion. A vertically extending recess portion 401 is formed in a plurality of positions of the inner circumferential side wall of the susceptor ring.