Title (en)

CARRIER FOR CLEANING SILICON WAFERS

Title (de

TRÄGER ZUR REINIGUNG VON SILIZIUMWAFERN

Title (fr)

SUPPORT POUR LE NETTOYAGE DE PLAQUETTES EN SILICIUM

Publication

EP 1138061 A2 20011004 (EN)

Application

EP 99970786 A 19991015

Priority

- JP 29729098 A 19981019
- US 9924203 W 19991015

Abstract (an

[origin: WO0024041A1] A carrier for receiving and holding a plurality of semiconductor wafers and permitting surfaces of the wafers to receive maximum exposure to ultrasonic waves during a wafer cleaning process in which the carrier and the wafers are immersed in a liquid medium and ultrasonic waves are generated in the liquid medium. The carrier includes spaced apart sidewalls and horizontal rods that interconnect the sidewalls and that are collectively positioned for supporting wafers in generally upright, face to face position generally parallel to each other. The rods are positioned in spaced relationship relative to each other so that wafers are exposed to the liquid medium and ultrasonic waves between the rods. The sidewalls are sized to have a maximum height that is less than about half of a wafer diameter. The carrier is adapted to hold wafers to permit generally unobstructed passage of ultrasonic waves through the liquid medium to reach all portions of wafer surfaces with minimal impedance by structure of the carrier, thereby facilitating effective cleaning. A stabilizing rod extends horizontally between central areas of the sidewalls for limiting wafer motion relative to the carrier to steady the wafers.

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