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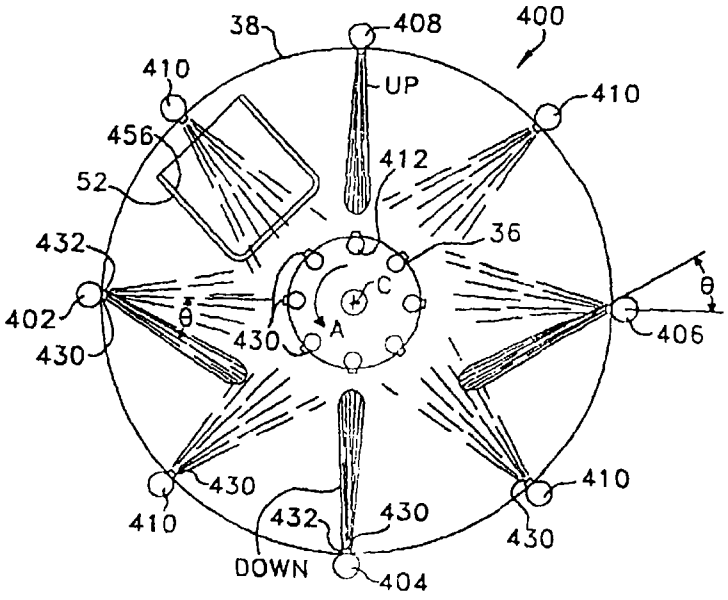
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(54) Title: SEMICONDUCTOR WAFER CONTAINER CLEANING APPARATUS



(57) Abstract: A cleaning system for cleaning boxes (52) or containers used to carry semiconductor wafers and other flat articles, has box holder assemblies (50)and a box door holder assembly (300) attached to a rotor (36) within an enclosure (38). Upper and lower hooks (96, 108, 314, 316) on the box holder and box door holder assemblies hold boxes (52) and doors (325) as the rotor spins. Liquid spray manifolds (406) have one or more spray nozzles (430) that spray at an angle toward or away from the direction of rotation of the rotor, or an angle up or down, rather than straight at the boxes in the box holder assemblies. Improved spray coverage and cleaning is achieved. Boxes and their doors, such as front opening unified pods (FOUP), are both efficiently cleaned and handled.

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