WAFER CONTAINER WITH TUBULAR ENVIRONMENTAL CONTROL COMPONENTS

Abstract

A wafer container utilizes a rigid polymer tubular tower with slots and a "getter" therein for absorbing and filtering moisture and vapors within the wafer container. The tower preferably utilizes a purge grommet at the base of the container and may have a check valve therein to control the flow direction of gas (including air) into and out of the container and with respect to the tower. The tower is sealingly connected with the grommet. The tower may have a getter media piece rolled in an elongate circular fashion forming or shaped as a tube and disposed within the tower and may have axially extending. The media can provide active and/or passive filtration as well as having capabilities to be recharged. Front opening wafer containers for 300mm sized wafers generally have a pair of recesses on each of the left and right side in the inside rear of the container portions. These recesses are preferably utilized for elongate towers, such towers extending substantially from a bottom wafer position to a top wafer position. In alternative embodiment, a tubular shape of getter material is exposed within the front opening container without containment of the getter other than at the ends. The tubular getter form is preferably supported at discrete locations to maximize exposure to the internal container environment. A blocker member can selectively close the apertures. An elastomeric cap can facilitate securement of the tubular component in the container portion.

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