

Claims

1. A purge apparatus for purging by purge gas a container that houses an article and has a gas introduction hole in a bottom portion thereof comprising:

a platform for placing the container thereon; a nozzle protruding upward from the platform and configured to contact the gas introduction hole of the container and to inject purge gas; and an alignment member configured to align the container,

wherein said nozzle is provided with a flat surface on the upper end of a tip portion thereof, a guide surface configured to guide the container within a side surface of the tip portion, and at a lower portion thereof with a pedestal and an elastic member that biases the pedestal upward, and

wherein the nozzle is configured to lower the flat surface on the upper end of the nozzle by deformation of the elastic member with application of a load from the container and to make the flat surface on the upper end of the nozzle inclined by deformation of the elastic member with application of an offset load to the nozzle from the gas introduction hole.

2. The purge apparatus according to claim 1,

wherein said alignment member comprises alignment pins fixed to the platform, protruding upward from the platform, and configured to fit into recesses provided in the bottom portion of the container, and wherein the nozzle is higher than the alignment pins.

3. A purge method purging by purge gas a container that houses an article and has a gas introduction hole in a bottom portion thereof: with a purge apparatus comprising:

a platform for placing the container thereon; a nozzle protruding upward from the platform and an alignment member configured to align the container,

wherein said nozzle is provided with a flat surface on the upper end of a tip

portion thereof, a guide surface configured to guide the container within a side surface of the tip portion, and at a lower portion thereof with a pedestal and an elastic member that biases the pedestal upward and is configured to lower the upper end of the nozzle with application of a load from the container,

the purge method comprising:

a step for guiding the container by means of the guide surface of the nozzle, when the nozzle contacts the container before the alignment member does, lowering the flat surface on the upper end of the nozzle by deformation of the elastic member with application of a load from the container, and bringing the alignment member and the container into contact;

a step for aligning the container by means of the alignment member; and

a step for injecting purge gas from the nozzle into the container at a state in which the flat surface on the upper end of the nozzle is inclined by deformation of the elastic member, when an offset load is applied to the nozzle from the gas introduction hole.