

ABSTRACT

A diffuser tower assembly having a diffuser with a flared end and a fitting with an offset portion and nipple sized for the flared end. The assembly may be configured for providing low coverage purging. Diffuser tower assemblies may be in the form of a kit for retrofitting existing front opening wafer containers. The inlet fitting may include structure that enhances purge characteristics near the base of the porous media diffuser for enhanced sweeping of the floor of the substrate container. Embodiments of the disclosure generate an uneven flow distribution that provides a non-uniform flow distribution at the opening. In an embodiment, where the opening is in a substantially vertical orientation, the non-uniform flow distribution is tailored to deliver a greater flow rate to the bottom half of the opening than to the top of the opening.

FIG. 16B