

ABSTRACT**REMOVING BUBBLES FROM A FLUID FLOWING DOWN THROUGH A PLENUM**

In an example embodiment, a top proximity head for depositing fluids on a semiconductor wafer includes a delivery bore which receives fluid. The top proximity head includes a plenum that is connected to the delivery bore by numerous input channels into which fluid flows from the delivery bore. Each input channel has an inverted V-shaped opening which urges the upward flow of any air bubbles. From the plenum, the fluid flows through output channels out of the top proximity head to form a meniscus. The fluid is suctioned from the meniscus back into the top proximity head through return channels that lead to a return bore. A passage connects the delivery bore with the return bore, allowing air bubbles to escape from the delivery bore into the return bore. The passage allows a negligible amount of fluid to flow directly between the two bores rather than through the plenum.

FIG. 4