

ABSTRACT**PROCESS TO KEEP SUBSTRATE SURFACE WET DURING PLATING**

Methods and systems for handling a substrate through processes including an integrated electroless deposition process includes processing a surface of the substrate in an electroless deposition module to deposit a layer over conductive features of the substrate using a deposition fluid. The surface of the substrate is then rinsed in the electroless deposition module with a rinsing fluid. The rinsing is controlled to prevent de-wetting of the surface so that a transfer film defined from the rinsing fluid remains coated over the surface of the substrate. The substrate is removed from the electroless deposition module while maintaining the transfer film over the surface of the substrate. The transfer film over the surface of the substrate prevents drying of the surface of the substrate so that the removing is wet. The substrate, once removed from the electroless deposition module, is moved into a post-deposition module while maintaining the transfer film over the surface of the substrate.

FIG. 4B