

WAFER PLATE AND MASK ARRANGEMENT FOR SUBSTRATE FABRICATION**ABSTRACT**

A system for processing wafers in a vacuum processing chamber. Carrier comprising a frame having a plurality of openings, each opening configured to accommodate one wafer. A transport mechanism configured to transport the plurality of carriers throughout the system. A plurality of wafer plates configured for supporting wafers. An attachment mechanism for attaching a plurality of wafer plates to each of the carriers, wherein each of the wafer plates is attached to a corresponding position at an underside of a corresponding carrier, such that each of the wafers positioned on one of the wafer carriers is positioned within one of the plurality of opening in the carrier. Mask attached over front side of one of the plurality of opening in the carrier. Alignment stage supports wafer plate under the opening in the carrier. A camera positioned to simultaneously image the mask and the wafer.

Figure 1.