

CLAIMS

1. A system for aligning a substrate to a processing mask, comprising:
a substrate holder having a holder alignment mechanism;
a system guide configured to be engaged by the holder alignment mechanism to thereby orient the substrate holder to the system guide;
a mask alignment mechanism attached to a processing chamber and aligned to the system guide, the mask alignment mechanism having mask attachment mechanism for attaching a processing mask in precise alignment to mask alignment mechanism
tracks positioned below the processing mask and configured to enable the substrate holder to place substrates below the mask when the holder alignment mechanism engages the mask alignment mechanism.
2. The system of claim 1, wherein the holder alignment mechanism comprises at least two rollers.
3. The system of claim 2, wherein the system guide comprises a straight edge configured to be engaged by the rollers.
4. The system of claim 3, wherein the mask alignment mechanism comprises a straight bar configured to be engaged by the rollers.
5. The system of claim 4, further comprising a carrier configured for traveling on the tracks and supporting the substrate holder.
6. The system of claim 5, wherein the substrate holder is configured to move in two degrees of freedom over the carrier.