

LITHOGRAPHY TOOL HAVING A VACUUM RETICLE LIBRARY COUPLED TO A VACUUM CHAMBER

ABSTRACT OF THE DISCLOSURE

A lithography tool includes an exposure chamber and a reticle handler that exchanges a reticle being exposed as prescribed by the user of the lithography tool. The reticle handler can include a vacuum-compatible robot, a vacuum chamber to house the robot, a load-lock to input reticles and transition them from atmospheric pressure to vacuum, a processing station for processing the reticle, and a reticle library for storing at least one extra reticle so that it is quickly available for exchange during an exposure process. The robot can have a two or more handed gripper to simultaneously hold multiple reticles. This allows a first reticle to be removed from the reticle stage with a first hand and a second reticle to be loaded onto the reticle stage with a second hand, and so on, which minimizes exchange time.

Figure 1A