# GLASS SUBSTRATE-HOLDING TOOL AND METHOD FOR PRODUCING AN EUV MASK BLANK BY EMPLOYING THE SAME


## ABSTRACT

A glass substrate-holding tool, which is adapted to be employed during the production of a reflective mask blank for EUV lithography (EUVL), includes an electrostatic chuck for attracting a rear surface of a glass substrate in a non-contact manner by an electrostatic attractive force, and a supporting member for partly supporting the rear surface of the glass substrate; wherein the ratio of a projected area ($mm^2$) of an active surface of the electrostatic chuck to provide the electrostatic attractive force, to an area ($mm^2$) of a quality-guaranteed region of the rear surface of the glass substrate ((a projected area of an active surface of the electrostatic chuck)/(an area of a quality-guaranteed region of the rear surface of the glass substrate)) is at least 0.5 and at most 1.0; the active surface of the electrostatic chuck is apart from the rear surface of the glass substrate by a distance of longer than 20 μm; and the supporting member is configured to support only a region including at least two sides among four sides defining an outer portion (outer peripheral portion of the rear surface) outside the quality-guaranteed region of the rear surface of the glass substrate.


Fig. 1