

ABSTRACT

A balance mass system shared by a workpiece stage and a mask stage includes a balance mass and an anti-drift and compensation apparatus (16). The balance mass includes a first part (11) for mounting thereon a workpiece stage system, a second part (20) for mounting thereon a mask stage system, and a third part (14) for interconnecting the first part (11) and the second part (20). The first part (11) of the balance mass is floatingly supported on a base frame (1) of a lithography machine, and the third part (14) of the balance mass is in connection with the base frame (1) via the anti-drift and compensation apparatus (16). The anti-drift and compensation apparatus (16) is disposed in proximity to the center of gravity of the balance mass as a whole. This balance mass system can eliminate the need for using an additional support for the mask stage system and allow the construction of a lithography machine with a higher structural compactness, reduced size and weight, and reduced total mass of used balance masses.