

LITHOGRAPHIC APPARATUS FOR TRANSFERRING PATTERN FROM PATTERNING DEVICE ONTO SUBSTRATE, AND DAMPING METHOD

ABSTRACT

The invention relates to a lithographic apparatus including a support frame which is supported by a base via a vibration isolation system; a projection system arranged to transfer a pattern from a patterning device onto a substrate, wherein the projection system includes a first frame which is spring-supported by the support frame; and an active damping system configured to damp movement of the first frame, including: a first sensor system configured to provide a first sensor output representative of absolute movement of the first frame, a first actuator system arranged to apply a force between the first frame and the support frame, and a control system configured to provide a drive signal to the first actuator system based on the first sensor output.

FIG 2