

LITHOGRAPHIC APPARATUS AND DEVICE MANUFACTURING METHOD**ABSTRACT**

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The invention relates to a lithographic apparatus comprising a substrate table for holding a substrate, a projection system for projecting a patterned beam onto a target portion of the substrate; and a displacement measuring system configured to measure the position of said substrate table in at least three degrees of freedom. Said displacement measuring system comprises a first x-sensor
10 configured to measure the position of the substrate table in a first direction and a first and a second y-sensor configured to measure the position of the substrate table in a second direction. Said displacement measuring system further comprises a second x-sensor, wherein said first and said second x-sensor and said first and second y-sensors are encoder type sensors configured to measure the position of each of said sensors with respect to at least one grid plate. Said displacement measuring
15 system is configured to selectively use, depending on the position of said substrate table, three of said first and second x-sensors and said first and second y-sensors to determine the position of said substrate table in three degrees of freedom.

20 Figure 4