

ABSTRACT

A stage device is equipped with: a wafer stage that has a coarse movement stage (91) that moves along an XY plane and
5 a table (WTB) that is finely movable in at least a direction parallel to the XY plane; and an encoder system. A plurality of encoder heads (such as 60C) are arranged on the coarse movement stage. Each of the heads irradiates a first grating section (RG) placed parallel to the XY plane and a second
10 grating section (RG2_y) arranged on the table with measurement beams (LB₁, LB₂), respectively, and receives diffracted lights from each of the first and second grating sections. The encoder system measures positional information of the table (wafer stage) within the XY plane based on an output of at
15 least one encoder head that faces the first and second grating sections.