

ABSTRACT

Lithographic Apparatus, Device Manufacturing Method, and
Device Manufactured Thereby.

A lithographic apparatus comprises moveable objects. A
5 position of these moveable objects may be controlled by a position
control system. A position control system according to the present
invention comprises a position controller (6), an object represented
as an object filter (H_o), a position feedback circuit (22), and an
acceleration control system (34). The acceleration control system 34
10 comprises a subtractor (8) and a first filter (H_f) in a first circuit
branch and a second filter (H_s) in a second circuit branch.

A position controller signal (F_p) output from the position
controller (6) is input into the subtractor (8) of the acceleration
control system (34). An external disturbance force (F_d), however, is
15 directly exerted upon the object (H_o). Thus, a first transfer
function (G_1) from the input of subtractor (8) to the acceleration of
the object (H_o) for the position controller force (F_p) may be
different than a second transfer function (G_2) from the input of
object (H_o) to the acceleration of the object (H_o) for the
20 disturbance force (F_d). Preferably, the first transfer function (G_1)
is identical to a transfer function for the position controller force
(F_p) in case no acceleration control system (34) is present in the
position control system.