

ELECTROMAGNETIC ACTUATOR, STAGE APPARATUS AND LITHOGRAPHIC APPARATUS

ABSTRACT

An electromagnetic actuator includes a first and second magnetic members that are displaceable relative to each other and are arranged to provide a magnetic circuit; and a coil configured to, in use, receive a current to generate a magnetic flux through the magnetic circuit, thereby generating a force between the first and second magnetic members in a first direction, the magnetic flux, in use, being transferred between the first and second magnetic members through a first surface of the first magnetic member and a second surface of the second magnetic member, the first and second surface being separated by an airgap, wherein the first surface and the second surface are arranged relative to each other such that an outer dimension of the first surface extends beyond an outer dimension of the second surface in a second direction substantially perpendicular to the first direction.

Figure 1