

Abstract

The invention discloses a planar motor displacement device, comprising a mover and a stator, the stator is provided with a magnet array to form a working area, the working area is laid with at least one first direction planar grating and at least one second direction planar grating that do not overlap with each other, traces of at least one first direction planar grating are parallel to each other and spaced apart along a first direction, and traces of at least one second direction planar grating are parallel to each other and spaced apart along a second direction, the first direction and the second direction intersect with each other; the mover is provided with a first direction three-phase coil array and a second direction three-phase coil array, and is configured to be movable above the working area, and is provided with at least one first direction reading head and at least one second direction reading head, which respectively move within a laid range of the at least one first direction planar grating and the at least one second direction planar grating along with the movement of the mover.

FIG.1