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Hol et al.

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(54) **DISPLACEMENT APPARATUS,
LITHOGRAPHIC APPARATUS, DEVICE
MANUFACTURING METHOD, AND DEVICE
MANUFACTURED THEREBY**

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G03F 7/20 (2006.01)

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(58) **Field of Classification Search** 310/12
See application file for complete search history.

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(57) **ABSTRACT**

A displacement apparatus comprising a first part and a second part, which can be displaced relative to each other in first and second different directions. The apparatus being suitable for use in a lithographic apparatus for positioning the mask holder with respect to the projection beam and for positioning the wafer substrate table with respect to the patterned beam. The first part comprises a first and second coil system in which an alternating current is provided by a power supply. The second part comprises a conductive platen which is disposed in a zone in which a magnetic field is induced when power is supplied to the coil systems. The coil system and platen are arranged with respect to each other so that when currents are passed through the coils, a magnetic field induced in the platen causes displacement between the platen and the coils in the first and second different directions.

15 Claims, 5 Drawing Sheets

