

Title (en)
MIRROR FOR A MICROLITHOGRAPHIC PROJECTION EXPOSURE SYSTEM, AND METHOD FOR OPERATING A DEFORMABLE MIRROR

Title (de)
SPIEGEL FÜR EINE MIKROLITHOGRAPHISCHE PROJEKTIONSBELEUCHTUNGSANLAGE, SOWIE VERFAHREN ZUM BETREIBEN EINES DEFORMIERBAREN SPIGELS

Title (fr)
MIROIR POUR UNE INSTALLATION D'EXPOSITION POUR LA MICROLITHOGRAPHIE PAR PROJECTION AINSI QUE PROCÉDÉ POUR FAIRE FONCTIONNER UN MIROIR DÉFORMABLE

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Abstract (en)
[origin: WO2020020550A1] The invention relates to a mirror for a microlithographic projection exposure system, and to a method for operating a deformable mirror. According to one aspect of the invention, a mirror has an active optical area (11), a mirror substrate (12), a reflective layer stack (21) for reflecting electromagnetic radiation impinging on the active optical area (11), and at least one piezoelectric layer (16), which is arranged between the mirror substrate (12) and the reflective layer stack (21) and which, via a first electrode arrangement situated on the side of the piezoelectric layer (16) facing the reflective layer stack (21) and via a second electrode arrangement situated on the side of the piezoelectric layer (16) facing the mirror substrate (12), can be exposed to an electrical field for generating a locally variable deformation, this piezoelectric layer (16) having a plurality of columns spatially separated from one another by column boundaries, wherein a mean column diameter of said columns is in the range of from 0.1 μm to 50 μm .

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