

Title (en)

DEVICE AND METHOD FOR THE OPTICAL MEASUREMENT OF AN OPTICAL SYSTEM, MEASUREMENT STRUCTURE SUPPORT, AND MICROLITHOGRAPHIC PROJECTION EXPOSURE APPARATUS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR OPTISCHEN VERMESSUNG EINES OPTISCHEN SYSTEMS, MESSSTRUKTURTRÄGER UND MIKROLITHOGRAPHIE-PROJEKTIONSBELICHTUNGSANLAGE

Title (fr)

DISPOSITIF ET PROCÉDE POUR RÉALISER DES MESURES OPTIQUES SUR UN SYSTÈME OPTIQUE, SUPPORT DE STRUCTURE DE MESURE ET INSTALLATION D'ÉCLAIRAGE PAR PROJECTION MICROLITHOGRAPHIQUE

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Application

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Abstract (en)

[origin: WO2005069080A2] The invention relates to a device for optically measuring an optical system that receives effective radiation on an incident side and emits effective radiation on an emission side in a working mode of operation. Said device comprises a measurement radiation source by which at least one element that is located on the emission side and emits measurement radiation to the optical system can be placed on the emission side of the optical system, and a detector by which at least one element that is located on the incident side and receives measurement radiation emanating from the optical system can be positioned on the incident side of the optical system. The invention further relates to a measurement structure support that can be used for such a device, a microlithographic projection exposure apparatus which is equipped with such a device, and an associated method. According to the invention, the measurement radiation source encompasses a measurement structure mask that is located on the source side and is positioned on the emission side, and/or the detector is provided with a measurement structure mask which is located on the detector side and is placed on the incident side. The invention is used for wavefront measurement of projection lenses in microlithographic projection exposure apparatuses, for example.

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