

Title (en)

METHOD AND ASSEMBLY FOR CHARACTERIZING A MASK OR A WAFER FOR MICROLITHOGRAPHY

Title (de)

VERFAHREN UND ANORDNUNG ZUR CHARAKTERISIERUNG EINER MASKE ODER EINES WAFERS FÜR DIE MIKROLITHOGRAPHIE

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR LA CARACTÉRISATION D'UN MASQUE OU D'UNE TRANCHE POUR LA MICROLITHOGRAPHIE

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Application

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Abstract (en)

[origin: WO2020030432A1] The invention relates to a method and to an assembly for characterizing a mask or a wafer for microlithography. A method according to the invention has the following steps: illuminating the object (104, 204) with electromagnetic radiation (106, 206) produced by a radiation source, using an illumination device; capturing, in each of a plurality of measurement steps, an intensity distribution in a diffraction image produced by the object, using a detecting device, the measurement steps differing from one another with respect to the illumination setting set by the illumination device; determining at least one characteristic variable which is characteristic of the object, on the basis of an iteratively performed comparison of the measured values obtained in the measurement steps with values model-simulated values; wherein: the model-simulated values are determined on the basis of a multiple-layer model, in which the object is modeled by a multiple-layer structure of layers separated from one another by respective boundary surfaces, the boundary surfaces being assigned a location-dependent reflectivity; and the illumination device and the detecting device are arranged on the same side of the object such that the diffraction image is captured in reflection.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2020030432A1

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