Title (en)

HOMOGENIZATION OF A SPATIALLY COHERENT RADIATION BEAM AND PRINTING AND INSPECTION, RESPECTIVELY, OF A PATTERN ON A WORKPIECE

Title (de)

HOMOGENISIERUNG EINES RÄUMLICH KOHÄRENTEN STRAHLUNGSSTRAHLS UND DRUCKEN BZW. UNTERSUCHUNG EINER STRUKTUR AUF EINEM ARBEITSSTÜCK

Title (fr)

UNIFORMISATION D'UN FAISCEAU DE RAYONNEMENT SPATIALEMENT COHERENT ET RESPECTIVEMENT IMPRESSION ET CONTROLE D'UN MOTIF SUR LA PIECE

Publication

EP 1425783 A1 20040609 (EN)

Application

EP 02768252 A 20020909

Priority

- SE 0201607 W 20020909
- SE 0103006 A 20010910

Abstract (en)

[origin: WO03023833A1] The present invention relates to a device for homogenizing the spatial intensity distribution of a spatially coherent radiation beam (11). The device includes a grating (13) arranged in the propagation path of said spatially coherent radiation beam for diffracting said coherent beam and thus decreasing the coherence length of a diffracted radiation beam in a direction orthogonal to the propagation direction of the radiation beam relative to the width of the radiation beam in said orthogonal direction; and a radiation splitting and directing arrangement (15, 17, 19) arranged in the propagation path of said diffracted radiation beam for splitting said diffracted radiation beam into spatially separated portions and for superimposing said spatially separated portions to thereby form a radiation beam having a homogenized spatial intensity distribution.

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H01L 21/027; G03F 7/00

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