

Title (en)

DIGITAL MICROMIRROR DEVICE FOR AN ILLUMINATION OPTICAL COMPONENT OF A PROJECTION EXPOSURE SYSTEM

Title (de)

MIKROSPIEGEL-ARRAY FÜR EINE BELEUCHTUNGSOPTISCHE KOMPONENTE EINER PROJEKTIONSBELEUCHTUNGSANLAGE

Title (fr)

RÉSEAU DE MICROMIROIRS DESTINÉ À UN COMPOSANT OPTIQUE D'ÉCLAIRAGE D'UNE INSTALLATION D'INSOLATION PAR PROJECTION

Publication

**EP 4222540 A1 20230809 (DE)**

Application

**EP 21785834 A 20210928**

Priority

- DE 102020212351 A 20200930
- EP 2021076561 W 20210928

Abstract (en)

[origin: WO2022069426A1] The invention relates to a digital micromirror device (23d) which is part of an illumination optical component (22) of a projection exposure system for projection lithography. A multiplicity of micromirrors (23a) are arranged in groups in a plurality of mirror modules (23b) which each have a rectangular module boundary (23c). The mirror modules (23b) are arranged in module columns (26). At least some of the module columns (26) are shifted in relation to one another along a column borderline (27) in such a way that at least some of the mirror modules (26i, 26i+1) which are mutually adjacent via the borderline (27) are shifted in relation to one another. This causes the module boundary sides (28) thereof extending transversely to the borderline (27) to not be aligned with one another. This results in a digital micromirror device which can be produced with maximum standardisation and, in the event that the digital micromirror device is the last illumination optical component before a reflective object to be illuminated, a smallest possible reflection fold angle can be implemented on the object.

IPC 8 full level

**G02B 5/08** (2006.01); **G02B 5/09** (2006.01); **G02B 26/08** (2006.01); **G03F 7/20** (2006.01)

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Citation (search report)

See references of WO 2022069426A1

Designated contracting state (EPC)

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