

Title (en)

METHOD FOR CREATING A THREE-DIMENSIONAL TARGET STRUCTURE IN A LITHOGRAPHIC MATERIAL BY MEANS OF A LASER LITHOGRAPHY APPARATUS

Title (de)

VERFAHREN ZUM ERZEUGEN EINER DREIDIMENSIONALEN ZIELSTRUKTUR IN EINEM LITHOGRAPHIEMATERIAL MITTELS EINER LASERLITHOGRAPHIE-VORRICHTUNG

Title (fr)

PROCÉDÉ DE CRÉATION D'UNE STRUCTURE CIBLE TRIDIMENSIONNELLE DANS UN MATÉRIAU DE GRAVURE AU MOYEN D'UN APPAREIL DE GRAVURE LASER

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Abstract (en)

[origin: WO2022242920A1] The invention relates to a method for creating a three-dimensional target structure (44) in a lithographic material (22) by means of a laser lithography apparatus, in which method: a substrate (40) comprising a lithographic material disposed thereon is provided; an interface (54) between the lithographic material and the substrate is located; the target structure is defined in that a focus area (28) of a write laser beam (14) is moved, according to specified write instructions, within a write area (34) on a scanning surface (36) by means of an optical device (16); in the focus area of the write laser beam, a write exposure dose is radiated into the lithographic material, and a structure area (46) is defined; in order to locate the interface, a focus area of a calibration laser beam is moved sequentially to a plurality of test positions within the write area on the scanning surface by means of the optical device; and at each test position, a test exposure dose is radiated into the lithographic material, and positional data of the interface (54) are determined from a response of the lithographic material and/or the substrate to the test exposure dose. The invention also relates to a laser lithography apparatus.

IPC 8 full level

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