

Title (en)

EUV LIGHT SOURCE HAVING A SEPARATION DEVICE

Title (de)

EUV-LICHTQUELLE MIT EINER SEPARATIONSEINRICHTUNG

Title (fr)

SOURCE DE LUMIÈRE EUV ÉQUIPÉE D'UN DISPOSITIF DE SÉPARATION

Publication

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Application

EP 21722173 A 20210426

Priority

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Abstract (en)

[origin: WO2022228646A1] The invention relates to an EUV light source (1), comprising a supply device (3) for supplying a target material (4), a pre-pulse laser source (5) for emitting at least one pre-pulse laser beam (9) at at least one pre-pulse wavelength (λ_V), a main pulse laser source (6) for emitting a main pulse laser beam (10) at a main pulse wavelength (λ_H) different from the at least one pre-pulse wavelength (λ_V), a pre-pulse beam guiding device (7) for delivering the at least one pre-pulse laser beam (9) from the pre-pulse laser source (5) into a beam generation chamber (2) and for focused irradiation of the target material (4) inside the beam generation chamber (2) with in each case at least one pre-pulse (11) of the at least one pre-pulse laser beam (9), and a main pulse beam guiding device (8) for delivering the main pulse laser beam (10) from the main pulse laser source (6) into the beam generation chamber (2) and for focused irradiation of the target material (4) inside the beam generation chamber (2) with in each case a main pulse (12) of the main pulse laser beam (10). The target material (4) is designed to emit EUV radiation (19) following the irradiation. The pre-pulse beam guiding device (7) has at least one separation device (22) which is designed to reflect interfering radiation (21) entering the pre-pulse beam guiding device (7) from the beam generation chamber (2), in at least one wavelength range which does not include the at least one pre-pulse wavelength (λ_V), in a focused manner back into the beam generation chamber (2) or in a focused manner into at least one beam dump (24).

IPC 8 full level

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