

Title (en)

LASER TREATMENT SYSTEM AND METHOD

Title (de)

LASERBEHANDLUNGSSYSTEM UND -VERFAHREN

Title (fr)

SYSTEME ET PROCEDE DE TRAITEMENT PAR LASER

Publication

EP 4003635 A1 20220601 (FR)

Application

EP 20740344 A 20200721

Priority

- FR 1908743 A 20190731
- EP 2020070502 W 20200721

Abstract (en)

[origin: WO2021018661A1] The present description concerns a system (10) for treating a region (28) of an object (20) adjacent to a substrate (22). The system comprises a source (20) of an incident laser beam (16) supplying a focused laser beam (18). The wavelength of the incident laser beam is greater than the sum of 500 nm and the wavelength associated with the band gap of the material making up the substrate and less than the sum of 2500 nm and this wavelength. The system comprises an optical device combining a numerical aperture greater than 0.3 and means for correcting spherical aberrations occurring when the substrate is traversed, for a given thickness of the substrate and a given distance between the substrate and the optical device. The treatment takes place on the region through the substrate (22), and comprises the physical, chemical or physico-chemical modification or the ablation of the region.

IPC 8 full level

B23K 26/06 (2014.01); **B23K 26/57** (2014.01)

CPC (source: EP KR US)

B23K 26/0622 (2015.10 - KR US); **B23K 26/0648** (2013.01 - EP KR US); **B23K 26/57** (2015.10 - EP KR); **G02B 3/04** (2013.01 - US); **H01L 21/6835** (2013.01 - EP KR); **B23K 2101/40** (2018.07 - US); **B23K 2103/56** (2018.07 - EP KR); **H01L 2221/68381** (2013.01 - EP KR)

Citation (search report)

See references of WO 2021018661A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 2020070502 W 20200721; EP 20740344 A 20200721; FR 1908743 A 20190731; KR 20227005484 A 20200721; US 202017630876 A 20200721