

Title (en)

SYSTEM AND METHOD FOR LASER PROCESSING OF WORKPIECES IN LIQUID

Title (de)

SYSTEM UND VERFAHREN FÜR DIE LASERBEARBEITUNG VON WERKSTÜCKEN IN FLÜSSIGKEIT

Title (fr)

SYSTÈME ET PROCÉDÉ D'USINAGE AU LASER DE PIÈCES DANS DU LIQUIDE

Publication

EP 4297926 A1 20240103 (DE)

Application

EP 22708123 A 20220224

Priority

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- EP 2022054702 W 20220224

Abstract (en)

[origin: WO2022180178A1] The system (10) for material-ablating laser processing of workpieces (22) in liquid is provided with - a laser beam source (12) for producing pulsed laser radiation (14); - a focusing unit (18) for focusing the laser radiation (14) on a workpiece (22); - a process chamber (20) for receiving a workpiece (22), the process chamber (20) comprising the following: - a first side (24) with a transparent process window (28) for passing the laser radiation (14); - a second side (26) arranged opposite to the first side (24); - a chamber wall (30) which surrounds an interior (20a) of the process chamber (20); and - a flow generator for producing a flow within the interior (20a) of the process chamber (20), the flow generator comprising a first flow generator unit (32) for producing a first flow along a first flow axis and a second flow generator unit (32) for producing a second flow along a second flow axis; and - a positioning unit (16) for adjusting the position of the laser radiation (14) on the workpiece (22).

IPC 8 full level

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CPC (source: EP US)

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