

Title (en)

LASER PROCESSING APPARATUS AND METHODS OF LASER-PROCESSING WORKPIECES

Title (de)

LASERBEARBEITUNGSVORRICHTUNG UND VERFAHREN ZUM LASERBEARBEITEN VON WERKSTÜCKEN

Title (fr)

APPAREIL DE TRAITEMENT AU LASER ET PROCÉDÉS DE TRAITEMENT AU LASER DE PIÈCES À USINER

Publication

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Application

EP 17835014 A 20170721

Priority

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Abstract (en)

[origin: WO2018022441A1] A method of processing a workpiece having a first surface and a second surface opposite the first surface includes: generating a first beam of laser pulses having a pulse duration less than 200 ps at a pulse repetition rate greater than 500 kHz, directing the first beam of laser pulses along a beam axis intersecting the workpiece, and scanning the beam axis along a processing trajectory. The beam axis is scanned such that consecutively-directed laser pulses impinge upon the workpiece at a non-zero bite size to form a feature at the first surface of the workpiece. One or more parameters such as bite size, pulse duration, pulse repetition rate, laser pulse spot size and laser pulse energy is selected to ensure that the feature has a processed workpiece surface with a mean surface roughness (Ra) of less than or equal to 1.0 μm .

IPC 8 full level

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CPC (source: EP KR)

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