

Title (en)

METHOD AND SYSTEM FOR PRODUCING MICROSTRUCTURED COMPONENTS

Title (de)

VERFAHREN UND SYSTEM ZUR HERSTELLUNG MIKROSTRUKTURIERTER KOMPONENTEN

Title (fr)

PROCÉDÉ ET SYSTÈME DE FABRICATION DE COMPOSANTS MICROSTRUCTURÉS

Publication

**EP 4329977 A2 20240306 (DE)**

Application

**EP 22725764 A 20220426**

Priority

- DE 102021204313 A 20210429
- EP 2022061015 W 20220426

Abstract (en)

[origin: WO2022229164A2] In a method for producing a microelectronic component which has a plurality of functional microelements on a substrate, laser machining is carried out in a laser machining station under the control of a control unit in at least one method step. The method step comprises positioning a workpiece to be machined in a machining position of the laser machining station by means of a workpiece-moving system in response to movement signals from the control unit. Camera-based monitoring of the workpiece is then carried out by means of a camera system, wherein at least one image of a portion of the workpiece located in the object field of a camera is generated. The image is then analysed by means of image processing in order to determine position data which represent the current position of at least one structural element of the workpiece in the object field. The current position is compared with a target position of the structural element and correction signals are generated on the basis of a deviation of the current position from the target position. The machining position is corrected on the basis of the correction signals by actuating the workpiece-moving system in order to align the current position with the target position. A laser beam directed onto the workpiece is then radiated on at least one machining point of the workpiece for local laser machining of the workpiece.

IPC 8 full level

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CPC (source: EP KR)

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