

Title (en)  
ALIGNMENT DEVICE FOR A BESSEL BEAM MACHINING OPTICAL SYSTEM AND METHOD

Title (de)  
JUSTAGE-VORRICHTUNG FÜR EINE BESSEL-STRAHL-BEARBEITUNGSOPTIK UND VERFAHREN

Title (fr)  
DISPOSITIF D'AJUSTEMENT POUR UN SYSTÈME OPTIQUE D'USINAGE PAR FAISCEAU DE BESSEL ET PROCÉDÉ CORRESPONDANT

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Application  
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Abstract (en)  
[origin: WO2021069362A1] The invention relates to a device (101) for the alignment of a machining optical system (3) of laser machining equipment (1), wherein the machining optical system (3) is designed to shape a laser beam (5) in the laser machining equipment (1) and to focus same along an incident beam axis (21) in such a way that a machining laser beam (5A) can form a preset Bessel beam focus zone (7) in a workpiece (9) to be machined. The device (101) comprises an entry region (104) for receiving the machining laser beam (5A), a focus zone formation region (106) which is provided to allow for a formation of a measuring focus zone (107) by the received machining laser beam (5A) along a desired axis (110), and an imaging unit (111) having a lens (113) and a detector surface (115A), wherein the lens (113) images measuring laser radiation (105), which exits the focus zone formation region (106) after the formation of the measuring focus zone (107), onto the detector surface (115A) along an imaging axis (117) predefined by the desired axis (110).

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