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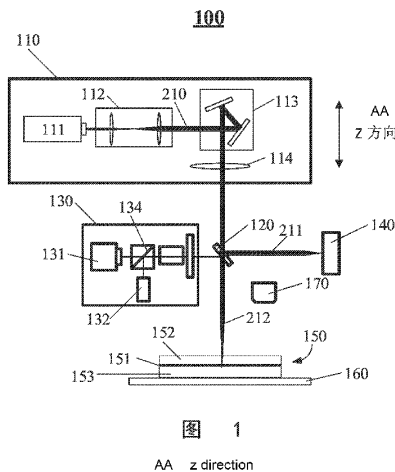
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(54) **Title:** LASER DEBONDING DEVICE AND METHOD

(54) 发明名称: 一种激光解键合设备和方法



(57) **Abstract:** A laser debonding device (100), comprising: a laser emitter (110); a beam splitter (120) for splitting the received initial laser beam (210) into a first laser beam (211) directed toward a beam profiler (140) and a second laser beam (212) directed toward a sacrificial layer (151) of a bonded assembly (150), wherein the distances from the beam splitter (120) respectively to the beam profiler (140) and to the sacrificial layer (151) are the same; an infrared vision assembly (130) for acquiring an infrared spot image of the second laser beam (212) on the sacrificial layer (151); and a controller configured to: acquire the spot size of the first laser beam (211) by means of the beam profiler (140), wherein the spot size of the first laser beam (211) is equivalent to the spot size of the second laser beam (212); perform preliminary adjustment of a working distance from the laser emitter (110) to the sacrificial layer (151), so that the spot of the second laser beam (212) reaches an optimal size; acquire the infrared spot image of the second laser beam (212) by means of the infrared vision assembly (130), and perform fine adjustment of the working distance from the laser emitter (110) to the sacrificial layer (151); and in response to the laser emitter (110) being adjusted to the optimal working distance, perform laser scanning debonding on the sacrificial layer (151). The device can quickly and accurately find the optimal working distance of the laser emitter (110). The present invention also relates to a laser debonding method and a computer-readable storage medium.

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TD, TG)。

本国际公布:

— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 一种激光解键合设备(100), 包括: 激光发射件(110); 分光镜(120), 将接收到初始激光(210)分为射向焦斑分析仪(140)的第一激光(211)和射向键合件(150)的牺牲层(151)的第二激光(212), 其中, 分光镜(120)到焦斑分析仪(140)和牺牲层(151)的距离相同; 红外视觉组件(130), 获取牺牲层(151)上第二激光(212)的红外光斑图; 以及控制器, 被配置为: 经由焦斑分析仪(140)获取第一激光(211)的光斑尺寸, 其中第一激光(211)的光斑尺寸等同于第二激光(212)的光斑尺寸; 初调激光发射件(110)到牺牲层(151)的工作距离, 以使第二激光(212)的光斑到达最优尺寸; 经由红外视觉组件(130)获取第二激光(212)的红外光斑图, 精调激光发射件(110)到牺牲层(151)的工作距离; 和响应于激光发射件(110)调整到最优工作距离, 对牺牲层(151)激光扫描解键合。该设备能够迅速准确地找到激光发射件(110)的最优工作距离。还涉及一种激光解键合方法和一种计算机可读存储介质。