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(54) Title (EN): SUBSTRATE PROCESSING DEVICE AND SUBSTRATE PROCESSING METHOD

(54) Title (FR): DISPOSITIF DE TRAITEMENT DE SUBSTRAT ET PROCÉDÉ DE TRAITEMENT DE SUBSTRAT

(54) Title (JA): 基板処理装置及び基板処理方法

(57) Abstract:

(EN): This substrate processing device processes a substrate and includes: a substrate holding part for holding a second substrate of a combined substrate obtained by bonding a first substrate and the second substrate together; a peripheral edge modification unit that forms, inside the first substrate held by the substrate holding part, a peripheral edge modified layer by projecting a peripheral edge laser beam along a boundary between a peripheral edge and a center section to be removed; and an inner surface modification unit that forms, inside the first substrate held by the substrate holding part, an inner surface modified layer by projecting an inner surface laser beam along the surface direction, after the peripheral edge modified layer has been formed by the peripheral edge modification unit.

(FR): L'invention concerne un dispositif de traitement de substrat traitant un substrat et comprenant : une partie de maintien de substrat destinée à maintenir un second substrat d'un substrat combiné obtenu par liaison d'un premier substrat et du second substrat ; une unité de modification de bord périphérique qui forme, à l'intérieur du premier substrat maintenu par la partie de maintien de substrat, une couche à bord périphérique modifié par projection d'un faisceau laser de bord périphérique le long d'une limite entre un bord périphérique et une section centrale à éliminer ; et une unité de modification de surface interne qui forme, à l'intérieur du premier substrat maintenu par la partie de maintien de substrat, une couche à surface interne modifiée par projection d'un faisceau laser de surface interne le long de la direction de surface, après que la couche à bord périphérique modifié a été formée par l'unité de modification de bord périphérique.

(JA): 基板を処理する基板処理装置であって、第１の基板の表面と第２の基板の表面が接合された重合基板において前記第２の基板を保持する基板保持部と、前記基板保持部に保持された前記第１の基板の内部に、除去対象の周縁部と中央部との境界に沿って周縁用レーザ光を照射して周縁改質層を形成する周縁改質部と、前記周縁改質部で前記周縁改質層を形成した後、前記基板保持部に保持された前記第１の基板の内部に、面方向に沿って内部面用レーザ光を照射して内部面改質層を形成する内部面改質部と、を有する。

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