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THE THE BUILDING

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#### Remarks:

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## (54) ROOM TEMPERATURE GLASS-TO-GLASS, GLASS-TO-PLASTIC AND GLASS-TO-CERAMIC/SEMICONDUCTOR BONDING

(57) An apparatus for room temperature laser bonding comprising an x-axis motion stage (32) mounted to a base (33); a y-axis motion stage (34) mounted to the x-axis motion stage; a substrate alignment fixture (36) mounted on the y-axis motion stage, said alignment fixture adapted to align and secure at least two substrates with a mutual interface as a workpiece; a gantry (44) mounted to the base and supporting alignment optics (46) for a laser (14) to focus on the workpiece in the alignment fixture; and a controller (55) for translation of the x-axis motion stage and y-axis motion stage for motion of the focused laser on the workpiece.

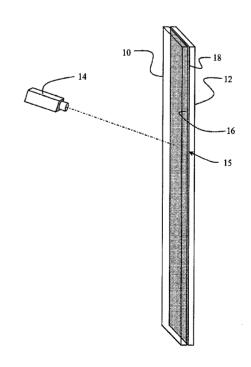


FIG. 1