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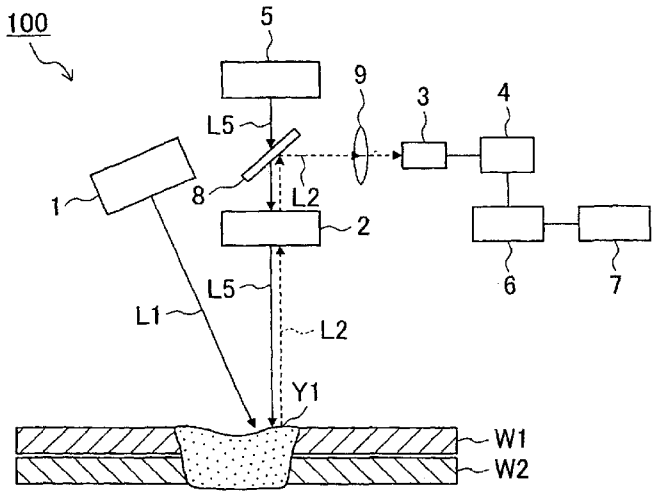
[Continued on next page]

(54) Title: WELDED PORTION INSPECTION APPARATUS AND INSPECTION METHOD THEREOF, WITH INSPECTION IN DIFFERENT ZONES OF THE MOLTEN POOL

FIG. 1



(57) Abstract: A welding laser beam (L1) is radiated along welding loci set in workpieces (W1, W2), or an inspection laser beam (L5) is radiated along scanning loci set in a molten pool (Y1) of the workpieces (W1, W2) that are molten by radiation of the welding laser beam (L1), a returned light beam (L2) including reflection light from the molten pool (Y1), vapor light caused due to melting and evaporation of the workpieces (W1, W2), and thermal radiation light emitted from the molten pool (Y1) is received, and a welding state of a welded portion of the workpieces (W1, W2) is inspected based oh an intensity of a returned light beam (L2) received in a first region inside the molten pool (Y1) which is relatively close to a given point and an intensity of a returned light beam received in a second region inside the molten pool (Y1) which is relatively spaced from the given point.

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