



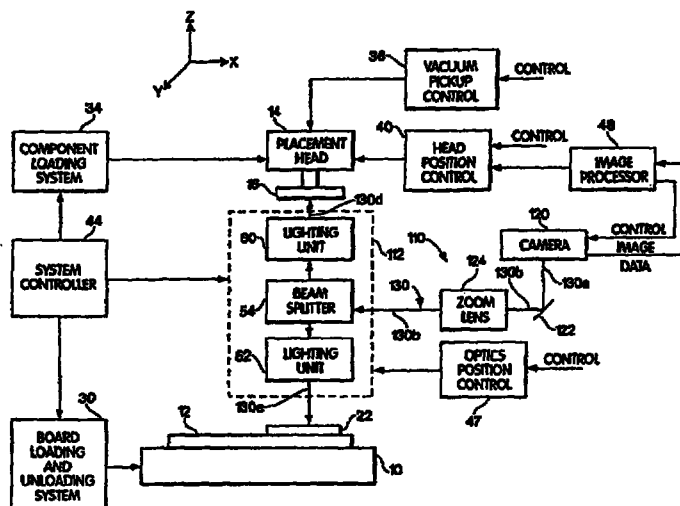
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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(54) Title: AUTOMATED SYSTEM FOR PLACEMENT OF COMPONENTS



## (57) Abstract

Automated component placement apparatus includes a table for holding a board having a placement site (22), a placement head (14) for holding a component to be placed on the placement site, an alignment assembly, a first actuator and a second actuator. The alignment assembly includes alignment optics for obtaining a first image of the component on the placement head and a second image of the placement site. The alignment assembly further includes an image processor (48) for processing the first and second images to determine a relative position error between the component and the placement site and for providing a control signal representative of the position error. The first actuator causes relative movement between the placement head and the placement site, typically by movement of the placement head, in response to the control signal so as to correct the position error. The second actuator then moves the placement head between the alignment position and the placement position for placement of the component on the placement site.