Semi-conductor mounting apparatus for applying adhesive to a substrate

Abstract

The apparatus for applying an adhesive pattern (3) to a chip mounting surface (2), by means of an adhesive dispensing head (5) moveable in x, y and z directions, is provided with a first carriage (10), which is moveable in x and y by means of first and second actuators (12, 14). A second carriage (20) with the dispensing head (5) is moveable in the z direction, that is to say perpendicular to the mounting surface (2), on a guide (16) mounted on the first carriage (10). The z actuator is provided with a positioning motor (30) mounted in a stationary manner and an auxiliary carriage (32) displaceable in the z direction. Said auxiliary carriage, driven by the motor (30) runs in a guide (16) which is also stationary. It is provided with a positioning surface (38) which is parallel to the mounting surface (2), with which a stop (25, 26) arranged on the second carriage (20) is kept in constant contact. This is preferably a gliding contact (insert 26) which is retained by a spring (28). The apparatus has good dynamic properties which make possible a rapid "drawing" of adhesive patterns with a high degree of precision.

(Fig. 1)