

METHOD AND APPARATUS FOR DISPENSING FLUX-FREE SOLDER ON A SUBSTRATE

ABSTRACT

An apparatus for dispensing flux-free solder comprises a dispenser head (2) with a stamp (5) to which ultrasound can be applied. Solder is dispensed by:

- A) moving the dispenser head (2) above a next substrate place,
- B) lowering the stamp (5) until the working surface (11) of the stamp (5) touches the substrate place or is located at a predetermined height above the substrate place,
- C) dispensing solder by:
 - C1) advancing the solder wire (8) until the solder wire (8) touches the substrate place, in such a manner that the tip of the solder wire (8) touches the substrate place within a recess (12) of the stamp (5),
 - C2) further advancing of solder wire (8) to melt a predetermined quantity of solder, and
 - C3) retracting the solder wire (8),
- D) moving the dispenser head (2) to distribute the solder on the substrate place, and simultaneously applying ultrasound to the stamp (5), and
- E) raising the stamp (5).

Figure 1