

**A METHOD AND APPARATUS FOR
PROGRAMMING A PASTE DISPENSING MACHINE**

ABSTRACT OF THE DISCLOSURE

1
2 A method for programming a paste dispensing machine 10
3 to paste a set of pads disposed on a printed circuit board 14 for attachment of a
4 ball-grid array component 74 includes generating a set of input data for the
5 paste dispensing machine 10. The set of input data represents a set of positions
6 26 on the printed circuit board 14 at which the pads are located and is
7 generated using a neutral file 44 having data that describes the layout of the
8 printed circuit board 14. A set of data extracted from the neutral file 44 that
9 describe a set of positions 26 on the printed circuit board 14 relative to a first
10 coordinate system are converted to be relative to a second coordinate system
11 that is used by the paste dispensing machine 10. The converted data is then
12 arranged in a desired pattern 134 such that when the input data is supplied to
13 the paste dispensing machine 10, the data causes the paste dispensing machine
14 10 to dispense paste to the pads of the printed circuit board 14 in the desired
15 pattern 134.

FIG.2