# FLIP CHIP BONDER AND METHOD THEREFOR

## ABSTRACT

A flip bonder (100) has a pick-up turret assembly (110) with a number of pick-up nozzles (112A-D), and a placing turret assembly (115) with a number of placing nozzles (117A-H). Each pick-up nozzle (112A-D) picks a die (107) by its bumped surface, and indexes the picked die (107) to the transfer location, thereby flipping the picked die (107). At the transfer location (310), the picked die is transferred to a placing nozzle (117A-H), with die now held by its back surface. The placing nozzle is indexed to a fluxing location where flux is applied to the die (107), and further indexed to a placing location, where the fluxed die (107) is placed on a target location (122A) on a leadframe (121), with the bumps abutting lead portions of the leadframe (121). The multiple nozzles (112A-D and 117A-H) allow concurrent operations with each die (107), thus supporting an improved throughput.

FIG. 1 accompanies this abstract.