

Chip Transporting Method And The Device Thereof

Abstract

The invention has been made to provide a chip transporting method and the device thereof that is provided with a collet portion for adsorbing at a chip a chip pick-up position and transport the chip to a chip placing position, wherein the collet portion is moved with parallel motion between the chip pick-up position and the chip placing position, thereby to decrease substantially three (3) steps of operation of the collet portion as compared with the prior art, remarkably enhance the chip transporting efficiency, decrease the number of components of the device, decrease the operation rate, that is the rotation number of drive motors, thereby to decrease the motor rotation number to avoid the consumption of drive motors and thereby to remarkably decrease the production cost of the device.

The invention substantially comprises a collet portion 12, for picking up a chip 4 from a semiconductor wafer 1, a Z axis drive mechanism 13, for reciprocatingly moving the collet portion slightly to and away from the wafer 1, in Z axis direction, a θ axis rotating mechanism 14 for reciprocatingly rotating an arm 45 to move the collet portion with parallel motion so as to enable the collet portion to pick up and transport the chip from the chip pick-up position 6 to the chip placing position 9.

Figure 4