ABSTRACT

A sheet sticking apparatus 10 comprises a sheet feed-out unit 12 for feeding out an adhesive sheet S to a position facing a surface of a semiconductor wafer W, and a press roller 14 for imparting a press force to the adhesive sheet S to stick the adhesive sheet S to the wafer W. The sheet feed-out unit 12 includes a tension measuring means 35 for measuring the tension of the adhesive sheet S between a feed-out head 49 and the press roller 14. The tension measuring means 35 maintains the tension to a constant level to prevent catching of air bubbles between the adhesive sheet S and the wafer W as well as to prevent warp deformation of the wafer stuck with the sheet.