

ABSTRACT

The present invention discloses a drying apparatus based on supercritical fluid. The drying apparatus comprises: an upper cover (1); a base (2), arranged below the upper cover (1) and the base (2) and the upper cover (1) being capable of moving relatively in the vertical direction so as to close to form a pressure-resistant closed chamber (120); a substrate tray (3), arranged on the base (2), and configured to bear a substrate (w); a first fluid supply tube (4), arranged on the top wall of the upper cover (1), and configured to supply supercritical fluid to the interior of the closed chamber (120), to make the closed chamber (120) reach a supercritical state from an atmospheric pressure state; a fluid disturbance plate (5), arranged below the first fluid supply tube (4); a second fluid supply tube (6), arranged on a first side wall of the upper cover (1) and configured to supply the supercritical fluid to the interior of the closed chamber (120); and a fluid discharge tube (7), arranged on a second side wall of the upper cover (1). The inner space of the closed chamber (120) can be minimized by using the drying apparatus, thereby saving the usage amount of the supercritical fluid, and reducing the usage costs.