

ABSTRACT

THIN FILM MANUFACTURING APPARATUS

The invention provides an apparatus that causes film formation particles to adhere to a surface of a substrate moving in a hermetically-sealable chamber and thereby
5 forms a thin film thereon and includes: a plasma generator; a substrate transfer unit; a film-formation source supplier; and a film-formation region limiter. The plasma generator includes a magnet located at the other surface of the substrate and a gas supplier that supplies a film forming gas to near the surface of the substrate. The film-formation region limiter includes a shield that is located close to the surface of the
10 substrate and has an opening. The ratio of a diameter of the opening of the shield to a diameter of the plasma generated by the plasma generator in a direction along the surface of the substrate is in a range of less than or equal to 110/100.

(fig.3)