

ABSTRACT

FILM FORMING METHOD AND FILM FORMING APPARATUS

A film forming method of forming a coating on a surface of an object to be processed includes disposing a target forming a base material of the coating and the object to be processed in a chamber so as to face each other, and generating a magnetic field through which a vertical line of magnetic force locally passes from a sputter surface of the target toward a surface to be film formed of the object to be processed at predetermined intervals; generating plasma in a space between the target and the object to be processed by introducing a sputter gas into the chamber, controlling a gas pressure in the chamber to a range of 0.3 Pa to 10.0 Pa, and applying a negative DC voltage to the target; and inducing and depositing the sputter particles on the object to be processed and forming the coating, while controlling flying direction of the sputter particles generated by sputtering the target.

Figure 1