

ABSTRACT

A reflective mask blank comprises: a substrate (1); a multilayer reflective film (2) that reflects the exposure light and is formed above one main surface of the substrate (1); a protective film (3) that protects the multilayer reflective film (2) and is formed above the multilayer reflective film (2); an absorption film (6) that absorbs the exposure light and is formed above the protective film (3); and an intermediate film provided between the protective film (3) and the absorption film (6). The intermediate film includes a first intermediate film (4) containing niobium (Nb) and a second intermediate film (5) that is provided closer to the absorption film (6) than the first intermediate film (4) and is made of a material that can be dry-etched with an oxygen-containing gas. The absorption film (6) is made of a material that can be dry-etched with a fluorine-containing gas.

Fig. 1