

ABSTRACT

5 Provided is a reflective mask blank for manufacturing a reflective mask capable of suppressing peeling of an absorber pattern when EUV exposure is performed in an atmosphere comprising a hydrogen gas.

10 A reflective mask blank comprises: a substrate; a multilayer reflective film on the substrate; and an absorber film on the multilayer reflective film. The absorber film comprises an absorption layer and a reflectance adjustment layer. The absorption layer comprises tantalum (Ta), boron (B), nitrogen (N), and at least one additive element selected from hydrogen (H) and deuterium (D). A content of the boron (B) in the absorption layer is more than 5 atomic %. A content of the additive element in the absorption layer is 0.1 atomic% or more and 30 atomic % or less.