

ABSTRACT

5 Provided is a reflective mask blank comprising a phase shift film having a small change in the phase difference and/or reflectance of the phase shift film even in a case where the film thickness of the phase shift film changes.

10 A reflective mask blank comprises a multilayer reflective film and a phase shift film in this order on a main surface of a substrate. The phase shift film comprises a lower layer and an uppermost layer. The lower layer is located between the uppermost layer and the multilayer reflective film. The lower layer is formed of a material in which the total content of ruthenium and chromium is 90 atomic % or more, or a material in which the total content of ruthenium, chromium, and nitrogen is 90 atomic % or more. The uppermost layer is formed of a material in which the total content of ruthenium, chromium, and oxygen is 90 atomic % or more.