

ABSTRACT

5 A reflective mask blank including a substrate, a multilayer reflection film, a
protection film and a light absorbing film that has a phase shift function is provided. The
light absorbing film contains ruthenium, tantalum and nitrogen and is free of oxygen, and
has a ruthenium content of 80 to 90 at%, a tantalum content of 5 to 15 at%, and a nitrogen
content of not more than 10 at%, a thickness of 38 to 50 nm, and a reflectance of 10 to 14%
10 and a phase shift of 205 to 225 degrees, with respect to exposure light being light in
extreme ultraviolet range.

[Figure 1]