

ABSTRACT

The present invention is intended to provide a reflective photomask blank and a reflective photomask that have high hydrogen radical resistance and minimize a shadowing effect to improve transferability. A reflective photomask blank (10) according to the present embodiment includes a substrate (1), a reflective portion (7), and a low reflective portion (8). The low reflective portion (8) includes an absorption layer (4) and an outermost layer (5). The absorption layer (4) includes a total of 50 atomic% or more of one or more selected from a first material group. The outermost layer (5) includes a total of 80 atomic% or more of at least one or more selected from a second material group. The first material group includes indium, tin, tellurium, cobalt, nickel, platinum, silver, copper, zinc, bismuth, and oxides, nitrides, and oxynitrides thereof. The second material group includes tantalum, aluminum, ruthenium, molybdenum, zirconium, titanium, zinc, vanadium, and oxides, nitrides, oxynitrides, and indium oxides thereof.

FIG. 1