Reflective Mask Blank, and Reflective Mask

ABSTRACT

A reflective mask blank including a substrate, a multilayer reflection film formed on one main surface of the substrate and reflects exposure light. The multilayer reflection film has a periodically laminated structure portion in which low refractive index layers and high refractive index layers are alternately laminated, and at least one of the low refractive index layer has a two-layered structure consisting of one layer containing molybdenum, and at least one additive element selected from the group consisting of nitrogen, carbon, boron, silicon and hydrogen, and the other layer containing molybdenum and substantively free of other elements other than molybdenum.

Figure 2A