

ABSTRACT

**REFLECTION-TYPE MASK BLANK FOR EUV LITHOGRAPHY,
REFLECTION-TYPE MASK FOR EUV LITHOGRAPHY, AND
MANUFACTURING METHODS THEREFOR**

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The present invention pertains to a reflection-type mask blank which is for EUV lithography and in which a multilayer reflective film that reflects EUV light, a protective film for the multilayer reflective film, and an absorption layer that absorbs EUV light are formed in this order, said mask blank being characterized in that the protective film is composed of rhodium (Rh) or a rhodium-based material containing Rh and at least one element selected from the group consisting of nitrogen (N), oxygen (O), carbon (C), boron (B), ruthenium (Ru), niobium (Nb), molybdenum (Mo), tantalum (Ta), iridium (Ir), palladium (Pd), zirconium (Zr), and titanium (Ti).

15 Figure 1