

SUBSTRATE WITH MULTILAYER REFLECTION FILM FOR EUV MASK BLANK, MANUFACTURING METHOD THEREOF, AND EUV MASK BLANK

ABSTRACT

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A substrate with a multilayer reflection film for an EUV mask blank including a substrate, and a multilayer reflection film formed on the substrate is provided. The multilayer reflection film includes a Si/Mo laminated portion in which Si layers and Mo layers are alternately laminated, and a layer containing Si and N intervenes at one or more portions between the Si layer and the Mo layer of the Si/Mo laminated portion, and is contact with both of the Si layer and the Mo layer.

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[Figure 1]