

# ABSTRACT

5 Provided is a substrate with a multilayer reflective film, a reflective mask blank, a reflective mask and a method of manufacturing a semiconductor device that are able to prevent contamination of the surface of the multilayer reflective film even in the case of having formed reference marks on the multilayer reflective film.

10 A substrate with a multilayer reflective film 10 contains a substrate 12, a multilayer reflective film 14 that reflects EUV light formed on the substrate 12, and a protective film 18 formed on the multilayer reflective film 14. Reference marks 20 are formed to a concave shape on the surface of the protective film 18. A surface layer 22 of the reference marks 20 contains an element that is the same as at least one of the elements contained in the protective film 18. A shrink region 24, where at least a portion of the plurality of films contained in the multilayer reflective film 14 are shrunk, is formed at the bottom of the reference marks 20.

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