

ABSTRACT

5 Provided are 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 and a multilayer reflective film 14 that reflects EUV light formed on the substrate 12. Reference marks 20 are formed to a concave shape on the surface of the substrate with the multilayer reflective film 10. The reference marks 20 have grooves 21 or protrusions 23 roughly in the center. The shape of the grooves 21 or protrusions 23 when viewed from overhead is similar or roughly similar to the shape of the reference marks 20.