

ABSTRACT

A solid immersion lens unit includes a solid immersion lens having a contact surface for coming into contact with semiconductor device formed of a silicon substrate and a spherical surface to be disposed to face an objective lens; a holder holding the solid immersion lens; and an optical element held by the holder to be positioned between the objective lens and the solid immersion lens. The solid immersion lens transmits light having at least a part of wavelength in a range of 200 nm or greater and 1100 nm or lower. The optical element corrects aberration caused by a difference in refractive indices between the silicon substrate and the solid immersion lens.

Figure.3