ABSTRACT

An exposure apparatus, wherein an exposure of a substrate (P) is carried out by filling at least a portion of the space between a projection optical system and the substrate (P) with a liquid and projecting an image of a pattern onto the substrate (P) via the projection optical system and the liquid, includes a bubble detector (20) which detects air bubble or bubbles in the liquid between the projection optical system and the substrate (P). Consequently, the exposure apparatus is capable of suppressing deterioration of a pattern image caused by bubbles in the liquid when an exposure is carried out while filling the space between the projection optical system and the substrate with the liquid.