

ABSTRACT

An end effector (1) according to the present invention includes: a hand (10); a substrate holder (11) provided on the hand (10); a mapping detector (12) provided at distal end portions (10b) and (10c) of the hand; a light emitter (13), which the hand (10) is provided with and which is configured to generate detection light; a light receiver (14), which the hand (10) is provided with and which is configured to receive the detection light and convert the detection light into an electrical output; and an optical path (15) formed such that the detection light emitted from the light emitter (13) passes through the optical path (15) to be incident on the light receiver (14). The optical path (15) is formed such that detection light (B1) is blocked by a substrate (W) detected in a cassette (6) by the mapping detector (12), and such that detection light (B2) is blocked by a substrate (W) held by the substrate holder (11).