

5

Abstract

An aircraft is moved toward the target landing point more accurately and faster. The aircraft position control system includes: a relative position acquisition unit that acquires the relative position of the aircraft and the target landing point; a relative velocity acquisition unit that acquires the relative velocity of the aircraft with respect to the target landing point; and a control unit that controls the aircraft. The control unit includes: a feedback control unit that calculates a feedback manipulated variable of the aircraft by feedback control so that the aircraft heads toward the target landing point, based on at least the relative position and the relative velocity; a multi-value control unit that sets, by referring to a switching line preliminarily provided in a manner passing through an origin of a coordinate plane whose orthogonal axes represent the relative position and the relative velocity and separating an acceleration region in which the relative velocity is increased and a deceleration region in which the relative velocity is decreased, an addition value that tends to increase the relative velocity when a coordinate point of the current relative position and the current relative velocity is located in the acceleration region, or sets an addition value that tends to decrease the relative velocity when the coordinate point is located in the deceleration region with respect to the switching line; and an addition circuit configured to calculate a manipulated variable of the aircraft by adding the addition value to the feedback manipulated variable.