

Abstract

The invention relates to a method for controlling a drone (104) along a shaft (106), the shaft (106) having at least a first shaft wall (118) and a second shaft wall (120) adjoining the first shaft wall (118), and the drone (104) having a sensor system (108; 210, 212; 300, 302, 304) for detecting an environment and/or a state of flight of the drone (104), an actuator system (102) for controlling the drone (104), and a control device (110) for controlling the actuator system (102). The method comprises the following steps: receiving sensor data (112) which have been generated by the sensor system (108; 210, 212; 300, 302, 304), in the control device (110); determining actual distances (l_x, l_{x_2}, l_y) of the drone (104) relative to the first shaft wall (118) and to the second shaft wall (120) by processing the sensor data (112); and generating a control signal (128) for actuating the actuator system (102) such that the drone (104) flies along the shaft (106), on the basis of a deviation of the actual distances (l_x, l_y) from the target distances (l'_x, l'_y) and a target flight route (s'_z) which the drone (104) is to cover until reaching a target position in the shaft (106). An actual flight route (s_z) of the drone (104) is determined by processing the sensor data (112), and the control signal (128) is generated on the basis of a deviation of the actual flight route (s_z) from the target flight route (s'_z). According to the invention, door regions (204) and/or height markings (205) in the shaft (106) are recognized by processing the sensor data (112), and the actual flight route (s_z) is determined on the basis of the door regions (204) and/or height markings (205) recognized by processing the sensor data (112).

Fig.2