

ABSTRACT

An electro-hydraulic actuator includes a pump 7 powered by a motor 3, a hydraulic actuator 5 biased to a first state and that reciprocates between the first state and a second state, a reservoir 4, and a hydraulic circuit that hydraulically controls the hydraulic actuator. The hydraulic circuit includes a pressurizing flow path 201 that supplies fluid from the pump to the hydraulic actuator, a discharge flow path 300 that discharges fluid from the hydraulic actuator to the reservoir via an unloading valve 61, a pilot flow path 301 that branches off midway through the pressurizing flow path and supplies fluid pressurized to a pilot pressure to the unloading valve, a mechanism 27 that generates pilot pressure while the pump is operating, and a check valve 26 that allows fluid to pass only in the direction from the pump to the hydraulic cylinder. The hydraulic circuit transitions to the second state when the pump is operating, and returns to the first state and when the pump is stopped.

FIG. 4