CLAIMS

[Claim 1] A switch comprising a control system for conducting a circuit through a wire, a first manipulating mechanism, and a second manipulating mechanism, wherein:

the control system emits an operating instruction to the second manipulating mechanism when the wire works normally, the operating instruction being configured for instructing the second manipulating mechanism to perform an opening action or a closing action;

the control system emits a first action instruction to the first manipulating mechanism and a second action instruction to the second manipulating mechanism, respectively, when the wire fails;

and wherein the first action instruction is configured for instructing the first manipulating mechanism to perform a first action;

the second action instruction is configured for instructing the second manipulating mechanism to perform a second action, the cooperative action between the first manipulating mechanism and the second manipulating mechanism implements redundancy of the switch operating; and

the time taken by the first manipulating mechanism to implement the first action is different from the time taken by the second manipulating mechanism to implement the second action.

[Claim 2] The switch according to claim 1, wherein the time taken by the first manipulating mechanism to implement the first action is shorter than the time taken by the second manipulating mechanism to implement the second action.

[Claim 3] The switch according to claim 2, wherein the switch further comprises an arc extinguishing component, wherein the arc extinguishing component comprises a movable contact and a stationary contact; connections among the first manipulating mechanism, the second manipulating mechanism, and the arc extinguishing component include one of the followings:

the connection between the first manipulating mechanism and the movable contact and the connection between the second manipulating mechanism and the first manipulating mechanism.

the connection between the first manipulating mechanism and the stationary contact and the connection between the second manipulating mechanism and to the movable contact;

the connection between the second manipulating mechanism and the stationary contact

and the connection between the first manipulating mechanism and the movable contact; and

the connection between the second manipulating mechanism and the movable contact and the connection between the first manipulating mechanism and the second manipulating mechanism.

[Claim 4] The switch according to claim 3, wherein the connection between the first manipulating mechanism and the movable contact and the connection between the second manipulating mechanism and the first manipulating mechanism specifically comprises:

the connection between a first motion lever of the first manipulating mechanism and the movable contact and the connection between a second motion lever of the second manipulating mechanism and a housing of the first manipulating mechanism;

or,

the connection between the first motion lever of the first manipulating mechanism and the movable contact and the connection between the second motion lever of the second manipulating mechanism and the housing of the first manipulating mechanism via a linkage.

[Claim 5] The switch according to claim 3, wherein the connection between the first manipulating mechanism and the stationary contact and the connection between the second manipulating mechanism and the movable contact specifically comprises:

the connection between a first motion lever of the first manipulating mechanism and the stationary contact and the connection between a second motion lever of the second manipulating mechanism and the movable contact.

[Claim 6. The switch according to claim 3, wherein the connection between the second manipulating mechanism and the stationary contact and the connection between the first manipulating mechanism and the movable contact specifically comprises:

the connection between a first motion lever of the first manipulating mechanism and the movable contact and the connection between a second motion lever of the second manipulating mechanism and the stationary contact.

[Claim 7] The switch according to any one of claim 1 or 2, wherein the switch further comprises an arc extinguishing component, wherein the arc extinguishing component comprises a movable contact and a stationary contact;

when performing a fast opening action, the first manipulating mechanism actuates the movable contact and the stationary contact to implement fast opening to cut off the circuit;

after the circuit is cut off, the movable contact or the stationary contact is continued to be pulled by the second manipulating mechanism to make an opening motion and the first

manipulating mechanism is reset to cause the first manipulating mechanism to resume the closed position, implementing a redundant action.

[Claim 8] The switch according to any one of claim 1 or 2, wherein the switch further comprises an arc extinguishing component, wherein the arc extinguishing component comprises a movable contact and a stationary contact;

when performing a fast closing action, the first manipulating mechanism actuates the movable contact and the stationary contact to implement fast closing to conduct the circuit;

after the circuit is conducted, the movable contact or the stationary contact is continued to be pushed by the second manipulating mechanism to make a closing motion and the first manipulating mechanism is reset to cause the first manipulating mechanism to resume the opening position, implementing a redundant action.

[Claim 9] A switch, comprising a control system for conducting a circuit through a wire, a first manipulating mechanism, and a second manipulating mechanism, wherein:

the control system emits an operating instruction to the second manipulating mechanism when the wire works normally, the operating instruction being configured for instructing the second manipulating mechanism to perform an opening action or a closing action;

the control system emits an action instruction to the first manipulating mechanism and the second manipulating mechanism, respectively, when the wire fails;

and wherein the action instruction is configured for instructing the first manipulating mechanism to perform the first action; then, the second manipulating mechanism performs the second action, the cooperative action between the first manipulating mechanism and the second manipulating mechanism implements redundancy of the switch operating;

the time taken by the first manipulating mechanism to implement the first action is different from the time taken by the second manipulating mechanism to implement the second action.

[Claim 10] The switch according to claim 9, wherein the time taken by the first manipulating mechanism to implement the first action is shorter than the time taken by the second manipulating mechanism to implement the second action.

[Claim 11] The switch according to any one of claim 9 or 10, wherein the switch further comprises an arc extinguishing component, wherein the arc extinguishing component comprises a movable contact and a stationary contact;

when performing a fast opening action, the first manipulating mechanism actuates the

movable contact and the stationary contact to implement fast opening to cut off the circuit;

after the circuit is cut off, the movable contact or the stationary contact is continued to be pulled by the second manipulating mechanism to make an opening motion and the first manipulating mechanism is reset to cause the first manipulating mechanism to resume the closed position, implementing a redundant action.

[Claim 12] The switch according to any one of claim 9 or 10, wherein the switch further comprises an arc extinguishing component, wherein the arc extinguishing component comprises a movable contact and a stationary contact;

when performing a fast closing action, the first manipulating mechanism actuates the movable contact and the stationary contact to implement fast closing to conduct the circuit;

after the circuit is conducted, the movable contact or the stationary contact is continued to be pushed by the second manipulating mechanism to make a closing motion and the first manipulating mechanism is reset to cause the first manipulating mechanism to resume the opening position, implementing a redundant action.