Claims

1. A method for starting a bus servomotor over a network, comprising:

determining a servo protocol stack as a target servo protocol stack, in a case that a start of the servo protocol stack is detected;

acquiring a target starting parameter corresponding to the target servo protocol stack after determining the servo protocol stack as the target servo protocol stack, wherein the target starting parameter is for a target bus servomotor;

parsing a preconfigured GSD file, to obtain a target parameter channel corresponding to the target servo protocol stack; and

transmitting the target starting parameter to the target bus servomotor via the target parameter channel, to start the target bus servomotor over the network according to the target starting parameter.

2. The method according to claim 1, wherein after transmitting the target starting parameter to the target bus servomotor via the target parameter channel, the method further comprises:

receiving parameter-response information fed back by the target bus servomotor;

determining, according to the parameter-response information, whether to adjust the target starting parameter; and

adjusting the target starting parameter, in a case that a result of the determining is positive.

3. The method according to claim 1 or 2, wherein after determining the servo protocol stack as the target servo protocol stack and before acquiring the target starting parameter corresponding to the target servo protocol stack, the method further comprises:

determining whether the start of the target servo protocol stack is normal;

acquiring the target starting parameter corresponding to the target servo protocol stack,

in a case that the start of the target servo protocol stack is determined to be normal;

reporting an error of the start of the servo protocol stack, in a case that the start of the target servo protocol stack is determined to be abnormal.

4. The method according to claim 3, wherein determining whether the start of the target servo protocol stack is normal comprises:

determining whether a virtual configuration of the network is consistent with a real configuration of the network, wherein the target servo protocol stack is located in the network.

5. The method according to claim 1, wherein the GSD file records a corresponding relationship between servo protocol stacks and parameter channels.

~~5~~6. An apparatus for starting a bus servomotor over a network, comprising:

a protocol stack determining module, configured to determine a servo protocol stack as a target servo protocol stack, in a case that a start of the servo protocol stack is detected;

a starting parameter acquiring module, configured to acquire a target starting parameter corresponding to the target servo protocol stack after the protocol stack determining module determines the servo protocol stack as the target servo protocol stack, wherein the target starting parameter is for a target bus servomotor;

a parameter channel acquiring module, configured to parse a preconfigured GSD file to obtain a target parameter channel corresponding to the target servo protocol stack; and

a network starting module, configured to transmit the target starting parameter to the target bus servomotor via the target parameter channel, to start the target bus servomotor over the network according to the target starting parameter.

~~6~~7. The apparatus according to claim ~~5~~6, further comprising:

a feedback information receiving module, configured to receive parameter-response

information fed back by the target bus servomotor, after the target starting parameter is transmitted to the target bus servomotor via the target parameter channel;

a first determining module, configured to determine, according to the parameter-response information, whether to adjust the target starting parameter, and

a parameter adjusting module, configured to adjust the target starting parameter, in a case that the determination of the first determining module is positive.

~~7~~8. The apparatus according to claim ~~5~~ 6 or ~~6~~7, further comprising:

a second determining module, configured to determine whether the start of the target servo protocol stack is normal, after the servo protocol stack is determined as the target servo protocol stack and before the target starting parameter corresponding to the target servo protocol stack is acquired; and

an abnormal error reporting module, configured to report an error of the start of the servo protocol stack, in a case that the start of the target servo protocol stack is determined to be abnormal;

wherein the starting parameter acquiring module is configured to acquire the target starting parameter corresponding to the target servo protocol stack, in a case that the start of the target servo protocol stack is determined to be normal.

~~8~~9. The apparatus according to claim ~~7~~8, wherein the second determining module is configured to determine whether a virtual configuration of the network is consistent with a real configuration of the network, wherein the target servo protocol stack is located in the network.

10. The apparatus according to claim 6, wherein the GSD file records a corresponding relationship between servo protocol stacks and parameter channels.

~~9~~11. A device for starting a bus servomotor over a network, comprising

a memory, configured to store a computer program, and

a processor, configured to implement the method according to any one of claims 1 to ~~4~~ 5 when executing the computer program..

~~10~~12. A computer-readable storage medium, storing a computer program, wherein:

the computer program when executed by a processor implements the method according to any one of claims 1 to ~~4~~5.