【CLAIMS】

【Claim 1】

A control method using a virtual code, the method comprising:

receiving, by a virtual code verification means, the virtual code, wherein the virtual code is generated by a virtual code generation function included in a virtual code generation means registered in the virtual code verification means;

searching, by the virtual code verification means, a storage location of each of a plurality of UIDs (User Identification) on the basis of the virtual code;

verifying, by the virtual code verification means, the virtual code on the basis of a plurality of searched UIDs; and

performing, by the virtual code verification means, a control command on the basis of the plurality of searched UIDs,

wherein, when sequentially searching for the plurality of UIDs, the searching of the storage location is performed by using a previously searched UID from the plurality of UIDs to search for another UID from the plurality of UIDs,

wherein, the virtual code comprises a first code, a second code, and a third code, and

the searching of the storage location comprises:

searching for the storage location of a second UID by setting the second code as a search start time point to the storage location of the second UID and setting the third code as a search path to the storage location of the second UID; and

searching for the storage location of a first UID by setting the first code as a search start time point to the storage location of the first UID and setting the second UID or a code matched to and stored in the second UID as a search path to the storage location of the first UID.

【Claim 2】

The method of claim 1, wherein the virtual code comprises a plurality of detailed codes, and

the searching of the storage location comprises:

searching for the storage location of any one of the plurality of UIDs on the basis of some of the plurality of detailed codes; and

searching for another one of the plurality of UIDs on the basis of a remaining part of the plurality of detailed codes and any one of the searched UIDs.

【Claim 3】

The method of claim 1, wherein the verifying of the virtual code determines that the virtual code is a valid code

when a UID searched last among the plurality of UIDs matches a previously stored UID, or information matched to and stored in the UID searched last among the plurality of UIDs matches a preset value.

【Claim 4】

The method of claim 1, wherein the performing of the control command is performed on the basis of control command information matched to and stored in at least one of the plurality of UIDs, and

the control command corresponding to the at least one of the plurality of UIDs is performed.

【Claim 5】

The method of claim 1, wherein the performing of the control command performs user authentication,

the virtual code verification means extracts authority information matched to and stored in the storage location of each of the plurality of UIDs, and

the virtual code verification means performs the user authentication corresponding to the authority information.

【Claim 6】

A control program comprising:

a virtual code used by the control program and stored in a medium in order to execute the method of any one of claims 1 to 5 in combination with a computer that is hardware.

[Claim 7]

A virtual code generation device comprising:

a detailed code generation part configured to generate a plurality of detailed codes on the basis of a plurality of UIDs (User Identification) registered in the virtual code generation device;

a virtual code generation part configured to generate a virtual code by combining the plurality of detailed codes by using a virtual code generation function; and

a virtual code provision part configured to transmit the generated virtual code to a virtual code verification device so that the virtual code verification device executes a control command corresponding to the virtual code,

wherein the virtual code generation device generates the plurality of detailed codes so that any one of the plurality of UIDs is utilized for searching for the other one of the plurality of UIDs,

wherein, the virtual code comprises a first code, a second code, and a third code, and

the searching of the storage location comprises:

searching for the storage location of a second UID by setting the second code as a search start time point to the storage location of the second UID and setting the third code as a search path to the storage location of the second UID; and

searching for the storage location of a first UID by setting the first code as a search start time point to the storage location of the first UID and setting the second UID or a code matched to and stored in the second UID as a search path to the storage location of the first UID.

【Claim 8】

A virtual code verification device for executing a control command and authenticating a user, the virtual code verification device comprising:

a virtual code reception part configured to receive a virtual code;

a detailed code extraction part configured to extract a plurality of detailed codes from the virtual code;

a storage location search part configured to search for a storage location of each of a plurality of UIDs (User Identification) on the basis of the plurality of detailed codes;

a virtual code verification part configured to verify the virtual code on the basis of the plurality of UIDs; and

a controller configured to perform the control command on the basis of the plurality of UIDs,

wherein the storage location search part sequentially searches for the plurality of UIDs, and uses a previously searched UID to search for another UID,

wherein, the virtual code comprises a first code, a second code, and a third code, and

the searching of the storage location comprises:

searching for the storage location of a second UID by setting the second code as a search start time point to the storage location of the second UID and setting the third code as a search path to the storage location of the second UID; and

searching for the storage location of a first UID by setting the first code as a search start time point to the storage location of the first UID and setting the second UID or a code matched to and stored in the second UID as a search path to the storage location of the first UID.