Automatic Access Control Method and System

FIELD OF THE INVENTION

The present invention relates to access control methods and systems, in particular for accessing a service automatically making cycles available.

More specifically, the invention relates to an access control method comprising an identification step in which a code identifying a user is read from an information media, in order to allow the user access to a place, or to a product or service.

BACKGROUND OF THE INVENTION

In known methods of this type, the correspondence of the user with a given information medium is generally recorded once and for all. This identification mode however requires the user to use multiple coded information media, for example electronic or magnetic cards, which is impractical.

SUMMARY OF THE INVENTION

The particular purpose of the present invention is to remedy this drawback.

For this purpose, the invention proposes an access control method implemented by an automatic access control system comprising automatic means for reading information media and automatic control means suited for selectively authorizing access (to a place, product or service), where the method comprises at least the following steps:

(a) an initial registration step in which a user is registered and given a first identifier (coded object or dematerialized identification code),

(b) an association step in which the user, who is already in possession of a coded personal information medium bearing a second identifier, identifies himself by entering the first identifier and has said coded personal information medium read by said automatic reading means,

after which the user is associated with the second identifier~~an association step in which the user is identified with the first identifier and has a coded personal information medium bearing a second identifier read by said automatic reading means, after which the user is associated with the second identifier~~,

(c) at least one subsequent identification step, in which said automatic reading means is made to read said personal information medium in order to access the second identifier, and the automatic control means is commanded as a function of the reading of said personal information medium.

Because of these arrangements, each user can use their own personal coded information medium so long as it is compatible with the automatic reading means of the system, which allows them to avoid pointlessly multiplying the coded information media that they must have on them.

In various embodiments of the method according to the invention, one and/or the other of the following arrangements (they could be used independently of each other and independently of the aforementioned arrangements) could additionally be called on:

- the personal information medium is an electronic information medium with contactless reading;
- the personal information medium is chosen among an RFID information medium and an NFC information medium;
- the personal information medium is chosen among an electronic card and a mobile telephone;
- during the identification step (d), the automatic access control means are commanded to selectively unlock a cycle initially locked on a locking position.

Additionally, the purpose of the invention is also an automatic access control system comprising command means, automatic information media reading means and automatic control means suited for selectively authorizing an access, where the control means are suited for:

- recording a user and communicating a first identifier to them,
- identifying the user with the first identifier entered by the user and having said automatic reading means read a second identifier carried by a personal information medium

which is already in possession of the user, and then associating said user with said second identifier~~identifying the user with the first identifier and having said automatic reading means read a second identifier carried by a personal information medium, and~~

~~then associating said user with said second identifier~~,

- subsequently identifying the user by having said automatic reading means read said personal information medium and then commanding the automatic control means based on the reading of said personal information medium.

In various embodiments of the method according to the invention, one and/or the other of the following arrangements (they could be used independently of each other and independently of the aforementioned arrangements) could additionally be called on:

- The automatic reading means are suited for reading at least electronic information media with contactless reading;

- The automatic reading means are suited for reading information media chosen among RFID and NFC information media;

- The access control system is a system for automatically making cycles available in which the automatic control means are commanded by the command means for selectively locking and unlocking cycles on locking positions.

BRIEF DESCRIPTION OF THE DRAWINGS

Other features and advantages of the invention will become apparent during the following description of one of the embodiments thereof, given as nonlimiting example, with reference to the attached drawings.

In the drawings:

- Figure 1 is a schematic perspective view showing an automatic system for making cycles available suited for implementing a process according to an embodiment of the invention.

- And, Figure 2 is a block drawing showing the main electric components of the system from Figure 1.

MORE DETAILED DESCRIPTION

In the various figures, the same references designate identical or similar items.

CLAIMS

1. An access control method implemented by an automatic access control system comprising automatic means for reading information media and automatic control means suited for selectively authorizing access, where the method comprises at least the following steps:

(a) an initial registration step in which a user is registered and given a first identifier,

(b) an association step in which the user, who is already in possession of a coded personal information medium bearing a second identifier, ~~is~~ identifies himself by entering ~~d with~~ the first identifier and has said coded personal information medium ~~a coded personal information medium bearing a second identifier~~ read by said automatic reading means, after which the user is associated with the second identifier,

(c) at least one subsequent identification step, in which said automatic reading means is made to read said personal information medium in order to access the second identifier, and the automatic control means is commanded as a function of the reading of said personal information medium.

2. Method according to claim 1, in which the personal information medium used during steps (b) and (c) is an electronic information medium with contactless reading.

3. Method according to claim 1, in which the personal information medium used during steps (b) and (c) is chosen among an RFID information medium and an NFC information medium.

4. Method according to any one of the preceding claims, in which the personal information medium used during steps (b) and (c) is chosen among an electronic card and the mobile telephone.

5. Method according to any one of the preceding claims, in which during the identification step (d), the automatic access control means are commanded to selectively unlock a cycle initially locked on a locking position.

6. Automatic access control system comprising command means, automatic information media reading means and automatic control means suited for selectively authorizing an access, where the control means are suited for:

- recording a user and communicating a first identifier to them,
- identifying the user with the first identifier entered by the user and having said automatic reading means read a second identifier carried by a personal information medium which is already in possession of the user, and then associating said user with said second identifier,
- subsequently identifying the user by having said automatic reading means read said personal information medium and then commanding the automatic control means based on the reading of said personal information medium.

7. System according to claim 6, in which the automatic reading means are suited for reading at least electronic information media with contactless reading.

8. System according to claim 7, in which the automatic reading means are suited for reading information media chosen among RFID and NFC information media.

9. System according to any one of claims 6 to 8, for automatically making cycles available in which the automatic control means are commanded by the command means for selectively locking and unlocking cycles on locking positions.