METHOD AND SYSTEM FOR ACCEPT AND ACTUATE THE AUTHENTICATED CUSTOMIZED ORDERS FORM USERS IN DINE-INS.

ABSTRACT

A wireless actuator device connected to an automated machine (example: coffee dispenser or water dispenser etc...) which is capable of receiving the customized orders from the users via a two layers of authentication QR- code scanned by a user device to ensure the presence of the user which may not allow receiving of fake customized orders from the users who are not dinning-in.

SUMMARY

An actuator device triggers a set of micro motors in the an automated machine (example: coffee dispenser or water dispenser etc..) to follow the received the customized orders from the users.

As per an embodiment the actuator device may be demountable device

As per another embodiment the actuator device may be in-built in the automated machine

The two layers of authentication by QR code comprises of a first layer, single dynamic QR code and a second, multiple static QR code.

The first layer, single dynamic QR code changes dynamically after every scan, may be placed in front of the counter. The second, multiple static QR code is a permanent QR code, placed in front of every table of the restaurants and/or hotels. Hereby the number of second, multiple static OR code is equal to the number of dine-in capacity of the restaurants and/or hotels.

TECHNICAL FIELD

The present subject matter is related, to a device and method for receiving the customized orders from users and initiates the cooking process according to the received customized orders from users in dine-ins.

BACKGROUND

Various previous inventions include the accepting the orders from customers in the dine-in which can fetch the menu by scanning the QR code placed on each table of a restaurant.

Such previous inventions also include the various location sensing sensors, proximity sensors, GPS for ensuring the presence of user there by not to allow receiving the fake orders from other than user, who are not dinning-in.

BRIEF DESCRIPTION OF DRAWINGS

Fig. 1, Explains the environment with respect to one of an embodiment to which the present invention may relates to.

Fig. 2A, Shows the detachable actuator device according to an embodiment, thick lines.

Fig. 2B, Shows the detached actuator device according the embodiment in fig. 2A with micro motors.

Fig. 3, Shows the flow chart explaining the possible steps performed by an user.

Fig. 4, Shows the flow chart explaining the possible backend steps happening in response the steps performed by the user in fig. 3.

Fig. 5, Shows one of the user interface that relates to one of the embodiment of the present invention.

Fig. 6 shows the components of the actuator device.

DETAILED DESCRIPTION

In the drawings, like reference characters generally refer to the same parts throughout the different views. The drawings are not necessarily to scale, emphasis instead generally being placed upon illustrating the invention. In the following description, various embodiments of the invention are described with reference to the following drawings, in which:

Fig. 1 describes the possible environment 10 where the present invention may be implemented. The environment comprises of a user 11 with the user device 12, the first, dynamic QR-code 13, and the second, static QR-code 14.

The user 11 with the user device 12 is directed to scan the first, dynamic QR-code 13, via a user interface (not shown), which when redirected to another user interface (not shown), where user is directed to scan the second, static QR-code 14. Upon which redirects the user to another user interface 50, where user is allowed to customize and place the order.

It is to be noted that multiple series of user interfaces may be used to facilitate the smooth user experience through-out the process.

Fig. 2A Shows the attached, detachable actuator device 20 to the previously available automotive machine 25.

According to an embodiment the previously available machine 25 can be any automated machine but not limited to example: coffee dispenser or water dispenser machine (not in the claim scope).

According to another embodiment the detachable actuator device 20 may be in-built into the automated machine 25.

Fig. 2B Shows the detached actuator device 30, analogous to the 20. Includes the micro motors 31A, 31B, 32C. Which are when actuated by the processor in the actuator device 30, According to the received customized order from the user interface 50.

Fig. 3 Explains the flow chart showing the series of steps involved the method for accepting the customized orders by the user 11from the environment 10.

Fig. 4 Explains the flow chart showing the series of involved in backend for receiving and actuating customized orders that are executed in response to the user 11actions.

Fig. 5 Shows one of the user interface 50 that is involved in accepting the customized orders from the user 11 through the user device 12 from the environment 10.

Fig. 6 Shows the various components comprising in the actuator device 30. Includes a receiver 60, a memory component 61, a processor 63, a set of micro motors 62.

The receiver 60 receives the customized order over a network from the user 11 via user device 12. After ensuring the presence of user 11 in the environment 10 using the two layer authentication method. The machine readable instructions are stored in the non-transitory memory component 61, which is when followed by the processor 63, and actuate the set of micro motors 62. Here by the actuated micro motors 62 are controlled in a way that the order is cooked or fetched in accordance to the received customized order.

It is to be noted that the terms accepting and receiving are used interchangeably. The two layer QR- code scan system is intended to restrict customized orders that are not from the environment 10 as such.

It is to be noted that there may be multiple micro motors 31A, 31B, 32C in the real device according to the type of automated machine 25.

It is to be noted that according to few embodiments the user interfaces may be implemented using web based interface, mobile application, augmented reality, virtual reality etc...

It is to be noted that the receiver in actuator device 30 may receive the customized orders over a network, cloud, Fog network, IoT network, or using any wireless communication networks.

CLAIMS

1. **A device for accepting the customized orders from users in dine-in comprises :**

An actuator device with a receiver,

A non- transitory memory component, stores the instructions used by actuator device to receive the customized orders from users.

2. The receiver in the claim 1 may receive the customized order signals over a wired or wireless network via a user device.
3. The actuator device in the claim 1 is a demountable or in-built device with at least one or more micro motors to perform one or more actions according the received signal from the receiver.
4. The actuator device in the claim 3 is demountable or in-built in an automated machine.
5. The automated machine in the claim 4 is any machine that is capable of cooking food, for example but not limited to (coffee dispenser or water dispenser).
6. A non-transitory memory component in claim 1, stores the instruction in machine readable language for processing the customized orders from users in first come first serve fashion.

7. Upon processing the received the customized orders from users the micro motors are being triggered accordingly to execute as per the received customized orders.

8. **A method for accepting the authenticated customized orders in dine-ins from users comprises :**

A two layered authentication of users or customers dining-in using QR-codes,

A user interface with provision for customizing the orders,

9. The two layer authentication comprises of a first single dynamic QR code and a second multiple static OR code.
10. The first single dynamic QR code in claim 7, changes dynamically after every scan, which may usually placed in front of the counter.
11. The second multiple static QR code in claim7, is a static QR code, which may usually placed on every table of the restaurants and/or hotels.
12. The user interface in claim 8 is a web-based or an application that runs on a user device facilitates for placing the customized orders, which is then received by the receiver in the actuator device in the claim

Drawings

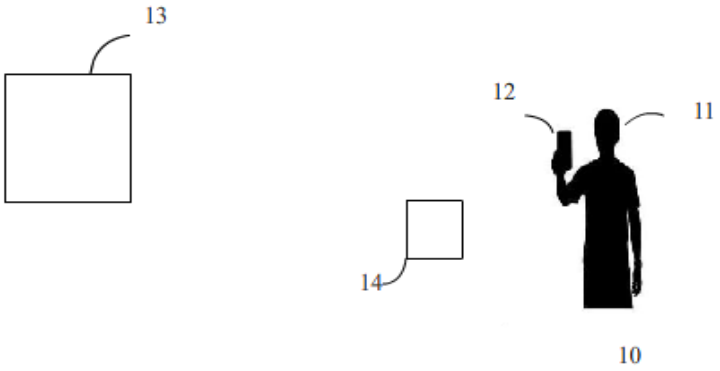

FIG. 1

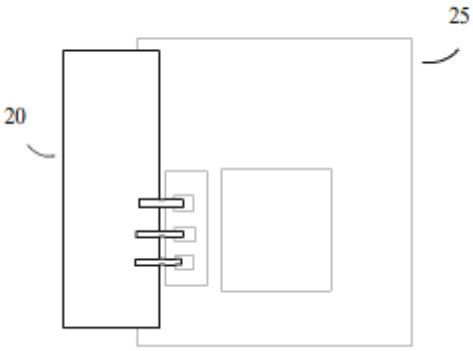

FIG. 2A

S. Nanda Sagar Reddy

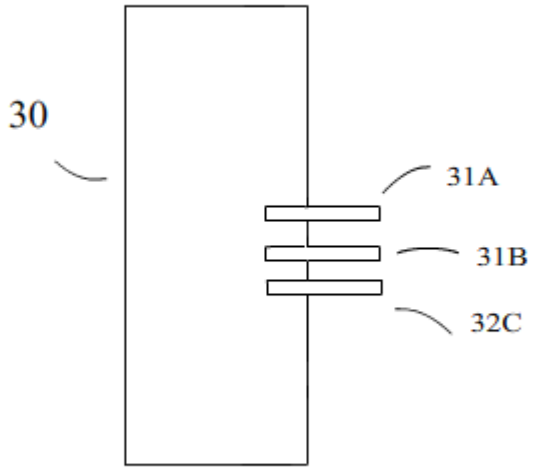

FIG. 2B

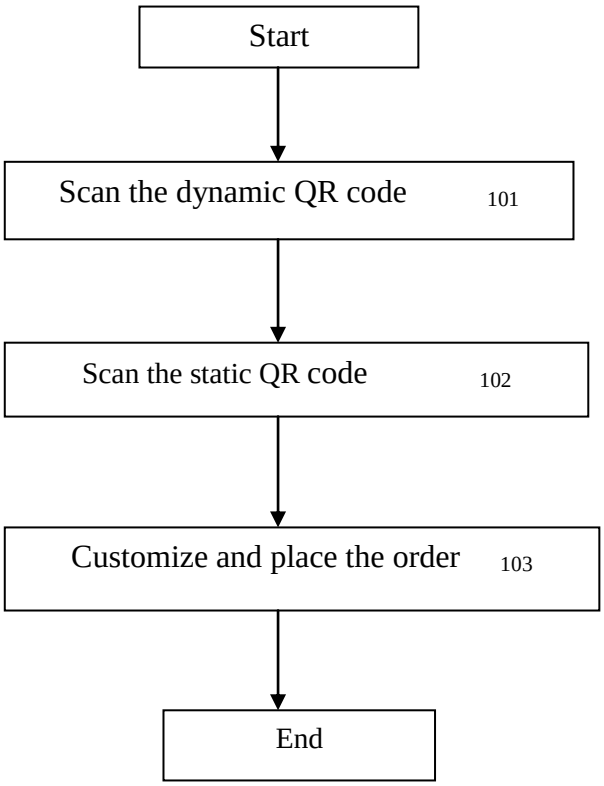
Start
Scan the dynamic QR code
101
Scan the static QR code
102
Customize and place the order
103
End

FIG. 3

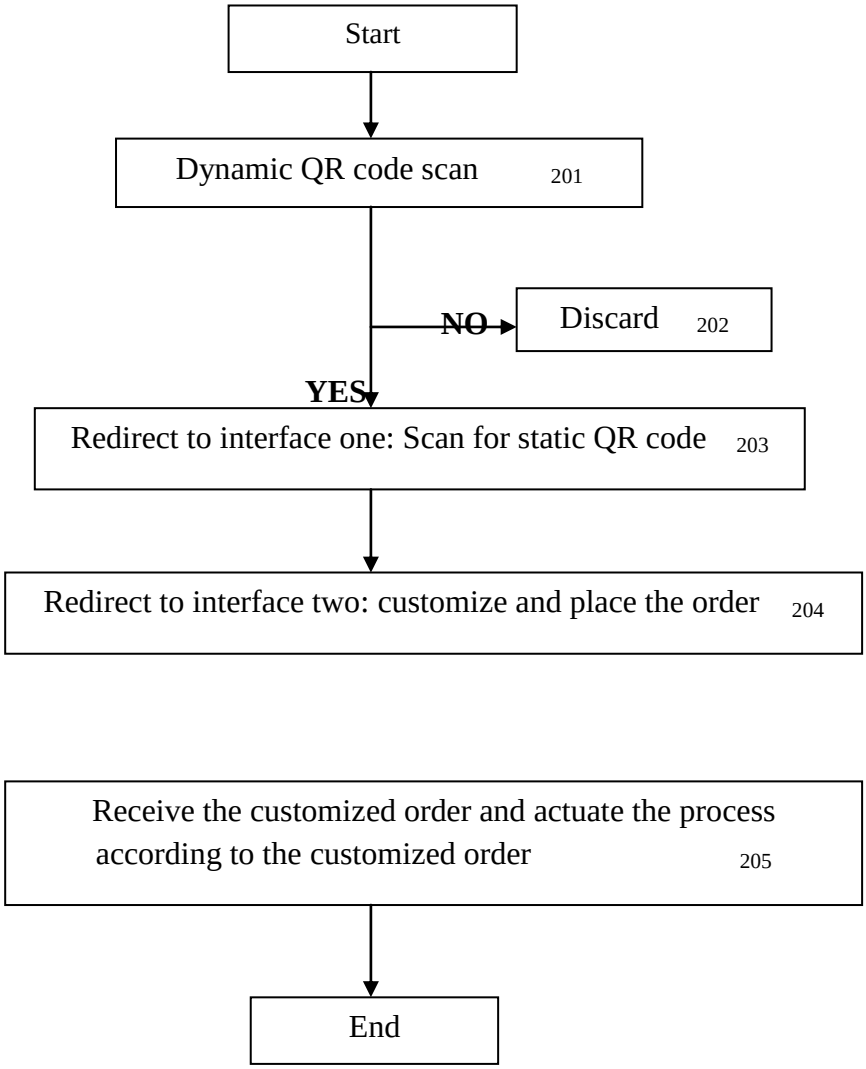

FIG. 4

S. Nanda Sagar Reddy

Dated: 14 April 2021

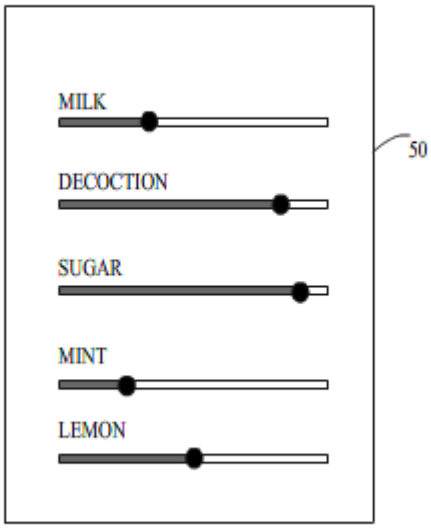

FIG. 5

S. Nanda Sagar Reddy

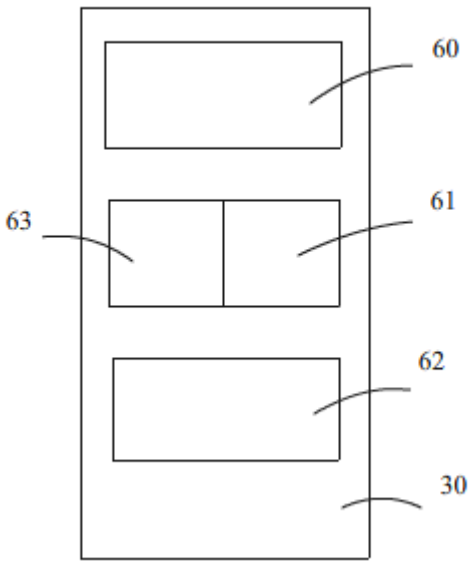

FIG. 6

S. Nanda Sagar Reddy

Dated: 14 April 2021