Claims

1. An automatic beverage ~~attendant~~machine ~~-~~ for serving beverage to a customer, the automatic beverage ~~attendant~~machine comprising

a beverage maker for concocting a beverage;

a payment terminal ~~(point of sale terminal)~~ connected to the beverage maker for receiving payment of the beverage;

a conveyor for transferring the beverage to the customer;

a detector for sensing input from a user

wherein the beverage maker comprises a user terminal for receiving order of the beverage from a customer;

wherein the detector comprises a biometric device for recognizing identity of the user based on physiological or behavioral characteristics of the user.

~~2. The automatic beverage attendant of claim 1 further comprising~~

~~a conveyor for transferring the beverage to the customer.~~

~~3~~ 2 The automatic beverage ~~attendant~~machine of claim ~~2~~1, wherein

the conveyor comprises a robot for fetching the beverage.

~~4~~ 3 The automatic beverage ~~attendant~~machine of any of the preceding claims further comprising

a CRM server (e.g. computer installed with customer relationship management programme) that is connected to the beverage maker, the payment terminal, the user terminal or a combination of any of these.

~~5 The automatic beverage attendant~~machine ~~of any of the preceding claims further comprising~~

~~a detector (connected to one or more parts of the automatic beverage attendant~~machine~~) for sensing input from a human (e.g. customer, waiter).~~

~~6~~ 4 The automatic beverage ~~attendant~~machine of claim ~~5~~1, wherein

the detector comprises at least one touchscreen for receiving the input.

~~7 The automatic beverage attendant~~machine ~~of claim 5, wherein~~

~~the detector comprises a biometric device (e.g. camera) for recognizing identity of a person based on physiological or behavioral characteristics of the person.~~

~~8~~ 5 The automatic beverage ~~attendant~~machine of any of the preceding claims further comprising

a communication terminal ~~(e.g. network interface)~~ for transferring information with an external electronic device ~~(a remote computer, other automatic beverage attendant~~machine~~s, cloud computing servers).~~

~~9~~ 6 The automatic beverage ~~attendant~~machine of claim 1, wherein

the beverage maker comprises a thermal container for providing the beverage to the customer at a predetermined temperature.

~~10 The automatic beverage attendant~~machine ~~of any of the preceding claims further comprising~~

~~a security device (e.g. barrier) for protecting (of safekeeping) at least one part (e.g. payment terminal, robot) of the automatic beverage attendant~~machine~~.~~

~~11~~ 7 A method of serving a beverage automatically, the method comprising

receiving an order of beverage at a user terminal of an automatic beverage ~~attendant~~machine;

making the beverage according to the order by a beverage maker; and

transacting the beverage automatically at a payment terminal of the automatic ~~attendant~~machine;

detecting presence of the user automatically.;

wherein the detecting presence of the user comprises recognizing identity of a person based on physiological or behavioral characteristics of the person.~~.~~

~~12~~ 8 The method of claim ~~11~~ 7 further comprising

conveying the beverage to a customer of the beverage.

~~13 The method of claim 11 or 12 further comprising~~

~~detecting presence of the user automatically.~~

~~14 The method of any of the preceding claims 11 to 13, wherein~~

~~the detecting presence of the user comprises recognizing identity of a person based on physiological or behavioral characteristics of the person.~~

~~15~~ 9 The method of any of the preceding claims ~~11 to 14~~7 further comprising

interacting with the user configuring ~~(e.g. selecting)~~ the beverage.

10 The method of claim 7, wherein the step of the detecting presence of the user further comprises the steps of

- identifying voice of the user;
- comparing the voice of the user with previous interaction; and
- suggesting preferred beverage purchased by the user.

11 The method of claim 10, wherein the step of identifying voice of the user comprises recording voice of user at every transaction and training the processor to ensure voice of the user can be detected accurately.

12 The method of claim 7, wherein the step of the detecting presence of the user further comprises the steps of

- obtaining biological data of the user, wherein the biological data comprises at least one of a fingerprint, iris, or facial features, using an image sensor;
- sampling the acquired biological data and processing the image; and
- comparing the digitally sampled biological data with a table in a database containing parameters defining a human face.

13 The method of claim 7, wherein the step of the detecting presence of the user further comprises the steps of

- obtaining biological data of the user;
- prompting user to process payment by using haptic interaction;
- processing the payment by comparing the biological data of the user and analysing the haptic interaction of the user.

14 The method of claim 13, wherein the step of using haptic interaction comprises of hand gestures, blinking of eyes, facial expressions.

15 The method of claim 7, wherein the step of the detecting presence of the user further comprises the steps of

- obtaining biological data of the user; and
- dispensing the beverage according to user's identified biological data.

16 . The method of claim 15, wherein the step of dispensing the beverage according to user's identified biological data further comprises of identifying user's previous transactions and providing suggestions based on past transactions of the user.

17 . The method of claim 7, wherein the step of the detecting presence of the user further comprises the steps of recording user's decision making and behaviour and transmitting the recorded data to process to build a predict model on the basis of machine learning.