Title: COMMUNICATION METHOD FOR VENDING MACHINES VIA VIDEO CALL

Abstract: The present invention relates to a communication method which ensures to do shopping from the vending machine quickly and reliably by starting a video call, by means of determining the machine identity number via video call.
Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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COMMUNICATION METHOD FOR VENDING MACHINES VIA VIDEO CALL

Field of the Invention

The present invention relates to a communication method whereby it is provided to determine the machine identity using video call from vending machines.

Prior Art

Vending machines are automatic systems whereby the users choose the product they want from inside the machine and the machine delivers the product after they make the payment. Many products are put up for sale in the vending machines whose area of use is quite widespread today.

Vending machines make shopping more practical. When doing shopping from vending machines the user can either do so by inserting a coin into the machine or, if he/she wants, can order over phone.

When the user wants to do shopping by inserting a coin into the machine himself/herself, he/she sees the price of the product on the display and takes the product by depositing the amount to be paid.

Shopping is done over phone in another method which is used when to do shopping from vending machines. In this method the user calls a service center number and informs the said center of the number which determines the vending machine via the keypad on the mobile device. Then, the vending machine and the phone line are matched with each other by the center.
Since the phones include secure identity information the payment transaction is carried out by deducting the amount, which is to be paid after the shopping, over the phone line or from the user's bank account.

Because of the fact that the user's making transaction by using the phone keypad is open to make incorrect entries, this situation causes troubles in terms of applicability of the method.

The USA patent document No. US7040533, an application in the state of the art, discloses cash withdrawal from ATM. The ATM has a single visible indicia on it. The user's mobile device includes a camera and a programmable memory. The camera is used to capture the image at the identifier of the ATM. The memory includes customer account data. The user informs the ATM and the provider of his/her cash request by establishing a connection with the operation provider via wireless communication using the mobile device. The said request includes the account information and the image of the identifier. The provider decides whether to give the requested cash or not using the user's account information.

The USA patent document No. US2002065728 discloses an electronic shopping system which is carried out using a wireless videophone. In order that the system can operate at first the purchase transaction program is downloaded from the seller's server to a wireless videophone. The program which is stored in the phone's memory enables the purchaser to make an easier selection and payment. The camera which is present on the videophone controls the bar code or the product icon image as function, via the downloaded program. The bar code or the product icon image is converted into an appropriate item identifier via the character or pattern recognition software.

Today, there are various applications for shopping done from vending machines via phone. These applications are basically over the phone line, however, using the phone keypad causes to make incorrect entries during the product selection. In
video applications of the method, review of the product is in question only via videophone.

Summary of the Invention

The objective of the present invention is to realize a communication method which enables to do shopping by determining the machine identity number via video call.

Another objective of the present invention is to realize a communication method which enables to do shopping quickly and reliably.

A further objective of the invention is to realize a vending machine communication method wherein shopping is done using the identity information approval of which is received before the sale is made.

Detailed Description of the Invention

A communication method realized to fulfill the objectives of the present invention is illustrated in the accompanying figure wherein:

Figure 1 is the flowchart of the communication method.

The inventive communication method comprises at least one vending machine, at least one mobile device having a camera and a service center.

The inventive communication method (100) comprises the following steps:
- the user connecting to the service center with his/her mobile device (101),
- the service center responding to the call (102),
- the user transmitting the identity information image of the vending machine to the service center (103),
- conversion of the identity information image into text (104),
- submitting the identity information for the user approval (105),
- carrying out matching between the mobile device and the vending machine (106),
- the service center allowing the vending machine for sale (107),
- transmitting the information of product selection to the user (108),
- the user making the product selection (109),
- termination of the connection (110).

The user who wants to do shopping from the vending machine with his/her mobile device is firstly connected to the service center of the vending machine over the mobile device. After the service center responds to the incoming call the user orients the camera of the mobile device whereby he/she is connected to the center towards the display, on which there is the identity information, on the vending machine from which he/she wants to get service and transmits the identity information of the vending machine to the service (103). The identity information image received by the service center is converted from image into text by the service center (104). The identity information which is converted into text is submitted for user approval (105) and after the approval of the user the matching is carried out between the mobile device and the vending machine (106). After this step, the service center allows the vending machine for carrying out the sale transaction (107) and transmits the information of product selection to the user (108). After that, the user makes the product selection (109) and the connection between the mobile device and the service center terminates (110).

In the inventive communication method (100), the user is connected to the service center visually by means of his/her mobile device. For this reason, the mobile device must have at least one camera necessarily.

In the inventive communication method (100), in case that the user does not approve the identity information of the vending machine, the service center ends
the connection between the mobile device and the service center by cancelling the transaction.

In the inventive communication method (100), the information that he/she can make the product selection is transmitted to the user both over the vending machine and the mobile device.

In the inventive communication method (100), the user can make the product selection in two different ways with whichever he/she wants. The user can make the product selection either via the keys present on the vending machine or by orienting the camera of the mobile device to the identity information of the products.

Within the scope of this basic concept, it is possible to develop a wide variety of embodiments of the inventive "Communication Method for Vending Machines via Video Call". The invention can not be limited to the examples described herein; it is essentially according to the claims.
CLAIMS

1. A communication method for vending machines via a video call (100) comprising at least one vending machine, at least one mobile device having a camera and a service center and characterized by the steps of:
   - the user connecting to the service center with his/her mobile device (101),
   - the service center responding to the call (102),
   - the user transmitting the identity information image of the vending machine to the service center (103),
   - conversion of the identity information image into text (104),
   - submitting the identity information for the user approval (105),
   - carrying out matching between the mobile device and the vending machine (106),
   - the service center allowing the vending machine for sale (107),
   - transmitting the information of product selection to the user (108),
   - the user making the product selection (108),
   - termination of the connection (110).

2. A communication method according to Claim 1 wherein the user connects to the service center visually by means of his/her mobile device.

3. A communication method according to Claim 1 and Claim 2 characterized in that, in case that the user does not approve the identity information of the vending machine the service center ends the connection between the mobile device and the service center by cancelling the transaction.

4. A communication method according to Claim 1 to Claim 3 characterized in that, the information that he/she can make the product selection is
transmitted to the user both over the vending machine and the mobile device.
the user connecting to the service center with his/her mobile device

the service center responding to the call

the user transmitting the identity information image of the vending machine to the service center

conversion of the identity information image into text

submitting the identity information for the user approval

carrying out matching between the mobile device and the vending machine

the service center allowing the vending machine for sale

transmitting the information of product selection to the user

the user making the product selection

termination of the connection
INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2009/055914

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06Q20/00
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G06Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Further documents are listed in the continuation of Box C

See patent family annex

* Special categories of cited documents

A - earlier document defining the general state of the art which is not considered to be of particular relevance
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1 & 2 - document member of the same patent family

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### DOCUMENTS CONSIDERED TO BE RELEVANT

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